

The Metropolitan Water District of Southern California

Agenda

The mission of the Metropolitan Water District of Southern California is to provide its service area with adequate and reliable supplies of high-quality water to meet present and future needs in an environmentally and economically responsible way.

Board of Directors - Final - Revised 2

April 12, 2022

12:00 PM

Tuesday, April 12, 2022 Meeting Schedule
08:30 am - WP&S 11:30 am - Break 12:00 pm - BOD

Agendas, live streaming, meeting schedules, and other board materials are available here: <https://mwdh2o.legistar.com/Calendar.aspx>. If you have technical difficulties with the live streaming page, a listen-only phone line is available at 1-877-853-5257; enter meeting ID: 891 1613 4145. Members of the public may present their comments to the Board on matters within their jurisdiction as listed on the agenda via in-person or teleconference. To participate via teleconference 1-833-548-0276 and enter meeting ID: 815 2066 4276 or click <https://us06web.zoom.us/j/81520664276pwd=a1RTQWh6V3h3ckFhNmDsUWpKR1c2Zz09>

MWD Headquarters Building • 700 N. Alameda Street • Los Angeles, CA 90012

1. Call to Order

- 1.1 Invocation: Mitch Lahouti, Metropolitan Retiree
- 1.2 Pledge of Allegiance: Director David De Jesus, Three Valleys Municipal Water District

2. Roll Call

3. Determination of a Quorum

4. Opportunity for members of the public to address the Board on matters within the Board's jurisdiction. (As required by Gov. Code § 54954.3(a))

- a. Member Agency Overview: Sunny Wang, Water Resources Manager, City of Santa Monica [21-985](#)

Attachments: [04122022 BOD 4a Presentation.pdf](#)

5. OTHER MATTERS AND REPORTS

Meeting Delayed

- A. Report on Directors' Events Attended at Metropolitan's Expense [21-986](#)
Attachments: [04122022 BOD 5A Report.pdf](#)
- B. Chairwoman's Monthly Activity Report [21-987](#)
Attachments: [04122022 BOD 5B Report.pdf](#)
- C. General Manager's Monthly Activity Report [21-988](#)
Attachments: [04122022 BOD 5C Report.pdf](#)
- D. General Counsel's summary of activities [21-989](#)
Attachments: [04122022 BOD 5D Report - Revised](#)
- E. General Auditor's summary of activities [21-990](#)
Attachments: [04122022 BOD 5E Report.pdf](#)
- F. Ethics Officer's summary of activities [21-991](#)
Attachments: [04122022 BOD 5F Report.pdf](#)

**** CONSENT CALENDAR ITEMS -- ACTION ****

6. CONSENT CALENDAR OTHER ITEMS - ACTION

- A. Approval of the Minutes of the Regular Meeting for March 8, 2022, the Special Meeting for March 22, 2022, and the Special Meeting for March 29, 2022 (Copies have been submitted to each Director) Any additions, corrections, or omissions) [21-992](#)
Attachments: [04122022 BOD 6A-1 minutes.pdf](#)
[04122022 BOD 6A-2 minutes.pdf](#)
[04122022 BOD 6A-3 minutes.pdf](#)

- B.** Adopt resolution to continue remote teleconference meetings pursuant to the Brown Act Section 54953(e) for meetings of Metropolitan's legislative bodies for a period of 30 days; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA [21-993](#)

Attachments: [04122022 BOD 6B Resolution.pdf](#)
[Resolution 9300.pdf](#)

- C.** Approve Committee Assignments

7. CONSENT CALENDAR ITEMS - ACTION

- 7-1** Adopt the 2020 Integrated Water Resources Plan Needs Assessment; the General Manager has determined that the proposed action is exempt of otherwise not subject to CEQA (IRP) [21-971](#)

Attachments: [04122022 IRP 7-1 B-L.pdf](#)
[03222022 IRP 7-1 Presentation.pdf](#)

- 7-2** Adopt the resolution finding that the ad valorem property tax rate limitation of Metropolitan Water District Act Section 124.5 is not applicable because it is essential to Metropolitan's fiscal integrity to collect ad valorem property taxes in excess of the limitation for fiscal years 2022/23 through 2025/26 or 2022/23 through 2023/24; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA (FI) [21-995](#)

Attachments: [04122022 FI 7-2 B-L.pdf](#)
[04112022 FI 7-2 Presentation.pdf](#)
[Resolution 9301.pdf](#)

- 7-3** Approve the proposed biennial budget for fiscal years 2022/23 and 2023/24, which includes the Capital Investment Plan and revenue requirements for fiscal years 2022/23 and 2023/24, and ten-year forecast; adopt resolutions fixing and adopting the water rates and charges for calendar years 2023 and 2024; the General Manager has determined that the proposed actions are exempt or otherwise not subject to CEQA (FI) **21-994**

Attachments: [04122022 FI 7-3 B-L only](#)
[04122022 FI 7-3 B-L and attachments.pdf](#)
[04112022 FI 7-3 Presentation.pdf](#)
[04122022 BOD 7-3 Presentation - option 4 .pdf](#)
[Resolution 9302.pdf](#)
[Resolution 9303.pdf](#)
[Resolution 9304.pdf](#)

- 7-4** Authorize an agreement with Stantec Consulting Services, Inc. for a not-to-exceed amount of \$8.5 million to replace the control system at the Mills Water Treatment Plant and amend an existing agreement with CH2M Hill Engineers, Inc. for a not-to exceed amount of \$4.435 million; the General Manager has determined that this proposed action is exempt or otherwise not subject to CEQA (EO) **21-996**

Attachments: [04122022 EO 7-4 B-L.pdf](#)
[04112022 EO 7-4 Presentation.pdf](#)

- 7-5** Appropriate \$600 million for projects identified in the Capital Investment Plan for Fiscal Years 2022/23 and 2023/24 and authorize the General Manager to initiate or proceed with work on capital projects identified in the Capital Investment Plan for Fiscal Years 2022/23 and 2023/24 and Minor Capital Projects to be identified during the biennial period, subject to any limits on the General Manager's authority and CEQA requirements; the General Manager has determined that the proposed actions are exempt or otherwise not subject to CEQA (EO) **21-997**

Attachments: [04122022 EO 7-5 B-L.pdf](#)
[04112022 EO 7-5 Presentation.pdf](#)

- 7-6** Adopt the CEQA determination that the proposed project was previously addressed in the approved 2014 Mitigated Negative Declaration and related CEQA action and (1) award a \$17,226,250 contract to Spiniello Infrastructure West, Inc. to replace the lining in a portion of the Orange County Feeder; and (2) authorize the General Manager to enter into a new 24-month lease agreement, with an 18-month option to extend, at 2750 Bristol Street in Costa Mesa, CA (Assessor's Parcel No. 418 182-05) in an amount not to exceed \$360,000 for use as a construction staging and storage site (EO) **21-99**
- Attachments:** [04122022 EO 7-6 B-L.pdf](#)
[04112022 EO 7-6 Presentation.pdf](#)
- 7-7** Approve the General Manager's Strategic Priorities; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA **21-886**
- Attachments:** [03082022 BOD 7-6 B-L](#)
[04122022 BOD 7-7 Presentation](#)
- 7-8** Authorize granting a new ten-year license agreement to New Cingular Wireless, PCS LLC, for the continued operation of an existing telecommunications site on Metropolitan's fee-owned property in the city of Yorba Linda, identified as Orange County Assessor Parcel Number 329-021-03; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA (RPAM) **21-1000**
- Attachments:** [04122022 RPAM 7-8 B-L.pdf](#)
[04112022 RPAM 7-8 Presentation.pdf](#)
- 7-9** Authorize granting a new ten-year license agreement to CCATT LLC, for the continued operation of an existing telecommunications site on Metropolitan's fee-owned property in the city of Los Angeles commonly identified as Los Angeles County Assessor Parcel Number 4493-014-906; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA (RPAM) **21-1001**
- Attachments:** [04122022 RPAM 7-9 B-L.pdf](#)
[04112022 RPAM 7-9 Presentation.pdf](#)

- 7-10** Authorize agreement with Western Municipal Water District, Rubidoux Community Services District, West Valley Water District, and San Bernardino Valley Municipal Water District to provide Rubidoux Community Services District assistance on water deliveries; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA (WPS) **[21-1002](#)**
- Attachments:** [04122022 WPS 7-10 B-L.pdf](#)
[04122022 WPS 7-10 Presentation.pdf](#)
- 7-11** Authorize the General Manager to negotiate an agreement consistent with the draft terms of the Metropolitan Water District/Inland Empire Utilities Agency Exchange Agreement; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA (WPS) **[21-1003](#)**
- Attachments:** [04122022 WPS 7-11 B-L.pdf](#)
[04122022 WPS 7-11 Presentation.pdf](#)
- 7-12** Authorize the General Manager to: (1) secure one-year water transfers with various water districts north of the Sacramento-San Joaquin River Delta for up to 75,000 acre-feet of additional supplies; (2) secure storage and conveyance agreements with the Department of Water Resources and various water districts to facilitate these transfers; (3) pay up to \$60 million from the State Water Project Budget for such transfers; and grant final decision-making authority to the General Manager subject to the terms set forth in this letter; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA (WPS) **[21-1004](#)**
- Attachments:** [04122022 WPS 7-12 B-L .pdf](#)
[04122022 WPS 7-12 Presentation.pdf](#)
- 7-13** Appropriate \$20 million, and authorize an amendment to the 2019 Reservoir Project Agreement with the Sites Project Authority to allow participation in the Sites Reservoir Project Amendment 3 Workplan; the General Manager has determined that the proposed actions are exempt or otherwise not subject to CEQA (WPS) **[21-1005](#)**
- Attachments:** [04122022 WPS 7-13 B-L .pdf](#)
[04122022 WPS 7-13 Presentation.pdf](#)

7-14 Declare Water Supply Condition; adopt supporting resolution; and authorize the General Manager to finalize a Water Supply Allocation for portions of the service area; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA. [WITHDRAWN] [21-1058](#)

7-15 Review and Express Support for the Bay-Delta Watershed Voluntary Agreements; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA. [WITHDRAWN] (WPS) [21-1060](#)

7-16 Express support for SB 991 (Newman, D-Fullerton): Public contracts: progressive design-build: local agencies; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA (CL) [21-1006](#)

Attachments: [04122022 CL 7-16 B-L.pdf](#)
[04112022 CL 7-16 Presentation.pdf](#)

7-17 Report on Baker Electric, Inc. v. Metropolitan Water District of Southern California, et al., (Los Angeles Superior Court Case No. 21STCV15612) regarding Metropolitan's CRA 6.9 kV Power Cables Replacement Project, Contract No. 1915; authorize an increase in the maximum amount payable under contract with Musick, Peeler & Garrett LLP, for legal services by \$600,000 to an amount not to exceed \$900,000; and authorize an increase in the maximum amount payable under contract with Exponent, Inc. for consultant services by \$300,000 to an amount not to exceed \$400,000; the General Manager has determined the proposed action is exempt or otherwise not subject to CEQA. [Conference with legal counsel - existing litigation; to be heard in closed session pursuant to Gov. Code Section 54956.9(d)(1). [SUBJECT REVISED 4/7/2022] (LC) [21-1008](#)

7-18 Authorize settlement of John Campbell v. The Metropolitan Water District of Southern California Workers Compensation Appeals Board, Riverside, Case Numbers ADJ11262832, ADJ9311537, ADJ7783020, and ADJ8290584; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA [Conference with legal counsel – existing litigation; to be heard in closed session pursuant to Government Code Section 54956.9(d)(1)] (LC) [21-1041](#)

**** END OF CONSENT CALENDAR ITEMS ****

8. OTHER BOARD ITEMS - ACTION

NONE

9. BOARD INFORMATION ITEMS

9-1 Report on Conservation

[21-1009](#)

Attachments: [04122022 BOD 9-1 Report.pdf](#)

9-2 Information on a proposed Water Shortage Emergency Condition and Emergency Water Conservation Program to Preserve Metropolitan's Supplies in the State Water Project-Dependent Areas. [SUBJECT REVISED 4/8/2022]

[21-1065](#)

Attachments: [04122022 WPS 9-2 B-L.pdf](#)
[04122022 WPS 9-2 Presentation.pdf](#)

10. OTHER MATTERS

NONE

11. FOLLOW-UP ITEMS

NONE

12. FUTURE AGENDA ITEMS

13. ADJOURNMENT

NOTE:

Each agenda item with a committee designation will be considered and a recommendation may be made by one or more committees prior to consideration and final action by the full Board of Directors. The committee designation appears in parenthesis at the end of the description of the agenda item e.g. (E&O, BF&I). Committee agendas may be obtained from the Executive Secretary.

Requests for a disability related modification or accommodation, including auxiliary aids or services, in order to attend or participate in a meeting should be made to the Executive Secretary in advance of the meeting to ensure availability of the requested service or accommodation.



City of
**Santa
Monica**

Sustainable Water Supply Program

4/12/2022

City of Santa Monica – Water Resources Division



93,000+ residents
2,700+ commercial
customers



Drinking water and
fire protection



groundwater (local)
surface water (MWD)



Sewer collection and
recycled water

9 million gallons
of high-quality drinking
water daily

14 million gallons
of wastewater captured
and delivered for treatment
each day

77,000 gallons
per day of recycled
water

**4 water storage
reservoirs**

totaling 40 million gallons



City of
**Santa
Monica**

Goals of the City's Sustainable Water Master Plan

- Long term cost benefits for rate payers
- Diverse, sustainable, & drought resilient water supply to support a sustainable community
- Reduction of energy footprint to support carbon reduction goals for the City



PLAN AT A GLANCE

The CAAP is a guiding document that provides overarching policy direction to achieve the interim goal of an 80% reduction in emissions by 2050 and to increase Santa Monica's resilience to climate change hazards and impacts. This plan supports and enhances many existing plans and initiatives within the City. The CAAP also suggests new plans and actions to supplement ongoing efforts and create new initiatives.

CLIMATE ACTION

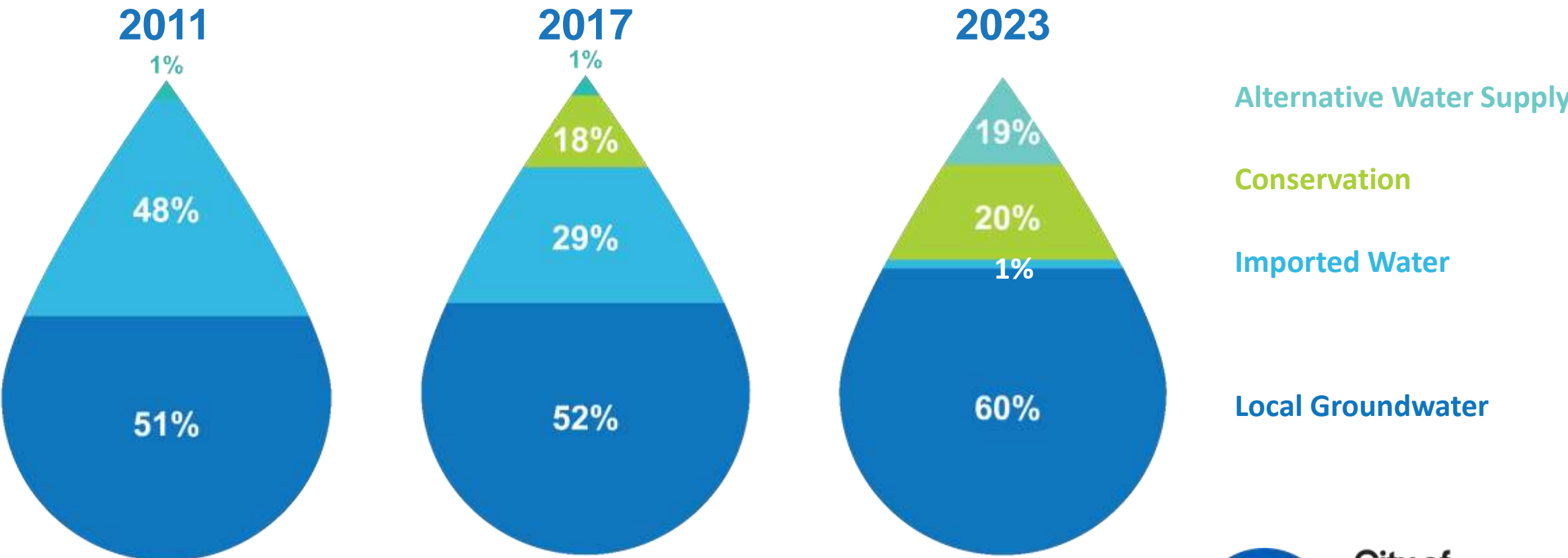
SECTOR	OBJECTIVES	SUPPORTING EFFORT
ZERO NET CARBON BUILDINGS	 <ul style="list-style-type: none">• Achieve 100% renewable grid electricity• Install 100 MW of local solar energy• Reduce fossil fuel use 20% in existing buildings• Discourage fossil fuels in new buildings	<ul style="list-style-type: none">• Zero net energy for new residential construction (2017)• Mandatory solar for new commercial construction (2017)
ZERO WASTE	 <ul style="list-style-type: none">• Divert 95% of materials from landfills	<ul style="list-style-type: none">• Plastic Bag Ban (2011)• Zero Waste Strategic Operations Plan (2014)• Disposable Food Serviceware Ordinance (2018)
SUSTAINABLE MOBILITY	 <ul style="list-style-type: none">• Convert 50% of local trips to foot, bike, scooter & skateboard• Convert 25% of commuter trips to transit• Convert 50% of vehicles to electric or zero emission	<ul style="list-style-type: none">• Land Use & Circulation Element (2010)• Bike Action Plan (2011)• Pedestrian Action Plan (2016)• Electric Vehicle Action Plan (2017)

CLIMATE ADAPTATION

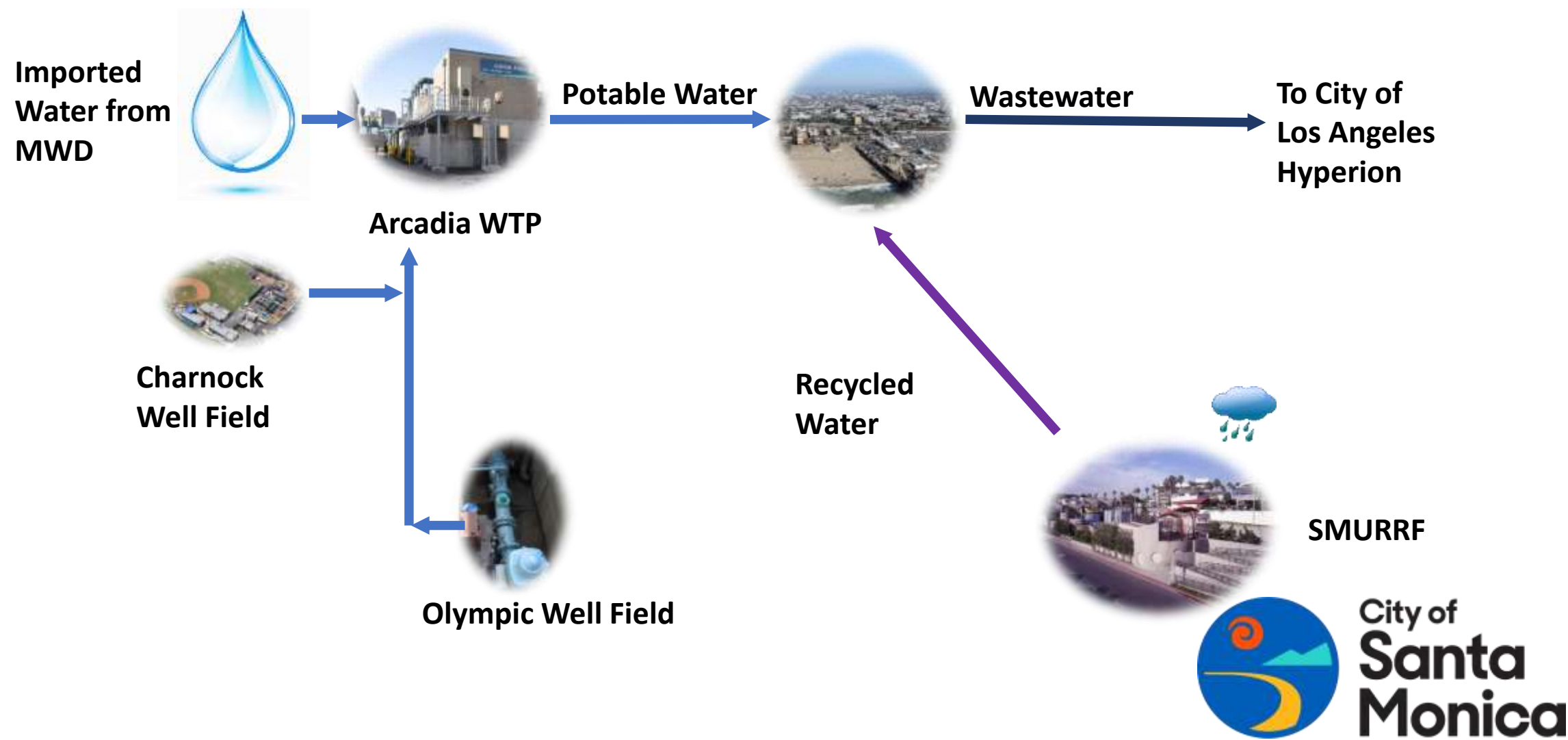
SECTOR	OBJECTIVES	SUPPORTING EFFORT
CLIMATE READY COMMUNITY	 <ul style="list-style-type: none">• Increase community resilience to climate change• Protect vulnerable groups from impacts• Integrate climate change impacts into City planning, operations & infrastructure projects	<ul style="list-style-type: none">• All Hazards Mitigation Plan (2015)• Santa Monica Organizations Active in Disaster (2018)
WATER SELF-SUFFICIENCY	 <ul style="list-style-type: none">• Achieve water self sufficiency by 2025	<ul style="list-style-type: none">• Water Neutrality Ordinance (2017)• Sustainable Water Master Plan (2018)
COASTAL FLOODING PREPAREDNESS	 <ul style="list-style-type: none">• Enhance natural systems to prevent damage from coastal flooding• Increase resilience of public and private assets in the coastal flood zone	<ul style="list-style-type: none">• Local Coastal Program Land Use Plan (2018)
LOW CARBON FOOD & ECOSYSTEMS	 <ul style="list-style-type: none">• Increase self-reliance through local food production• Reduce or sequester carbon emissions from food production, consumption, waste and landscape management and natural processes	<ul style="list-style-type: none">• Urban Forest Master Plan (2015)

The CAAP is not an element of the City's General Plan or a regulatory document for the purposes of streamlining the California Environmental Quality Act (CEQA) process. Any policy or ordinance described in the CAAP must be developed and adopted through a public review process.

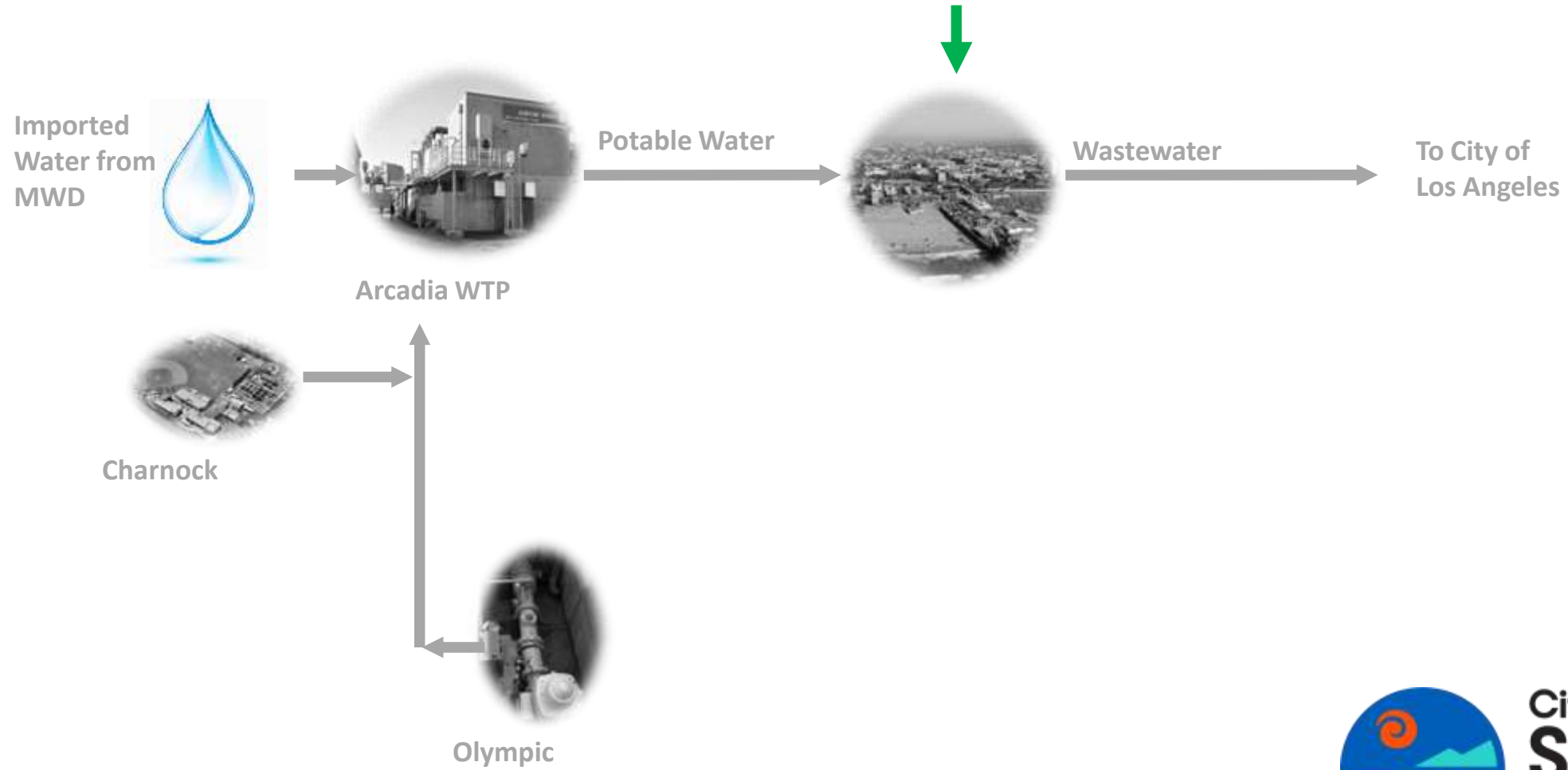
Diversifying Local Water Supplies for a Sustainable Future



One Water Approach to Maximize Local Water Resources

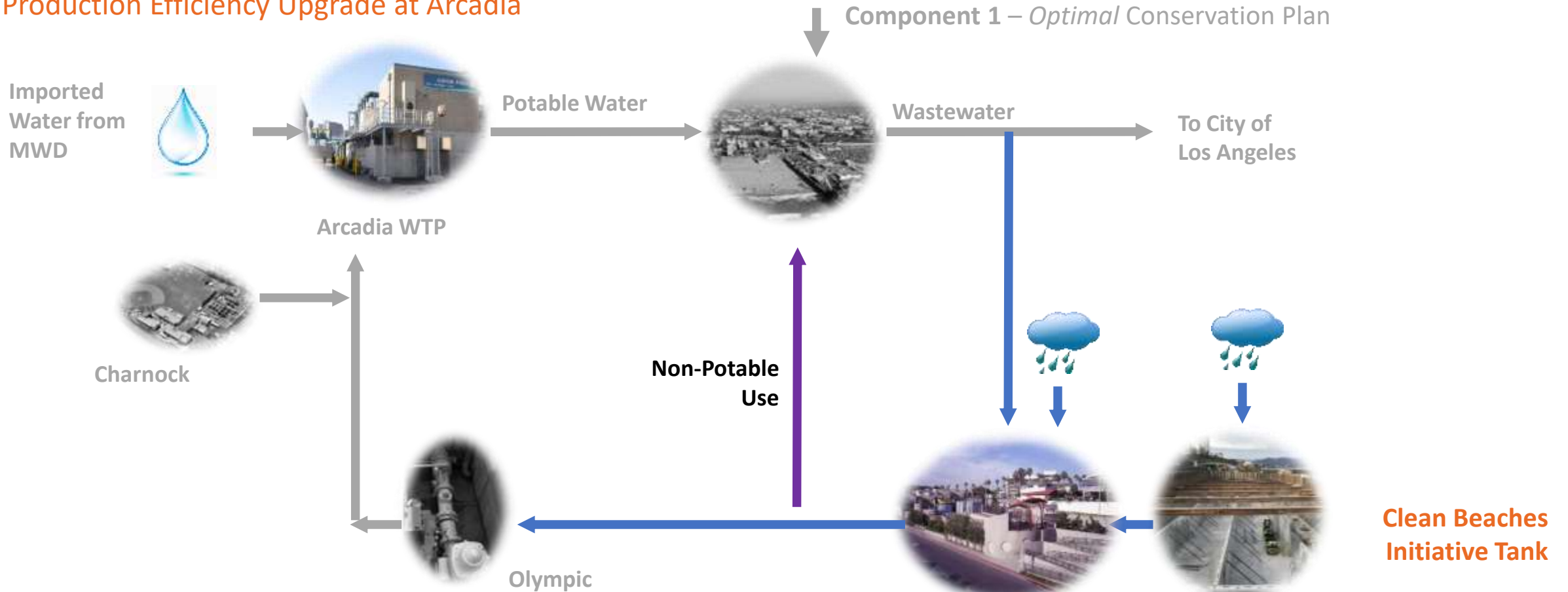


Component 1 – *Optimal* Conservation Plan



Component 2 – Alternative Water Supply

Production Efficiency Upgrade at Arcadia



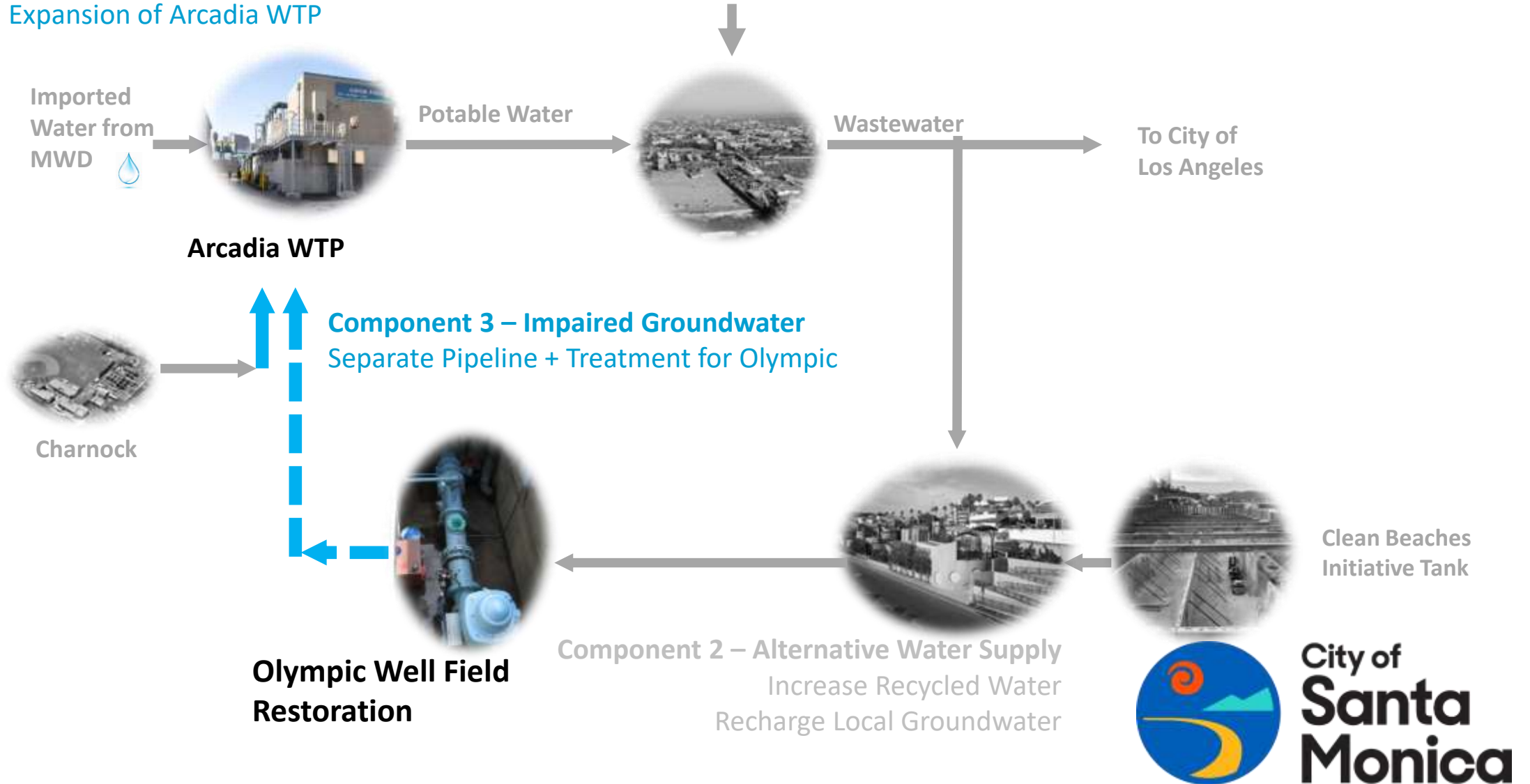
Component 2 – Alternative Water Supply

- Stormwater + Urban Runoff @ **SMURRF** for Non-Potable and Potable Reuse
- Stormwater Capture + Municipal WW @**SWIP** for Potable Reuse

Component 2 – Alternative Water Supply
Production Efficiency Upgrade at Arcadia

Component 3 – New Local Groundwater
Expansion of Arcadia WTP

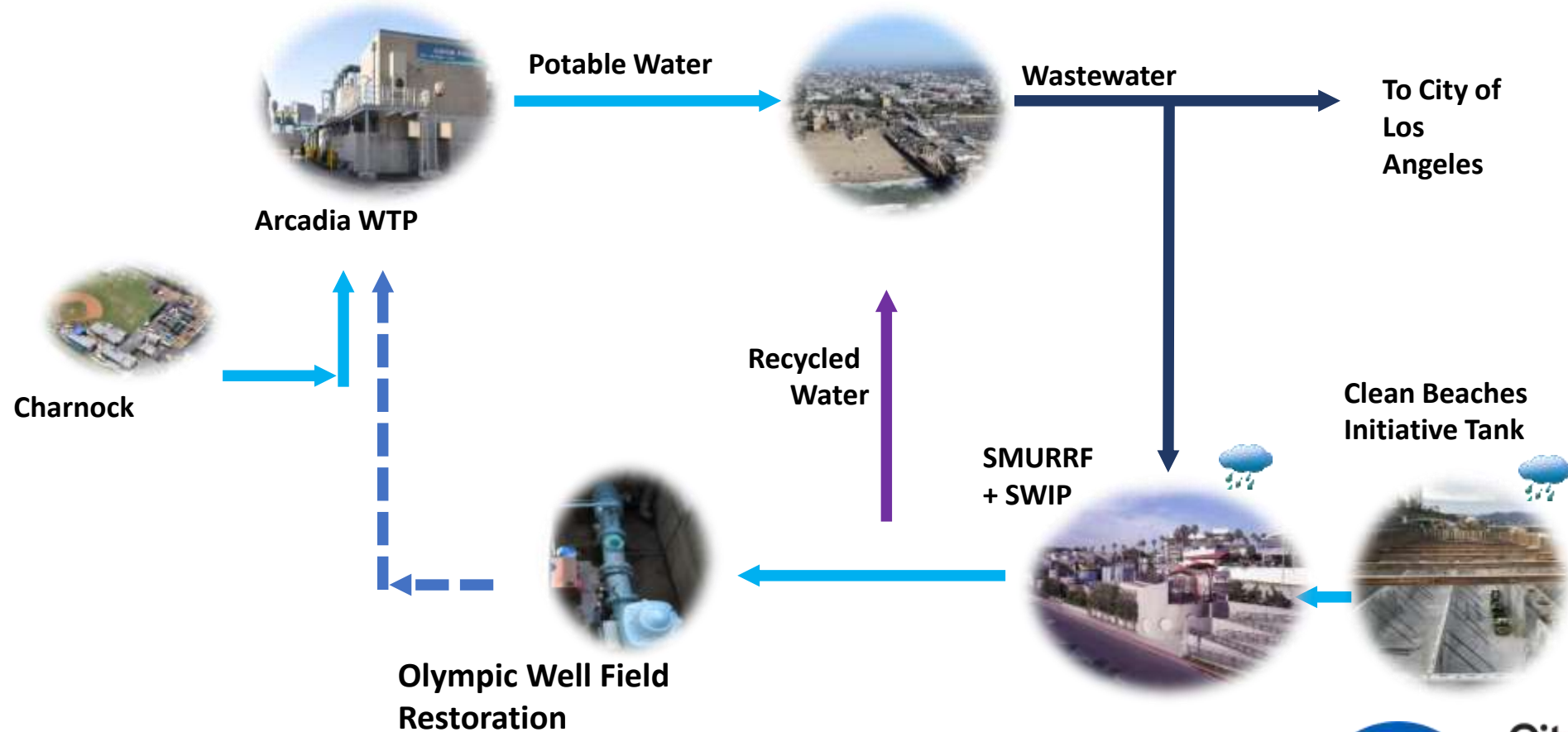
Component 1 – Optimal Conservation Plan



Component 1 – Conservation

Component 2 – Alternative Water Supply

Component 3 – New Local Groundwater





City of
**Santa
Monica**

Key Projects

Sustainable Water Infrastructure Project (SWIP)

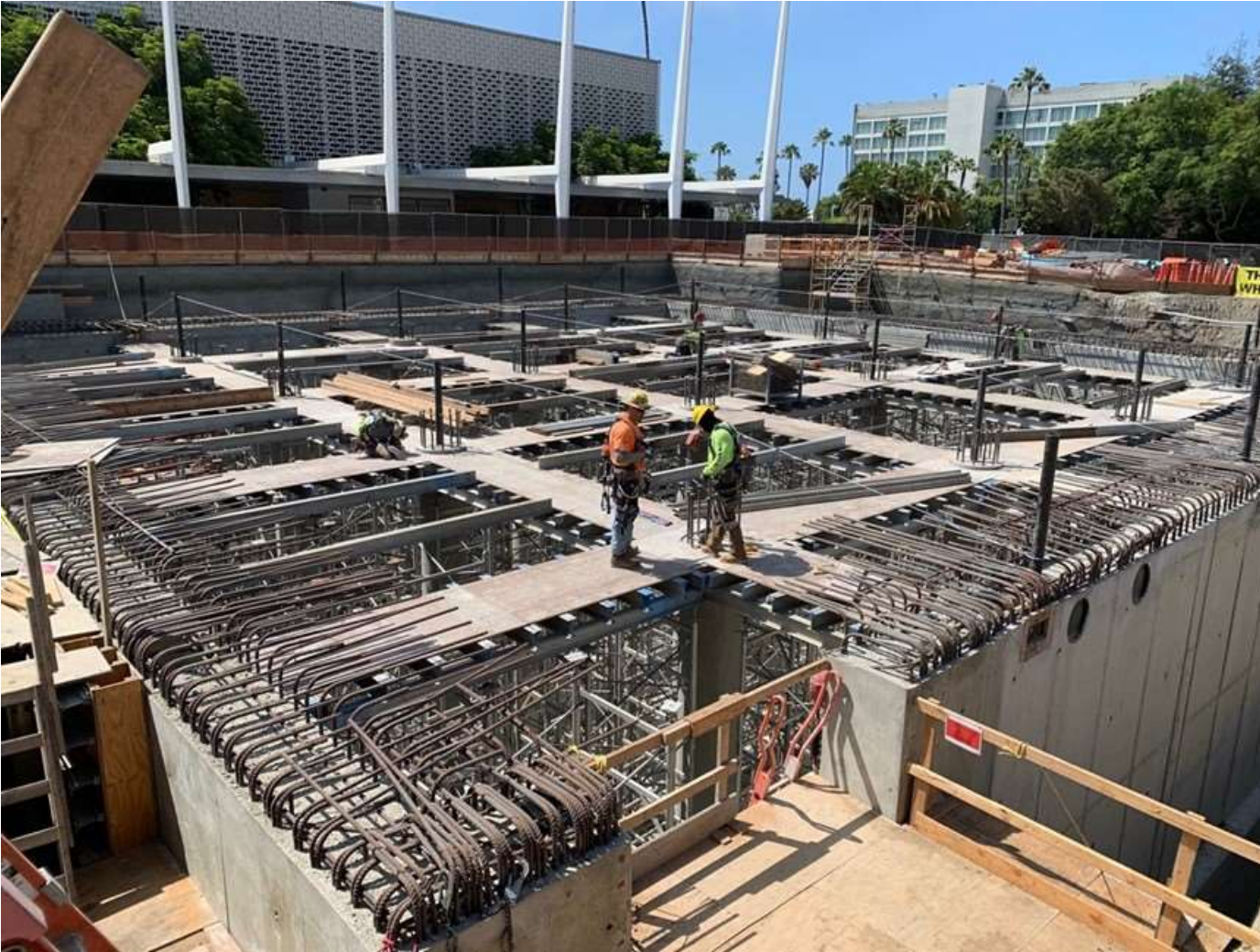


- Element 1
 - 1.5 MG Clean Beaches Tank
 - SMURRF Upgrades
- Element 2
 - New 1 MGD SWIP AWTF
 - 30/70 Blend of Stormwater and Wastewater
- Element 3
 - New 1.5 MG Stormwater capture tank

SWIP's Multiple Benefits

- Improves beach water quality
- Provides EWMP/MS4 compliance
- Drought resilient water supply
- Diversifies City's water supply portfolio
- Increases recycled water production
- Augments local groundwater supply
- Creates ~1,600 AFY of local water supply for the City

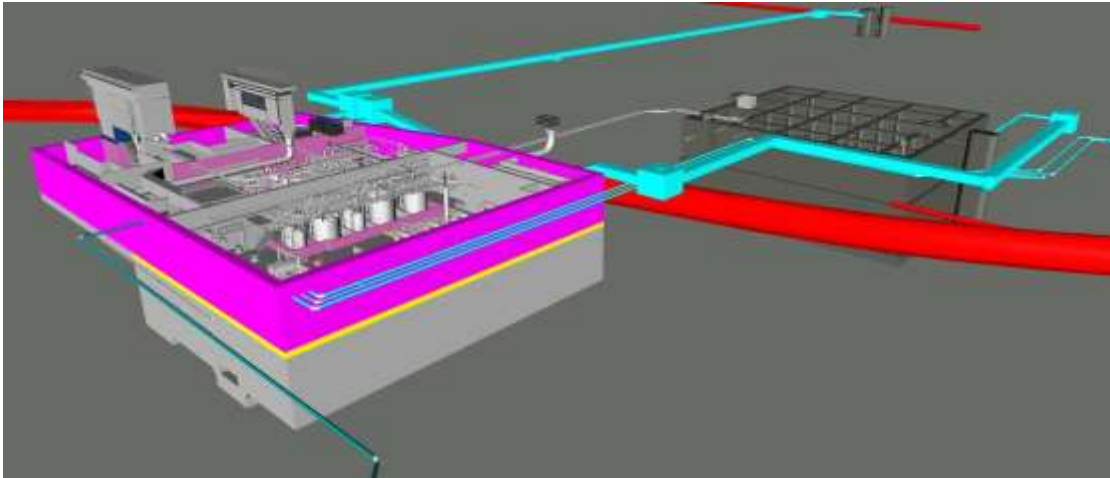
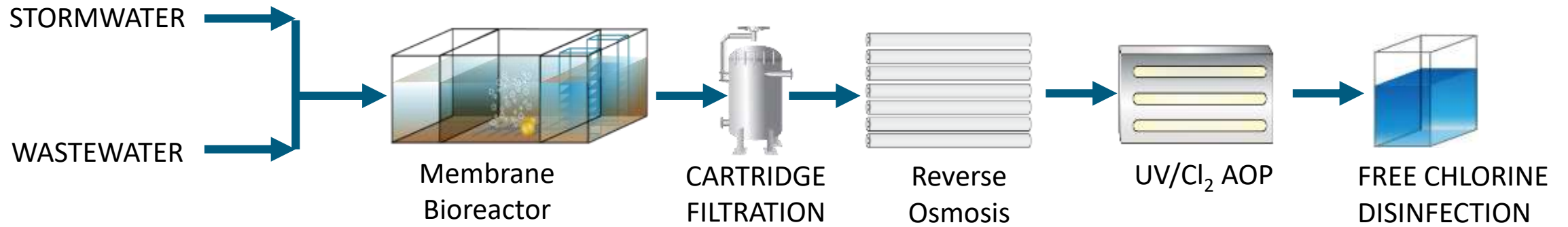
SWIP Stormwater Harvesting Tank



SWIP Advanced Water Treatment Facility

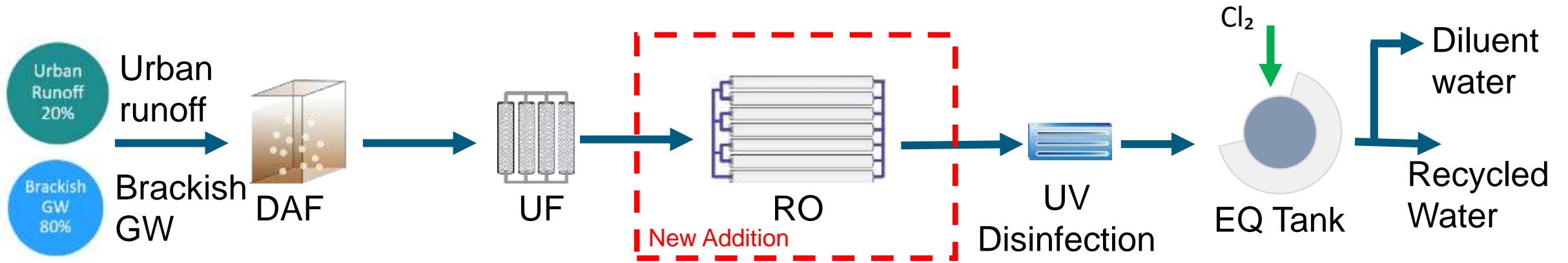


First Potable Reuse MBR in CA



- Source Water - Wastewater with up to 30% stormwater contribution when available
- Ability to meet 12-10-10 log removal for a Groundwater Replenishment Reuse Project within AWTF
- Produces up to 1,100 AFY of advanced treated recycled water

First Stormwater Direct Injection Project in CA

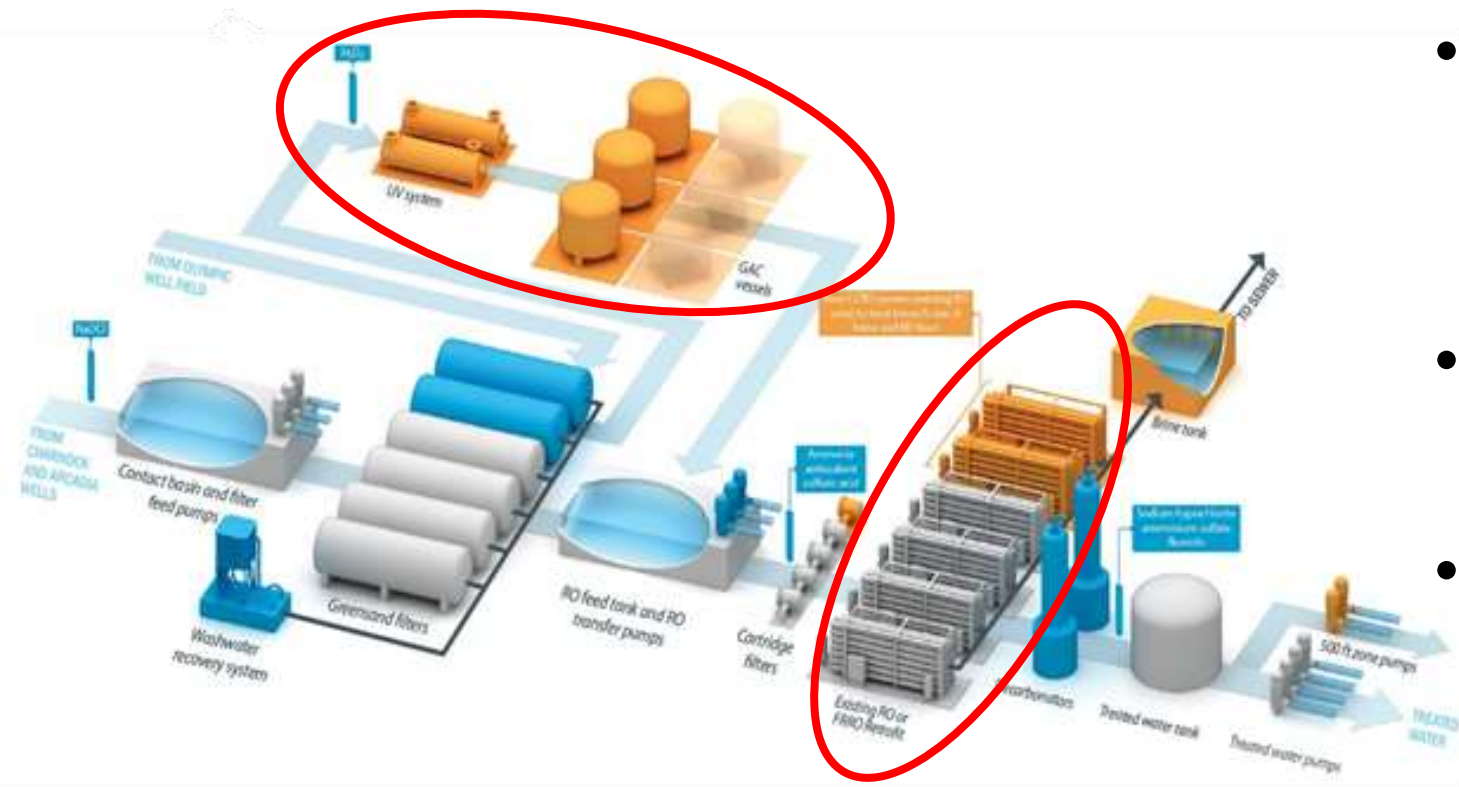


- Provides pollution control for Santa Monica Bay via stormwater diversion
- Produces Title 22 Groundwater Replenishment Reuse Project ***Diluent Water***
- Produces up to 500 AFY of diluent water



Olympic Well Field Restoration and Arcadia WTP Expansion

Key Project Elements:



- New 3 mgd UV-AOP + GAC treatment system to restore Olympic Well Field
- Expand brackish desalter from 10 to 13 mgd
- Increase RO recovery to $\geq 90\%$

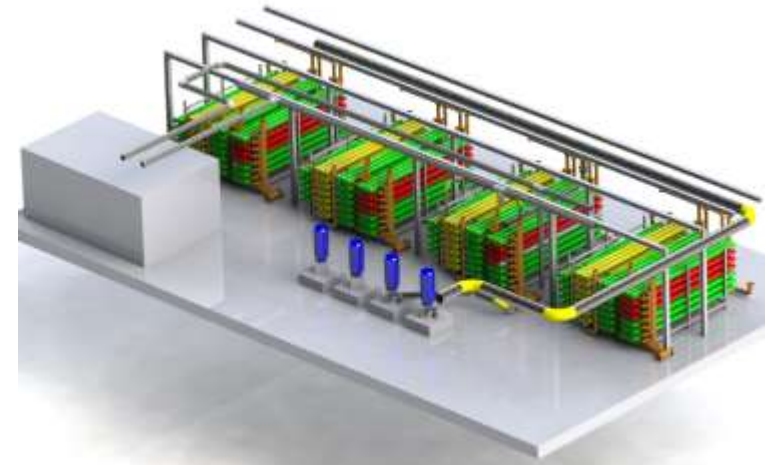
Is the Concentrate Worth the Squeeze?



Existing RO System



Closed Circuit RO (CCRO)



Flow Reversal RO (FRRO)

- Increase RO system recovery to $\geq 90\%$ to increase local water supply
- Side-by-side pilot testing of CCRO vs FRRO

First Flow Reversal RO in the United States

- Stable operations at high recovery $\geq 90\%$
- Ability to retrofit existing RO skids
- Lower operation and life-cycle cost
- Funding flexibility
- Operation flexibility
- Relatively lower risk profile

3D concept Design – Before (original design)

Front view

Back view



3D concept Design- After + additional parts

Front view

Back view



Funding Partners

- State Water Resources Control Board: Clean Water SRF \$75 million loan for SWIP
- Department of Water Resources: Water Desalination Grant Program - \$10 million construction grant for the Production Efficiency Enhancement at Arcadia WTP
- State Water Resources Control Board: Prop 1 Stormwater Grant - \$8.77 million for SWIP stormwater tank
- Los Angeles County: Measure W Safe Clean Water Program - \$7.5 million to support stormwater capture and treatment components of the SWIP.
- Metropolitan Water District of Southern California: Local Resources Program for \$19.6 million over 25 years for water produced by SWIP and the Production Efficiency Enhancement Project.
- Water Revenue Bond - \$78 million



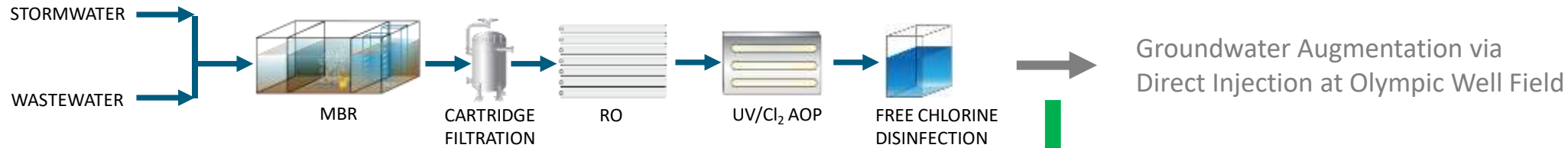
Project Partners



CALIFORNIA DEPARTMENT OF
WATER RESOURCES



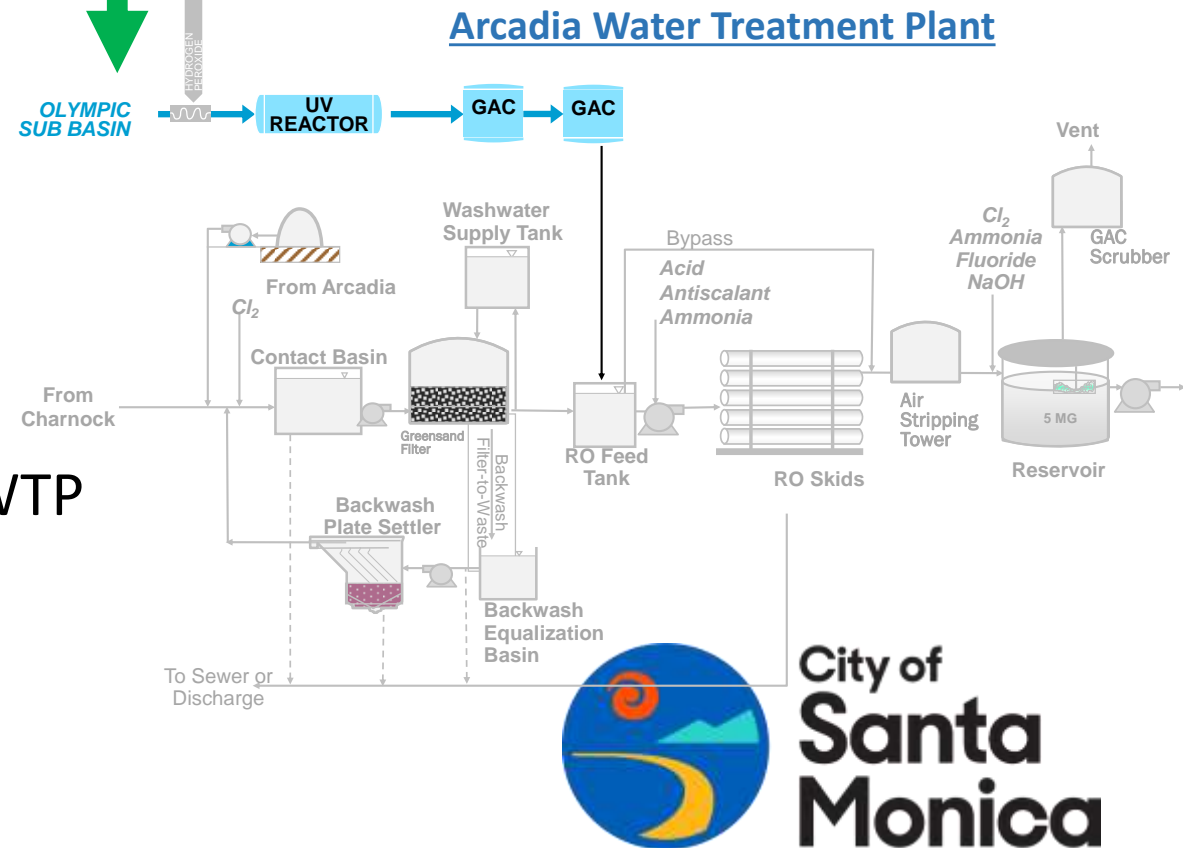
Looking to Our Future.....Direct Potable Reuse?



Sustainable Water Infrastructure Project

Future Potable Reuse – Raw Water Augmentation?

- Pending DDW guidelines in 2023
- <10% Contribution in Raw Water to Arcadia WTP
- Additional treatment through UV/H₂O₂ AOP, GAC, and RO at Arcadia WTP
- Existing Arcadia WTP is a permitted 97-005 multi-barrier treatment facility





THANK YOU...

April 12, 2022 Board Meeting

Item 5A



Metropolitan Water District of Southern California Summary of Events

Attended by Directors at Metropolitan's Expense in March 2022

Date(s)	Location	Meeting Hosted by:	Participating Director(s)
March 10	Virtual	Association of California Water Agencies (ACWA) 2022 Virtual Legislative Symposium	Russell Lefevre Glen Peterson
March 17-18	Virtual	Stegner Center and Water & Tribes Initiative Symposium: The Colorado River Compact: Navigating the Future	David DeJesus



● Chairwoman of the Board Monthly Activity Report – March 2022

Summary

This report highlights activities of the Chairwoman of the Board during the month of March 2022 on matters relating to The Metropolitan Water District of Southern California's business.

Monthly Activities

March 1

- Participated via teleconference with Assembly Member Albert Muratsuchi, General Manager Hagekhalil, Assistant General Manager Zinke, and legislative staff to discuss Metropolitan's legislative proposal on alternative delivery methods for the construction of Metropolitan's emergency drought projects and proposed Regional Recycled Water Project
- Participated via teleconference with Assembly Member Laura Friedman, General Manager Hagekhalil, Assistant General Manager Zinke, and legislative staff to discuss Metropolitan's legislative proposal on alternative delivery methods for the construction of Metropolitan's emergency drought projects and proposed Regional Recycled Water Project
- Participated via teleconference with General Manager Hagekhalil to discuss matters of the Board

March 2

- Participated via teleconference in West Basin Municipal Water District's Caucus meeting
- Participated via teleconference with Director Ramos and outside legal counsel Lance Olson regarding ethics related matters

March 3

- Participated via teleconference with the City of Carson Mayor Lula Davis-Holmes, General Manager Hagekhalil, and agency staff to discuss the Regional Recycled Water Project located in Carson, CA
- Participated via teleconference and provided remarks at the BizFed's Advocacy committee meeting
- Participated via teleconference with General Manager Hagekhalil to discuss matters of the Board

March 7

- Participated via teleconference in Metropolitan's Engineering and Operations Committee meeting
- Participated via teleconference in Metropolitan's Water Planning and Stewardship Committee meeting
- Participated via teleconference in Metropolitan's Communications and Legislation Committee meeting
- Participated via teleconference in Metropolitan's Finance and Insurance Committee meeting

March 8

- Participated via teleconference in Metropolitan's Real Property and Asset Management Committee meeting
- Participated via teleconference in Metropolitan's Organization, Personnel, and Technology Committees meeting
- Participated in Metropolitan's Board meeting, Los Angeles
- Participated in Metropolitan's Special Executive Committee meeting, Los Angeles

March 9

- Participated via teleconference with Senator Josh Newman, General Manager Hagekhalil, Assistant General Manager Zinke, and legislative staff to discuss Metropolitan's legislative proposal on alternative delivery methods for the construction of Metropolitan's emergency drought projects and proposed Regional Recycled Water Project.
- Participated via teleconference with Senator Maria Elena Durazo, General Manager Hagekhalil, Assistant General Manager Zinke, and legislative staff to discuss Metropolitan's legislative proposal on alternative delivery methods for the construction of Metropolitan's emergency drought projects and proposed Regional Recycled Water Project.
- Participated via teleconference with Assembly Member Miguel Santiago, General Manager Hagekhalil, Assistant General Manager Zinke, and legislative staff to discuss Metropolitan's legislative proposal on alternative delivery methods for the construction of Metropolitan's emergency drought projects and proposed Regional Recycled Water Project.
- Participated via teleconference with Ethics Officer Salinas to discuss ethics related matters

March 10

- Participated via teleconference with Assistant General Manager Kasaine to discuss upcoming Diversity, Equity, and Inclusion initiatives
- Attended the city of Gardena's State of the City 2022 event, Gardena
- Participated via teleconference with Director Ramos and outside legal counsel Lance Olson regarding ethics related matters

March 11

- Participated via teleconference with California Assembly Chief of Staff Nick Hardeman, Chief Policy Advisory Kip Lipper, General Manager Hagekhalil, Assistant General Manager Zinke, and legislative staff to discuss Metropolitan's legislative proposal on alternative delivery methods for the construction of Metropolitan's emergency drought projects and proposed Regional Recycled Water Project.
- Participated via teleconference with Director Ramos and outside legal counsel Lance Olson regarding ethics related matters

March 13 - 17

- Attended the Los Angeles Area Chamber of Commerce Access D.C. conference, Washington DC

March 14

- Participated via teleconference with Senator Ben Allen, General Manager Hagekhalil, Assistant General Manager Zinke, and legislative staff to discuss Metropolitan’s legislative proposal on alternative delivery methods for the construction of Metropolitan’s emergency drought projects and proposed Regional Recycled Water Project

March 15

- Met with Congresswoman Karen Bass, Executive Legislative Representative Schneider, and staff to discuss Metropolitan’s key water priorities, Washington, D.C.

March 16

- Met with Congresswoman Grace Napolitano, General Manager Hagekhalil, Executive Legislative Representative Schneider, and staff to discuss Metropolitan’s key water priorities, Washington, D.C.
- Met with Congresswoman Maxine Waters, Executive Legislative Representative Schneider, and staff to discuss Metropolitan’s key water priorities, Washington, D.C.
- Participated via teleconference with outside legal counsel Lance Olson to discuss ethics related matters

March 17

- Participated via teleconference with General Counsel Scully to discuss matters of the Board

March 18

- Participated via teleconference with General Manager Hagekhalil to discuss matters of the Board

March 21

- Attended and provided remarks at a joint press conference with the State Secretary for Natural Resources Wade Crowfoot, Los Angeles Department of Water and Power Manager Delon Kwan, General Manager Hagekhalil, and Theodore Payne Foundation Executive Director Evan Meyer to communicate the severity of the current drought and offer residents tips and rebate information to help them conserve water, Sun Valley
- Attended the California Environmental Voters Event featuring a discussion on Water Reuse and Reclamation Policy and Potential, Los Angeles

March 22

- Participated via teleconference in Metropolitan’s Integrated Resources Planning Committee meeting
- Participated via teleconference in Metropolitan’s Executive Committee meeting
- Participated via teleconference in Metropolitan’s Special Finance and Insurance Committee meeting
- Participated via teleconference in Metropolitan’s Special Board meeting

March 23

- Participated via teleconference with outside legal counsel Lance Olson to discuss ethics related matters

- Participated via teleconference in an introduction meeting with 3i's Principle Consultant Mohsen Mortada

March 24

- Participated via teleconference with General Manager Hagekhalil to discuss matters of the Board

March 28

- Participated via teleconference with General Manager Hagekhalil to discuss matters of the Board

March 29

- Participated via teleconference in Metropolitan's Special Board meeting

March 30

- Participated via teleconference in the California African American Water Education Foundation Special Board meeting

March 31

- Attended the City of Beverly Hills New Water Treatment Facility Ribbon Cutting Ceremony, Beverly Hills



General Manager's Monthly Report



April 12, 2022
Activities for the Month of March 2022



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Message from the General Manager

We head into April after a dry and thirsty start to the year. The context of Earth Day 2022 is sobering: severe drought and climate disruptions have shrunk the snowpack, altered the passing of seasons, and put at risk the water supplies of tens of millions of people.

I am buoyed, however, by the commitment of our workforce and the readiness of leaders all around me to forge solutions to our present crises.

I recently spent two days touring the Bay Delta and met with property owners, activists, elected officials and scientists who are envisioning a more sustainable future. I visited farms that could share land during the rainy season so that flood waters can benefit fish and wildlife. I saw up close the interface of urban and wild lands where a shared interest in water quality could help communities realize the potential for economic and recreational activity.

Standing on the levee, one is reminded that the water at the core of Met's mission is relied upon multiple times over. In the river it serves wildlife and recreation and commerce. Behind the dam it drives clean hydropower. It is at the foundation of local economies of all kinds. We grow our food with it, drink it, clean with it, and, in the best cases, reuse it. Every drop is precious, and too often its value and potential are underappreciated.

Our "One Water" approach recognizes the interconnected nature of finite water resources and seeks to integrate planning for long-term resilience and reliability to meet both community and ecosystem needs. Only by working together and harnessing the expertise of our dedicated employees, can we secure true sustainability, through a renewed commitment to conservation, innovative approaches to water management, inclusive planning and dialogue, and major investments to modernize our infrastructure.

We are one,

Adel



“Now is the time to make investments, big and small, to ensure the reliability of our water supply.”



Executive Summary

This executive summary is added to this report to provide a high-level snapshot of a key accomplishment from each area of the organization. Detailed information is reported in the pages following this summary.

Administrative Services

The Enterprise Content Management (ECM) Team reached an important milestone in the Program by completing prerequisite work (ECM Phase I) necessary to deploy an ECM System to manage our electronic files in the cloud (ECM Phase II). The Professional Services Contracting Team completed Request for Proposals (RFP) 1254 – Control System Upgrade. A highly visible and integral acquisition is to upgrade Metropolitan’s current supervisory control and data acquisition system (SCADA) to obtain higher levels of functionality and security. The essential services include designing, programming, configuring, manufacturing or procuring, and commissioning the upgraded SCADA system.

Bay-Delta Initiatives

In March, scientific studies related to the Bay-Delta that Metropolitan funded and/or collaborated on were published in peer-reviewed scientific journals. The studies address the risk of pesticide contaminants in salmon habitats, juvenile salmon growth rates in different habitats, the impacts of drought on Delta smelt reproduction, and development of pathogen screening methods for Delta smelt. These published studies contribute toward Metropolitan’s objectives to support strong science to inform management actions that protect the Delta ecosystem and State Water Project water supply reliability, reduce stressors, and inform habitat restoration efforts.

Chief Financial Officer

Water Transactions for February 2022 totaled 104.3 thousand acre-feet (TAF), which were 3.1 TAF higher than the budget of 101.2 TAF and translate to \$96.2 million in revenues for February 2022, which were \$3.2 million higher than the \$93.0 million budget. Year-to-date water transactions through February 2022 were 1,112.5 TAF, which were 48.8 TAF higher than the budget of 1,063.7 TAF. Year-to-date water revenues through February 2022 were \$1,002.8 million, which were \$30.5 million higher than the budget of \$972.3 million. In February 2022, Accounts Payable processed approximately 2,800 vendor invoices for payment and took advantage of about \$1,300 in discounts.

Colorado River

Another dry month in the Colorado River Basin has the Department of the Interior concerned about the potential for Lake Powell to fall below minimum power pool elevation within the next 18 months. Federal officials have been meeting with the Basin States to discuss options to reduce that threat, including reducing releases from Lake Powell this summer.

Engineering Services

While the 2021/2022 shutdown season is winding down, Engineering is getting ready for the next shutdown season. During March nine contracts were out for bid by contractors, including relining of a portion of the Second Lower Feeder and the Orange County Feeder.

Environmental Planning

The Environmental Planning Section negotiated and executed a new agreement with the California Department of Fish and Wildlife (CDFW) Regions 5 and 6 for dedicated CDFW staff support. The agreement will be utilized on an on-call basis to streamline and expedite regulatory permitting for critical capital projects and O&M activities.

External Affairs

Chairwoman Gray and GM Hagekhalil joined with California Natural Resources Secretary Crowfoot and LA DWP’s Managing Water Utility Engineer Kwan for a well-attended media event calling on Southern Californians to increase conservation efforts and use more native plants as a water saving strategy during this historic drought. The event, which was held at the Theodore Payne headquarters, was covered by CBS2, NBC4, Spectrum News, Univision, KNX, KFI and the San Fernando Sun. (March 21)

Human Resources

This month HR completed two high level recruitments with the successful hiring of the new Chief Sustainability, Resiliency and Innovation Officer and the new Equal Employment Opportunity Officer.

Information Technology

IT Group worked diligently to support the Board of Directors and executed the first hybrid board and committee meetings. In preparation for the return of in-person board and committee meetings, IT technical staff and iHUB tested the hardware, software and integration of the audio and video systems. The team continues to work collaboratively with key stakeholders for future on-site board and committee meetings, as well as the required in-person resources needed to support the meetings and logistics.

Real Property

A new ten-year lease was executed for the continued farming of 585 acres in Palo Verde Valley. This new lease replaces the lease that was executed in 2017 with updated terms and conditions and encourages water conservation with fallowing, conservation and innovative farming financial incentives included in the new lease.

Security Management

Western Region C&D partners with Security to safeguard drinking water integrity.

Water Resource Management

WRM staff has been working extensively with member agencies who are currently receiving Metropolitan's State Water Project (SWP) supply. The group is regularly reporting drought-response activities and developing a State Water Project Conservation Plan to preserve the limited supply available in 2022.

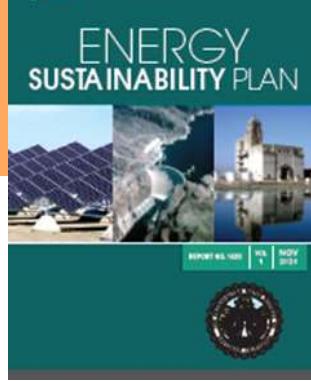
Water System Operations

While maintaining approximately 350 miles of unpaved dirt roads along its vast system, Metropolitan uses water trucks for dust abatement, soil compaction, and fire watch. Staff developed a new, innovative approach to refilling water trucks in the field utilizing our existing infrastructure and raw water pipelines. This maintenance improvement saves both time and fuel, while meeting all environmental requirements in an efficient and flexible manner.

Upcoming Board Items

ANTICIPATED KEY ITEMS OF FOCUS – NOT AN EXHAUSTIVE LIST
SCHEDULE SUBJECT TO CHANGE

Month	Key Board Items
May	<ul style="list-style-type: none">• Report on Bond Financing CY 2022• Presentation by Delta Conveyance Authority Regarding Delta Conveyance EIR Technical Support• Approve the Climate Action Plan• Update on Status of Recommendation from Independent Review of Workplace Concerns
June	<ul style="list-style-type: none">• Approve Bay-Delta Policies• Authorize payment for support of the Colorado River Board and Six-Agency Committee for FY 2022/23• Approve 500+ Plan Implementation Agreements• Update on Public Draft EIR Release on Delta Conveyance Project (Invited Presenter from California Department of Water Resources)
July	
August	<ul style="list-style-type: none">• Update on Delta Conveyance Public Draft EIR and Comments• Authorize an increase to agreement with Roesling Nakamura Terada Architects for final design and architectural services in support of the District Housing and Property Improvement Program
September	<ul style="list-style-type: none">• Oral Report on the Surplus Plan• Consider Project Labor Agreement Status



“Metropolitan, like all of us, is living in an era of constant change, from climate to regulation and the evolving impacts of the current pandemic. The challenge and the key component when implementing changes is to gain buy-in from all stakeholders, which is what we have strived for and incorporated in both project planning and execution”

*Ha Nguyen,
Principal Resource Specialist*

PROGRAM DESCRIPTION

In 2020, Metropolitan began the implementation of the Battery Energy Storage System (BESS) at its facilities. Taking advantage of the State of California’s incentive program, three BESS projects at Jensen, Skinner, and Weymouth treatment plants are currently underway. Paired with existing solar facilities on site, the BESS will store energy during lower cost and lower GHG emission periods and discharge energy for usage during higher energy cost periods in the evening hours.

IMPORTANCE TO METROPOLITAN

BESS is one of the key recommendations of Metropolitan’s Energy Sustainability Plan (ESP), and the implementation of these projects will provide electricity cost savings, improve operational flexibility and resiliency, and reduce GHG emission at these facilities. These projects also showcase the ability of Metropolitan employees to adapt to new technologies that increase efficiency and further the mission of providing reliable water supplies in a sustainable way. The success of these innovative projects is evident in the high degree of collaboration to gather input and address concerns, and make adjustments when and where appropriate as we proceed with the design and installation of the new battery storage systems at the three treatment plants.

The work supports the three I’s that are pillars of our foundation for success: *Integration* of smart water management into our infrastructure, *inclusion* of all voices to create our water future together, and *innovation* to ensure we look at different and creative ways to problem solve.

MEMORABLE MOMENT

Critical work was identified and planned accordingly to meet the milestones required to preserve the incentives awarded to Metropolitan’s projects. Despite the current supply chain disruptions, Metropolitan staff were able to secure the necessary materials and successfully complete critical site modifications as part of the preparations for the BESS installation.



Water Resources and Engineering



Water Resource Management

GM Strategic Priority #1: Resiliency

Objective #5 Ensure reliable State Water Project (SWP).

The Department of Water Resources (DWR) is initiating a project to design and install a debris catchment device in the State Water Project intake towers. This project is necessary to protect downstream valves and other infrastructure in case of concrete debris falling inside the intake tower during catastrophic events, such as a major earthquake. During the construction of this project, no water deliveries will be available via the intake towers, and DWR is working with Metropolitan to install barge pumps to maintain deliveries from Castaic Lake to the SWP-dependent areas.

Two Lake Perris-related dam safety projects are expected to be advertised for construction in 2022:

1. **Perris Dam Emergency Release Facility Project**—Scheduled to go out in the second quarter of 2022. This project aims to design and construct infrastructure necessary to safely convey an emergency release around the residential neighborhood to the Perris Valley drain.
2. **Perris Dam Outlet Tower Improvements**—Scheduled to go out in the third quarter of 2022, and 32.2 percent of the costs will be covered by recreation funding.

These projects will help improve the reliability of the SWP infrastructure.

Objective #6 Ensure access to sufficient water supplies to operate a full Colorado River Aqueduct in times of drought.

Staff attended meetings with other Lower Colorado River Basin State and federal representatives to discuss implementation of the 500+ Plan. The 500+ Plan aims to increase water storage in Lake Mead by a total of 500,000 acre-feet over the course of 2022 and 2023 through additional conservation to offset rapidly declining reservoir levels in the Basin. The overarching funding agreement for the 500+ Plan was signed in December 2021. In these March meetings, staff helped to finalize the cost-sharing framework for individual conservation projects.

Staff attended a Lower Colorado River Basin States meeting that included representatives from California, Nevada, Arizona, and the U.S. Bureau of Reclamation (USBR). In the meeting, USBR reported on reservoir conditions in Lake Powell and Lake Mead and presented USBR's current understanding of Glen Canyon Dam outlets that could be used to release water if Lake Powell drops below elevation 3,490 feet, the minimum elevation for generating power at the dam. USBR's presentation was in response to continued dry conditions and declining reservoir elevations in the Basin.

GM Strategic Priority #2: Sustainability

Objective #1 Complete the 2020 Integrated Water Resource Plan.

Phase one of the 2020 IRP nears completion. On March 11, staff met with the member agency managers to discuss and receive feedback on the draft findings of the Draft 2020 IRP Regional Needs Assessment. Staff considered all member agency feedback and incorporated revisions into a draft report that includes findings in five broad categories (State Water Project Dependent Areas, Storage, Demand Management, Imported Supplies, and Local Supplies), quantifies supply/demand gaps, and examines the effectiveness of generalized portfolio categories. The report documents the completion and findings of phase one of the 2020 IRP process. On March 22, the IRP Regional Needs Assessment Report was submitted for consideration by the Integrated Resources Plan Special Committee. The IRP Committee unanimously recommended that the Board adopt the 2020 Integrated Water Resources Plan Needs Assessment at the April 12 board meeting. Adopting the Regional Needs Assessment will allow the analysis and findings to serve as guidance for phase two of the IRP process, which will focus on implementation of policies and programs to address the findings identified in phase one.

Objective #4 Manage existing and develop new regional water management programs to maintain water supply reliability in the face of increasing water supply volatility.

WRM staff has been working extensively with member agencies who are currently receiving Metropolitan's State Water Project (SWP) supply. The group is regularly reporting drought-response activities and developing a State Water Project Conservation Plan to preserve the limited supply available in 2022.

WRM staff attended the groundbreaking ceremony in Long Beach for the Rancho Los Cerritos—Looking Back to Advance Forward project, as part of the Stormwater for Direct Use Pilot Program. The project commenced construction in late February and is estimated to be operational by September 2022. Upon completion, the project will capture and store virtually 100 percent of the stormwater on the 2.25-acre property for direct irrigation use. Metropolitan is funding \$324,800 toward the project's construction, monitoring, and reporting costs.

Objective #8 Implement Regional Conservation Program.

As dry conditions persist, Metropolitan staff continued efforts to implement the regional conservation program. Conservation outreach activities this month include:

- Holding a Water Efficient Landscape Dual Certification Program session in partnership with Municipal Water District of Orange County (MWDOC). The session focused on efficient landscaping, irrigation, and maintenance practices and had approximately 40 attendees.
- Hosting Model Water Efficient Landscape Ordinance (MWELO) training classes for roughly 60 city and county staff, as well as landscape professionals. MWELO aims to increase landscaping water efficiency and improve environmental conditions in the built environment.
- Participation in the Board of Directors Meeting for California Water Efficiency Partnership (CalWEP). CalWEP is a chapter of AWE and its mission is to maximize urban water efficiency and conservation throughout California.
- Presenting on Metropolitan's water efficiency programs at the Southern California Water Utilities Association monthly meeting.

GM Strategic Priority #3: Innovation

Objective #2 Collaborate with member agencies, water agencies and associations, and provide leadership for policy development, advocacy, outreach and education.

Staff attended and participated in the California Irrigation Institute's (CII) 60th Annual Conference. The California Irrigation Institute brings both agricultural and urban water leaders together to discuss water efficiency. Staff co-moderated a panel titled "Regenerative Agriculture: What it is, and Where are We Headed?" Staff is a member of the Board of Director of CII.

Staff participated in the Board of Directors Meeting for Alliance for Water Efficiency (AWE). AWE is a national water efficiency non-profit organization with over 500 members from all areas of water efficiency. AWE recently completed in partnership with Metropolitan and the City of Long Beach on a research report titled, "An Assessment of Water Affordability & Conservation Potential in Long Beach California". The report examined water affordability in the City of Long Beach and how water efficiency and conservation can help families lower their water and sewer bills. The Alliance of Water Efficiency's report ultimately found that the Long Beach-implemented water efficiency and conservation programs help lower the average water bill by up to 22 percent.

In addition, Metropolitan staff participated in a webinar with AWE and Long Beach to promote the release of the assessment. As a follow up to the assessment, Metropolitan is working with Long Beach and manufacturers Kohler and Whirlpool to provide direct installation of water efficient toilets and clothes washers in up to 100 homes within disadvantaged census tracts to further examine the potential for water efficiency to lower consumer costs and make water more affordable.

On March 29, Metropolitan staff hosted an online meeting with the member agencies to begin coordination on their Annual Water Supply and Demand Assessments, which will be due, beginning in 2022, to the California Department of Water Resources (DWR), by July 1 or within 14 days of receiving final State Water Project or Central Valley Project allocations, whichever is later. This is a new annual requirement that is part of the 2018 Conservation as a California Way of Life legislation and related to the Water Shortage Contingency Plans that were completed by each agency with their 2020 Urban Water Management Plans in 2021.

DWR started its collaboration with statewide stakeholders for the California Water Plan (CWP) Update 2023. The CWP, updated every five years, is the state's strategic plan for developing and managing California's water resources. DWR is leading the work and ultimately developing the final plan, while actively promoting coordination among state agencies and California's diverse water resources interests. On March 2, 2022, DWR hosted a public workshop covering the scope of Update 2023 and to convene the Policy Advisory Committee (PAC). The PAC comprises 41 member organizations, including Metropolitan. The purpose of the PAC is to inform and advise DWR and state agency partners, share and explore innovative ideas, inform content development, and promote a common understanding for enhancing the resilience of the state's watersheds. The intended outcome of Update 2023 is regional water resilience across California's watersheds centered around three central themes: 1) Promote climate change adaptations that ensure resilient water resources; 2) Support watershed-based, multi-sector resilience planning; and 3) Strengthen water equity. DWR has scheduled a series of stakeholder meetings and public webinars leading up to the anticipated release of the CWP Update 2023 Public Draft in the first quarter of 2023.

Water Resources and Engineering

(continued)

Objective #4 Implement Future Supply Actions Funding Program.

Staff provided testimony in support of the Doheny Ocean Desalination Project during a March 9, San Diego Regional Water Quality Control Board (SDRWQCB) permit hearing. The testimony reinforced the support letter Metropolitan submitted to the South Coast Water District—the project proponents. Metropolitan’s letter and testimony stressed the need for diversifying Southern California’s water resource portfolio to adapt to climate change and recognized the sustainability features of the project. The RWQCB approved the permits unanimously in a 4 to 0 vote. The next step in the permitting process will be consideration of the project’s coastal development permit by the California Coastal Commission.

Objective #5 Position Metropolitan as a leader in Open Water Data.

Staff participated in a board meeting of the California Water Data Consortium (Consortium) on March 22. The Consortium’s Board approved the one-year appointment of Adrian Covert of the Bay Area Council as Board Chair. The Consortium also re-elected Debbie Franco, Meredith Lee, and David Orth to serve on the Board for a term of three years. Agenda items included discussions of fundraising efforts and updates on pilot projects such as the Urban Water Data Reporting study. The Consortium is recruiting members and will be providing an update during Metropolitan’s Member Agency Manager’s meeting in April. Metropolitan helped launch the Consortium with a \$200,000 investment in 2020 and currently serves on the Consortium’s Board.

Objective #8 Explore and study current and new opportunities to reduce water demand.

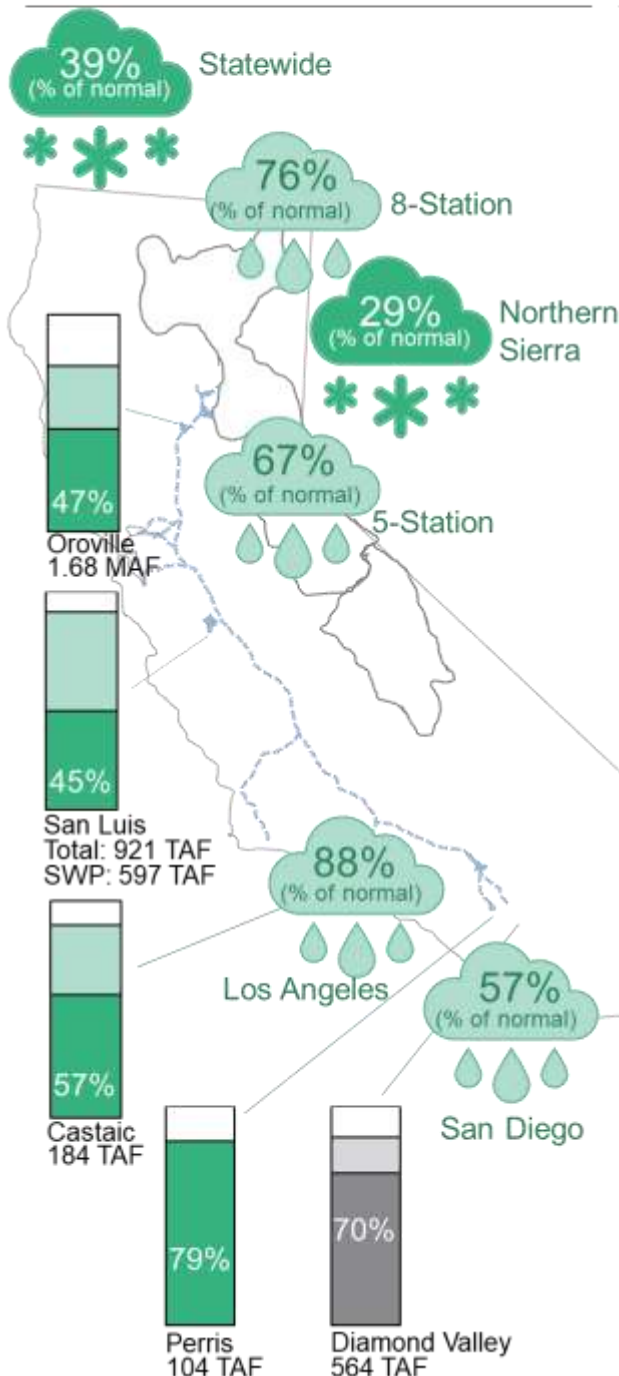
Staff led and participated in the evaporation control technologies workgroup. This workgroup was formed to study potential opportunities to reduce evaporation loss at Metropolitan’s canals and reservoirs as well as potential for solar power generation at the same time. The workgroup is formed with staff from Water Resource Management, Water System Operations, Engineering, and External Affairs groups and will start a second phase to the project. This workgroup is also tracking the \$20 million state sponsored pilot project at Turlock Irrigation District that aims to install solar panels over their irrigation canals to generate clean energy while hopefully reducing water evaporation.

Water Resources and Engineering

(continued)

State Water Project Resources

SWP Table A – 5% - 95,575 AF



Colorado River Resources

Projected CRA Diversions – 1,135,000 AF



Extended Report:

<http://mwdh2o.com/WSCR>

As of March 31, 2022

Bay-Delta Initiatives

Resiliency

Staff continued to participate in the collaborative groups called for in the 2019 Biological Opinions (BiOp) for the State Water Project (SWP) and the Central Valley Project (CVP), and in the 2020 Incidental Take Permit (ITP) for long-term operation of the SWP, to address science needs and inform management and operation of the water projects. Staff is collaborating with state and federal agencies to conduct planning for a migratory barrier at Georgiana Slough to reduce the diversion of juvenile salmonids from the Sacramento River into the interior and south Delta, as required by the ITP. The group is finalizing the monitoring plan, which describes the project, its location and infrastructure, and how its effectiveness will be monitored and analyzed.

Staff is participating in the Delta Coordination Group to develop and implement an expert elicitation regarding the Summer-Fall Habitat Actions considered for 2022 through the structured decision-making process as part of the BiOp/ITP. The elicitation will address how contaminants may change in response to the actions and how changes in contaminants may affect the vital rates of Delta smelt and zooplankton. The two actions planned for 2022 are the Suisun Marsh Salinity Control Gate Operations and the North Delta Foodweb Enhancement.

Sustainability

Delta Conveyance

The California Department of Water Resources (DWR) is continuing to develop a public Draft Environmental Impact Report (EIR) under the California Environmental Quality Act for the Delta Conveyance Project. The U.S. Army Corps of Engineers (USACE), as part of its permitting review under the Clean Water Act and Rivers and Harbors Act, is preparing an Environmental Impact Statement (EIS) to comply with the National Environmental Policy Act. DWR and USACE are planning to release draft environmental documents for public review in mid-2022.

Joint Powers Authorities

At its regularly scheduled March 17 Delta Conveyance Design and Construction Authority (DCA) Board of Director's meeting, the board of directors approved a resolution to amend the Joint Exercise of Power Authority (JEPA) to clarify the expiration date of the agreement during the planning phase. While the body of the JEPA does not have an expressed termination date, an expiration date was included when the Department of General Services approved a prior amendment. This amendment will extend the termination date of the agreement during the planning phase until June 30, 2025.

The regularly scheduled March 17 Delta Conveyance Finance Authority meeting was cancelled.

Sites Reservoir

At their joint March meeting, the Sites Project Authority Board (Authority Board) and the Sites Reservoir Committee (Reservoir Committee) gave the Executive Director authorization to submit the Sites Reservoir Project's (Project) water right application to the State Water Resources Control Board (State Water Board) including the associated application fee. The Authority Board and Reservoir Committee also directed staff to proceed with pivoting to Alternative 3 as the Preferred Project Alternative and adjusting to more environmentally protective diversion criteria that could potentially achieve a higher degree of permitting certainty while maintaining project affordability.

Alternative 3 would allow for a federal investment (through the United States Bureau of Reclamation [Reclamation]) in the Project of between 7 and 25 percent. Their current level of participation is 7 percent.

The Executive Director was also authorized to execute a proposal letter with the Environmental Defense Fund and The Nature Conservancy, to cooperatively develop terms and conditions for consideration in the Proposition 1 Benefit Agreement with the California Department of Fish and Wildlife (CDFW) to incorporate an Environmental Water Manager “pilot” as part of the Sites Project implementation. The goal of this pilot is to work with the non-governmental organization partners to determine the technical, legal, contractual, and statutory provisions necessary for the practical implementation of an Environmental Water Manager within the Sites Reservoir Project. Revisions to the Funding Credit and Reimbursement Policy were also approved to incorporate an opportunity cost fee and key terms for potential new participants, and priority system for admitting new participants was discussed.

Innovation

Science Activities

Staff co-authored two scientific papers published in March in peer-reviewed journals that reported on results from a study evaluating the bioavailability of pesticides in juvenile Chinook salmon habitat in the Sacramento River watershed. The study was funded by a Proposition 1 grant with cost-share from Metropolitan. The first paper published in the journal *Chemosphere* ([Bioavailability of legacy and current-use pesticides in juvenile Chinook salmon habitat of the Sacramento River watershed: Importance of sediment characteristics and extraction techniques - ScienceDirect](#)), evaluated the presence and bioavailability of pesticides in salmon habitats in a floodplain and the mainstem Sacramento River. Higher organochlorine pesticide concentrations were found in floodplains compared with riverine habitats, and overall, pesticides were less available during low-flow conditions. The second paper published in the journal *Environmental Pollution* ([Pesticide residues in juvenile Chinook salmon and prey items of the Sacramento River watershed, California – A comparison of riverine and floodplain habitats - ScienceDirect](#)), reported on the occurrence of pesticide residues in Chinook salmon, zooplankton, and macroinvertebrates from the Yolo Bypass floodplain and the mainstem Sacramento River. The study found that zooplankton had higher concentrations of pesticides than macroinvertebrates. Chinook salmon had threefold higher organochlorine pesticide concentrations in the floodplain as compared with the Sacramento River, and pesticide concentrations were higher in prey organisms during flood events than in drought conditions. The study findings suggest that within these habitats, the benefits to juvenile salmon of an improved food supply in floodplains may be countered by increased pesticide exposure.

Staff co-authored another salmon scientific paper in March in collaboration with researchers from UC Davis, UC Santa Cruz and the National Oceanic and Atmospheric Administration Southwest Fisheries Science Center, evaluating juvenile salmon growth in the Delta. The paper published in *San Francisco Estuary and Watershed Science* ([Variation in Juvenile Salmon Growth Opportunities Across a Shifting Habitat Mosaic \(escholarship.org\)](#)) reported on a study evaluating juvenile salmon growth rates in the American River and Delta by measuring the width of the daily rings in the fish’s otoliths (earbones) similar to how growth is measured with tree rings. The region that produced the highest growth rates varied within and among years. Juvenile salmon grew fastest in the Delta in some years, but slower in drought years. The study findings suggest that maintaining a mosaic of quality habitats in both the rivers and Delta will be important for juvenile salmon in California’s dynamic hydroclimate.

Two scientific papers addressing Delta smelt studies were also published in March. Staff co-authored a study in collaboration with researchers from UC Davis, CDFW, and Reclamation. The paper published in *PLOS ONE* ([Reproductive strategy of Delta Smelt *Hypomesus transpacificus* and impacts of drought on reproductive performance \(plos.org\)](#)) reported on a study evaluating the impacts of drought on Delta smelt reproduction. Salinity was a stronger driver of distribution than temperature or turbidity during the subadult/adult period. Mature females exhibited lower numbers and smaller sized eggs during the drought of 2013–2014 than the wet year class of 2011 suggesting that reproductive performance was negatively affected by environmental conditions during the drought.

The second Delta smelt publication reported on a study funded by Metropolitan to conduct pathogen screening in Delta smelt. The paper published in *San Francisco Estuary and Watershed Science* ([Investigation of Molecular Pathogen Screening Assays for Use in Delta Smelt \(escholarship.org\)](#)) reported on efforts to develop molecular assays to screen cultured Delta smelt in the lab and in enclosures in the Delta, and screen wild Delta smelt for a variety of pathogens. The study found that hatchery and wild Delta smelt had similar pathogens and that hatchery Delta smelt posed a low risk for pathogen transmission.

Delta Islands Adaptation Planning Grant

Staff is managing the Delta Island Adaptations project funded by a CDFW Proposition 1 Planning Grant. The planning project is an evaluation of opportunities for island-wide improvements that include subsidence reversal, sustainable agricultural practices, carbon sequestration, water quality improvements, and habitat restoration. The objective of this effort is to provide science-based planning for potential land uses on an entire island owned by Metropolitan that meets the Delta Plan co-equal goals using creative and innovative solutions for subsided Delta islands. The first public workshop was held on March 15, to get input from interested parties on the adaptation opportunities. The next step in the project is to document and include the public input and continue focused meetings with subject expert teams.

Core Business Reliability

On February 28, 2022, Reclamation issued a Notice of Intent in the Federal Register which formally began the process to reinstate consultation on the 2019 BiOp for the long-term operations of the CVP and SWP. Staff is working in coordination with the State Water Contractors to provide scoping comments by the March 30, 2022, deadline. Staff is also involved in ongoing technical workgroups and policy-level discussions that help provide input into the process. Under the current schedule, Reclamation anticipates a Biological Assessment and Public Draft (EIS will be completed in 2023, and a Final EIS and Record of Decision in 2024).

On March 18, DWR and Reclamation jointly filed a Temporary Urgency Change Petition (TUCP) with the State Water Board requesting temporary modification of water right permit and license requirements for Delta outflow and Delta salinity during the April 1 to June 30, 2022 timeframe. The TUCP was filed in response to critically dry conditions in the Bay-Delta watershed. The State Water Board will consider the TUCP at a future meeting.

Colorado River

Reclamation Concerned over Drought Impacts to Glen Canyon Dam

Following a dry January and February, it is becoming apparent that water year 2022 will be another below average runoff year for the Colorado River. The Bureau of Reclamation (Reclamation) regularly updates its projections for future elevations in Lake Powell and Lake Mead. In February, Reclamation concluded that without proactive actions, there is about a 30 percent chance that Lake Powell would fall below minimum power pool in the summer of 2023. In March, Reclamation met with the Basin States, including staff from Metropolitan, to discuss its concerns about the infrastructure of Glen Canyon Dam, and the possibility of the water level dropping below the power plant intake structure, which would require use of the bypass tubes. They explained that the bypass tubes have not been operated for extended periods in more than 50 years, and they are concerned that this could have challenged the tubes' ability to operate effectively. Additionally, losing the ability to produce power at Glen Canyon Dam could affect the reliability of the western energy grid. To reduce the risk of Lake Powell falling below minimum power pool, Reclamation is exploring options to increase releases from upstream reservoirs into Lake Powell and reducing releases from Lake Powell to Lake Mead. Reclamation modeling suggests that both of those actions could effectively eliminate the risk of Lake Powell falling below minimum power pool for at least the next two years. Staff will continue to work with Reclamation and the Basin States to explore these options and any efforts to mitigate the Lower Basin water users from these proposed actions.

Engineering

GM Strategic Priority #1: Resiliency

Objective #1 Manage and execute Board-authorized projects within the Capital Investment Plan (CIP) to ensure the reliable delivery of water to Metropolitan's member agencies.

Distribution System Reliability Program

This program maintains reliable water deliveries through specific repair and rehabilitation projects on Metropolitan's pipelines, reservoirs, and control structures. Recent activities include the following:

- **Lake Mathews Wastewater Replacement**—The project consists of installing a wastewater system in place of the existing septic tank system at Lake Mathews. The new wastewater system connects various facilities at Lake Mathews and ultimately connects to the Western Municipal Water District main wastewater line. Construction is 6 percent complete and is scheduled to be complete by March 2023. The contractor is currently working on submittals for Metropolitan's review.
- **Right of Way and Infrastructure Protection Improvements, Western San Bernardino County, Stage 1**—The project consists of construction of erosion-control features to protect critical infrastructure. Final design is complete, and Metropolitan's Board awarded a construction contract in March 2022.
- **Orange County Feeder Lining Repairs**—This project replaces the deteriorated internal lining along an 11-mile portion of the Orange County Feeder within the cities of Santa Ana, Costa Mesa, and Newport Beach. Rehabilitation is proceeding in three stages. Construction of Stages 1 and 2 are complete. Final design and the project advertisement for the remaining third stage is complete and a board action for award of a construction contract is planned for April 2022.
- **OC-88 Pump Station Chiller Replacement**—This project replaces chiller units at OC-88 Pump Station. The chillers circulate liquid to cool pumps and other process equipment. Final design is complete, and a board action for award of a construction contract is planned for May 2022.
- **Garvey Reservoir Hypochlorite System Replacement**—This project replaces the existing chemical feed pumps, reconfigures the feed pipe system, upgrades the existing control systems and automatic process controls, and implements the remote feed control from the SCADA system. The contractor completed demolition of the existing pump pad and is currently installing electrical control panels. Construction is 65 percent complete and is scheduled to be complete in July 2022.

Prestressed Concrete Cylinder Pipe (PCCP) Reliability Program

This program was established to enhance the reliability of Metropolitan's water distribution system and to reduce the risk of costly emergency repairs of PCCP. The priority pipelines included in the program are the Second Lower Feeder, Sepulveda Feeder, Calabasas Feeder, Rialto Pipeline, and the Allen-McColloch Pipeline. A total of 100 miles of PCCP pipelines will eventually be relined with new steel pipe liners under this 20-year program. Recent activities include the following:

- **Second Lower Feeder PCCP Rehabilitation**—This project rehabilitates the remaining 28 miles of PCCP segments within the Second Lower Feeder and will enhance delivery reliability to member agencies. Long-term rehabilitation of this pipeline is being staged over a period of eight to ten years, with multiple

construction and procurement contracts. Final design of Reach 3, the westernmost portion of Second Lower Feeder, spanning approximately 4.8 miles through the cities of Lomita, Torrance, Los Angeles, and Rolling Hills Estates, has been divided into two construction packages, Reach 3A and Reach 3B. Final design of Reach 3A is complete, and a board action for award of a construction contract is planned for May 2022. Reach 3B is 95 percent complete and scheduled to be complete by June 2022. Study efforts continue for Reach 9, an approximately 0.8-mile-long portion of Second Lower Feeder in western Long Beach that crosses the Los Angeles River.

- **Second Lower Feeder Isolation Valve Procurement**—This fabrication contract provides 13 conical plug valves for the Second Lower Feeder PCCP rehabilitation. These valves, which include three 48-inch and ten 54-inch diameter, provide primary isolation for maintenance activities, inspections, and repairs required to maintain reliable water deliveries within Metropolitan’s distribution system. Fabrication of these valves is approximately 60 percent complete. All three 48-inch conical plug valves have been delivered. Fabrication of seven 54-inch valves is in progress. The first two 54-inch valves are scheduled to be delivered in April 2022, and the next five will be delivered between September 2022 and July 2023. Fabrication of three remaining 54-inch valves is scheduled to start in 2022 and be completed in early-2024.
- **Sepulveda Feeder PCCP Rehabilitation**—This project rehabilitates 35 miles of PCCP segments within the Sepulveda Feeder and will enhance delivery reliability to member agencies. Long-term rehabilitation of the Sepulveda Feeder will be staged over multiple years with multiple construction and procurement contracts. Final design of Reach 1 and Reach 2 are occurring simultaneously. Final design of Reach 1 is 18 percent complete and Reach 2 is 35 percent complete. Both are scheduled to be complete by February 2023. Preliminary design to rehabilitate the remaining reaches of the feeder continues. Inspections of Reaches 1, 4, and 5 have been completed as part of regularly scheduled inspections for this feeder.

Colorado River Aqueduct (CRA) Reliability Program

This program maintains the reliability of Metropolitan’s CRA conveyance system. Recent activities include the following:

- **Gene Wash Reservoir Discharge Structure Rehabilitation**—This project replaces the existing deteriorated discharge valve and refurbishes the valve house and discharge structure at the base of the Gene Wash Reservoir dam. If the reservoir needed to be drained rapidly in the event of an emergency, the valve would be opened to safely release the water. The contractor completed installation of the discharge valve and actuator and began start-up and commissioning activities. Construction is 94 percent complete and is scheduled to be complete by April 2022.
- **CRA Storage Buildings at Hinds, Eagle Mountain, and Iron Mountain**—This project furnishes and installs two new storage buildings (six total) and constructs associated site improvements at the Hinds, Eagle Mountain, and Iron Mountain pumping plants. Final design is 98 percent complete and is scheduled to be complete by June 2022.
- **CRA Domestic Water Treatment System Replacement**—This project replaces the membrane filtration system and associated water treatment equipment at the five Colorado River Aqueduct pumping plants. Procurement of water treatment equipment is complete with expected deliveries in two shipments in mid-2022 and early 2024. Construction is 6 percent complete is scheduled to be complete by March 2025. The contractor is currently working on submittals for Metropolitan’s review.

Treatment Plant Reliability Program

This program was initiated to maintain reliability and improve the operating efficiency of Metropolitan's water treatment plants through specific improvement projects. Recent activities include the following:

Jensen Plant

- **Jensen Electrical Upgrades, Stage 2**—This three-stage project upgrades the electrical system with dual power feeds to key process equipment to comply with current codes and industry practice, improves plant reliability, and enhances worker safety. Stage 1 work is complete. Stage 2 improvements will upgrade Unit Power Centers 7 and 9 and their associated motor control centers (MCCs) to support critical process equipment. Cutover work for Building 12 and other MCCs was successfully completed during the January plant shutdown. The contractor completed transferring and commissioning Thickeners Nos. 4 and 6 and is continuing work at Thickener No. 5 and other solids handling facilities. Construction is 97 percent complete and is scheduled to be complete by August 2022.

System Reliability Program

The System Reliability Program consists of projects to improve or modify facilities located throughout Metropolitan's service area to use new processes and/or technologies and improve facility safety and overall reliability. Recent activities include the following:

- **Headquarters Building Improvements**—This project provides seismic upgrades and other needed improvements to the Metropolitan Headquarters Building. Construction related to the original contract scope and the UVC air disinfection system are substantially complete. The contractor continues installation of additional cooling equipment for electrical and AV/IT rack rooms. Because of the long equipment lead time, the anticipated contract completion date is being reassessed.
- **Headquarters Physical Security Upgrades**—This project implements comprehensive security upgrades for the Metropolitan Headquarters Building. These upgrades are consistent with federally recommended best practices for government buildings. This work has been prioritized and staged to minimize rework and impacts on day-to-day operations within the building. Stage 1 work enhances security related to perimeter windows and doors. Construction of Stage 1 improvements is complete. Stage 2 improvements will provide security system upgrades inside the building with a focus on the main entry rotunda area, boardroom, executive dining lounge, and security control room. Construction of Stage 2 improvements is 95 percent complete and is scheduled to be complete by June 2022. The contractor completed security equipment installation on all floors; completed the testing and cutover to the new security system; and is continuing the rotunda equipment installation. Stage 3 improvements will provide security system upgrades around the perimeter of the building. Design of Stage 3 improvements is complete and board award of a construction contract is planned in mid-2022.
- **Headquarters Building Fire Alarm and Smoke Control System Upgrades**—This project upgrades The Metropolitan Headquarters Building fire life safety systems, which includes replacement of the fire detection and alarm system and HVAC system improvements for smoke control. The fire alarm and smoke control systems in the Metropolitan Headquarters Building provide detection, notification, and control of building functions so that occupants and visitors can safely exit in the event of a fire. The contractor completed the installation of the CO controllers; is finalizing the fire alarm system cutover on the first floor; is continuing installation of the electrical closets and Emergency Radio Responder System; and is beginning the fire alarm

Water Resources and Engineering

(continued)

system cutover on the second floor. Construction is 39 percent complete, and the anticipated project completion date is being reassessed.



Headquarters Building Improvements
Installation of fire alarm devices in cafeteria



Water System Operations

GM Strategic Priority #1: Resiliency

Objective #1 Provide Reliable Water Deliveries.

Metropolitan member agency water deliveries were 120,450 acre-feet (AF) for March with an average of 3,885 AF per day, which was 435 AF per day higher than in February. Treated water deliveries increased by 20,221 AF from February for a total of 75,541 AF, or 63 percent of total deliveries for the month. Following a month-long shutdown, the Colorado River Aqueduct (CRA) ramped up from a five-pump to an eight-pump flow earlier in the month with a total of 97,000 AF pumped during the period. State Water Project (SWP) imports averaged 1,136 AF per day, totaling about 35,225 AF for the month, which accounted for about 29 percent of Metropolitan's deliveries. The target SWP blend remained at zero percent for the Weymouth, Diemer, and Skinner plants.

Objective #2 Ensure Water Quality Compliance, Worker Safety, and Environmental Protection.

Metropolitan complied with all water quality regulations and primary drinking water standards during February 2022.

On March 15, the California State Water Resources Control Board's Division of Drinking Water (DDW) conducted a sanitary survey at the Jensen plant. A sanitary survey is a comprehensive review and inspection periodically performed to evaluate the adequacy of a water system to provide safe drinking water. Accompanied by Jensen plant and Water Quality staff, the DDW inspectors walked through the plant, visited unit treatment processes and chemical tank farms, and observed various plant alarms and responses that were tested for the survey. The second part of the survey will be conducted in April.



Staff explaining filter water quality sampling to Division of Drinking Water inspectors at the Jensen plant

This month, staff published and posted a Safety Talk on the SRS IntraMet webpage that provides details on different stretches that can be performed before the start of each workday to help avoid musculoskeletal injuries.

MWD Safety Talk

Employee Environmental, Health & Safety Information for Stretch & Flex

Importance of Stretching

Performing stretches at the beginning of the workday helps warm up muscles and improve elasticity. Investing 5-15 minutes to stretch throughout the workday helps reduce fatigue, prevent body sprain/strain injuries, improve posture, increase muscle coordination and balance, and increase range of motion. Stretching at the end of the workday can also help with muscle recovery.

Stretch & Flex Improves

- Flexibility** - allowing you to push your body beyond its comfort zone, thus increasing your overall physical ability.
- Range of Motion** - providing better balance which will help keep you mobile and less susceptible to falls.
- Circulation** - increasing the blood flow to your muscles, thus improving your circulation.
- Stress Management** - relaxing tense muscles and releases the mind that often accompany stress.
- Posture & Technique** - preventing muscles and joints from seizing up and improves elasticity, allowing better posture and technique.

Do's and Don'ts

- Stretch to the point where it is comfortable, not painful.
- Do not strain when you stretch - straining keeps the muscle from relaxing.
- As the feeling of the stretch changes to a mild stretch, stretch a little further, a comfortable stretch with no pain.
- Do not bounce when you stretch. That causes injuries. Always stretch to the right side first.
- Breathe with a slow, normal rhythm. Don't hold your breath.
- Stretch slowly and gently.

Simple Stretches to Do on the Job

Here are stretches you can do at the beginning, during, and at the end of the workday.

- Each stretch focuses on a specific part of the body.
- Each stretch should be done slowly and gently.
- Before beginning any stretching program, be sure to check with your healthcare practitioner.
- If at any point you feel discomfort performing any of the following stretches listed below, stop what you are doing and consult with your healthcare practitioner before continuing.

New Safety Talk on Stretch and Flex

The 2021 Environmental, Health, and Safety (EHS) Performance Chart was published and posted on the SRS IntraMet webpage. The revised chart is now one page and displays all of the Water System Operations (WSO) units. It includes a new leading metric (Near-Misses Reported) and an improved color-coded layout to easily identify which indicators meet EHS goals. Green indicates the goal was met and yellow indicates the goal was not met for the noted quarter. EHS Performance Chart results are used for determining the annual safety award winners.

Date of Last Update:		2/3/2022	
Includes Data Up To:		4th Quarter, 2021	

Goal Met

Goal Not Met

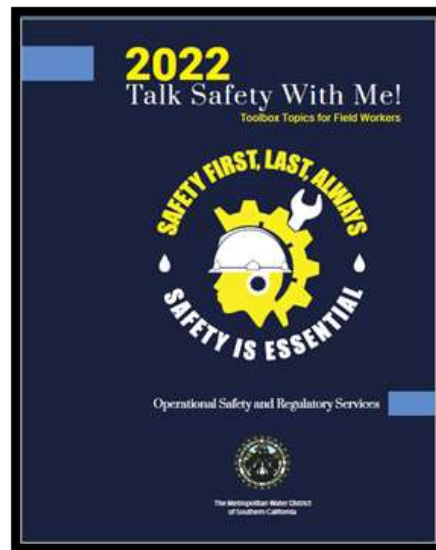
WSO EHS Performance Chart

Calendar Year 2021

GOAL	Leading Indicators										Lagging Indicators													
	Safety Inspection Completion Rate (%)		Training Completion Rate (Running % for CY)		Toilets Completion Rate (%)		Safety Committee Meeting Rate (%)		JSH Checklist Completion Count ¹		Near Miss Submissions Count ²		Recordable Injury Count ³		Reportable Chemical Release or Spill Count ⁴		Regulatory Inspection Findings - HCV Count ⁵		Regulatory Inspection Findings - HVC Count ⁶		Regulatory Inspection - Count ⁷			
	30%		90%		90%		100%		Year-Over-Year Improvement		Year-Over-Year Improvement		0		0		0		0		N/A			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
WT - Denver Unit	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0	0	0	0	0	0
WT - Jensen Unit	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	0	0	0	0	0	0	0	0	0
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Updated EHS Performance Chart for 2021

Staff published the 2022 *Talk Safety With Me* book. The book contains 52 toolbox topics—one for each week of the year—reflecting Metropolitan Health and Safety policies and procedures. Sixteen new topics were added this year, including a new cover designed by a Mills plant staff member. The Safety Talk book is posted on the SRS IntraMet webpage.



2022 *Talk Safety With Me* book

Metropolitan has partnered with the National Safety Council (NSC) to conduct an independent review of Metropolitan’s safety program. This month, the General Manager sent a communication to all employees asking for voluntary participation in virtual focus groups, which will delve further into perceptions that emerged from the safety barometer survey completed in December 2021. The focus groups are expected to meet throughout the month of April.



Flyer update on the independent review of Metropolitan’s Safety Program

Objective #3 Actively Engage in Capital Project Planning and Execution.

Staff inspected and cleaned the Wastewater Reclamation Plant (WWRP) in preparation for a rehabilitation capital project at the Jensen plant. Staff established a clearance to allow a vendor to remove accumulated solids from the flocculation basins and to allow Engineering staff to safely perform an inspection. This work provided additional data for staff to accurately scope the project.



Staff inspecting the WWRP at the Jensen plant



Accumulated solids before cleaning (left) and after removal (right) from the WWRP at the Jensen plant

Staff began planning for the conversion of a formerly used workshop to be used for storage of materials for Diemer plant operations and maintenance. Work will include lighting improvements, addition of storage bins, and other facility improvements. This minor capital project will provide a much-needed centralized material storage facility at the treatment plant.



Staff planning the arrangement of storage racks for a repurposed storage facility at the Diemer plant

As part of the Colorado River Aqueduct Main Pump Rehabilitation (CRAMPR) capital project, a large conical plug valve was disassembled for inspection and repair. Staff disassembled the valve, performed the necessary repairs, and provided Engineering Services an opportunity to gather data for the upcoming rehabilitation project.



Staff disassembling a large conical plug valve for the CRAMPR project

Objective #4 Optimize Maintenance.

The La Verne Shops supported the Sepulveda Feeder shutdown by replacing two large lubricated plug valves and trimming two existing stainless-steel thimbles at the Venice Pressure Control Structure. The stainless-steel thimbles were trimmed in the shops and transported back to the facility to successfully complete the installation.



Staff removing the existing plug valve at the Venice PCS



Staff installing the new plug valve at the Venice PCS

Staff completed routine patrol road grading on the Lower Feeder patrol roads through Chino Hills State Park. The Lower Feeder conveys water from Lake Mathews to the Diemer plant. The patrol road grading includes minor vegetation removal, erosion repair, and road grading. Grading inside the state park requires proper notification to park staff and Metropolitan's Environmental Planning staff.



Staff using a motor grader for patrol road grading along the Lower Feeder

The Lower Feeder has cathodic protection along the pipeline to minimize corrosion and ensure reliability of Metropolitan's infrastructure. Along the Lower Feeder, the meter pedestal that supplies power to the corrosion protection rectifier was severely corroded and in need of replacement. Staff removed the damaged meter pedestal and concrete base to install a new meter pedestal on a new concrete base.



Damaged metering pedestal and concrete base along the Lower Feeder



Staff removing damaged sections of concrete base for repairs to cathodic protection equipment along the Lower Feeder

Staff prepared to install security gates at the rejection structure openings at the Weymouth plant to prevent trespassing. This work includes installing security gates, “no trespassing” signs, and manhole-locking devices to secure Metropolitan’s infrastructure and prevent harm to trespassers in the event of a water release.



Staff determining concrete anchor point for a security gate at the Weymouth plant rejection structure

Staff performed high-voltage electrical switching at the Skinner plant in preparation for maintenance activities. In addition to performing the switching activities, a recent Apprenticeship Program graduate was evaluated for the final test to become a certified high-voltage switcher. High-voltage switching has the potential to cause an arc flash, which is a phenomenon where a flashover of electric current leaves its intended path and travels through the air or ground from one conductor to another. Because of this danger, the high-voltage switcher wears an arc flash protection suit as a safety measure.



Staff performing high-voltage switching wearing an arc flash protection suit at the Skinner plant

The tunnel cleaning machine is used to remove underground buildup in the CRA conduits. During the 2022 CRA shutdown, the tunnel cleaning machine and crew traveled a total of 332 miles underground making four passes through tunnel portions of the aqueduct. Above-ground teams cleaned and scraped an additional 60 miles of open canal.



Tunnel Cleaning Machine being lowered into the CRA

The spare 230kV transformer at Gene pumping plant was removed from service during the 2022 CRA Shutdown for maintenance. The Gene facility transformers supply 6.9kV of power for the facility's pumps and 69kV that power the Whitsett Intake pumping plant.



Staff removing the 230kV feed to the spare transformer at the Gene pumping plant

Staff used the 2022 CRA Shutdown to perform critical maintenance on pumps and ancillary equipment, some of which have been running non-stop for the last year. With drought conditions and current demands, these units must be maintained and ready to operate around the clock in the coming year.



Staff performing exciter maintenance on a 12,500 hp pump during the CRA shutdown

In accordance with the Prestressed Concrete Cylinder Pipe (PCCP) inspection and rehabilitation program, staff inspected the condition of the Sepulveda Feeder's PCCP. These inspections are completed in 5-year intervals and have been instrumental in detecting wire breaks used to monitor and focus rehabilitation efforts. During a 10-day

shutdown of the Sepulveda Feeder, visual and electromagnetic (EM) inspections were completed on 12 miles of pipe between the Venice Pressure Control Structure and West Coast Feeder interconnection. Visual inspection indicated that the pipe lining is in good condition. The large amount of EM inspection data collected is being compiled and will be reviewed in April.



Staff dewatering a pump-well structure during the Sepulveda Feeder shutdown



Staff performing an electromagnetic inspection of the Sepulveda Feeder

San Diego Pipeline No. 4 (SDPL4) was shut down for 10 days in early March as requested by the San Diego County Water Authority to facilitate replacement of several sections of PCCP in their portion of SDPL4. Once the pipeline

was isolated, Metropolitan staff also used this opportunity to replace a secondary isolation valve for an air release vacuum valve on the northern reach of the pipeline within Metropolitan's jurisdiction.



Staff replaced secondary isolation valve for an air release vacuum valve on SDPL4

Staff continued the system-wide coatings program aimed at preventing corrosion and extending the life of pipelines and other infrastructure. In addition to maintaining the valves and piping systems in pressure control structures and hydroelectric plants, the control cabinets also require periodic coating because of their operating environment. This month, staff completed coating of a control cabinet at the Irvine Pressure Regulating Structure on the Orange County Feeder.



Staff coating control cabinet at Irvine Pressure Regulating Structure on the Orange County Feeder



Control cabinet before (left) and after (right) coating at Irvine Pressure Regulating Structure on the Orange County Feeder

Objective #5 Manage the Power System.

Staff reviewed the Resource Adequacy (RA) requirements for CRA pumping operations for May 2022. An RA deficit of 14.05 MW was identified, because of an expected eight-pump flow and declining Hoover power generation forecast for 2022 that indicates a decline of about one-third of Hoover Dam's maximum generation output. An RA purchase request was submitted and approved. Given the continuing drought conditions, the CRA is expected to maintain a planned eight-pump flow for several months. Under eight-pump flow conditions, an RA deficit of approximately 2 MW is anticipated in June 2022.

Objective #6 Improve Emergency Preparedness and Response.

Emergency Management and Cybersecurity staff have been planning Metropolitan's emergency response to possible cybersecurity incidents in the future. This coordinated planning extends to Metropolitan's field resources including several units running cybersecurity emergency response exercises. Although there are no specific threats at this time, these planning efforts are prudent given current world events.

Part of an effective emergency response includes coordination between various responding agencies during an emergency. To support this concept, the Governor's Office of Emergency Services (OES) established the State's Emergency Operations Center (EOC) Credentialing Program. This program credentials individuals who meet standard training and experience requirements in specific EOC positions and, therefore, are able to work within any government EOC in the state during an emergency. Metropolitan's Emergency Management Program Manager was

officially credentialed this month by OES to work as an *EOC Coordinator* in a government EOC. Although not mandatory, this credentialing provides standard training and experience for those wishing to expand their emergency management background. Other staff are currently working towards their EOC credentials as Metropolitan continues to build its Emergency Management program.

Objective #7 Optimize Water Treatment and Distribution.

The State Project water (SPW) target blend entering the Weymouth and Diemer plants was zero percent in February 2022. The supply entering Lake Skinner transitioned from 100 percent SPW to 100 percent Colorado River Aqueduct (CRA) water on March 3 following the CRA shutdown and stayed at this level through the end of the month.

Flow-weighted running annual averages for total dissolved solids from January 2021 through December 2021 for Metropolitan's treatment plants capable of receiving a blend of SPW and CRA water were 575 mg/L, 570 mg/L, and 577 mg/L for the Weymouth, Diemer, and Skinner plants, respectively.

Staff performed 5-year maintenance and cleaning of the chlorine scrubbers at the Skinner plant. The scrubbers are part of the protection system of the plant's chlorine containment facility. In the event of a chlorine release, the scrubbers remove chlorine from the air within the facility and prevent it from being released into the environment. The 5-year maintenance involves removing the used caustic solution and cleaning any remaining solids from the scrubbers using a muriatic acid wash. All equipment was inspected for wear and repaired as needed, and the caustic solution was replaced.



Chlorine scrubber pump before (left) and after (right) acid wash cleaning at the Skinner Plant

Objective #8 Manage Water Reserves.

Water reserves continued to be managed according to Water Surplus and Drought Management (WSDM) principles, operational objectives, and the current 5 percent State Water Project (SWP) allocation. Deliveries of SWP supplies were minimized to preserve SWP Carryover and Flexible Storage. Releases from DVL through PC-1 to connections on the Lakeview Pipeline, as well as the DVL to Mills plant operation, continued in March to conserve SWP use in that area. Returns from the Semitropic and Kern Delta SWP Banking Programs also continued in March. Staff continued Greg Avenue pump operations to minimize SWP usage by about 3,300 AF per month. In addition, staff continued

coordination with member agencies, shifting their deliveries from SWP connections to Colorado River water connections, when possible. Staff continue to develop additional drought mitigation actions to help with the low SWP allocation in 2022.

Objective #10 Manage Vacancies.

WSO filled 4 vacant positions in February.

Objective #11 Prepare Employees for New Opportunities.

The Water System Operations Apprentice and Technical Training Programs develop and train personnel to become qualified mechanics and electricians responsible for maintaining Metropolitan's water treatment and distribution systems. This month, the Class of 2023 mechanical apprentices continued welding and fabrication training. This course teaches safe hot work practices, welding principles, torch cutting, metallurgy, and project layout. Apprentices attend lecture and hands-on training during class sessions. Once apprentices understand concepts and techniques, they are assigned projects to complete during class.



Apprentices observing oxy-fuel torch cutting demonstration



Apprentice using an oxy-fuel torch to cut practice weld coupons

GM Strategic Priority #2: Sustainability

Objective #1 Prepare for Future Legislation and Regulation.

On February 22, the California Air Resources Board (CARB) held a workgroup meeting to discuss potential regulatory concepts for its Zero-Emission (ZE) Forklift Regulation. The goal of the ZE Forklift Regulation is to accelerate the transition of large-spark ignition (LSI) forklifts (i.e., propane and gasoline) to ZE technologies. Metropolitan owns approximately 20 LSI forklifts that will be subject to the ZE Forklift regulation. Staff are working with CARB to provide feedback on rulemaking language and will continue to participate in future workshops.

Staff met with CARB board members and presented on the regulatory challenges faced by water agencies in trying to meet proposed zero-emission vehicle regulatory requirements under CARB's Advanced Clean Fleet Regulations. Staff highlighted Metropolitan's positive planning efforts and recommendations to feasibly make the transition towards electrification. The board members were receptive and indicated that they would follow-up with CARB staff. CARB anticipates releasing a full regulatory draft rule in summer 2022.

Effective March 1, 2022, the California Department of Public Health (CDPH) rescinded its indoor mask mandate for unvaccinated workers. However, masking is strongly recommended and still required in high-risk settings (i.e., public transit). In late March, Metropolitan's General Manager made mask wearing voluntary at facilities, with some exceptions based on CDPH guidelines. Staff will continue to monitor for new local, state, and federal COVID-19 updates.

Objective #3 Support the Regional Recycled Water Program.

During March, staff continued maintenance of the Regional Recycled Water Advanced Purification Center (RRWAPC) demonstration facility in preparation for secondary membrane bioreactor (MBR) testing, treating primary effluent from the Los Angeles County Sanitation Districts (LACSD). Staff supported primary effluent functional testing, prepared for bioreactor seeding, and scheduled membrane replacement following the demonstration facility startup. Staff began training onsite laboratory and operations staff on microbial sampling techniques and also performed extensive maintenance activities to prepare for secondary MBR testing. Training included replacing UV lamps, improvements to the reverse osmosis system, piping modifications, SCADA troubleshooting, and various other preventative maintenance. Staff supported LACSD efforts to repair the plant influent line, address minor leaks, and ensure that sufficient flow can be provided for secondary MBR operations.

Staff continued to engage in dialogue with the Independent Science Advisory Panel to finalize the report from Workshop No. 5 held in January and obtain feedback on a modified testing approach for the secondary MBR testing phase.

On March 9, staff hosted visitors from Southern Water in the United Kingdom to exchange technical information on reuse, discuss treatment approaches, and showcase the RRWAPC demonstration facility.



Practicing the microbial sample elution protocol at the RRWAPC demonstration plant



Training on microbial sample collection protocol for the next phase of testing at the RRWAPC demonstration plant



Reinstalling a repaired return activated sludge pump at the RRWAPC demonstration plant

Objective #5 Manage Power Resources and Energy Use in a Sustainable Manner.

Metropolitan's hydroelectric plants generated an average of about 15.5 megawatts or 10,435 megawatt-hours, and approximately \$475,650 in revenue, for the month of February 2022. Metropolitan's solar facilities, totaling 5.4 megawatts of capacity, generated approximately 750 megawatt-hours in February 2022.

Staff are continuing to explore various options for moving non-CRA electric load to "green" retail electric rates. These rates are offered by the Los Angeles Department of Water and Power, Southern California Edison, and Community Choice Aggregators (CCAs) such as the Clean Power Alliance. Staff are also reviewing options to minimize the financial impact and ensure that there are no adverse operational implications.

GM Strategic Priority #3: Innovation

Objective #1 Develop New Solutions to Enhance Operational and Business Processes.

Metropolitan maintains approximately 350 miles of unpaved dirt patrol roads which provide access to Metropolitan's conveyance and distribution infrastructure. These access roads are routinely used by staff to perform maintenance and water sampling and are vital to Metropolitan's emergency response preparedness. Staff use water trucks for dust abatement, soil compaction and fire watch during patrol road maintenance, while meeting all environmental requirements. Recently, staff have been implementing a new innovative approach to refilling water trucks in the field using existing Metropolitan infrastructure, saving time and fuel. Staff added strategically-placed, secure connections to Metropolitan's raw water pipelines to refill water trucks directly in the field, enabling staff to meet environmental requirements and critical maintenance needs in an efficient and flexible manner.



Staff filling water truck from manhole structure (left) and applying air gap for filling water truck (right) in the field

Staff participated in a peer review with the Los Angeles County Sanitation Districts' (LACSD's) Fleet Manager regarding LACSD's Zero Emission (ZE) "green fleet" efforts. LACSD is transitioning its 1,100-vehicle inventory to ZE vehicles with 13 percent of their fleet converted to electric passenger vehicles to date. They also have electric light-duty trucks on order and are working with a manufacturer to have three heavy-duty trucks built. Funding for the vehicles and charging infrastructure has been supplemented by the South Coast Air Quality Management District, Southern California Edison, and State incentive programs. Staff discussions with LACSD have been beneficial to Metropolitan's ZE fleet transition efforts. In the coming months, staff will be coordinating with Los Angeles Department of Water and Power on their ZE fleet transition.



Partnering with LACSD on Transitioning to a Green Fleet

Objective #3 Advance Education and Outreach Initiatives.

On March 6–9, staff presented the results of tertiary MBR testing at the 37th Annual WaterReuse Symposium in San Antonio, Texas. This meeting also provided an opportunity for Metropolitan staff to engage with the broader reuse science, engineering, and regulatory community and gain valuable insights on the latest developments in reuse technology and applications.



Metropolitan, LACSD, and consultant staff at the 2022 WaterReuse Symposium in San Antonio, Texas

Monthly Update as of:

3/31/2022

<u>Reservoir</u>	<u>Current Storage</u>	<u>Percent of Capacity</u>
<i>Colorado River Basin</i>		
Lake Powell	5,824,000	24%
Lake Mead	8,756,400	34%
<i>DWR</i>		
Lake Oroville	1,676,435	47%
Shasta Lake	1,732,317	38%
San Luis Total	909,218	45%
San Luis CDWR	584,762	55%
Castaic Lake	179,781	56%
Silverwood Lake	67,208	90%
Lake Perris	104,449	79%
<i>MWD</i>		
DVL	564,597	70%
Lake Mathews	119,644	66%
Lake Skinner	37,061	84%



Hoover Dam

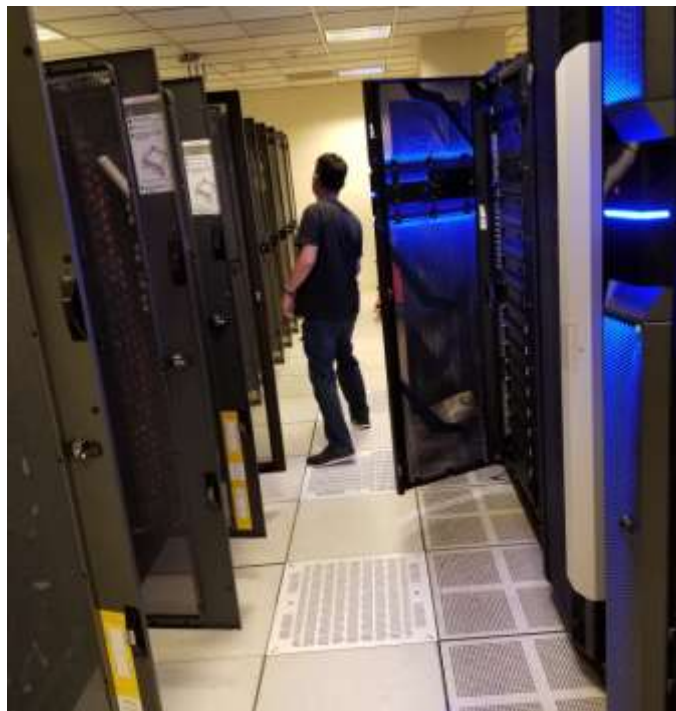
Information Technology

GM Strategic Priority #1: Resiliency

Objective #2 Manage Information Technology Projects within the Capital Investment Plan to ensure reliability of IT Systems and Infrastructure.

Information Technology (IT) continued to execute capital projects supporting Metropolitan's priorities by replacing end-of-life infrastructure, upgrading applications, and delivering innovative solutions to ensure the reliability and resilience of IT systems. These capital projects require close collaboration with business groups and resources from across the enterprise. Examples of key projects underway within the IT capital investment plan include:

- Implementation of Cybersecurity projects and initiatives to improve Metropolitan's security posture and to collaborate with stakeholders to further enhance network security capabilities for Metropolitan's computing environments.
- Partner with Water System Operations Group (WSO) to enhance the reliability of the Automatic Meter Reading system to address obsolescence related to end-of-life equipment.
- Collaborate with Finance on the Water Information System (WINS) Upgrade.
- Work with Engineering Services Group and WSO on wireless connectivity enhancements at field facilities to improve coverage and capacity.
- Continued efforts to upgrade older Windows servers to up-to-date versions to better support Metropolitan business and operational applications affecting various business groups.



GM Strategic Priority #2: Sustainability

Objective #1 Provide IT services in support of the Headquarters Improvements Program.

In addition to completing new technology in the Metropolitan Headquarters Building (i.e., board room and committee room upgrades), staff has been working behind the scenes in preparation for our return-to-work initiative. IT staff worked in collaboration with various business units to plan and support the upcoming transition by:

- Participating in a webinar hosted by Human Resources, Facilities, and IT Cybersecurity.
- Provided Return to Office checklist, instructions, and frequently asked questions sheet.
- Prepared Instruction guides to support staff with the transition of working in a hybrid environment.
- Continued to prepare Metropolitan's computing environment (IT infrastructure and networks) to support staff returning to work at headquarters.

GM Strategic Priority #3: Innovation

Objective #1 Strengthen Metropolitan's cyber security capabilities by deploying new and emerging technologies, and implementing enhanced security countermeasures.

The construction of the Security Operations Center (SOC) is proceeding as planned. This project will assess and remediate exposures and cyber threats throughout Metropolitan with special emphasis on the business and SCADA networks. Cyber security remains a high priority and is a key part of the Information Technology Strategic Plan. Maintaining a secure computing infrastructure requires application of ongoing cyber countermeasures to protect against new cyber threats that are identified on a continual basis.

Additional project details and updates are provided to executive management and the Board through cybersecurity briefings.



Objective #3 Modernize Operational Technology and Control System Upgrades as part of the Capital Investment Plan.

Ongoing efforts continue to upgrade Metropolitan's Supervisory Control and Data Acquisition (SCADA) to ensure continued reliability of the system-wide control system. Metropolitan staff have completed the recommendation to award memorandum (RTAM) for the prime consultant solicitation. Staff plan to submit their recommendation for the Board's consideration at the April 2022 Engineering and Operations (E&O) Committee meeting. The proposed action begins the design and implementation activities for the first area of Metropolitan's System-Wide Control System Upgrade.

Objective #5 Deploy innovative solutions to improve operations, promote collaboration, and provide business value.

Information Technology staff continued to work closely with customers to provide innovative solutions for their business needs. During this period, staff collaborated with business units to leverage drone technology to conduct missions and capture footage of the newly installed orifice gates at the Hinds Pumping Plant. In addition, Unmanned Aerial Vehicles were used to capture 16 miles of Colorado River Aqueduct (CRA) while it was empty as a proof of concept project to test the validity of using drones for documenting and inspecting the condition of the CRA.



Real Property

GM Strategic Priority #1: Resiliency

Objective #1 Provide right-of-way planning, valuation, and real property acquisition support services for the protection and reliability of existing infrastructure.

An encroachment permit was acquired from the Riverside County Flood Control and Water Conservation District in support of the Perris Valley Pipeline Project. This permit allows the temporary installation of a dewatering line to dewater into the flood control's facility. The pipeline project will ensure continuous reliability of water delivery for both Western and Eastern Municipal Water Districts.

An entry permit for one month in duration was obtained from a private owner in the city of Tustin for contractor parking on the corner of Red Hill Avenue and Warner Avenue to repair a damaged meter cabinet that collects water use data and supports billing activities for Metropolitan's customers.

A two-year lease was executed with a private property owner in the city of Costa Mesa. The lease allows the site to be used as a construction storage area and ultimately to construct a portion of the Orange County Feeder Relining Project. This project will aid in increased reliability of the pipeline.

Objective #2 Foster staff training and development.

Staff attended the International Right of Way Association's "Engineering Plan Development" course, which provides an improved understanding of construction and right of way drawings.

Core Business: Real Property Acquisition, Management, and Revenue Enhancement

Objective #2 Provide valuation, land management, and real property disposition support services for the maximum return or use of Metropolitan-owned land and facilities.

A new ten-year lease was executed for the continued farming of 585 acres in Palo Verde Valley. This new lease replaces the lease that was executed in 2017 with updated terms and conditions and encourages water conservation.

Metropolitan staff has coordinated with the Diamond Valley Lake Marina Concessionaire to reopen the Wildflower Trail for the 2022 season. The natural landscape is showing early signs of the vibrant colors that draws visitors to the trail.



Objective #3 Efficiently maintain and operate assets not related to the treatment and distribution of water.

Office renovations, including wallpaper removal and carpet replacement were completed on the twelfth floor because of normal wear and tear and to meet current carpet and paint standards.



Before



After

Objective #4 District Housing Maintenance and Management.

Sixty-two work orders were completed in the desert villages that consisted of flooring, HVAC, electrical, plumbing, and roofing repairs or replacements.

A concrete patio was replaced at a village residence to eliminate a safety hazard.



Before



After

Replacement of a column supporting a shade structure and partial roof work was completed at a Metropolitan house located at the Live Oak Reservoir. The repair was needed because of dry rot and termite infestation.



Before



After

Objective #5 Annexations.

Over the past few months, two annexations have been completed within the San Diego County Water Authority (SDCWA) and Metropolitan.

Metropolitan's Board approved the Rancho Corrido Annexation to SDCWA and Metropolitan on April 14, 2020, and set terms and conditions in resolution 9264 to annex 32.026 acres with an anticipated water use of 16.8 acre-feet a year. This annexation was completed through the San Diego Local Agency Formation Commission (SDLAFCO) and recorded with the county of San Diego, on October 15, 2021, which is the completion date of this annexation. The Certificate of Completion was re-recorded on February 14, 2022, to add Metropolitan's Board Resolution of terms and conditions.

Metropolitan's Board also approved the Sringeri Vidya Bhatari Foundation Temple Annexation to SDCWA and Metropolitan on January 14, 2020, and set terms and conditions in resolution 9263 to annex 22.13 acres with an anticipated water use of 11.9 acre-feet a year. This annexation was completed through the SDLAFCO and recorded with the county of San Diego, on December 16, 2021.

Environmental Planning

GM Strategic Priority #1: Resiliency

Objective #1 Provide planning, California Environmental Quality Act (CEQA)/National Environmental Policy Act (NEPA), and regulatory permitting support for programs and projects that focus on infrastructure reliability and redundancy.

Colorado River Aqueduct Projects

- Completed hydrologic surveys in support of testing the newly installed Gene Wash Discharge Valve.
- Completed biological, cultural, and noise assessments in support of the Colorado River Aqueduct (CRA) Housing Upgrade Project.
- Completed biological, cultural, and jurisdictional surveys in support of the Copper Basin Discharge Valve Rehabilitation and Copper Basin Access Road Repairs Project.

Objective #2 Emphasize employee development and recruitment, knowledge capture, cross-training, management/leadership training, and succession planning.

Staff attended the following trainings and workshops:

- Endangered Species Regulation and Protection hosted by UC Davis Extension.
- 2022 Advanced CEQA Workshop hosted by Association of Environmental Professionals.

GM Strategic Priority #2: Sustainability

Objective #2 Provide planning, CEQA/NEPA, and regulatory permitting support for projects and activities that address the challenges of sustainability, including aging infrastructure, contaminants of concern, and affordability of water supplies.

Lake Perris Seepage Recovery Project

- Provided design phase support and continued coordination with California Department of Water Resources to finalize the CEQA document.

Perris Valley Pipeline Project

- Provided support for final design phase.

Regional Recycled Water Program

- Continued coordination with Los Angeles County Sanitation Districts in support of environmental planning phase activities.

San Gabriel Tower and Improvements Project

- Provided support for the design phase and continued development of draft Environmental Impact Report (EIR).

Weymouth Water Treatment Plant

- Executed a professional services agreement and initiated preparation of the Weymouth Water Treatment Plant and La Verne Sites Improvements Program EIR.

Objective #3 Continue to actively manage Metropolitan's more than 30,000 acres of conservation lands through cooperative relationships with public agencies and non-governmental conservation organizations to promote sustainability of reserve resources.

Lake Mathews Multiple Species Reserve

- Completed invasive vegetation removal and management effort.
- Began annual invasive species surveys of the Reserve using UAVs.
- Continued conducting security patrol around the Reserve boundary and maintenance of perimeter fencing.

Southwestern Riverside County Multi-Species Reserve

- Submitted a \$2 million request for a CalFire grant to assist with habitat restoration activities.
- Initiated surveys for rare plants on the Reserve.
- Conducted invasive vegetation removal and management efforts, including removal of Stinknet, a priority invasive species.
- Completed burrowing owl artificial burrow maintenance.
- Reopened the Alamos Schoolhouse Reserve environmental education center to the public.

Objective #4 Develop a Climate Action Plan (CAP) and prepare CEQA documentation to be used to offset greenhouse (GHG) emissions from future construction projects. Identify new and continuing conservation efforts for the purpose of reducing future GHG reductions, as well as highlighting Metropolitan's effort to achieve those reductions, and develop a tracking methodology to ensure that Metropolitan is meeting its goal.

Climate Action Plan

- Continued finalization of Program EIR and preparation of May board letter; certification of the Program EIR and adoption of the CAP scheduled for the May board meeting.

Water Energy Climate Sustainability Team

- Completed draft CRA Sustainability Study Proposal.

GM Strategic Priority #3 Innovation

Objective #1 Pursue programmatic CEQA and regulatory permitting efforts for operations and maintenance activities throughout Metropolitan's service area to streamline clearances for capital projects and O&M activities.

Surface Mining and Reclamation Act (SMARA) Compliance

- Completed site visit to all SMARA sites with Department of Conservation staff in preparation for submission of the draft Reclamation Plan.

Objective #3 Partner and collaborate with regulatory and resources agencies, as well as other public agencies and external organizations, to build relationships and expedite/streamline environmental authorizations and clearances for Metropolitan projects.

- Executed agreement with California Department of Fish and Wildlife (CDFW) for dedicated staff support to expedite regulatory permitting processes for capital projects and O&M activities in CDFW Regions 5 and 6.

Core Business: Regulatory Compliance

Objective #1 Provide timely and professional environmental planning services and CEQA and regulatory permitting support to ESG, WSO, WRM, External Affairs, and Real Property groups.

Engineering Services

- Provided design phase support for the following projects:
 1. Black Metal Mountain 2.4 kV Electrical Rehabilitation
 2. CRA Housing Upgrade
 3. Copper Basin Access Road and Discharge Valve Repair
 4. CRA Pump Plant 2.3 kV and 480V Rehabilitation
 5. CRA Delivery Line Rehabilitation
 6. CRA Storage Buildings
 7. Gene Communication Systems Upgrades
 8. Etiwanda Pipeline Relining Stage 3 Project
 9. Foothill Hydroelectric Power Plant Seismic Upgrade
 10. Garvey Reservoir Rehabilitation Project
 11. Headquarters Fire Sprinkler
 12. La Verne Water Quality Building Improvements
 13. Mills Plant Maintenance Building Roof Replacement
 14. Orange County Feeder Relining, Reach 3, 4, and 4A
 15. Perris Valley Pipeline Rehabilitation
 16. San Diego Canal and Cabazon Radial Gate Replacement
 17. San Diego Canal Repairs
 18. Western San Bernardino Right-of-Way and Infrastructure Protection Program Phase 2
 19. Weymouth Plant Basins 5-8 Rehabilitation
 20. Weymouth Plant Battery Energy Storage System
 21. Weymouth Plant Administration Building Seismic Upgrades
- Provided construction phase support for:
 1. Cholla Wash Conduit Lining projects
 2. CRA Mile 12 Flow Monitoring Station Upgrades
 3. CRA Overhead Cranes
 4. CRA Domestic Water Treatment System Replacement
 5. Garvey Reservoir Drainage Improvement Project
 6. Gene Wash Discharge Valve Rehabilitation
 7. Live Oak Reservoir Asphalt Upgrades

Water System Operations

- Provided CEQA analysis and environmental planning support for the following O&M activities:
 1. CRA Routine V-Dike & Drainage Maintenance MM 127.29-149.34 (5-Year Authorization)
 2. Repair Fire Hydrant Isolation Valve at Diemer North Access Road
 3. San Diego Canal Algae Piping Bypass
 4. San Diego County Water Authority Emergency Shutdown Pipeline Repair
 5. San Dimas Hydroelectric Plant Oak Tree Trimming
 6. Tin Mine Road Trespass Issues
- Negotiated and obtained the California Department of Fish and Wildlife (CDFW) Final Streambed Alteration Agreement for the Lake Skinner Outlet Tower Shutdown.
- Conducted sensitive species and nesting bird surveys to ensure compliance with the Migratory Bird Treaty Act and Fish and Game Code for multiple operations and maintenance activities throughout service area.

External Affairs

- Provided support to External Affairs to manage proper transfer of curation of cultural resources due to the conversion of the Diamond Valley Lake Visitor's Center to the Apprenticeship Program Training Facility.
- Provided legislative analysis on the following: Assembly Bill (AB 1640): (Ward) Regional Climate Networks; AB 1676: (Burke) Greenhouse Gases: carbon capture, utilization, and sequestration; AB 2944: (Petrie-Norris) Greenhouse Gases: carbon capture, utilization, and sequestration; AB 2966: (Rivas) Conservation easements: forest lands: California Conservation Corps; Senate Bill (SB) 852: (Dodd) Climate resilience districts: formation: funding mechanisms; and SB 1145: (Laird) GHG dashboard.

External Environmental Document Reviews

- Reviewed 23 CEQA notices for external projects and prepared comment letters for those that may affect Metropolitan facilities and/or operations.
- Provided analysis of Fish and Game Commission review of California Endangered Species listing petition for southern California steelhead trout.

Real Property Support

- Provided CEQA analysis and determinations in support of five real property agreements.

Security

GM Strategic Priority #1: Resiliency

Objective #2 Improve Security and Emergency Response

Utilities throughout Southern California have experienced a significant spike in commercial burglaries targeting vehicle fleets. Darkness often gives potential adversaries a substantial advantage in facilitating catalytic converter theft, vehicle burglary, and potential sabotage of the drinking water system. By installing new, low-cost LED security lights in four key locations, that advantage is completely nullified.

Metropolitan has largely escaped costly and debilitating criminal loss events because of proactive partnerships between Security and key stakeholders. Security specialists and Jensen facility electricians worked diligently to upgrade security lighting at the Valley C&D yard. The new lighting allows for:

- Early detection of intruders and hazardous conditions by Security staff during evening shifts
- Enhanced safety for C&D workers, who often conduct nighttime operations during planned or emergency shutdowns
- Significant visual improvement within the maintenance yard for video surveillance



Before installing LED security lighting



After installing four new security lights in key locations

Objective #2 Improve Security and Emergency Response

Los Angeles Conveyance and Distribution (C&D) Team patrollers observed standing water near Palos Verdes Feeder vent stacks and substructures due to vandalism. Security and LA C&D staff quickly responded to the scene and discovered both a valve cabinet and a substructure lid had been severely damaged by vandals seeking to illegally tap into the potable water system.

Solid metal sheeting was welded into place on the cabinet face and a large stainless-steel, reinforced, double-locked, substructure lid was craned onto the substructure and bolted into place from the inside of the structure—guaranteeing the integrity and security of the feeder for years to come.



Problem: Vandals attacked substructure lid & lock



Solution: Stainless-steel, reinforced, double-lock lid

Finance and Administration



Finance

CFO Strategic Priority: Maintain Strong Financial Position

Provide timely and discerning financial analyses, planning, and management to ensure that forecasted revenues are sufficient to meet planned expenses and provide a prudent level of reserves consistent with board policy.

Objective #1 Establish rates and charges to maintain moderate overall rate increases, minimize variability, and recover costs consistent with Board policy.

In February, the proposed biennial budget was provided to the Board, including the Capital Investment Plan and revenue requirements for fiscal years 2022/23 and 2023/24; proposed water rates and charges for calendar years 2023 and 2024 to meet revenue requirements for fiscal years 2022/23 and 2023/24; ten-year forecast; and Cost of Service Report. Budget Workshops #1 and #2, which discussed the Proposed Biennial Budget in more detail and addressed numerous board member questions and requests, were held at the Finance & Insurance Committee on Feb 7 and Feb 22.

Also, in February at the Finance & Insurance Committee the board set a combined public hearing regarding: (1) the proposed water rates and charges for calendar years 2023 and 2024 necessary to meet the revenue requirements for fiscal years 2022/23 and 2023/24, and (2) review of the applicability of the MWD Act Section 124.5 ad valorem property tax limitation for fiscal years 2022/23 through 2025/26.

Objective #2 Manage risk to protect Metropolitan's assets against exposure to loss.

The Risk Management Unit completed 59 incident reports communicating instances of Metropolitan property damage, liability, workplace injuries, regulatory visits, and spills.

Risk Management completed 75 risk assessments on contracts, including professional service agreements, construction contracts, entry permits, special events, and film permits.

Core Priority: Business Continuity

Facilitate district-wide planning and training to prepare employees and managers to effectively carry out critical roles and recover mission essential functions thus ensuring continuity of operations and resiliency in the event of a disaster.

Objective #1 Manage the Business Continuity Management Program in accordance with Operating Policy A-06.

- Conducted business continuity tabletop exercises with the Water Quality and Water Treatment sections in Water System Operations. A cyberattack scenario was used to validate how to continue operations without system access.
- Conducted MetAlert Emergency Notification tests with all employees and board members. The purpose of the test was to ensure effective communications during an emergency.
- Continued participating in Metropolitan's Employee Innovation Council (EIC) meetings.
- Participated in meetings for the Hazard Mitigation core planning team to develop a Local Hazard Mitigation Plan in accordance with FEMA's grant funding requirements.

Core Business: Financial Management

Manage Metropolitan's finances in an ethical and transparent manner and provide consistent, clear, and timely financial reporting. Update Metropolitan's capital financing plans and work with rating agencies and investors to communicate Metropolitan's financial needs, strategies, and capabilities, thus ensuring that Metropolitan has cost effective access to capital markets and the ability to finance ongoing future needs. In addition, actively manage Metropolitan's short-term investment portfolio to meet ongoing liquidity needs and changing economic environments.

Objective #1 Record and report the financial activities of Metropolitan in a timely, accurate, and transparent manner to the Board, executive management, member agencies, and the financial community.

- Water Transactions for February 2022 totaled 104.3 thousand acre-feet (TAF), which were 3.1 TAF higher than the budget of 101.2 TAF and translate to \$96.2 million in revenues for February 2022, which were \$3.2 million higher than the \$93.0 million budget.
- Year-to-date water transactions through February 2022 were 1,112.5 TAF, which were 48.8 TAF higher than the budget of 1,063.7 TAF. Year-to-date water revenues through February 2022 were \$1,002.8 million, which were \$30.5 million higher than the budget of \$972.3 million.
- In February 2022, Accounts Payable processed approximately 2,800 vendor invoices for payment and took advantage of about \$1,300 in discounts.

Objective #5 Prudently manage the investment of Metropolitan's funds in accordance with policy guidelines and liquidity considerations.

As of February 28, 2022, Metropolitan's investment portfolio balance was \$1.42 billion; for the month of February 2022, Metropolitan's portfolio managers executed 14 trades.

During the month of February 2022, Treasury staff processed 926 disbursements by check, 19 disbursements by Automated Clearing House (ACH), and 100 disbursements by wire transfer. Treasury staff also processed 79 receipts by check, 24 receipts by ACH, and 48 receipts by incoming wires and bank transfers.

Administrative Services

GM Strategic Priority #3: Innovation

Objective #1 Use technology and best practices to implement innovative solutions in business processes to improve the customer and end user's experience.

The ECM Team reached an important milestone in the Program by completing prerequisite work (ECM Phase I) necessary to deploy an Enterprise Content Management (ECM) System to manage our electronic files in the cloud (ECM Phase II).

We are currently developing a Request for Proposals (RFP) for this deployment and are seeking additional input from Metropolitan organizational units. A questionnaire is being circulated to collect (updated) baseline information ahead of group interviews that will be scheduled for April.

Accomplishments

1. The Professional Services Contracting Team (PSCT) completed several high-profile highly visible acquisitions for the month as cited below:

In Support of Metropolitan's Bay Delta Initiatives Program, the PSCT staff completed Request for Qualifications (RFQ) 1291 to provide on-call professional and technical expertise in Sacramento-San Joaquin Bay-Delta (Bay-Delta) issues. Metropolitan is now well positioned to obtain various levels of support and expertise in furtherance of the Bay Delta Program.

PSCT staff completed Request for Proposals (RFP) 1254—Control System Upgrade. The purpose of this highly visible and integral acquisition is to upgrade Metropolitan's current supervisory control and data acquisition system (SCADA) to obtain higher levels of functionality and security. The essential services include designing, programming, configuring, manufacturing or procuring, and commissioning the upgraded SCADA system.

PSCT staff completed RFQ 1298 for On-Call Services for the Perris Valley Pipeline Interstate 215 Crossing Construction Management Services. This acquisition supports construction of approximately 3,000 feet of pipeline within a new tunnel beneath the Interstate 215 (I-215) freeway for the Perris Valley Pipeline, including the construction of multiple access shafts, pipe installation, dewatering, and potential contaminated water treatment.

2. The second quarterly Administrative Services Section employee newsletter was distributed to its employees. The quarterly e-newsletter is an opportunity to share and connect the Section with inspiring stories, information, milestones, and media content happening within the Section. The issue featured:

- Four Easy "Green" New Year's Resolutions
- Teams Spotlight
- Employee Spotlight
- Employee Services Milestones: Anniversaries, Promotions, and Retirements
- Write On! Writing tips from the Technical Writing Team
- The Positive Feedback Box!



A New Year has arrived, and along with it, lots of resolutions. This year why not resolve to make a few simple lifestyle changes that could significantly impact the earth? To help you get started, explore this issue for eco-inspiration plenty in 2022!

4 EASY "GREEN" NEW YEAR'S RESOLUTIONS

The New Year brings the opportunity to reflect on the past and look forward to the future. One way to ensure a greener future is to commit to making small life changes that reduce our impact on the environment. If you're looking for easy ways to make your life greener in 2022, let's revisit the past and explore some new green "know-hows."

- ◆ **A Greener Home Office**
 - Be the Eco-CEO of your home office space; assess your work area and make sure that you are exercising the three R's: Reduce, Reuse, Recycle.
- ◆ **Ditch the Dump, Donate**
 - Donate items that you no longer use. Rather than throwing them away to a landfill, let your unwanted items be someone else's found treasure.
- ◆ **#PickUp5**
 - GAME ON! Commit to picking up five pieces of litter each time you go for a walk. If you stroll at least once every day, that adds up to 1,825 pieces of debris picked up over the year! Connect to others on this green mission by using #PickUp5 on social media and share photos of the impacts you've made!
- ◆ **Bring the Outdoors In**
 - Go for a neighborhood walk with a reusable bag and collect pieces of nature to create an eco centerpiece for your home! It is a great conversation piece to engage on the topic of sustainability with your family!

Here are more simple ways to make a difference:

- Carry reusable bags; don't get plastic bags everywhere you shop (you save money too!)
- Get into "green gifting" – gift certificates, recyclable batteries and eco-friendly products are a great way to search for "green" gifts. Rethink gift wrapping: utilize brown postal paper or paper bags as your wrapping paper, it looks earthy and original! Use pinecones or dried flowers for bows or gift toppers.
- Minimize your energy. This is a great time to upgrade to LED lights.



Human Resources

GM Strategic Priority #1: Resiliency

Objective #1: Partner with Metropolitan leadership to support learning, development, and adaptive workforce planning initiatives.

The Organizational Development and Training Unit held five Career Fairs (University of West Los Angeles, University of Arizona Global, University of La Verne, University of Redlands, and DeVry University) to connect employees with continuing degree curricula and promote Metropolitan's tuition reimbursement program. There were approximately 50 Metropolitan employees in attendance.

In March, 371 Metropolitan employees attended other online classes, including Mechanics of Writing; Excel Formulas & Functions; Dealing with Difficult People; Resume Writing; and Using E-mail Effectively.

LinkedIn Learning, Metropolitan's online e-learning content platform, was used for classes, including topics on Managing Upwards; Creating Positive & Healthy Work Environments; Construction Risk Management; Difficult Conversations; Developing a Career Plan; and Time Management Fundamentals.

Objective #2 Seek diverse, high-quality talent, and establish partnerships to discover additional outreach opportunities that aid in staffing positions.

Recruitment successfully filled 10 positions for the month of March. We received 19 new staffing requisitions resulting in 202 positions currently in recruitment. Recruitment continues to conduct virtual interviews using Zoom.

The recruitment of the Chief Sustainability, Resiliency and Innovation Officer and the EEO Officer concluded with candidates selected and scheduled to start at the end of March and mid-April respectively. Interviews for the Chief Diversity, Equity & Inclusion Officer occurred with a hiring decision scheduled in April.

Continuing the Expert Training Series at the Diversity, Equity & Inclusion Council, Tiana Sanchez, a training and development expert, corporate trainer and consultant on developing talent and influencing organizational culture, presented "Inclusive Leadership" strategies to the Council.

GM Strategic Priority #2: Sustainability

Objective #1 Implement employee retention and engagement programs to ensure Metropolitan's investment in employees is supported.

The new MET Rewards system was piloted with HR staff to ensure that the system is functioning appropriately before rolling it out to the entire organization.

The Human Resources Group Manager, along with Facilities and Health and Safety staff, held a webinar on Implementing a Hybrid Work Environment that had over 900 participants. The webinar focused on the transition process, protocols required by the California Department of Public Health, and frequently asked questions. It was recorded and is available on the IntraMet for employees to review.

Objective #2 Ensure Metropolitan managers have foundational knowledge, on-going support to effectively manage employees, and the tools to prepare for a changing workforce.

Human Resources staff continued to provide one-on-one coaching and mediation services for managers and employees in the developmental areas of team engagement, innovative thinking, communication skills, and strategic delegation.

GM Strategic Priority #3: Innovation

Objective #1: Continue to upgrade HR's technological capabilities and continue to seek out improved technologies to better serve HR's customers.

HRIS staff continued to configure and test capabilities in the MyHR system to track COVID vaccination status, testing results, and other key COVID metrics. This will support Metropolitan's ability to begin safely transitioning staff back to the workplace who have been working remotely.

HR Core Business: Provide Excellent Human Resources Services

Objective #1: Administer all HR services with efficiency and a focus on customer service excellence, consistency, and flexibility.

During March, Employee Relations staff continued negotiations with AFSCME Local 1902 to secure a three-year MOU extension, consistent with parameters approved by the OP&T Committee in November. Negotiations have also begun with the Supervisors Association. A comprehensive update on the status of negotiations was provided to the OP&T Committee in March.

Employee Relations staff also continued ongoing collaborative discussions with the bargaining units over Metropolitan's response to the COVID pandemic. The focus has been on tracking updated federal, state, and local guidelines, as well as developing "toolkits" to assist managers and employees with the eventual transition back to in-person work.

HR Core Business: Comply with Employment Laws and Regulations

Objective #1: Effectively administer all Human Resources policies, programs, and practices in compliance with applicable federal and state laws and Metropolitan's Administrative Code, Operating Policies, and Memorandum of Understanding.

During March, four new Workers' Compensation claims were received. Five employees remain off work because of an industrial injury or illness. This reflects Metropolitan's effort to accommodate injured workers, while enabling them to be productive and on the job.

Staff continues to work closely with our new Workers' Compensation third-party administrator, TRISTAR Risk Management, to transition claims management from the previous third-party administrator.

Activities of the Workers' Compensation/Medical Screening Unit are summarized as follows for March:

- Coordinated three medical Medvan visits (DMV, respirator exams, and hearing tests), one at Lake Mathews and two at LaVerne
- Arranged seven medical evaluations (Pre-employment, DMV, and medical surveillance)
- Coordinated three random drug tests
- Addressed six accommodation issues

Finance and Administration

(continued)

HR Metrics	June 2021	March 2022	Prior Month February 2022
Headcount			
Regular Employees	1,806	1,744	1,746
Temporary Employees	30	36	36
Interns	3	2	2
Recurrents	20	19	19
Annuitants	16	15	15

	March 2022	February 2022
Number of Recruitments in Progress (Includes Temps and Intern positions)	202	193
Number of New Staffing Requisitions	19	9
	March 2022	February 2022
Number of Job Audit Requests in Progress	9	9
Number of Completed/Closed Job Audits	1	2
Number of New Job Audit Requests	1	0

Transactions Current Month and Fiscal YTD (includes current month)			
<u>External Hires</u>	<u>FY 20/21 Totals</u>	<u>March 2022</u>	<u>FISCAL YTD</u>
Regular Employees	74	6	53
Temporary Employees	30	1	24
Interns	3	0	4
Internal Promotions	60	8	55
Management Requested Promotions	149	17	112
Retirements/Separations (regular employees)	78	8	114
Employee-Requested Transfers	20	3	9

Retirees

Last	First Name	Classification	Eff Date	Reason	Group
Aurangzeb	Naushad	Team Manager V	2/5/2022	Retirement - Service	WATER SYSTEM OPERATIONS GROUP
Hollis	Brian	O&M Tech IV	1/25/2022	Retirement - Service	WATER SYSTEM OPERATIONS GROUP
Meisler	Martin	Sr Environmental Specialist	2/2/2022	Retirement - Service	BAY DELTA INITIATIVES
Nunn	Richard	O&M Tech IV	2/4/2022	Retirement - Service	WATER SYSTEM OPERATIONS GROUP
Barnes	Sherri	Survey and Mapping Tech IV	2/12/2022	Retirement - Service	ENGINEERING SERVICES GROUP
Myers	John	Facilities Maint Mechanic	2/18/2022	Retirement - Service	WATER SYSTEM OPERATIONS GROUP

External Affairs



External Affairs

GM Hagekhalil joined representatives from MWDOC, retail water agencies and the Wyland Foundation to kick off the “Streams of Hope” community outreach campaign in Orange County to support water stewardship. Metropolitan is co-sponsoring the month-long event which includes a public art installation, educational curriculum to promote environmental literacy, and social media outreach. (March 5)



GM Hagekhalil joins with local water leaders in Orange County to kick off a month-long water stewardship public awareness campaign.



GM Hagekhalil, Mayor Garcetti, Chairwoman Gray and LADWP GM Adams

Chairwoman Gray and GM Hagekhalil attended the L.A. Chamber Access DC conference and met with Senator Padilla, Representatives Napolitano (D-El Monte), Bass (D-Los Angeles) and Waters (D-Los Angeles), and staff from Senator Feinstein’s office to discuss priority issues including the need for continued federal funding for water infrastructure and tax parity for water conservation measures. GM Hagekhalil participated on a panel, “The State of Infrastructure—Water” with LADWP GM Adams and Rep. Napolitano Chief of Staff Sheehy. (March 14–15)

Chairwoman Gray and GM Hagekhalil joined with California Natural Resources Secretary Crowfoot and LA DWP’s Managing Water Utility Engineer Kwan for a well-attended media event calling on Southern Californians to increase conservation efforts and use more native plants as a water saving strategy during this historic drought. The event, which was held at the Theodore Payne headquarters, was covered by CBS2, NBC4, Spectrum News, Univision, KNX, KFI and the San Fernando Sun. (March 21)



Metropolitan hosted California Secretary for Natural Resources Crowfoot for a water conservation media event at the Theodore Payne Garden Center

Legislative Services

Federal

The FY 2022 Omnibus Appropriations bill, signed into law by President Biden, appropriates \$1.92 billion in FY22 funding for the Bureau of Reclamation including \$53 million for water recycling, \$117 million for water storage projects, and \$25 million for the Colorado River Drought Contingency Plan work. The U.S. Environmental Protection Agency will receive \$9.56 billion in FY 22 including \$3.62 billion for the clean water and drinking water SRF and \$69.5 million for the Water Infrastructure Finance and Innovation Act program.

State

Metropolitan staff continues its outreach work with legislators and the Newsom administration and efforts to build support from the water, business, and labor community, for additional funding in the state budget to address Southern California’s \$14.5 billion water infrastructure needs, including a one-time request for \$552 billion for the Regional Recycled Water Program and a set of emergency drought mitigation projects.

Key legislative proposals being tracked by staff are Metropolitan's sponsored bill AB 1845 (Calderon, D-Baldwin Hills) to use alternative delivery methods to accelerate design and construction of the Regional Recycled Water Program and drought mitigation projects; AB 2449 (B. Rubio, D-Baldwin Park), sponsored by Three Valley MWD to modernize the Brown Act to allow agencies to use teleconferencing during non-emergencies; and SB 832 (Dodd, D-Napa) regarding alternative water measurement studies for agricultural regions.

Local

Chairwoman Gray spoke to the Los Angeles County Business Federation's Advocacy Committee to seek the organization's support for Metropolitan-sponsored legislation, AB 1845. The Committee voted to recommend that the organization's board of directors support the bill. (March 3)

In addition to monitoring regularly scheduled government affairs and regional meetings, Metropolitan staff participated in the various webinars, virtual meetings and events on water-specific topics representing the district and provided information on water supply conditions and securing support for Metropolitan's priority legislation.

Media and Communications

Media Activities and Interviews

- Coordinated interview between National Association of Realtors magazine writer Brian Clark and Water Resource Management's Coffey on Metropolitan's climate change adaptation efforts, including Regional Recycled Water Program and conservation investments.
- Arranged interview with Rebuild So Cal Partnership and GM Hagekhalil for podcast on Metropolitan's future infrastructure investments.
- Set up interview with New York Magazine reporter Kyle Paoletta, GM Hagekhalil and Colorado River Resources Manager Hasencamp on Colorado River issues.
- Coordinated live interview with KCAL-TV Channel 9 anchors Pat Harvey, Jeff Vaughn and Water User Efficiency Manager McDonnell about water conservation programs and tips.
- Arranged interview with California Water publication, a series of special inserts in local daily newspapers, and GM Hagekhalil on drought conditions and Metropolitan's actions.
- Set up interview with KNX-AM 1070 radio producer Brandon Liebhaber and COO/AGM Upadhyay on state's snow survey results.
- Coordinated interview with Los Angeles Times reporter Hayley Smith and COO/AGM Upadhyay regarding state water board's latest conservation numbers indicating increased water use.
- Arranged interviews for GM Hagekhalil with KNBC-4 and KTLA on drought conditions and conservation.
- Handled fact-checking questions from Voice of San Diego reporter MacKenzie Elmer on Metropolitan budget and rate increases.

Press releases

- Board approval of \$10.5 million investment in advertising and public outreach for conservation
- Metropolitan winning silver for best tasting water in the U.S.
- Statement from GM Hagekhalil on latest snow survey results, dwindling snowpack
- Statement from GM Hagekhalil in response to Department of Water Resources announcement lowering State Water Project allocation from 15 percent to 5 percent
- Press event with Chairwoman Gray, GM Hagekhalil and Resources Secretary Crowfoot on need for residents and business in region to ramp up their water-saving efforts because of drought

Creative Design

Responding to extreme drought conditions, developed and presented new round of conceptual treatments for 2022 Spring/Summer drought advertising campaign to member agency PIOs and Water Use Efficiency managers. Campaign will be produced entirely in-house, using a multi-media, multi-language approach.

Website

- Received 101,275 visits to the mwdh2o.com website, with the careers and Diamond Valley Lake the most popular destinations.
- Generated 49,470 visits to bewaterwise.com, doubling the number of visits in February.

Social Media

- Celebrated Women's History Month with a social media campaign featuring Chairwoman Gray and posts highlighting Metropolitan female employees across the district through personal video messages conveying why they are proud to work in the water industry.
- Posted on Twitter about board approval of funding for an advertising campaign and recognition for best tasting tap water resulted in some of the highest organic engagement on Twitter this month.
- Completed the second phase of the conservation advertising campaign on social media, digital marketing, billboards, and transit shelters, generating more than 103,000 clicks to bewaterwise.com and more than 18 million impressions.



Public Outreach and Member Services

Outreach activities for the Regional Recycled Water Program:

- Virtual tours of the Advanced Purification Center in Spanish (March 22) and English (March 23).
- Staffed an exhibit at the South Bay City Council of Governments General Assembly in Carson (March 24).
- Met with the Council for Watershed Health and other public agencies to discuss recycled water communications (March 31).
- Provided a project briefing for the following organizations:
 - Pasadena Sierra Club (March 2)
 - Port of Long Beach (March 3)
 - Torrance Chamber of Commerce (March 10)
 - Rebuild SoCal Partnership Board of Directors (March 15)
 - Carson City Council (March 15)
 - Los Angeles County Sanitation Districts Industry Advisory Council (March 15)
 - LA County Supervisor Mitchell's Office (March 16)
 - Baldwin Park Kaiser Permanente managers (March 16)
 - San Gabriel Valley Legislative Coalition of Chambers (March 17)
 - LA County Supervisor Janice Hahn's Office (March 17)
 - The Nature Conservancy (March 17)
 - Vulcan Materials (March 21)
 - TreePeople (March 21)
 - Los Angeles County Supervisor Hilda Solis' Office (March 22)
 - LA Waterkeeper (March 25)
 - East Yard Communities for Environmental Justice (March 28)
 - Nature for All (March 31)

Other Outreach Activities

- Conducted a public opinion survey of 1,000 Southern Californians on drought and conservation attitudes (March 6-13).
- Provided a tour of Lake Havasu and overview of Metropolitan's Colorado River system for the Water Education Foundation (March 17).
- Conducted an employee brown bag on "How to Talk to Family and Friends about the Drought" (March 28).

Education and Community Relations

Metropolitan staff virtually interacted with more than 770 teachers, students, and parents through online virtual tours, scouting programs, and customized Zoom class presentations. Virtually out in the community, staff participated in a meeting of the Ventura County Work Based Learning Consortium. The VCWBLC is composed of public agencies, private businesses, and education groups in and around Ventura County.

Kicked off online Solar Cup 2022 with 18 high school teams representing 10 member agencies.

Staff presented on DEI, Drought, and Community Engagement to the DWR's Water Education Committee, which includes water educators from throughout the state, and to the California Environmental Education Foundation.



Community Partnering and Sponsorship Program

Metropolitan joined dozens of water agencies nationwide to celebrate EPA WaterSense's Fix a Leak Week, a public outreach campaign to encourage the public to save water by fixing common household leaks. Staff participated in EPA's Fix a Leak Week "Twitter Party" and also developed two Instagram reels highlighting the district's Flow Monitor Rebate Pilot Program.

Sponsored the following events to promote water education, conservation and sustainability initiatives:

- WaterReuse Association; 2022 WaterReuse Symposium (March 6–9)
- Climate Resolve; Coolest in LA (March 17)

Business Outreach and Innovation

Staff participated in the following events:

- United States Green Building Council workshop on Net Zero Carbon Neutrality (March 3)
- National Association of Minority Contractors Corporate advisory board meeting (March 8)
- Panelist for the Women's Business Enterprise Council (WBEC) Pacific, WE-Xcel Business Mock Matchmaking webinar (March 17)
- Asian American Architects and Engineers workshop on Diversity, Equity, and Inclusion (March 17)
- California American Indian Chamber of Commerce "Tribal Business Empowerment Journey Program" (March 24)
- Los Angeles Chamber workshop on Faces of Resilience—Promoting environmental, socio-economic, and racial equity roles. (March 25)



Metropolitan's Mission is to provide its service area with adequate and reliable supplies of high-quality water to meet present and future needs in an environmentally and economically responsible way.

700 N. Alameda Street, Los Angeles, CA 90012
General Information (213) 217-6000
www.mwdh2o.com www.bewaterwise.com

General Manager: Adel Hagekhail
Office of the GM (213) 217-6139
OfficeoftheGeneralManager@mwdh2o.com



Metropolitan Cases

Association of Confidential Employees v. Metropolitan (Public Employment Relations Board)

On April 4, 2022, the Association of Confidential Employees (ACE) filed an unfair practice charge with the Public Employment Relations Board (PERB). The Charge alleges Metropolitan failed to adequately complete the meet and confer process when Metropolitan created the new unrepresented EEO Officer position and advertised the opening for this position on Metropolitan's website in December 2021. The Charge is based, in

significant part, on the presumption the new EEO Officer position will replace key functions currently performed by the ACE-represented EEO Manager position. ACE requests an order that, *inter alia*, would require Metropolitan to restore the status quo by returning the job duties it asserts were transferred to the EEO Officer position back to the EEO Manager position, and which would direct Metropolitan to provide ACE with notice and an opportunity to meet and confer about changes to matters subject to bargaining within the scope of representation. The Legal Department is representing Metropolitan.

Other Matters

Garvey Reservoir

Staff from Engineering Services Group and the General Counsel's Office worked together to secure the removal of a backyard encroachment into a small portion of Metropolitan's Garvey

Reservoir in the City of Monterey Park, California. Metropolitan staff secured the necessary legal instruments to allow for the timely completion of stormwater drainage and erosion control improvements to protect Metropolitan facilities. .

Matters Received by the Legal Department

<u>Category</u>	<u>Received</u>	<u>Description</u>	
Government Code Claims	3	Claims relating to: (1) tree falling on claimant's vehicle in the city of Fallbrook; and (2) two accidents involving MWD vehicles	
Requests Pursuant to the Public Records Act	19	<u>Requestor</u>	<u>Documents Requested</u>
		AKM Consulting Engineers	Meter data for Three Valleys PM-18 for August and September 2021
		Brown and Caldwell	Statement of Qualifications for pre-qualified firms to provide engineering services for water treatment facilities, conveyance, storage and distribution facilities, and large rotating equipment
		California Regional Water Quality Control Board	Drawings showing how the flow from Goodhart Canyon and other drainages east of the East Dam connect to the Salt Creek drainage
		Green Media Creations	Cost proposal for winning bidder for California Friendly & Native Plant Landscape Training, Design Seminar and Turf Removal



<u>Requestor</u>	<u>Documents Requested</u>
GVR Group	Financial details relating to Southern Nevada Water Authority, Central Arizona Project, and Arizona Department of Water Resources offers to California water agencies for the Regional Recycled Water Program
Fomotor Engineering (2 requests)	Existing utility plans/as-built drawings for two projects in Desert Hot Springs
Lagrange Communications	Submissions and scoring sheets for Multi-Media Placement Consulting Services for Water Awareness & Outreach Campaign
Law Offices of Michael A. Brodsky	Delta Conveyance Project Administrative Draft Environmental Impact Report
Los Angeles County Civil Grand Jury	Data on average water use in 2021 for Los Angeles County
Michael Baker International	Proposals and scoring/evaluations for Request for Proposal for Colorado River Conduit Erosion Control Improvements
MWD Supervisors Association	Written transcript, digital media, and chats from Coffee with the General Manager session held on April 27, 2022
OnPoint Insights	Proposals and ranking data for Request for Proposal for Enterprise Data Analytics
Orbach Huff & Henderson	Documents relating to the termination of the sublease between Hooman Enterprises and MWD, and permits issued and work performed on the property
Padre Associates	Drawings for any MWD pipelines in area of a proposed school site for the Fontana Unified School District
Private Citizen	Rebate records for properties on certain streets in San Juan Capistrano
Southern California Edison	List of zip codes in MWD service area
Transparent California	MWD Employee Compensation Report for 2021
WestWater Research	Documents on the status of the sale of the Palo Verde property



Bay-Delta and SWP Litigation	
Subject	Status
<p>Consolidated DCP Revenue Bond Validation Action and CEQA Case</p> <p><i>Sierra Club, et al. v. California Department of Water Resources</i> (CEQA, designated as lead case)</p> <p><i>DWR v. All Persons Interested</i> (Validation)</p> <p>Sacramento County Superior Ct. (Judge Kenneth C. Mennemeier)</p>	<ul style="list-style-type: none">• Validation Action<ul style="list-style-type: none">• Metropolitan, Mojave Water Agency, Coachella Valley Water District, and Santa Clarita Valley Water Agency have filed answers in support• Kern County Water Agency, Tulare Lake Basin Water Storage District, Oak Flat Water District, County of Kings, Kern Member Units & Dudley Ridge Water District, and City of Yuba City filed answers in opposition• North Coast Rivers Alliance et al., Howard Jarvis Taxpayers Association, Sierra Club et al., County of Sacramento & Sacramento County Water Agency, CWIN et al., Clarksburg Fire Protection District, Delta Legacy Communities, Inc, and South Delta Water Agency & Central Delta Water Agency have filed answers in opposition• Case ordered consolidated with the DCP Revenue Bond CEQA Case for pre-trial and trial purposes and assigned to Judge Earl for all purposes• DWR's motions for summary judgment re CEQA affirmative defenses granted; cross-motions by opponents denied• CEQA Case<ul style="list-style-type: none">• Sierra Club, Center for Biological Diversity, Planning and Conservation League, Restore the Delta, and Friends of Stone Lakes National Wildlife Refuge filed a standalone CEQA lawsuit challenging DWR's adoption of the bond resolutions• Alleges DWR violated CEQA by adopting bond resolutions before certifying a Final EIR for the Delta Conveyance Project• Cases ordered consolidated for all purposes• DWR's motion for summary judgment granted; Sierra Club's motion denied



SWP-CVP 2019 BiOp Cases

Pacific Coast Fed'n of Fishermen's Ass'ns, et al. v. Raimondo, et al. (PCFFA)

Calif. Natural Resources Agency, et al. v. Raimondo, et al. (CNRA)

Federal District Court, Eastern Dist. of California,
Fresno Division
(Judge [Thurston](#))

- SWC intervened in both *PCFFA* and *CNRA* cases
- Briefing on federal defendants' motion to dismiss CNRA's California ESA claim is complete; no hearing date set and may be decided on the papers
- Federal defendants circulated administrative records for each of the BiOps
- December 18, 2020 PCFFA and CNRA filed motions to complete the administrative records or to consider extra-record evidence in the alternative
- Federal defendants reinitiated consultation on Oct 1, 2021
- On Nov. 8, 2021, Federal Defendants and PCFFA plaintiffs stipulated to inclusion of certain records in the Administrative Records and to defer further briefing on the matter until July 1, 2022
- On Nov. 12, 2021, SWC filed a motion to amend its pleading to assert cross-claims against the federal defendants for violations of the ESA, NEPA and WIIN Act; Court has yet to set a hearing date
- November 23, 2021, Federal Defendants filed a motion for voluntary remand of the 2019 Biological Opinions and NEPA Record of Decision and requesting that the Court issue an order approving an Interim Operations Plan through September 30, 2022; that the cases be stayed for the same time period; and that the Court retain jurisdiction during the pendency of the remand. State Plaintiffs filed a motion for injunctive relief seeking judicial approval of the Interim Operations Plan
- December 16, 2021 – NGO Plaintiffs filed a motion for preliminary injunction related to interim operations
- Motions fully briefed as of Jan. 24, 2022
- Hearing on motions held Feb. 11, 2022
- District court (1) approved the State and Federal Government's Interim Operations Plan (IOP) through September 30, 2022; (2) approved the federal defendants' request for a stay of the litigation through September 30, 2022; (3) remanded the BiOps without invalidating them for



	<p>reinitiated consultation with the 2019 BiOps in place; (4) denied PCFFA's alternative request for injunctive relief; and (5) by ruling on other grounds, denied the state plaintiffs' motion for injunctive relief and the federal defendants' request for equitable relief</p>
<p>CESA Incidental Take Permit Cases</p> <p>Coordinated Case Name <i>CDWR Water Operations Cases, JCCP 5117</i> (Coordination Trial Judge Gevercer)</p> <p><i>Metropolitan & Mojave Water Agency v. Calif. Dept. of Fish & Wildlife, et al.</i> (CESA/CEQA/Breach of Contract)</p> <p><i>State Water Contractors & Kern County Water Agency v. Calif. Dept. of Fish & Wildlife, et al.</i> (CESA/CEQA)</p> <p><i>Tehama-Colusa Canal Auth., et al. v. Calif. Dept. of Water Resources</i> (CEQA)</p> <p><i>San Bernardino Valley Municipal Water Dist. v. Calif. Dept. of Water Resources, et al.</i> (CEQA/CESA/ Breach of Contract/Takings)</p> <p><i>Sierra Club, et al. v. Calif. Dept. of Water Resources</i> (CEQA/Delta Reform Act/Public Trust)</p> <p><i>North Coast Rivers Alliance, et al. v. Calif. Dept. of Water Resources</i> (CEQA/Delta Reform Act/Public Trust)</p> <p><i>Central Delta Water Agency, et. al. v. Calif. Dept. of Water Resources</i> (CEQA/Delta Reform Act/Public Trust/ Delta Protection Acts/Area of Origin)</p> <p><i>San Francisco Baykeeper, et al. v. Calif. Dept. of Water Resources, et al.</i> (CEQA/CESA)</p>	<ul style="list-style-type: none"> • All 8 cases ordered coordinated in Sacramento County Superior Court • Stay on discovery issued until coordination trial judge orders otherwise • All four Fresno cases transferred to Sacramento to be heard with the four other coordinated cases • SWC and Metropolitan have submitted Public Records Act requests seeking administrative record materials and other relevant information • Answers filed in the three cases filed by State Water Contractors, including Metropolitan's • Draft administrative records produced on Sept. 16, 2021 • Certified administrative records lodged March 4, 2022 • May 13, 2022 Case Management Conference



<p>CDWR Environmental Impact Cases Sacramento Superior Ct. Case No. JCCP 4942, 3d DCA Case No. C091771 (20 Coordinated Cases)</p> <p>Validation Action <i>DWR v. All Persons Interested</i></p> <p>CEQA 17 cases</p> <p>CESA/Incidental Take Permit 2 cases</p>	<ul style="list-style-type: none"> • Cases dismissed after DWR rescinded project approval, bond resolutions, decertified the EIR, and CDFW rescinded the CESA incidental take permit • January 10, 2020 – Nine motions for attorneys’ fees and costs denied in their entirety • Parties have appealed attorneys’ fees and costs rulings • Hearing on attorneys’ fee appeals held March 28, 2022 and matter submitted
<p>COA Addendum/ No-Harm Agreement</p> <p><i>North Coast Rivers Alliance v. DWR</i> Sacramento County Superior Ct. (Judge Gevercer)</p>	<ul style="list-style-type: none"> • Plaintiffs allege violations of CEQA, Delta Reform Act & public trust doctrine • USBR Statement of Non-Waiver of Sovereign Immunity filed September 2019 • Westlands Water District and North Delta Water Agency granted leave to intervene • Metropolitan & SWC monitoring • Deadline to prepare administrative record extended to May 20, 2022 • July 22, 2022 hearing on the merits
<p>Delta Plan Amendments and Program EIR 4 Consolidated Cases Sacramento County Superior Ct. (Judge Gevercer)</p> <p><i>North Coast Rivers Alliance, et al. v. Delta Stewardship Council</i> (lead case)</p> <p><i>Central Delta Water Agency, et al. v. Delta Stewardship Council</i></p> <p><i>Friends of the River, et al. v. Delta Stewardship Council</i></p> <p><i>California Water Impact Network, et al. v. Delta Stewardship Council</i></p> <p>Delta Stewardship Council Cases 3 Remaining Cases (CEQA claims challenging original 2013 Delta Plan EIR) (Judge Chang)</p> <p><i>North Coast Rivers Alliance, et al. v. Delta Stewardship Council</i></p> <p><i>Central Delta Water Agency, et al. v. Delta Stewardship Council</i></p> <p><i>California Water Impact Network, et al. v. Delta Stewardship Council</i></p>	<ul style="list-style-type: none"> • Cases challenge, among other things, the Delta Plan Updates recommending dual conveyance as the best means to update the SWP Delta conveyance infrastructure to further the coequal goals • Allegations relating to “Delta pool” water rights theory and public trust doctrine raise concerns for SWP and CVP water supplies • Cases consolidated for pre-trial and trial under <i>North Coast Rivers Alliance v. Delta Stewardship Council</i> • SWC granted leave to intervene • Metropolitan supports SWC • 2013 and 2018 cases to be heard separately due to peremptory challenge • SWC and several individual members, including Metropolitan, SLDMWA and Westlands have dismissed their remaining 2013 CEQA claims but remain intervenor-defendants in the three remaining <i>Delta Stewardship Council Cases</i> <p>2013 Cases</p> <ul style="list-style-type: none"> • After a hearing on Feb. 25, 2022 the court ruled against plaintiffs on the merits of their BDCP-related CEQA claims



	<ul style="list-style-type: none"> April 22, 2022 <u>court ruled against the remaining CEQA claims and denied the petitions for writs of mandamus</u> <p>2018 Cases</p> <ul style="list-style-type: none"> 2018 Cases fully briefed as of Jan. 24, 2022, hearing on the merits set for July 22, 2022
<p>SWP Contract Extension Validation Action Sacramento County Superior Ct. (Judge Culhane)</p> <p><i>DWR v. All Persons Interested in the Matter, etc.</i></p>	<ul style="list-style-type: none"> DWR seeks a judgment that the Contract Extension amendments to the State Water Contracts are lawful Metropolitan and 7 other SWCs filed answers in support of validity to become parties Jan. 5-7, 2022 Hearing on the merits held with CEQA cases, below Final statement of decision in DWR's favor filed March 9, 2022 Final judgment pending
<p>SWP Contract Extension CEQA Cases Sacramento County Superior Ct. (Judge Culhane)</p> <p><i>North Coast Rivers Alliance, et al. v. DWR</i> <i>Planning & Conservation League, et al. v. DWR</i></p>	<ul style="list-style-type: none"> Petitions for writ of mandate alleging CEQA and Delta Reform Act violations filed on January 8 & 10, 2019 Deemed related to DWR's Contract Extension Validation Action and assigned to Judge Culhane Administrative Record completed DWR filed its answers on September 28, 2020 Metropolitan, Kern County Water Agency and Coachella Valley Water District have intervened and filed answers in the two CEQA cases Final statement of decision in DWR's favor denying the writs of mandate filed March 9, 2022 Final judgments pending



<p>Delta Conveyance Project Soil Exploration Case</p> <p><i>Central Delta Water Agency, et al. v. DWR</i> Sacramento County Superior Ct. (Judge Chang)</p>	<ul style="list-style-type: none"> • Filed August 10, 2020 • Plaintiffs Central Delta Water Agency, South Delta Water Agency and Local Agencies of the North Delta • One cause of action alleging that DWR's adoption of an Initial Study/Mitigated Negative Declaration (IS/MND) for soil explorations needed for the Delta Conveyance Project violates CEQA • March 24, 2021 Second Amended Petition filed to add allegation that DWR's addendum re changes in locations and depths of certain borings violates CEQA • Deadline to prepare the administrative record extended to April 22, 2022 • DWR's petition to add the 2020 CEQA case to the <i>Department of Water Resources Cases</i>, JCCP 4594, San Joaquin County Superior Court denied
<p>Water Management Tools Contract Amendment</p> <p><i>California Water Impact Network et al. v. DWR</i> Sacramento County Superior Ct. (Judge Eurie)</p> <p><i>North Coast Rivers Alliance, et al. v. DWR</i> Sacramento County Super. Ct. (Judge Eurie)</p>	<ul style="list-style-type: none"> • Filed September 28, 2020 • CWIN and Aqualliance allege one cause of action for violation of CEQA • NCRA et al. allege four causes of action for violations of CEQA, the Delta Reform Act, Public Trust Doctrine and seeking declaratory relief • Parties have stipulated to production of a draft administrative record by April 1, 2022 and to a timeline to attempt to resolve any disputes over the contents • CWIN case reassigned to Judge Earl so both cases will be heard together • SWC motion to intervene in both cases granted



San Diego County Water Authority v. Metropolitan, et al.

Cases	Date	Status
2010, 2012	Aug. 13-14, 2020	Final judgment and writ issued. Transmitted to the Board on August 17.
	Sept. 11	Metropolitan filed notice of appeal of judgment and writ.
	Jan. 13, 2021	Court issued order finding SDCWA is the prevailing party on the Exchange Agreement, entitled to attorneys' fees and costs under the contract.
	Feb. 10	Court issued order awarding SDCWA statutory costs, granting SDCWA's and denying Metropolitan's related motions.
	Feb. 16	Per SDCWA's request, Metropolitan paid contract damages in 2010-2012 cases judgment and interest. Metropolitan made same payment in Feb. 2019, which SDCWA rejected.
	Feb. 25	Metropolitan filed notice of appeal of Jan. 13 (prevailing party on Exchange Agreement) and Feb. 10 (statutory costs) orders.
	Sept. 21	Court of Appeal issued opinion on Metropolitan's appeal regarding final judgment and writ, holding: (1) the court's 2017 decision invalidating allocation of Water Stewardship Rate costs to transportation in the Exchange Agreement price and wheeling rate applied not only to 2011-2014, but also 2015 forward; (2) no relief is required to cure the judgment's omission of the court's 2017 decision that allocation of State Water Project costs to transportation is lawful; and (3) the writ is proper and applies to 2015 forward.
	Mar. 17, 2022	Court of Appeal unpublished decision affirming orders determining SDCWA is the prevailing party in the Exchange Agreement and statutory costs.
	Mar. 21	Metropolitan paid SDCWA \$14,296,864.99 for attorneys' fees and \$352,247.79 for costs, including interest.
2014, 2016	Aug. 28, 2020	SDCWA served first amended (2014) and second amended (2016) petitions/complaints.
	Sept. 28	Metropolitan filed demurrers and motions to strike portions of the amended petitions/complaints.



Cases	Date	Status
	Sept. 28-29	Member agencies City of Torrance, Eastern Municipal Water District, Foothill Municipal Water District, Las Virgenes Municipal Water District, Three Valleys Municipal Water District, Municipal Water District of Orange County, West Basin Municipal Water District, and Western Municipal Water District filed joinders to the demurrers and motions to strike.
	Feb. 16, 2021	Court issued order denying Metropolitan's demurrers and motions to strike, allowing SDCWA to retain contested allegations in amended petitions/complaints.
	March 22	Metropolitan filed answers to the amended petitions/complaints and cross-complaints against SDCWA for declaratory relief and reformation, in the 2014, 2016 cases.
	March 22-23	Member agencies City of Torrance, Eastern Municipal Water District, Foothill Municipal Water District, Las Virgenes Municipal Water District, Three Valleys Municipal Water District, Municipal Water District of Orange County, West Basin Municipal Water District, and Western Municipal Water District filed answers to the amended petitions/complaints in the 2014, 2016 cases.
	April 23	SDCWA filed answers to Metropolitan's cross-complaints.
	Sept. 30	Based on the Court of Appeal's Sept. 21 opinion (described above), and the Board's Sept. 28 authorization, Metropolitan paid \$35,871,153.70 to SDCWA for 2015-2017 Water Stewardship Rate charges under the Exchange Agreement and statutory interest.
2017	July 23, 2020	Dismissal without prejudice entered.
2018	July 28, 2020	Parties filed a stipulation and application to designate the case complex and related to the 2010-2017 cases, and to assign the case to Judge Massullo's court.
	Nov. 13	Court ordered case complex and assigned to Judge Massullo's court.
	April 21, 2021	SDCWA filed second amended petition/complaint.
	May 25	Metropolitan filed motion to strike portions of the second amended petition/complaint.
	May 25-26	Member agencies City of Torrance, Eastern Municipal Water District, Foothill Municipal Water District, Las Virgenes Municipal Water District, Three Valleys Municipal Water District, Municipal Water District of Orange County, West Basin Municipal Water District, and Western Municipal Water District filed joinders to the motion to strike.
	July 19	Court issued order denying Metropolitan's motion to strike portions of the second amended petition/complaint.



Cases	Date	Status
2018 (cont.)	July 29	Metropolitan filed answer to the second amended petition/complaint and cross-complaint against SDCWA for declaratory relief and reformation.
	July 29	Member agencies City of Torrance, Eastern Municipal Water District, Foothill Municipal Water District, Las Virgenes Municipal Water District, Three Valleys Municipal Water District, Municipal Water District of Orange County, West Basin Municipal Water District, and Western Municipal Water District filed answers to the second amended petition/complaint.
	Aug. 31	SDCWA filed answer to Metropolitan's cross-complaint.
2014, 2016, 2018	June 11, 21	Deposition of non-party witness.
	Aug. 25	Hearing on Metropolitan's motion for further protective order regarding deposition of non-party witness.
	Aug. 25	Court issued order consolidating the 2014, 2016, and 2018 cases for all purposes, including trial.
	Aug. 30	Court issued order granting Metropolitan's motion for a further protective order regarding deposition of non-party witness.
	Aug. 31	SDCWA filed consolidated answer to Metropolitan's cross-complaints in the 2014, 2016, and 2018 cases.
	Oct. 27	Parties submitted to the court a joint stipulation and proposed order staying discovery through Dec. 8 and resetting pre-trial deadlines.
	Oct. 29	Court issued order staying discovery through Dec. 8 and resetting pre-trial deadlines, while the parties discuss the prospect of settling some or all remaining claims and crossclaims.
	Jan. 12, 2022	Case Management Conference. Court ordered a 35-day case stay to allow the parties to focus on settlement negotiations, with weekly written check-ins with the court; and directed the parties to meet and confer regarding discovery and deadlines.
	Feb. 22	Court issued order resetting pre-trial deadlines as proposed by the parties.
	Feb. 22	Metropolitan and SDCWA each filed motions for summary adjudication.
	April 13	Hearing on Metropolitan's and SDCWA's motions for summary adjudication.
	<u>April 18</u>	<u>Parties filed supplemental briefs regarding their respective motions for summary adjudication, as directed by the court.</u>



Cases	Date	Status
	<u>April 18</u>	<u>Court issued order resetting pre-trial deadlines as proposed by the parties.</u>
	<u>April 29</u>	<u>Parties filed pre-trial briefs.</u>
	<u>April 29</u>	<u>Metropolitan filed motions in limine.</u>
	<u>May 4</u>	<u>Court issued order granting Metropolitan's motion for summary adjudication on cross-claim for declaratory relief that the conveyance facility owner, Metropolitan, determines fair compensation, including any offsetting benefits; and denying its motion on certain other cross-claims and an affirmative defense.</u>
2014, 2016, 2018 (cont.)	May 16-27, 2022	Trial.
All Cases	April 15, 2021	Case Management Conference on 2010-2018 cases. Court set trial in 2014, 2016, and 2018 cases on May 16-27, 2022.
	April 27	SDCWA served notice of deposition of non-party witness.
	May 13-14	Metropolitan filed motions to quash and for protective order regarding deposition of non-party witness.
	June 4	Ruling on motions to quash and for protective order.



Outside Counsel Agreements				
Firm Name	Matter Name	Agreement No.	Effective Date	Contract Maximum
Andrade Gonzalez LLP	MWD v. DWR, CDFW and CDNR Incidental Take Permit (ITP) CESA/CEQA/Contract Litigation	185894	07/20	\$250,000
Aleshire & Wynder	Oil, Mineral and Gas Leasing	174613	08/18	\$50,000
Atkinson Andelson Loya Ruud & Romo	Employee Relations	59302	04/04	\$1,214,517
	MWD v. Collins	185892	06/20	\$100,000
	Delta Conveyance Project Bond Validation-CEQA Litigation	185899	09/21	\$100,000
	MWD Drone and Airspace Issues	193452	08/20	\$50,000
	Equal Employee Opportunity Commission Charge	200462	03/21	\$20,000
	Public Employment Relations Board Charge No. LA-CE-1441-M	200467	03/21	\$30,000
	Representation re the Shaw Law Group's Investigations	200485	05/20/21	\$50,000
	DFEH Charge- (DFEH Number 202102-12621316)	201882	07/01/21	\$25,000
	AFSCME Local 1902 in Grievance No. 1906G020 (CSU Meal Period)	201883	07/12/21	\$30,000
	AFSCME Local 1902 v. MWD, PERB Case No. LA-CE-1438-M	201889	09/15/21	\$20,000
	MWD MOU Negotiations**	201893	10/05/21	\$100,000
	DFEH Charge- (DFEH Number 202106-13819209)	203439	12/14/21	\$15,000
Best, Best & Krieger	Navajo Nation v. U.S. Department of the Interior, et al.	54332	05/03	\$185,000
	Bay-Delta Conservation Plan/Delta Conveyance Project (with SWCs)	170697	08/17	\$500,000
	Environmental Compliance Issues	185888	05/20	\$50,000



Firm Name	Matter Name	Agreement No.	Effective Date	Contract Maximum
Blooston, Mordkofsky, Dickens, Duffy & Prendergast, LLP	FCC and Communications Matters	110227	11/10	\$100,000
Brown White & Osborn LLP	HR Matter	203450	03/22	\$50,000
Buchalter, a Professional Corp.	Union Pacific Industry Track Agreement	193464	12/07/20	\$50,000
Burke, Williams & Sorensen, LLP	Real Property - General	180192	01/19	\$100,000
	Labor and Employment Matters	180207	04/19	\$50,000
	General Real Estate Matters	180209	08/19	\$100,000
Law Office of Alexis S.M. Chiu*	Bond Counsel	200468	07/21	N/A
Cislo & Thomas LLP	Intellectual Property	170703	08/17	\$75,000
Curls Bartling P.C.*	Bond Counsel	174596	07/18	N/A
	Bond Counsel	200470	07/21	N/A
Duane Morris LLP	SWRCB Curtailment Process	138005	09/14	\$615,422
Duncan, Weinberg, Genzer & Pembroke PC	Power Issues	6255	09/95	\$3,175,000
Ellison, Schneider, Harris & Donlan	Colorado River Issues	69374	09/05	\$175,000
	Issues re SWRCB	84457	06/07	\$200,000
Haden Law Office	Real Property Matters re Agricultural Land	180194	01/19	\$50,000
Hanson Bridgett LLP	SDCWA v. MWD	124103	03/12	\$1,100,000
	Finance Advice	158024	12/16	\$100,000
	Deferred Compensation/HR	170706	10/17	\$ 400,000
	Tax Issues	180200	04/19	\$50,000
Hausman & Sosa, LLP	MOU Hearing Officer Appeal	201892	09/21	\$25,000



Firm Name	Matter Name	Agreement No.	Effective Date	Contract Maximum
Hawkins Delafield & Wood LLP*	Bond Counsel	193469	07/21	N/A
Horvitz & Levy	SDCWA v. MWD	124100	02/12	\$900,000
	General Appellate Advice	146616	12/15	\$100,000
	MWD v. Collins	203449	01/03/22	\$20,000
	<u>Colorado River</u>	<u>203464</u>	<u>04/22</u>	<u>\$100,000</u>
Hunt Ortmann Palffy Nieves Darling & Mah, Inc.	Construction Contracts/COVID-19 Emergency	185883	03/20	\$40,000
Internet Law Center	HR Matter	174603	05/18	\$60,000
	Cybersecurity and Privacy Advice and Representation	200478	04/13/21	\$100,000
	Systems Integrated, LLC v. MWD	201875	05/17/21	\$40,000
Amira Jackmon, Attorney at Law*	Bond Counsel	200464	07/21	N/A
Jackson Lewis P.C.	Employment: Department of Labor Office of Contract Compliance (OFCCP)	137992	02/14	\$45,000
Jones Hall, A Professional Law Corporation*	Bond Counsel	200465	07/21	N/A
Kegel, Tobin & Truce	Workers' Compensation	180206	06/19	\$250,000
Lesnick Prince & Pappas LLP	Topock/PG&E's Bankruptcy	185859	10/19	\$30,000
Liebert Cassidy Whitmore	Labor and Employment	158032	02/17	\$201,444
	EEO Investigations	180193	01/19	\$100,000
	FLSA Audit	180199	02/19	\$50,000
LiMandri & Jonna LLP	Bacon Island Subrogation	200457	03/21	\$50,000
Manatt, Phelps & Phillips	In Re Tronox Incorporated	103827	08/09	\$540,000
	SDCWA v. MWD rate litigation	146627	06/16	\$2,900,000



Firm Name	Matter Name	Agreement No.	Effective Date	Contract Maximum
Meyers Nave Riback Silver & Wilson	OCWD v. Northrop Corporation	118445	07/11	\$2,300,000
	IID v. MWD (Contract Litigation)	193472	02/21	\$100,000
Miller Barondess, LLP	SDCWA v. MWD	138006	12/14	\$600,000
Morgan, Lewis & Bockius	SDCWA v. MWD	110226	07/10	\$8,750,000
	Project Labor Agreements	200476	04/21	\$100,000
Musick, Peeler & Garrett LLP	Colorado River Aqueduct Electric Cables Repair/Contractor Claims	193461	11/20	\$300,000
	Arvin-Edison v. Dow Chemical	203452	01/22	\$50,000
Nixon Peabody LLP*	Bond Counsel	193473	07/21	N/A
Norton Rose Fulbright US LLP*	Bond Counsel	200466	07/21	N/A
Olson Remcho LLP	Government Law	131968	07/14	\$200,000
	Ethics Office	170714	01/18	\$350,000
	<u>MWD Board/Ad Hoc Committee Advice</u>	<u>203459</u>	<u>03/22</u>	<u>\$60,000</u>
Ryan & Associates	Leasing Issues	43714	06/01	\$200,000
Seyfarth Shaw LLP	HR Litigation	185863	12/19	\$250,000
	Claim (Contract #201897)	201897	11/04/21	\$100,000
	Claim (Contract #203436)	203436	11/15/21	\$100,000
	Claim (Contract #203454)	203454	01/22	\$100,000
	Claim (Contract #203455)	203455	10/21	\$100,000
Stradling Yocca Carlson & Rauth*	Bond Counsel	200471	07/21	N/A
Theodora Oringher PC	OHL USA, Inc. v. MWD	185854	09/19	\$1,100,000
	Construction Contracts - General Conditions Update	185896	07/20	\$100,000



Firm Name	Matter Name	Agreement No.	Effective Date	Contract Maximum
Thomas Law Group	MWD v. DWR, CDFW, CDNR – Incidental Take Permit (ITP) CESA/CEQA/Contract Litigation	185891	05/20	\$250,000
	Iron Mountain SMARA (Surface Mining and Reclamation Act)	203435	12/03/21	\$100,000
Thompson Coburn LLP	FERC Representation re Colorado River Aqueduct Electrical Transmission System	122465	12/11	\$100,000
	NERC Energy Reliability Standards	193451	08/20	\$100,000
Van Ness Feldman, LLP	General Litigation	170704	07/18	\$50,000
	Colorado River MSHCP	180191	01/19	\$50,000
	Bay-Delta and State Water Project Environmental Compliance	193457	10/15/20	\$50,000
Western Water and Energy	California Independent System Operator Related Matters	193463	11/20/20	\$100,000

*Expenditures paid by Bond Proceeds/Finance

**Expenditures paid by another group



Internal Audit Report for March 2022

Summary

One report was issued during the month:

Fuel Management Audit Report

Discussion Section

This report highlights the significant activities of the Internal Audit Department during March 2022. In addition to presenting background information and the opinion expressed in the audit report, a discussion of findings noted during the examination is also provided.

Fuel Management

The Audit Department has completed a review of the accounting and administrative controls over Fuel Management as of October 31, 2021.

Scope

Our review consisted of evaluating internal controls over bulk fuel suppliers' bid and selection process and reviewing the purchase, delivery, usage, and reporting of fuel supplies. In addition, we tested the validity and propriety of invoice payments, including Fleet Card transactions, for compliance with contract terms and that the amounts billed were accurate and adequately supported. Finally, we performed analytical procedures designed to evaluate fueling activity.

Background

The Fleet Services Unit (Fleet) of the Operations Support Services Section within the Water Systems Operations Group (WSO) utilizes the Ward Fuel Management System (FMS), implemented in 2007/2008, to control fuel dispensing, manage fuel inventory, and meet regulatory requirements. In April 2021, the board approved an agreement with Syntech to implement a new FuelMaster Fuel Management System (FuelMaster). While FuelMaster may improve the District's fuel management capabilities, it will not in and of itself address the control deficiencies that underlie our opinion. Fleet management has initiated corrective action in response to our concerns.

Fleet manages diesel fuel, gasoline, jet fuel, CNG, and propane supplies. Metropolitan uses diesel fuel in vehicles and emergency backup generators and gasoline in vehicles and equipment (e.g., air compressors, etc.) The District dispenses fuel at nine fleet service centers and four other facilities at treatment plants, pumping plants, and the Sunset garage. Metropolitan also uses jet fuel for

aircraft, propane for heating purposes, and CNG in equipment (forklifts, etc.); however, it does not operate dispensing facilities for these products.

The fleet staff prepares monthly Perpetual Fuel Inventory Reports (PFIR) to summarize deliveries, usage, and inventory balances. Accounting Operations, part of the Controller Section in the Office of the Chief Financial Officer, uses the PFIR to record adjustments to the fuel inventory account, compute diesel fuel tax, and allocate fuel usage costs to field locations.

Fuel consumption for the past three years:

Account #	Account Name	FYE 2018/2019	FYE 2019/2020	FYE 2020/2021	Total
4300021	Gasoline (unleaded)	\$2,096,700	\$2,018,100	\$1,578,482	\$5,693,282
4300022	Diesel	407,500	380,500	255,221	1,043,221
4300023	Propane	108,400	38,100	60,901	207,401
					\$6,943,904

Opinion

In our opinion, the accounting and administrative procedures over Fuel Management provided a less than satisfactory internal control structure between July 2017 and October 2021. This opinion results from control design and operation deficiencies, non-compliance with procedures, and ineffective monitoring. Specifically, we noted flaws in practices designed to prevent and monitor unauthorized dispensing of fuel, including failure to identify and correct equipment malfunctions. Further, management did not take action to resolve known control deficiencies. Taken as a whole, we cannot attest to the safeguarding of fuel assets and proper recording of fuel purchases and uses.

Comments and Recommendations

FUEL DISPENSING

Safeguarding of assets is those policies and processes that provide reasonable assurance in the prevention or timely detection of unauthorized acquisition, use, or disposition of the District's assets. Prudent fuel management practices optimize fuel usage, track data on fuel usage for individual assets and ensure regulatory compliance. Moreover, physical access controls should limit fuel dispensing to authorized users, vehicles, and equipment. Combined, these preventative and detective controls ensure the safeguarding of fuel supply assets.

Metropolitan pumps fuel at thirteen facilities using the Fuel Management System (FMS) to control inventory and track fuel dispensing. Fleet Management installed telematics on its fuel pumps and approximately 75% of its vehicles and fuel-burning equipment. During fueling, telematics capture the vehicle or equipment identity, the odometer reading, if applicable, and the number of gallons pumped and records this information automatically in FMS. Pumping fuel into vehicles or equipment not fitted with telematics requires an authorized operator to swipe their identification badge and enter the information manually.

Audit testing revealed deficiencies in control design, operation, and circumvention of established procedures.

Control Design

- For vehicles and equipment not fitted with telematics, pumps should not dispense fuel unless authorized employees swipe their identification badge and key in the equipment bar code, license number or assigned vehicle number, and odometer reading, as appropriate. There is no procedure to ensure that employees key in the correct vehicle or equipment information.

For example, Securitas provides guard services for Metropolitan; their contract authorizes them to fuel 17 vehicles at Metropolitan facilities.

- None of the Securitas vehicles are equipped with telematics.
- Securitas contract terms allow for 17 vehicles to refuel at Metropolitan facilities. However, the FMS system identifies 39 vehicles as being authorized Securitas vehicles. Further review revealed that 15 of these were Metropolitan assets used by employees. Of the remaining 24, five showed no fueling activity during the period of our audit.
- Securitas informed us that one of the vehicles in the FMS does not belong to them. Fleet personnel told us they received an email from Securitas to authorize fueling the vehicle; however, they could not produce it. We were unable to determine who owned the vehicle.
- FMS records report that refueling of four vehicles (\$14,212) occurred after Securitas had notified Metropolitan of their sale. Further investigation revealed that Securitas employees used information from the sold vehicles to pump fuel into new ones. We were unable to verify the identity of the vehicles receiving this fuel.

Controls Not Operating as Intended

- Fleet management informed us pumps should stop dispensing fuel after removing the nozzle from the tank when telematics is engaged. We noted 71 units where fuel pumped exceeded the tank capacity of the receiving vehicle or equipment by 1,378 gallons. Of these transactions, 211 involved telematics and 105 involved employee card fueling. Employees told us the discrepancies occurred because they fueled nursing tanks, recorded the wrong asset, had the incorrect tank capacity recorded in the system, or fueled more than one asset on a single transaction.
- Pumps should not dispense fuel for vehicles and equipment fitted with telematics unless the odometer reading is higher than recorded at the last fueling. We tested FMS fueling data for 945 assets from July 1, 2018, to October 30, 2020. We noted 353 with odometer readings lower than that of the last fueling. This outcome should not be possible with the telematics equipment.

- Additionally, our comparison of the odometers of 64 vehicles to the odometer readings in FMS noted five (7.8%) had discrepancies.

Circumvented Controls

- Operators can place fuel pumps in Bypass Mode, which permits dispensing fuel without identifying the individual who operates the pump or the vehicle or equipment fueled. Between July 2017 and March 2021, pumps operated in Bypass Mode at all thirteen Metropolitan facilities for varying lengths of time, resulting in untracked fuel dispensing totaling \$13,063 (5,410 gallons). At Gene Camp, the diesel pump remained in Bypass Mode continuously for eleven months, dispensing 4,010 untracked gallons. The Fleet Manager deactivated Bypass Mode after Internal Audit identified the situation.
- “Jerry Cans” are five-gallon, portable containers used for transporting fuel. Management does not monitor fuel pumped into “Jerry Cans.” Additionally, since June 2019, Fleet recorded all fuel pumped into “Jerry Cans” as being dispensed from Weymouth, a default location. Consequently, Fleet cannot determine where or how “Jerry Can” fuel is used. Since June 2019, “Jerry Cans” accounted for 5,833 gallons.

Failure to ensure that only authorized vehicles and equipment receive fuel could result in erroneous reporting and undetected, fraudulent transactions.

We recommend that Fleet management develop, maintain and comply with written procedures to ensure that only authorized vehicles and equipment receive fuel. These procedures should ensure:

- Telematics is installed on all vehicles and equipment
- Data recorded in the FMS is complete, accurate, and appropriately supported
- Management reviews all fueling transactions regularly to identify discrepancies and take timely corrective action.
- Pumps placed in Bypass mode are properly authorized, and activity is tracked and periodically reviewed for propriety.

TELEMATICS COMPONENT MAINTENANCE

Fleet implemented the Ward Fueling Management System (FMS) in 2007/2008 to control fuel dispensing, manage fuel inventory, and meet regulatory requirements. In addition, telematics was installed on fuel pumps and approximately 75% of Metropolitan vehicles and fuel-burning equipment to provide usage and monitoring capabilities. When utilized as intended, these elements provide control over the purchase, use, and monitoring of fuel supplies and usage.

Our review of FMS data of refueling transactions for 1,202 assets from July 1, 2018, to October 30, 2020, revealed:

- Odometer readings for 353 units were descending instead of ascending
- The “last odometer or meter hour reading” was zero for 49 units
- The “current odometer or meter hour reading” was zero for six units
- Mileage or meter hour reading since the last fueling was zero for 533 units

We also noted:

- Management cannot determine if fuel was dispensed to the vehicle recorded in FMS for vehicles without telematics. Also, FMS does not distinguish between automatic and manual fueling when transactions are initiated by swiping an MWD badge.
- Metropolitan assigns a vehicle to California Fish and Game for monitoring Diamond Valley Lake. Our testing revealed the telematics in this vehicle had not worked since January 3, 2018. Fleet Management replaced it after we brought it to their attention in February 2021.

Failure to accurately track fueling activities could result in financial loss and create opportunities for fraud. Malfunctioning equipment makes the data inaccurate; consequently, Fleet Management is unable to perform reliable data analysis.

We recommend that Fleet management establish and implement written policies and procedures to promptly identify and repair malfunctioning devices.

FUEL INVENTORY PROCEDURES

Periodic comparison of physical inventory to accounting records is essential to track fuel usage, identify leakage, manage purchases, and ensure accurate financial reporting.

Fleet management uses a Perpetual Fuel Inventory (PFI) worksheet to track fuel inventory for each tank daily. Fleet relies on daily readings from tank level sensors to determine the amount of fuel on hand. Additionally, Fleet personnel must physically verify tank levels using a measurement stick before and after each fuel delivery.

During our audit, we noted the following:

- Fleet personnel only check tank level sensors when significant inventory variances occur (over 250 gallons) or when field personnel identify issues. We analyzed inventory variances by storage tank between June 2020 and December 2020 and noted three tanks with greater than 100-gallon variances in five out of six months. Furthermore, 76% of 100-gallon

variances were related to five tanks. Service records indicate only one tank service call during this time.

- Fleet personnel did not document required physical measurement before and after fuel delivery in nine of 63 receiving logs we examined.
- We conducted a physical inventory on one unleaded gasoline tank in La Verne on May 5, 2021. The stick measurement agreed with the tank level sensor. However, La Verne did not have usable water paste on hand. Consequently, we could not verify that the tank level sensor accurately detected water.

Accurate fuel level measurement is affected by various factors, including temperature and the presence of water. Storage tanks can accumulate water when it drains into the tank after a rainstorm or a contaminated fuel delivery. Undetected water can contaminate fuel, degrade components, promote corrosion, and result in erroneous inventory readings. The latter condition could lead to inaccurate reporting.

We recommend that Fleet management take physical measurements using water paste before and after fuel deliveries; the procedure takes only a few minutes. We also recommend stick measurement of all tanks at least monthly. Fleet personnel should resolve significant variances with tank level sensors promptly.

INVOICE REVIEW AND APPROVAL

Proper invoice review and approval ensures accurate billings for goods and services, the propriety of transactions, compliance with contractual terms and conditions, and prompt error correction. Fleet procedures require personnel to conduct and record a physical inventory of fuel tanks before and after delivery in the Inventory Report. Both the delivery driver and the receiver are required to sign the delivery ticket. Business Support Services staff is required to compare unit prices on supplier invoices against the Oil Price Information Service (OPIS) index report to determine the reasonableness of fuel charges before payment.

Our testing of 63 fuel invoices from July 1, 2017, to October 30, 2020, revealed:

- There was no evidence of a physical inventory before and after delivery for 15 invoices.
- The Inventory Report did not agree to the Regulated Substance Measurements Receiving Log (Log) for 31 invoices. The Log exceeded the Inventory Report by as much as 294 gallons and fell short by as much as 84 gallons.
- One invoice included the wrong date for the OPIS price; thus, we could not verify its accuracy. Management relies on the fuel supplier to provide the correct OPIS rate. Fleet management has an annual subscription to OPIS, but the license resides with a retired District employee.

- The receiver's signature was missing on two of 30 Pinnacle delivery tickets; there was no delivery ticket for a third.

Failure to verify fuel deliveries and invoice accuracy properly could result in financial loss due to fraudulent, erroneous, or unauthorized transactions.

We recommend that Fleet management adheres to fuel receiving and invoice processing policies and procedures. We also recommend that management reassign the OPIS subscription and use it to verify invoice prices.

FLEET CARD TRANSACTIONS

Metropolitan issues Fleet Cards to full-time employees who fuel District vehicles, aircraft, or equipment when Metropolitan fuel service is unavailable. Fleet cardholders are required to retain receipts, complete the Fleet Card Purchase Log, and obtain management approval on these transactions.

We tested 67 Fleet Card transactions from January 1, 2018, to October 20, 2020, and noted the following:

- Thirty showed no evidence of manager approval
- Two were not recorded in the Fleet Card Purchase Log and had no receipt
- Four did not include a transaction purpose
- Six jet fuel expenditures totaling \$5,596 were incorrectly posted to the propane account.
- Four aircraft fueling expenditures totaling \$1,572, and an oil change, \$91, were incorrectly posted to the gasoline/propane accounts.

Failure to perform proper review and approval of Fleet card transactions could result in financial loss to Metropolitan due to fraudulent, erroneous, or unauthorized transactions.

We recommend Fleet management enforce existing procedures for Fleet Card transactions.

MISRECORDED AND UNDER-UTILIZED ASSETS

A key component of effective risk management and internal control is to ensure that resources are acquired economically, used efficiently, and adequately protected. Asset tracking is an essential component of this effort and is critical to accurate financial accounting and reporting. Asset purchases and retirements should be promptly recorded as prescribed in the MWD Operating and Expensed Equipment Manual, dated October 2018.

During our testing of fueling activity, we noted assets that were underutilized and unrecorded.

- The District purchased a new Chevy Colorado truck in April 2019 for the Engineering Services Group. In March 2021, the odometer showed only 39 miles. The vehicle, fitted with telematics and GPS, was towed to the maintenance garage four times due to a dead battery resulting from inactivity; after the fourth tow, staff replaced the battery. After an Internal Audit inquiry, Engineering Services assigned the truck to an employee, who began to use it.
- The District purchased a new Dodge Sedan on December 30, 2014, as a secondary pool car at Skinner. In May of 2021, the odometer showed only 10,603 miles.
- Asset custodians told us that a GMC Truck, a generator, and a reciprocating air compressor, were salvaged. Further review revealed that Fleet did not know the location of these items, and the Investment Recovery Team, responsible for salvaged asset disposal, had no record of receiving them. Following our inquiry, Fleet located the GMC truck parked in the salvage yard and found the generator at Lake Mathews. The reciprocating air compressor remains missing, and there is no evidence of its salvage.

Failure to identify underutilized assets is inefficient. Failure to accurately record the status of assets could result in inaccurate financial reporting.

We recommend that management develop written procedures to evaluate the efficient use of resources and accurately record the status of all assets.

COMPRESSED NATURAL GAS (CNG) AND DIESEL FUEL TAX CREDITS

The federal government offers rebates for vehicles using Compressed Natural Gas (CNG) through its Alternative Fuel Tax Credit Program. Additionally, Metropolitan is entitled to credits for California Diesel Fuel Tax. Metropolitan should take advantage of all entitled federal energy rebates and tax credits for the appropriate amount.

Our audit of 67 Fleet Card transactions revealed that Metropolitan records CNG expenses in the Propane account. Consequently, we do not claim the federal CNG credit. Additionally, we noted that the historical off-road diesel fuel usage is greater than 50%; Metropolitan uses 28% to calculate the tax credit. For illustrative purposes, using 50% would yield an additional tax credit of \$15,787.

Failure to claim appropriate energy rebates could result in financial loss to Metropolitan.

We recommend that Fleet Management and the Controller's section reassess the federal CNG and state diesel fuel rebates. Consideration should be given to creating a separate account for CNG expenses.

POLICIES AND PROCEDURES

Written policies and procedures should be established and documented to provide a framework for achieving compliance with regulatory requirements, the Metropolitan's Administrative Code, and department goals and objectives. Written procedures assist management in training new employees, provide guidance for the consistent performance of daily responsibilities, and provide a source of reference for experienced personnel.

Our review of Fleet Management Procedures and the Fleet Maintenance Manual revealed no procedures for vehicle transfers. We also noted that responsibilities for car custodians and fuel users are not defined. Also, there is no standard reporting mechanism to communicate vehicle assignments and changes or malfunctioning equipment; such communications occur through email or undocumented conversations.

Incomplete policies and procedures may result in inconsistent performance and unfulfilled goals and objectives.

We recommend Fleet Management establish policies and procedures to guide those who utilize company vehicles. In addition, we recommend Fleet Management consider creating an e-form to facilitate changes in vehicle assignments, malfunctioning equipment, and other standard communication situations.

MANAGEMENT RESPONSE

As of the date of this report, we have not received a written response from management.



Ethics Office Monthly Report

March 2022

COMPLIANCE

Assisted Board members and employees with their Annual, Assuming Office, and Leaving Office Form 700 filings. Assistance included filing for multiple positions, troubleshooting the electronic filing system, and notifications of deadlines.

Monitored the status of past due Assuming Office and Leaving Office Form 700 filings; obtained compliance from one current and five former employees and sent filing notices to five other former employees. Staff also referred one former employee to the Fair Political Practices Commission for non-filing of a Leaving Office Form 700 after two written notices.

ADVICE

Addressed 18 advice matters involving: conflicts of interest, financial disclosure, gifts, and other ethics-related topics.

EDUCATION

Held new filer training session for employee who assumed a Form 700 filing position. Session included a governmental ethics overview and what to report on Form 700.

INVESTIGATIONS

Received complaints alleging that: 1) An employee retaliated against another employee for reporting a workplace violation; 2) An employee released another employee's confidential personnel records without authorization; and 3) Consultants engaged in unprofessional behavior in the

course of conducting Metropolitan business.

Opened one investigation into allegations that an employee retaliated against another employee for reporting a workplace violation.

Determined in one complaint filed with the Ethics Office that there was no potential violation of an ethics rule. Therefore, the issue was referred to the General Auditor for audit consideration since it involved data integrity of a Metropolitan system.

ETHICS OFFICER FINDINGS

The Ethics Officer found that allegations that a supervisor misused their authority to provide a private advantage to another person were not substantiated. The investigation was conducted by Ethics Office staff and the findings were based on evidence that the supervisor's actions were driven by legitimate business purposes.

ADVICE AND INVESTIGATIVE DATA

Advice Matters	18
Compliance Assistance	96
Complaints Received	3
Investigations Opened	1
Pending Investigations	4

MINUTES
REGULAR MEETING OF THE
BOARD OF DIRECTORS
THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA
March 8, 2022

52714 The Board of Directors of The Metropolitan Water District of Southern California met in regular session on Tuesday, March 08, 2022.

Chairwoman Gray called the teleconference meeting to order at 12:40 PM.

52715 Annette Eckhardt, President of Women at Metropolitan Water District introduced the following invocation speakers: Pamela Tobin, ACWA President, and Cathy Green, ACWA Vice President.

52716 The Pledge of Allegiance was given by Director Brenda Dennstedt, Western Municipal Water District.

Chairwoman Gray acknowledged Women's History Month, the crisis in Ukraine, as well as addressing the drought conditions in Southern California.

52717 Board Secretary Abdo administered the roll call. Those responding present were: Directors Abdo, Ackerman, Apodaca, Atwater, Blois, Camacho, Cordero, De Jesus, Dennstedt, Dick, Erdman, Faessel, Fellow, Fong-Sakai, Goldberg, Gray, Hawkins, Jung, Kassakhian, Kurtz, Lefevre, Luna, Miller, Morris, Peterson, Phan, Pressman, Quinn, Ramos, Record, Repenning, Smith, Sutley, Tamaribuchi, and Williams.

Those not responding were: Directors McCoy, Ortega, and Petersen

Board Secretary Abdo declared a quorum present.

52718 Member Agency Overview: Richard Wilson, Assistant General Manager, Water, City of Burbank.

Director Ramos introduced Assistant General Manager Wilson who presented an member agency overview for the City of Burbank.

52719 Introductory remarks given by Senior Deputy General Counsel Quilizapa regarding the public hearing. Public hearing opened regarding: (1) the proposed water rates and charges for calendar years 2023 and 2024 necessary to meet the revenue

requirements for fiscal years 2022/23 and 2023/24, and (2) Review of the applicability of Metropolitan Water District Act Section 124.5 ad valorem property tax limitation for fiscal years 2022/23 through 2025/26.

Chairwoman Gray invited members of the public to address the Board on matters within the Board's jurisdiction.

	Name	Affiliation	Item
1.	Lauren Ahkiam	Director of Water Campaign Los Angeles Alliance for a New Economy	Project Labor Agreement
2.	Ron Miller	Retired LA Orange County Buildings Trades	Project Labor Agreement
3.	Roxanna Tynan	Executive Director of Water Projects Los Angeles Alliance for a New Economy	Project Labor Agreement
	Caty Wagner	Sierra Club	Project Labor Agreement and Proposed Water Rate Increase/Delta Conveyance
4.			
5.	Rob Nothoff	Policy Director LA County Federation of Labor	Project Labor Agreement
6.	Darcy Burke	Board President, Elsinore Valley Municipal Water District	Strategic Plan
7.	Chris Cheek	Director of Piping Industry Progress & Education Trust Fund (P.I.P.E.)	Project Labor Agreement
8.	Nicole Heil	Los Angeles resident	Project Labor Agreement
	Brittany Russell	Orange County resident	Project Labor Agreement and Proposed Water Rate Increase
9.			
10.	M. Venezuela	City of South Gate resident	Project Labor Agreement
11.	Joe Rangel	International Union of Operating Engineers Local Number 12	Project Labor Agreement
12.	Victor Sanchez	Los Angeles resident	Project Labor Agreement
13.	Cameron Hurt	Los Angeles resident	Project Labor Agreement
	Conner Everts	Environmental Water Caucus & the Southern California Watershed Alliance	Project Labor Agreement and Proposed Water Rate Increase
14.			
15.	Ernesto Madano	LA Orange County Building, Construction Trades Council, and the Orange County Representative	Project Labor Agreement
16.	Kathy McLaren Gomez	Palmdale Water District Board	Project Labor Agreement
17.	Sam Lewis	Executive Director, Anti-Recidivism Coalition	Project Labor Agreement
18.	Mark Hovatter	Chief Facility Executive, Los Angeles Unified School District	Project Labor Agreement
19.	Andrew Villasenor	CSI Electrical Contractors, Inc.	Project Labor

			Agreement
20.	Tommy Faavae	IBEW Local 11	Project Labor Agreement
21.	Anne-Marie Otey	LA Orange County's Building Construction Trades Council	Project Labor Agreement
22.	Chris Hannan	Executive Secretary, LA Orange County's Building Construction Trades Council	Project Labor Agreement
23.	John Hanna	Southwest Regional Council of Carpenters	Project Labor Agreement
24.	Douglas Obegi	Senior Attorney with NRDC	Proposed Water Rate Increase
25.	Ellen Mackey	Senior Ecologist, Chair of the Women's Caucus, Metropolitan Employee	Women History Month/DEI
26.	Michael Flores	PLA Administrator, Los Angeles Metro	Project Labor Agreement
27.	Denise Cenicerros	Diamond Bar Resident	Proposed Water Rate Increase/Delta Conveyance
28.	Victor Lamont	Orange County Labor Federation	Project Labor Agreement
29.	Bill Perez	Executive Secretary, Riverside Building Trades Council	Project Labor Agreement
30.	Ian Monte	City of Los Angeles Department Public Works	Project Labor Agreement
31.	Cliff Smith	Business Manager of Local 36 United Union of Roofers, Water proofers, and Allied Workers	Project Labor Agreement
32.	Yvette Stevenson-Rodriguez	President, Portugal Water District	Project Labor Agreement
33.	Gretchen Newsom	IBEW Local 11	Project Labor Agreement
34.	Sherry Ross	San Diego resident	Proposed Water Rate Increase
35.	Eric Christen	Executive Director, Coalition for Fair Employment in Construction	Project Labor Agreement
36.	Richard Markuson	Western Electrical Contractors Association	Project Labor Agreement
37.	Carol Kim	Business Manager San Diego County Building and Construction Trades Council	Project Labor Agreement

Chairwoman Gray addressed the following: Other Matters and Reports.

52720 Chairwoman Gray asked if there were any changes to the report of events attended by Directors at Metropolitan's expense during the month of February as previously posted and distributed to the Board. No amendments were made.

52721 Chairwoman Gray referred to her monthly report, which was previously posted and distributed to the Board. Chairwoman stated she had nothing to add to her report.

52722 Regarding matters relating to Metropolitan's operations and activities, General Manager Hagekhalil, reported on the following:

1. Acknowledged the crisis in Ukraine and Women's History Month
2. Reported on snowpack and conservations measures
3. Reported on current water supply and drought conditions
4. Status update California Resilience Challenge
5. Reported on the four grants Metropolitan received
6. Status update on the State Audit
7. Reported on the EEOC Officer Position
8. Status update on the Shaw Law Group Report
9. Reported on the National Safety Council

General Manager Hagekhalil presented a video acknowledging the employees at the Jensen Water Treatment Plant, San Diego Canal, and Castaic Lake during the January-February 2022 shut down.

Additional information on the General Manager's activities may be found in his written monthly report.

52723 General Counsel Scully acknowledged Women's History Month and presented a response to recent allegations in public statements regarding the Shaw Law Group.

The following Director asked questions or made comments:

Directors	Comments/Questions
1. Goldberg	Asked questions.

Staff responded to Director's questions.

52724 Assistant General Auditor John Tonsick reported on Chairwoman Gray's reimbursements and approval.

The following Directors asked questions or made comments:

Directors	Comments/Questions
1. Goldberg	Commented and asked a question.
2. Peterson	Asked a question.

Chairwoman Gray responded that Vice Chair DeJesus will be reviewing Chairwoman Gray's reimbursements and approval.

Staff responded to Director's questions.

52725 Ethics Officer Salinas reported filing deadline for Form 700 is April 1. The Board of Directors were encouraged to contact the Ethics office for advice and assistance.

The following Directors asked questions or made comments:

	Directors	Comments/Questions
1.	Sutley	Commented and asked a question.
2.	Goldberg	Asked a question.

Staff responded to Director's questions.

52726 Presentation of 20-year Service Pin to Director David D. De Jesus, representing Three Valleys Municipal Water District. Chairwoman Gray made remarks. Vice Chair DeJesus also made brief comments.

Chairwoman Gray addressed the Consent Calendar Items for March 2022.

52727 Chairwoman Gray asked Directors if there were any comments or discussion on the approval of the Minutes of the Regular Meeting for February 8, 2022 (Agenda Item 6A). No comments or requests were made.

52728 Adopt resolution to continue remote teleconference meetings pursuant to the Brown Act Section 54953(e) for meetings of Metropolitan's legislative bodies for a period of 30 days (Agenda Item 6B). No comments or requests were made.

52729 Approval of Committee Assignments (Agenda Item 6C).

- Director Fong-Sakai was appointed to the One Water (Conservation and Local Resources) Committee and the Engineering and Operations Committee
- Director Miller was appointed to the Water Planning and Stewardship Committee, and the Integrated Resources Plan Special Committee
- Director Smith was removed from the Integrated Resources Plan Special Committee

52730 Chairwoman Gray addressed the Consent Calendar Items – Action for March 2022.

Chairwoman Gray called on the Committee Chairs to give a report of the Consent Calendar Action Items as discussed at their Committees.

	Directors	Comments/Questions
1.	Smith	Commented.

Director Blois requested that Item 7-1 be voted on separately from Consent Calendar Action Items.

52731 Authorize an agreement with Hazen and Sawyer for a not-to-exceed amount of \$890,000 for design to upgrade the Cabazon Radial Gate Facility; and authorize an agreement with LEE + RO, Inc. for a not-to-exceed amount of \$904,000 for design to replace radial gates along the San Diego Canal, as set forth in Agenda Item 7-2 board letter.

52732 Adopt CEQA determination that the proposed action was previously addressed in the certified 2020 Program Environmental Impact Report and related CEQA actions; and award \$677,898 contract to Jeremy Harris Construction, Inc. for Stage 1 Right-of-Way and Infrastructure Protection improvements in Western San Bernardino region of Metropolitan's distribution system, as set forth in Agenda Item 7-3 board letter.

52733 Authorize an agreement with HDR Engineering, Inc. for a not-to-exceed amount of \$2,800,000 for preliminary design to improve erosion protection structures along the aqueduct, as set forth in Agenda Item 7-4 board letter.

52734 Authorize the General Manager to enter into a three-year agreement with GP Generate, LLC for media placement and advertising consulting services not to exceed \$10.5 million, as set forth in Agenda Item 7-5 board letter.

Agenda Item 7-6 was deferred, Approve the General Manager's Strategic Priorities; the General 21-886 Manager has determined that the proposed action is exempt of otherwise not subject to CEQA, with no action taken.

The following Directors asked questions or made comments:

	Directors	Comments/Questions
1.	De Jesus	Commented and asked a question.
2.	Miller	Commented.

Staff responded to Director's questions.

52735 Authorize the General Manager to sign the Equity in Infrastructure Project pledge and participate in the project to support opportunities for historically underserved and underutilized businesses, as set forth in Agenda Item 7-7 board letter.

Chairwoman Gray made a statement regarding Agenda Item 7-7.

52736 Authorize an agreement with Kennedy Jenks Consultants in an amount not to exceed \$1.5 million for design of on-site utility systems to serve the Diamond Valley Lake East Marina, as set forth in Agenda Item 7-8 board letter.

52737 Review and consider the County of Riverside's certified Final Environmental Impact Report and Addendum No. 1, and take related CEQA actions; and authorize the granting of a permanent easement for public road purposes to the County of Riverside, as set forth in Agenda Item 7-9 board letter.

The following Directors asked questions or made comments:

	Directors	Comments/Questions
1.	Peterson	Moved Consent Calendar Items.
2.	Blois	Seconded Peterson's motion.

Chairwoman Gray called for a vote to approve the Consent Calendar Items 6A, 6B, 6C, and 7-2 through 7-5, and 7-7 through 7-9 **(M.I. 52727 through 52737)**.

Director Peterson moved, seconded by Director Blois that the Board approve the Consent Calendar Items 6A, 6B, 6C, and 7-2 through 7-5, and 7-7 through 7-9 as follows:

The following is a record of the vote:

Record of Vote on Consent Item(s) 6A, 6B, 6C, and 7-2 through 7-5 and 7-7 to 7-9									
Member Agency	Total Votes	Director	Present	Yes	Yes Vote	No	No Vote	Abstain	Abstain Vote
Anaheim	5277	Faessel	x	x	5277				
Beverly Hills	4056	Pressman	x	x	4056				
Burbank	2666	Ramos	x						
Calleguas Municipal Water District	11552	Blois	x	x	11552				
Central Basin Municipal Water District	17051	Apodaca	x	x	8526				
		Hawkins	x	x	8526				
			Subtotal:		17051				
Compton	553	McCoy							
Eastern Municipal Water District	9492	Record	x	x	9492				
Foothill Municipal Water District	2131	Atwater	x	x	2131				
Fullerton	2255	Jung	x	x	2255				
Glendale	3622	Kassakhian	x	x	3622				
Inland Empire Utilities Agency	13433	Camacho	x	x	13433				
Las Virgenes	2741	Peterson	x	x	2741				
Long Beach	5772	Cordero	x	x	5772				
Los Angeles	70689	Sutley	x	x	17672				
		Petersen							
		Quinn	x	x	17672				
		Luna	x	x	17672				
		Repenning	x	x	17672				
			Subtotal:		70689				
Municipal Water Dist. of Orange Coun	57264	Ackerman	x	x	14316				
		Tamaribuchi	x	x	14316				
		Dick	x	x	14316				
		Erdman	x	x	14316				
			Subtotal:		57264				
Pasadena	3522	Kurtz	x	x	3522				
San Diego County Water Authority	58302	Fong-Sakai	x	x	14576				
		Goldberg	x	x	14576				
		Miller	x	x	14576				
		Smith	x	x	14576				
			Subtotal:		58302				
San Fernando	224	Ortega							
San Marino	730	Morris	x	x	730				
Santa Ana	3035	Phan	x	x	3035				
Santa Monica	4352	Abdo	x	x	4352				
Three Valleys Municipal Water District	7753	De Jesus	x	x	7753				
Torrance	3237	Lefevre	x	x	3237				
Upper San Gabriel Valley Mun. Wat. D	11942	Fellow	x	x	11942				
West Basin Municipal Water District	23608	Williams	x	x	11804				
		Gray	x	x	11804				
			Subtotal:		23608				
Western Municipal Water District	12466	Dennstedt	x	x	12466				
Total	337725				334282				
Present and not voting	2666								
Absent	777								

The motion to approve the Consent Calendar Items 6A, 6B, 6C, and 7-2 through 7-5 and 7-7 to 7-9 (**M.I. 52727 through 52737**), passed by a vote of 334,282 ayes; 0 noes; 0 abstain; 2,666 not voting; and 777 absent.

***Note: Individual vote tally for Item 7-8**

Director Morris recused himself for Item 7-8. The motion to approve the Consent Calendar Item 7-8 passed by a vote of 333,552 ayes; 0 noes; 0 abstain; 3,396 not voting; and 777 absent.

Chairwoman Gray Director called on Director Smith to introduce Item 7-1.

52738 Authorize the General Manager to negotiate a Project Labor Agreement for application on construction contracts with a value of \$5 million or greater within Metropolitan's Capital Investment Plan, as set forth in Agenda Item 7-1 board letter.

Director Smith moved, seconded by Director Phan that the Board approve the Consent Calendar Item 7-1 as follows:

The following Directors asked questions or made comments:

	Directors	Comments/Questions
1.	Smith	Moved Consent Calendar Item.
2.	Phan	Seconded Smith's motion.
3.	Gray	Commented.
3.	Blois	Substitute motion.
4.	Dick	Seconded substitute motion and asked a question.
5.	Repenning	Commented.
6.	De Jesus	Commented.
7.	Camacho	Commented and asked a question.
8.	Pressman	Commented and asked a question.
9.	Lefevre	Commented.
10.	Cordero	Commented.
11.	Record	Commented.
12.	Dennstedt	Commented.
13.	Ramos	Commented.
14.	Faessel	Commented.
15.	Luna	Commented.
16.	Peterson	Commented.
17.	Miller	Commented.
18.	Goldberg	Commented.
19.	Kurtz	Commented.
20.	Fong-Sakai	Commented.
21.	Blois	Withdrew substitute motion.
22.	Ackerman	Commented.

Staff responded to Director's questions.

Record of Vote on Item: 7-1									
Member Agency	Total Votes	Director	Present	Yes	Yes Vote	No	No Vote	Abstain	Abstain Vote
Anaheim	5277	Faessel	x	x	5277				
Beverly Hills	4056	Pressman	x	x	4056				
Burbank	2666	Ramos	x	x	2666				
Calleguas Municipal Water District	11552	Blois	x			x	11552		
Central Basin Municipal Water District	17051	Apodaca	x	x	8526				
		Hawkins	x	x	8526				
			Subtotal:		17051				
Compton	553	McCoy							
Eastern Municipal Water District	9492	Record	x	x	9492				
Foothill Municipal Water District	2131	Atwater	x	x	2131				
Fullerton	2255	Jung	x	x	2255				
Glendale	3622	Kassakhian	x	x	3622				
Inland Empire Utilities Agency	13433	Camacho	x	x	13433				
Las Virgenes	2741	Peterson	x	x	2741				
Long Beach	5772	Cordero	x	x	5772				
Los Angeles	70689	Sutley	x	x	17672				
		Petersen							
		Quinn	x	x	17672				
		Luna	x	x	17672				
		Repenning	x	x	17672				
			Subtotal:		70689				
Municipal Water Dist. of Orange County	57264	Ackerman	x	x	14316				
		Tamaribuchi	x	x	14316				
		Dick	x	x	14316				
		Erdman	x	x	14316				
			Subtotal:		57264				
Pasadena	3522	Kurtz	x	x	3522				
San Diego County Water Authority	58302	Fong-Sakai	x	x	14576				
		Goldberg	x	x	14576				
		Miller	x	x	14576				
		Smith	x	x	14576				
			Subtotal:		58302				
San Fernando	224	Ortega							
San Marino	730	Morris	x	x	730				
Santa Ana	3035	Phan	x	x	3035				
Santa Monica	4352	Abdo	x	x	4352				
Three Valleys Municipal Water District	7753	De Jesus	x	x	7753				
Torrance	3237	Lefevre	x	x	3237				
Upper San Gabriel Valley Mun. Wat. Dist.	11942	Fellow	x	x	11942				
West Basin Municipal Water District	23608	Williams	x	x	11804				
		Gray	x	x	11804				
			Subtotal:		23608				
Western Municipal Water District	12466	Dennstedt	x	x	12466				
Total	337725				325396		11552		
Present and not voting									
Absent	777								

The motion to approve Item 7-1 passed by a vote of 325,396 ayes; 11,552 noes; 0 abstain; 0 not voting; and 777 absent.

52739 Chairwoman Gray stated there were no Other Items - Action.

52740 Chairwoman Gray asked if there were questions or need for discussion for Board Information Item 9-1. No requests were made.

52741 Chairwoman Gray asked if there were questions or need for discussion for Board Information Item 9-2. No requests were made.

52742 Chairwoman Gray asked if there were questions or need for discussion for Board Information Item 9-3. No requests were made.

52743 Chairwoman Gray asked if there were any Other Matters. No requests were made.

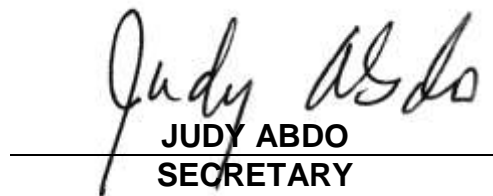
52744 Chairwoman Gray asked if there were any Follow-up Items. No requests were made.

52745 Chairwoman Gray asked if there were any future agenda items. No requests were made.

52746 There being no objection, at 4:36 PM, Chairwoman Gray adjourned the Meeting with Director Blois' comments in honor of the over 400 victims of St. Francis Dam collapse on March 12, 1928.



GLORIA D. GRAY
CHAIRWOMAN



JUDY ABDO
SECRETARY

MINUTES
SPECIAL MEETING OF THE
BOARD OF DIRECTORS
THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA
March 22, 2022

52748 Board Chairwoman Gray called the Teleconference to order at 3:09 p.m.

52749 Board Secretary Abdo administered the roll call. Those responding present were: Directors Abdo, Ackerman, Apodaca, Blois, Cordero, De Jesus, Dennstedt, Erdman, Faessel, Fellow, Fong-Sakai, Goldberg, Gray, Jung, Kurtz, Lefevre, McCoy, Miller, Morris, Ortega, Peterson, Pressman, Quinn, Ramos, Record, Smith, and Tamaribuchi.

Director Camacho entered the Meeting after the roll call.

Those not responding were: Directors Atwater, Dick, Hawkins, Kassakhian, Luna Petersen, Phan, Repenning, Sutley, and Williams.

Board Secretary Abdo declared a quorum present.

52750 Chairwoman Gray invited members of the public to address the Board on matters in this notice of Special Board meeting. No requests were made.

52751 Board Secretary Abdo called the meeting into closed session to discuss on Agenda Item 5A.

52751 Chairwoman Gray called the Meeting into closed session to hear Agenda Item 5A Workshop on litigation, including discussions regarding potential settlement, in San Diego County Water Authority v. Metropolitan Water District of Southern California, et al., San Francisco County Superior Court Case Nos. CPF-10-510830, CPF-12-512466, CPF-14-514004, CPF-16-515282, CPF-16-515391, CGC-17-563350, and CPF-18-516389; the appeals of the 2010 and 2012 actions, Court of Appeal for the First Appellate District Case Nos. A146901, A148266, A161144, and A162168, and California Supreme Court Case No. S243500; the petition for extraordinary writ in the 2010 and 2012 actions, Court of Appeal for the First Appellate District Case No. A155310; the petition for

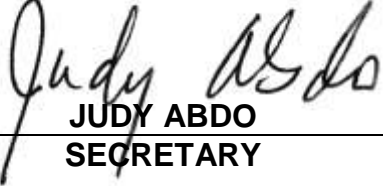
extraordinary writ in the second 2016 action, Court of Appeal for the First Appellate District Case No. A154325 and California Supreme Court Case No. S251025; and the Metropolitan Water District of Southern California v. San Diego County Water Authority cross-complaints in the 2014, 2016, and 2018 actions. [Conference with legal counsel - existing litigation; to be heard in closed session pursuant to Gov. Code Sections 54956.9(d)(1)]

Meeting returned to open session at 4:52 p.m. Chairwoman Gray stated that the Board discussed Item 5A. No action was taken during closed session.

52752 Chairwoman Gray adjourned the Meeting at 4:53 p.m.



GLORIA D. GRAY
CHAIRWOMAN



JUDY ABDO
SECRETARY

MINUTES
SPECIAL MEETING OF THE
BOARD OF DIRECTORS
THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA
March 29, 2022

52753 Board Chairwoman Gray called the Teleconference to order at 10:00 a.m.

52754 Board Secretary Abdo administered the roll call. Those responding present were: Directors Abdo, Ackerman, Apodaca, Atwater, Blois, Camacho, Cordero, De Jesus, Dennstedt, Dick, Erdman, Faessel, Fellow, Fong-Sakai, Goldberg, Gray, Jung, Luna, Miller, Morris, Ortega, Phan, Quinn, Ramos, Record, Smith, Sutley, and Tamaribuchi.

Directors Kassakhian, Peterson, Pressman, and Repenning entered the Meeting after the roll call.

Those not responding were: Directors Hawkins, Kurtz, Lefevre, McCoy, Petersen, and Williams.

Board Secretary Abdo declared a quorum present.

52755 Chairwoman Gray invited members of the public to address the Board on matters in this notice of the Special Board meeting.

Name	Affiliation	Item
Alan Shanahan	Executive President, AFSCME 1902	The memory of retired Metropolitan staff Dora Williamson & draft State Auditor's Report

Chairwoman Gray expressed her condolences to the family and friends of Metropolitan retiree Dora Williamson.

52756 Regarding matters relating to Metropolitan's operations and activities, General Manager Hagekhalil, announced the following.

1. Expressed condolences to the family and friends of Metropolitan retiree Dora Williamson.
2. Updated the Board on the voluntary agreements to sign a Memorandum of Understanding with other water agencies related to the Sacramento-San Joaquin Delta water quality program.
3. Updated the Board on the Governor's Drought Executive Order.
4. Reported on the press conference on water conservation, usage of native plants, and utilizing the rebate programs with California Secretary for Natural Resources Wade Crowfoot and Chairwoman Gray.
5. Reported on the grants received for water efficiency devices and turf removal program.
6. Reported on hiring Metropolitan first Chief Sustainability, Resiliency, Innovation Officer Liz Crosson and Equal Employment Opportunity Officer Jonaura Wisdom.
7. Updated the Board on the status of hiring the first Diversity Equity and Inclusion Officer.

The following Directors provided comments or asked questions:

Directors	
1.	Peterson
2.	Ortega

Staff responded to the Directors.

52757 Chairwoman Gray presented Item 6A that the Board adopt the resolution to continue remote teleconference meetings pursuant to the Brown Act Section 54953(e) for meetings of Metropolitan's legislative bodies for a period of 30 days.

Chairwoman Gray called for a vote to approve Consent Calendar Item 6A (**M.I. No. 52757**).

Director Camacho moved, seconded by Director De Jesus that the Board approve Consent Calendar Item for Action 6A as follows:

The following is a record of the vote:

Record of Vote on Consent Item(s):		6A							
Member Agency	Total Votes	Director	Present	Yes	Yes Vote	No	No Vote	Abstain	Abstain Vote
Anaheim	5277	Faessel	x	x	5277				
Beverly Hills	4056	Pressman	x	x	4056				
Burbank	2666	Ramos	x	x	2666				
Calleguas Municipal Water District	11552	Blois	x	x	11552				
Central Basin Municipal Water District	17051	Apodaca	x	x	17051				
		Hawkins							
			Subtotal:		17051				
Compton	553	McCoy							
Eastern Municipal Water District	9492	Record	x	x	9492				
Foothill Municipal Water District	2131	Atwater	x	x	2131				
Fullerton	2255	Jung	x	x	2255				
Glendale	3622	Kassakhian	x	x	3622				
Inland Empire Utilities Agency	13433	Camacho	x	x	13433				
Las Virgenes	2741	Peterson	x			x	2741		
Long Beach	5772	Cordero	x	x	5772				
Los Angeles	70689	Sutley	x	x	17672				
		Petersen							
		Quinn	x	x	17672				
		Luna	x	x	17672				
		Repenning	x	x	17672				
			Subtotal:		70689				
Municipal Water Dist. of Orange County	57264	Ackerman	x	x	14316				
		Tamaribuchi	x	x	14316				
		Dick	x	x	14316				
		Erdman	x	x	14316				
			Subtotal:		57264				
Pasadena	3522	Kurtz							
San Diego County Water Authority	58302	Fong-Sakai	x	x	14576				
		Goldberg	x	x	14576				
		Miller	x	x	14576				
		Smith	x	x	14576				
			Subtotal:		58302				
San Fernando	224	Ortega	x	x	224				
San Marino	730	Morris	x	x	730				
Santa Ana	3035	Phan	x	x	3035				
Santa Monica	4352	Abdo	x	x	4352				
Three Valleys Municipal Water District	7753	De Jesus	x	x	7753				
Torrance	3237	Lefevre							
Upper San Gabriel Valley Mun. Wat. Dist.	11942	Fellow	x	x	11942				
West Basin Municipal Water District	23608	Williams							
		Gray	x	x	23608				
			Subtotal:		23608				
Western Municipal Water District	12466	Dennstedt	x	x	12466				
Total	337725				327672		2741		
Present and not voting									
Absent	7312								

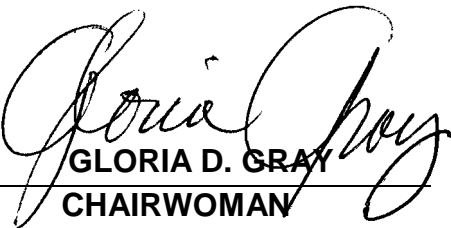
The motion to approve Consent Calendar Item 6A (**M.I. No. 52757**) passed by a vote of 327,672 ayes; 2,741 noes; 0 abstain; 0 not voting; and 7,312 absent.

Chairwoman Gray announced that Agenda Item 7A was withdrawn.

52758 Chairwoman Gray called the meeting into closed session to hear Agenda Item 7B on a briefing and discussion of proposed response to confidential draft State Audit Report of the Metropolitan Water District of Southern California [Audit by California State Auditor's Office - to be heard in closed session pursuant to Government Code Section 54956.75].

Meeting returned to open session at 1:31 p.m. Vice Chair De Jesus stated that the Board discussed Item 7B. No action was taken during closed session.

52759 Vice Chair De Jesus adjourned the Meeting at 1:33 p.m.



GLORIA D. GRAY
CHAIRWOMAN



JUDY ABDO
SECRETARY

THE METROPOLITAN WATER DISTRICT
OF SOUTHERN CALIFORNIA

RESOLUTION NO. XXXX

**RESOLUTION OF THE BOARD OF DIRECTORS OF
THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA
RELYING ON GOVERNOR NEWSOM’S MARCH 4, 2020 PROCLAMATION OF A
STATE OF EMERGENCY
AND RE-AUTHORIZING REMOTE TELECONFERENCE MEETINGS OF THE
LEGISLATIVE BODIES OF THE METROPOLITAN WATER DISTRICT OF
SOUTHERN CALIFORNIA FOR THE PERIOD OF 30 DAYS FROM
APRIL 12, 2022 TO MAY 12, 2022 PURSUANT TO BROWN ACT PROVISIONS**

WHEREAS, The Metropolitan Water District of Southern California (“Metropolitan”) is committed to preserving and nurturing public access and participation in meetings of its legislative bodies; and

WHEREAS, all meetings of Metropolitan’s legislative bodies are open and public, as required by the Ralph M. Brown Act (Cal. Gov’t Code Sections 54950 – 54963), so that any member of the public may attend, participate, and watch the Metropolitan’s legislative bodies conduct their business; and

WHEREAS, the Brown Act, Government Code Section 54953(e), makes provisions for remote teleconferencing participation in meetings by members of a legislative body, without compliance with the requirements of Government Code Section 54953(b)(3), subject to the existence of certain conditions; and

WHEREAS, a required condition is that a state of emergency is declared by the Governor pursuant to Government Code Section 8625, proclaiming the existence of conditions of disaster or of extreme peril to the safety of persons and property within the state caused by conditions as described in Government Code Section 8558; and

WHEREAS, a proclamation is made when there is an actual incident, threat of disaster, or extreme peril to the safety of persons and property within the jurisdictions that are within Metropolitan’s boundaries, caused by natural, technological, or human-caused disasters; and

WHEREAS, it is further required that state or local officials have imposed or recommended measures to promote social distancing, or, the legislative body meeting in person would present imminent risks to the health and safety of attendees; and

WHEREAS, the Board of Directors previously adopted Resolution Number 9285 on September 28, 2021, finding that the requisite conditions exist for the legislative bodies of Metropolitan to conduct remote teleconference meetings without compliance with paragraph (3) of subdivision (b) of Section 54953; and

WHEREAS, as a condition of extending the use of the provisions found in Section 54953(e), the Board of Directors must reconsider the circumstances of the state of emergency, and the Board of Directors has done so in subsequent Resolutions Numbered 9287, 9288, 9291, 9292, 9295, 9296, 9297, and 9298 on October 12, 2021, November 9, 2021, November 23, 2021, December 14, 2021, January 11, 2022, February 8, 2022, March 8, 2022, and March 29, 2022 respectively; and

WHEREAS, such conditions now persist at Metropolitan, specifically, Governor Newsom's March 4, 2020 Proclamation of A State of Emergency caused by the COVID-19 pandemic; and

WHEREAS, state or local officials continue to impose or recommend measures to promote social distancing, including County of Los Angeles Department of Public Health Order issued on March 23, 2022 effective April 1, 2022, providing guidance for indoor masking and implementation of policies and practices that support physical distancing where possible; and

WHEREAS, as a consequence of the state of emergency, the Board of Directors does hereby find that the legislative bodies of Metropolitan shall conduct their meetings without compliance with paragraph (3) of subdivision (b) of Government Code Section 54953, as authorized by subdivision (e) of Section 54953, and that such legislative bodies shall continue to comply with the requirements to provide the public with access to the meetings as prescribed in paragraph (2) of subdivision (e) of Section 54953; and

WHEREAS, Metropolitan is providing call-in telephonic access for the public to make comment and to listen; and providing livestreaming of the meetings over the internet to ensure access for the public.

NOW, THEREFORE, the Metropolitan Board of Directors does hereby resolve as follows:

Section 1. Recitals. The Recitals set forth above are true and correct and are incorporated into this Resolution by this reference.

Section 2. Reconsider the Circumstances of the State of Emergency Persists. The Board of Directors hereby reconsiders the conditions of the state of emergency and the Board of Directors hereby continues to rely on the Governor of the State of California's Proclamation of State of Emergency, effective as of its issuance date of March 4, 2020.

Section 3. State or Local Officials Continue to Impose or Recommend Measures to Promote Social Distancing. The Board of Directors hereby acknowledges that state or local officials continue to impose or recommend measures to promote social distancing, including County of Los Angeles Department of Public Health Order issued on March 23, 2022 effective April 1, 2022, providing guidance for indoor masking and implementation of policies and practices that support physical distancing where possible.

Section 4. Remote Teleconference Meetings. The General Manager and legislative bodies of Metropolitan are hereby authorized and directed to take all actions necessary to carry out the intent and purpose of this Resolution, including conducting open and public meetings in

accordance with Government Code Section 54953(e) and other applicable provisions of the Brown Act.

Section 5. Effective Date of Resolution. This Resolution shall take effect immediately upon its adoption and shall be effective until the earlier of (i) May 12, 2022, or such time the Board of Directors adopts a subsequent resolution in accordance with Government Code Section 54953(e)(3) to extend the time during which the legislative bodies of Metropolitan may continue to teleconference without compliance with paragraph (3) of subdivision (b) of Section 54953.

I HEREBY CERTIFY that the foregoing is a full, true, and correct copy of a resolution adopted by the Board of Directors of The Metropolitan Water District of Southern California at its meeting held on April 12, 2022.

Secretary of the Board of Directors of
The Metropolitan Water District
of Southern California

**THE METROPOLITAN WATER DISTRICT
OF SOUTHERN CALIFORNIA**

RESOLUTION NO. 9300

**RESOLUTION OF THE BOARD OF DIRECTORS OF
THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA
RELYING ON GOVERNOR NEWSOM’S MARCH 4, 2020 PROCLAMATION OF A
STATE OF EMERGENCY
AND RE-AUTHORIZING REMOTE TELECONFERENCE MEETINGS OF THE
LEGISLATIVE BODIES OF THE METROPOLITAN WATER DISTRICT OF
SOUTHERN CALIFORNIA FOR THE PERIOD OF 30 DAYS FROM
APRIL 12, 2022 TO MAY 12, 2022 PURSUANT TO BROWN ACT PROVISIONS**

WHEREAS, The Metropolitan Water District of Southern California (“Metropolitan”) is committed to preserving and nurturing public access and participation in meetings of its legislative bodies; and

WHEREAS, all meetings of Metropolitan’s legislative bodies are open and public, as required by the Ralph M. Brown Act (Cal. Gov’t Code Sections 54950 – 54963), so that any member of the public may attend, participate, and watch the Metropolitan’s legislative bodies conduct their business; and

WHEREAS, the Brown Act, Government Code Section 54953(e), makes provisions for remote teleconferencing participation in meetings by members of a legislative body, without compliance with the requirements of Government Code Section 54953(b)(3), subject to the existence of certain conditions; and

WHEREAS, a required condition is that a state of emergency is declared by the Governor pursuant to Government Code Section 8625, proclaiming the existence of conditions of disaster or of extreme peril to the safety of persons and property within the state caused by conditions as described in Government Code Section 8558; and

WHEREAS, a proclamation is made when there is an actual incident, threat of disaster, or extreme peril to the safety of persons and property within the jurisdictions that are within Metropolitan’s boundaries, caused by natural, technological, or human-caused disasters; and

WHEREAS, it is further required that state or local officials have imposed or recommended measures to promote social distancing, or, the legislative body meeting in person would present imminent risks to the health and safety of attendees; and

WHEREAS, the Board of Directors previously adopted Resolution Number 9285 on September 28, 2021, finding that the requisite conditions exist for the legislative bodies of Metropolitan to conduct remote teleconference meetings without compliance with paragraph (3) of subdivision (b) of Section 54953; and

WHEREAS, as a condition of extending the use of the provisions found in Section 54953(e), the Board of Directors must reconsider the circumstances of the state of emergency, and the Board of Directors has done so in subsequent Resolutions Numbered 9287, 9288, 9291, 9292, 9295, 9296, 9297, and 9298 on October 12, 2021, November 9, 2021, November 23, 2021, December 14, 2021, January 11, 2022, February 8, 2022, March 8, 2022, and March 29, 2022 respectively; and

WHEREAS, such conditions now persist at Metropolitan, specifically, Governor Newsom's March 4, 2020 Proclamation of A State of Emergency caused by the COVID-19 pandemic; and

WHEREAS, state or local officials continue to impose or recommend measures to promote social distancing, including County of Los Angeles Department of Public Health Order issued on March 23, 2022 effective April 1, 2022, providing guidance for indoor masking and implementation of policies and practices that support physical distancing where possible; and

WHEREAS, as a consequence of the state of emergency, the Board of Directors does hereby find that the legislative bodies of Metropolitan shall conduct their meetings without compliance with paragraph (3) of subdivision (b) of Government Code Section 54953, as authorized by subdivision (e) of Section 54953, and that such legislative bodies shall continue to comply with the requirements to provide the public with access to the meetings as prescribed in paragraph (2) of subdivision (e) of Section 54953; and

WHEREAS, Metropolitan is providing call-in telephonic access for the public to make comment and to listen; and providing livestreaming of the meetings over the internet to ensure access for the public.

NOW, THEREFORE, the Metropolitan Board of Directors does hereby resolve as follows:

Section 1. Recitals. The Recitals set forth above are true and correct and are incorporated into this Resolution by this reference.

Section 2. Reconsider the Circumstances of the State of Emergency Persists. The Board of Directors hereby reconsiders the conditions of the state of emergency and the Board of Directors hereby continues to rely on the Governor of the State of California's Proclamation of State of Emergency, effective as of its issuance date of March 4, 2020.

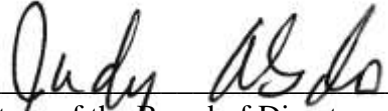
Section 3. State or Local Officials Continue to Impose or Recommend Measures to Promote Social Distancing. The Board of Directors hereby acknowledges that state or local officials continue to impose or recommend measures to promote social distancing, including County of Los Angeles Department of Public Health Order issued on March 23, 2022 effective April 1, 2022, providing guidance for indoor masking and implementation of policies and practices that support physical distancing where possible.

Section 4. Remote Teleconference Meetings. The General Manager and legislative bodies of Metropolitan are hereby authorized and directed to take all actions necessary to carry out the intent and purpose of this Resolution, including conducting open and public meetings in

accordance with Government Code Section 54953(e) and other applicable provisions of the Brown Act.

Section 5. Effective Date of Resolution. This Resolution shall take effect immediately upon its adoption and shall be effective until the earlier of (i) May 12, 2022, or such time the Board of Directors adopts a subsequent resolution in accordance with Government Code Section 54953(e)(3) to extend the time during which the legislative bodies of Metropolitan may continue to teleconference without compliance with paragraph (3) of subdivision (b) of Section 54953.

I HEREBY CERTIFY that the foregoing is a full, true, and correct copy of a resolution adopted by the Board of Directors of The Metropolitan Water District of Southern California at its meeting held on April 12, 2022.


Secretary of the Board of Directors of
The Metropolitan Water District
of Southern California



• **Board of Directors**
Integrated Resources Plan Special Committee

4/12/2022 Board Meeting

7-1

Subject

Adopt the 2020 Integrated Water Resources Plan Needs Assessment; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA

Executive Summary

The 2020 Integrated Water Resources Plan (IRP) establishes a strategy for ensuring regional water reliability through 2045. The 2020 IRP incorporated scenario planning to address wide-ranging uncertainties rather than focusing on a single set of assumptions as in the past. In collaboration with the Member Agencies, the Board of Directors, and other interested parties, Metropolitan broadened its perspectives by constructing and modeling four plausible scenarios. Staff organized the 2020 IRP into a Regional Needs Assessment (Phase 1) and a One Water Implementation phase (Phase 2). The Regional Needs Assessment is now complete.

This letter recommends adoption of the 2020 IRP Regional Needs Assessment (**Attachment 1**), which includes findings in five broad categories (State Water Project Dependent Areas, Storage, Demand Management, Imported Supplies, and Local Supplies), quantifies supply/demand gaps, and examines the effectiveness of generalized portfolio categories. Adopting the Regional Needs Assessment allows the analysis and findings to serve as both a foundation and as guardrails for the next implementation phase.

Details

Background

The IRP serves as Metropolitan's long-term, comprehensive water resources strategy to provide the region with a reliable and affordable water supply. After its first adoption in 1996, the IRP was updated in 2004, 2010, and 2015 to adapt to changing conditions that affected water resource reliability. With each update, Metropolitan recalibrated to current conditions and incorporated the best information available to update its forecasts. These plans focused on a single set of assumptions about the future.

The 2020 IRP sought a new analytical framework to:

- Define and account for uncertainties affecting water reliability
- Develop a method to assess and communicate the impacts of those uncertainties
- Explain the uncertainties and their relevance in a clear and transparent way
- Allow integration with an adaptive management strategy that will provide ongoing decision support, information generation, and reporting as essential components

The 2020 IRP explicitly plans for a wide range of uncertainties through scenario planning and by embracing a One Water approach to planning and implementation.

2020 IRP – A Phased Approach for One Water Implementation

Although initially envisioned as a single assessment and planning effort, scenario planning required close coordination with the member agencies. Scenario planning departed from the prior single-scenario methods and needed extra time to help member agencies become comfortable with the approach. Additionally, staff valued

member agency input and refined the scenarios and analysis through multiple iterative steps. The Covid-19 pandemic also forced changes in outreach methods, dynamics of interacting with member agencies, and the work environment of staff conducting the analyses.

Concurrent with developing and analyzing the scenarios, California again slipped into a severe drought. Several scenarios under development showed that the State Water Project (SWP) dependent areas could experience shortages more quickly and deeply as the SWP imported supply became constrained. Eventually, it became clear that the Regional Needs Assessment could serve as a stand-alone guide to the deeply uncertain future of Southern California's water supply without completion of the implementation phase. Thus, the complete IRP was divided into two phases, and the needs assessment was completed.

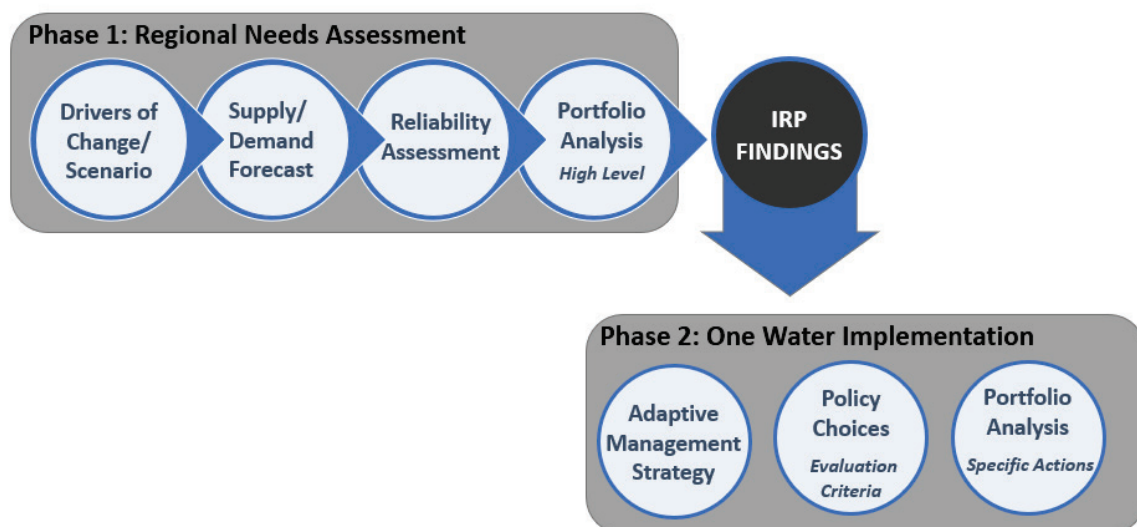
Figure 1 shows the two phases:

- Phase 1: Regional Needs Assessment
- Phase 2: One Water Implementation

The two-phase IRP allows Metropolitan to transition towards a new One Water approach to water reliability and resilience in Phase 2. The One Water approach will focus on balancing Southern California's broad interests in managing finite water resources for both community and ecosystem needs. It will embrace the region's diverse communities through a collaborative approach to addressing water challenges. Establishing a common understanding of the scope of potential water needs of Southern California over the next 25 years is key to the approach in Phase 2. By first defining and identifying a potential range of the region's problems, the IRP Regional Needs Assessment provides the technical foundation to enable the work of identifying specific actions in Phase 2.

Attachment 1 contains the final draft report of the IRP Regional Needs Assessment. It documents the scenario development and subsequent modeling efforts. It then offers a set of findings to inform deliberations and decision-making in Phase 2. In Phase 2, portfolios will be advanced by identifying policies, programs, and projects to address the findings. A comprehensive, adaptive management strategy will be developed in Phase 2 to guide these specific actions.

Figure 1: Process Diagram for Phases 1 and 2 of the 2020 IRP



Recommendation to Adopt Findings of the Phase 1 2020 IRP Regional Needs Assessment

The 2020 IRP Regional Needs Assessment outcomes can be summarized through a set of findings grounded in the scenario reliability analysis. These findings provide the foundation and guardrails for Phase 2. Grouped by topic, the following findings are offered for consideration by the Board:

SWP Dependent Areas

- Vulnerabilities in the SWP Dependent Areas are more severe given reduced reliability of SWP supplies and Metropolitan distribution system constraints. Actions identified in the implementation phase must prioritize addressing the SWP Dependent Area's reliability challenge.
- New core supplies must be accessible to the SWP Dependent Areas. Greater access to existing core supplies can also increase SWP Dependent Area reliability.
- Enhanced accessibility to core supplies and storage, both existing and new, will improve SWP Dependent Area and overall reliability. This includes improvements to Metropolitan's distribution system and capacity to deliver non-SWP supply and storage.
- Storage capacity, put/take capabilities, and accessibility are critical considerations for the SWP Dependent Area. New storage capacity and put/take capabilities should be consistent with the portfolio analysis. New storage must be accessible to the SWP Dependent Areas.

Storage

- Storage capacity, put/take capabilities, and accessibility are critical considerations in maintaining reliability under the region's current and future conditions, especially for SWP Dependent Areas.
- Maintaining Metropolitan's existing storage portfolio is critical, including the consideration of re-negotiating contracts when they expire.
- Expanding existing or developing new storage programs and investments in Metropolitan's distribution system can reduce the need for new core supply development to meet potential future shortages and adapt to climate change.
- When evaluating storage options, put/take capabilities are essential; even storage programs with modest put/take capabilities help reduce the need for flexible supply.

Retail Demand/Demand Management

- Metropolitan's future supply reliability may fluctuate based on demand increases and decreases.
- Variability in retail demand largely comes from changes in outdoor water use. Outdoor water use behavior is complex, influenced by weather and climate and by awareness of water scarcity and other conservation measures.
- It is important to pay attention to demand rebound, demand growth, and demand reductions, and take appropriate regional measures as necessary.
- Managing long-term demands through the efficient use of water reduces dependency on supplies, helps preserve storage, and helps reduce the need for extraordinary conservation measures.

Metropolitan Imported Supplies

- Existing imported supplies are at risk from various drivers of uncertainty.
- Maintaining existing imported supply reliability reduces the need for new core supply development and leverages years of investments.
- SWP supplies are highly susceptible to varying hydrologic conditions, climate change, and regulatory restrictions.
- Variability and capacity in SWP supplies provide opportunities to store water during wet periods for use in dry years, including Colorado River storage. Metropolitan's ability to distribute or store SWP supplies when they materialize will enhance the region's reliability, particularly the SWP Dependent Areas. The Colorado River system and Colorado River Aqueduct capacity do not offer the same opportunities concerning SWP storage.
- Shortages on the Colorado River will limit the reliability of Colorado River Aqueduct deliveries as a core supply in the future.

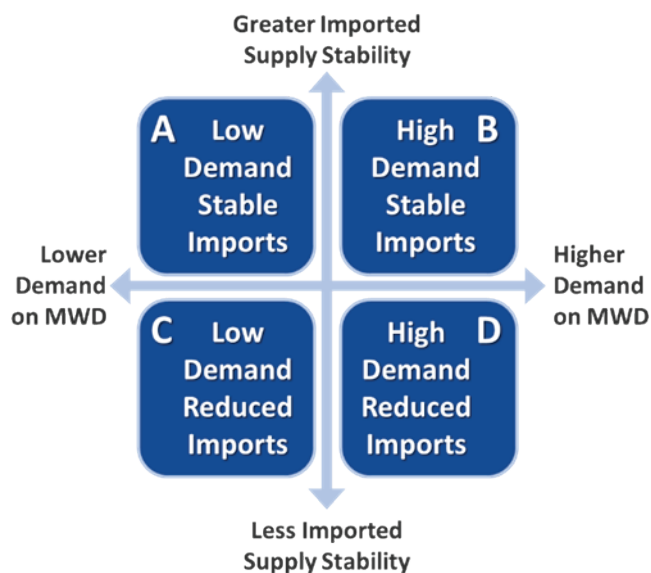
Local Supply

- Maintaining existing and developing new local supplies is critical in helping manage demands on Metropolitan.
- Impacts to reliability occur if local supply assumptions are not achieved; therefore, it is important to track the progress of local supply development as one of the signposts in the One Water Implementation phase.
- Additional actions may be needed should existing and future local supply levels deviate from IRP assumptions.

IRP Scenario Framework

Figure 2 shows the four scenarios used to characterize different outcomes of imported supply stability and demand on Metropolitan. Key drivers of change such as climate, regulatory requirements, and the economy are uncertain and may exert significant effects on both water supply and demands. These and other drivers of change were identified through a collaborative process involving member agencies, expert consultants, research by staff,

Figure 2. Four Scenarios Used in the IRP



and the input of other interested parties. The impacts of these drivers within each scenario were quantified using in-house models.

Interaction with Other Planning Efforts

Metropolitan's 2020 Urban Water Management Plan was developed in coordination with the 2020 IRP. When both phases of the IRP are complete, the planning process will serve as Metropolitan's blueprint for long-term water reliability, including key supply development, infrastructure improvements, and water use efficiency goals.

Together, the IRP and the UWMP serve as the reliability roadmap for the region. The UWMP relied on demographic and climate inputs provided by other agencies such as the Southern California Association of Governments, San Diego Association of Governments, California Department of Water Resources, and the U.S. Bureau of Reclamation. The

IRP Regional Needs Assessment extended the planning horizon beyond the single scenario outcomes shown in the UWMP. But importantly, the factors and assumptions used to create the UWMP scenario fall within the bounds of this work.

The IRP Regional Needs Assessment informs other planning efforts and serves as boundary conditions to consider in other planning venues. For example, the IRP Implementation Phase will need to consider the performance of any portfolio under the four scenarios identified in this work.

The General Manager's priorities for the next biennium emphasize action to address findings of the IRP Regional Needs Assessment. For example, substantial effort is underway to provide each member agency access to an equivalent level of water supply reliability and to resolve the constraints of the SWP dependent areas.

Likewise, the portfolio selection will also need to consider Metropolitan's proposed emissions reduction goal in the draft Climate Action Plan to ultimately achieve carbon neutrality by 2045. Finally, the planned rate structure review will also need to ensure the business model can adapt to changing needs of the member agencies and support sustainable local and imported supplies under the same scenarios.

Next Steps

Adoption of the findings and analysis represents a critical juncture; however, the 2020 IRP is far from over. No specific actions are recommended or have been determined from the IRP Regional Needs Assessment. Following adoption of the IRP Regional Needs Assessment, Metropolitan will transition to implementation in Phase 2.

The One Water Implementation phase will take the results and findings of Phase 1 into a collaborative process to identify integrated regional solutions. Using a One Water approach, the implementation phase will translate the high-level portfolio analysis from Phase 1 into specific policies, programs, and projects to address the findings and mitigate the potential shortages. A comprehensive, adaptive management strategy and evaluation criteria will be developed to guide these specific actions. The adaptive management strategy will also establish a process for monitoring key reliability indicators to support decision-making.

Appendices for the 2020 IRP Regional Needs Assessment will be posted to Metropolitan's website at www.mwdh2o.com/IRP. These appendices serve as living documentation for the IRP Regional Needs Assessment, and they will be supplemented and refreshed with updated materials as they become available.

Policy

By Minute Item 14727, dated December 16, 1952, board adoption of a statement of policy with regard to the plans being proposed for the importation or development of large, additional water supplies for the area coming within the scope of this District.

By Minute Item 39412, dated January 14, 1992, board adoption of the revised mission statement of the Metropolitan Water District of Southern California.

By Minute Item 41734, dated January 9, 1996, board adoption of the Integrated Water Resources Plan.

By Minute Item 43810, dated December 14, 1999, board adoption of the Strategic Plan Policy Principles.

By Minute Item 45841, dated July 13, 2004, the Board approved the Integrated Water Resources Plan Update report and the regular interval of IRP Implementation Reports and IRP updates.

By Minute Item 48449, dated October 12, 2010, board adoption of the 2010 Integrated Resources Plan Update.

By Minute Item 50358, dated January 12, 2016, the Board adopted the 2015 Integrated Water Resources Plan Update.

Metropolitan Water District Administrative Code Section 11104: Delegation of Responsibilities.

California Environmental Quality Act (CEQA)

CEQA determination for Option #1:

The proposed action is not defined as a project under CEQA (Public Resources Code Section 21065, State CEQA Guidelines Section 15378(b)(2) and 15378(b)(5)) because it involves organizational or administrative activities and general policy and procedure making that would not result in a direct or indirect physical change to the environment.

CEQA determination for Option #2:

None required

Board Options

Option #1

Authorize the General Manager to adopt the 2020 Integrated Water Resources Plan Regional Needs Assessment.

Fiscal Impact: No immediate impact; Metropolitan's long-term costs will depend upon individual project approvals following a forthcoming One Water Implementation Plan.

Business Analysis: Metropolitan's mission is to provide a reliable supply of water to its service area. The 2020 IRP Needs Assessment findings provide guidance on how Metropolitan may accomplish this mission for the next 25 years

Option #2

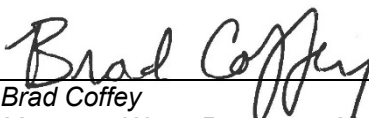
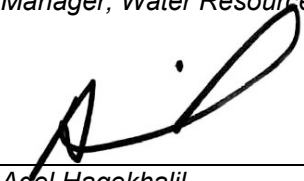
Do not adopt the 2020 Integrated Water Resources Plan Regional Needs Assessment.

Fiscal Impact: None

Business Analysis: This option reduces the ability of Metropolitan to consider and plan for major changes in the region's water resources.

Staff Recommendation

Option #1

 Brad Coffey Manager, Water Resources Management	3/16/2022 Date
 Adel Hagekhalil General Manager	3/17/2022 Date

Attachment 1 – 2020 IRP Regional Needs Assessment

Ref# wrm12685000

2020 IRP – Regional Needs Assessment

Draft

Executive Summary

Southern California's water future in a word — uncertain.

Higher temperatures in the Southwest have led to a dramatic reduction in Colorado River runoff this century. Variable weather in Northern California and stressed ecosystems have resulted in unprecedented low imports from the State Water Project (SWP). Likewise, in Southern California itself, less stormwater is percolating into groundwater basins, both from too much rain at times or not enough.

As a regional planner for water supply reliability for Southern California, the Metropolitan Water District relied on single, mid-range forecasts during planning efforts for over a generation. At this moment, with so many questions about what lies ahead, planning that narrows in on a single forecast does not capture the breadth of uncertainties.

Scenario Planning: A Fresh Approach

In collaboration with its 26 member agencies, other interested parties, and its Board of Directors, Metropolitan has broadened its perspectives with scenario planning and thoroughly analyzing four potential futures – all different, all plausible. In the scenarios, demands on Metropolitan's imported supplies varied due to different weather and demographic patterns, among other factors. Supplies varied as well, due to reasons such as climate change severity and regulatory impacts.

After analyzing these futures, a potential for water shortages emerged. The planning revealed that a large portion of Metropolitan's service area is vulnerable to Northern California drought and regulatory restrictions. At present, Metropolitan has limited capacity to move Colorado River water to the northern portions of the district's service area served by the SWP.

The member agencies in this area are the City of Burbank, Calleguas MWD, Eastern MWD, Inland Empire Utility Agency, Las Virgenes MWD, Los Angeles Department of Water and Power, San Fernando, Three Valleys MWD, Upper San Gabriel Valley MWD, and Western MWD. About a third of Metropolitan's six-county service area lives within the boundaries of this SWP Dependent Area.

As the scenario planning process identified the potential of water shortages for these communities, the threat began to play out in real life.

The 2020 and 2021 water years experienced record low supply from Northern California due to the drought – a 20 percent SWP allocation in 2020 followed by a historically low 5 percent last year. Metropolitan declared a drought emergency in 2021 because the Dependent Areas were approaching shortage conditions.

With experience confirming analysis, Metropolitan found the possibility of shortage in three of the four scenarios, after exhausting available and accessible supplies. Only in a future with low demands and stable imported supplies would Southern California avoid shortage without additional water supply and system reliability investments. The record low supplies so far this decade from Northern California,

coupled with the first-ever shortage declaration for the lower Colorado River in August 2021, suggest the region may not be so fortunate.

Scenario planning led to the following findings:

SWP Dependent Areas

- Vulnerabilities in the SWP Dependent Areas are more severe given reduced reliability of SWP supplies and Metropolitan distribution system constraints. Actions identified in the implementation phase must prioritize addressing the SWP Dependent Area's reliability challenge.
- New core¹ supplies must be accessible to the SWP Dependent Areas. Greater access to existing core supplies can also increase SWP Dependent Area reliability.
- Enhanced accessibility to core supplies and storage, both existing and new, will improve SWP Dependent Area and overall reliability. This includes improvements to Metropolitan's distribution system and capacity to deliver non-SWP supply and storage.
- Storage capacity, put/take capabilities, and accessibility are critical considerations for the SWP Dependent Area. New storage capacity and put/take capabilities should be consistent with the portfolio analysis. New storage must be accessible to the SWP Dependent Areas.

Storage

- Storage capacity, put/take capabilities, and accessibility are critical considerations in maintaining reliability under the region's current and future conditions, especially for SWP Dependent Areas.
- Maintaining Metropolitan's existing storage portfolio is critical, including the consideration of re-negotiating contracts when they expire.
- Expanding existing or developing new storage programs and investments in Metropolitan's distribution system can reduce the need for new core supply development to meet potential future shortages and adapt to climate change.
- When evaluating storage options, put/take capabilities are essential; even storage programs with modest put/take capabilities help reduce the need for flexible supply².

Retail Demand/Demand Management

- Metropolitan's future supply reliability may fluctuate based on demand increases and decreases.
- Variability in retail demand largely comes from changes in outdoor water use. Outdoor water use behavior is complex, influenced by weather and climate and by awareness of water scarcity and other conservation measures.

¹ Core supplies are resource management actions that augment supply or reduce Metropolitan demand and remain available each year.

² Flexible supplies are implemented as needed and include savings from deliberate efforts to change water use behavior

- It is important to pay attention to demand rebound, demand growth, and demand reductions, and take appropriate regional measures as necessary.
- Managing long-term demands through the efficient use of water reduces dependency on supplies, helps preserve storage, and helps reduce the need for extraordinary conservation measures.

Metropolitan Imported Supplies

- Existing imported supplies are at risk from various drivers of uncertainty.
- Maintaining existing imported supply reliability reduces the need for new core supply development and leverages years of investments.
- SWP supplies are highly susceptible to varying hydrologic conditions, climate change, and regulatory restrictions.
- Variability and capacity in SWP supplies provide opportunities to store water during wet periods for use in dry years, including Colorado River storage. Metropolitan's ability to distribute or store SWP supplies when they materialize will enhance the region's reliability, particularly the SWP Dependent Areas. The Colorado River system and Colorado River Aqueduct capacity do not offer the same opportunities concerning SWP storage.
- Shortages on the Colorado River will limit the reliability of Colorado River Aqueduct deliveries as a core supply in the future.

Local Supply

- Maintaining existing and developing new local supplies is critical in helping manage demands on Metropolitan.
- Impacts to reliability occur if local supply assumptions are not achieved; therefore, it is important to track the progress of local supply development as one of the signposts in the One Water Implementation phase.
- Additional actions may be needed should existing and future local supply levels deviate from IRP assumptions.

One Water: How a Comprehensive Solution Starts by Understanding the Need

Metropolitan's emerging One Water approach to reliability and resilience brings together all of Southern California's interests in managing finite water resources for both community and ecosystem needs. It goes beyond identifying the region's future water portfolio and embraces collaboration, diverse communities, and a unified approach to problem-solving. This 2020 IRP looks at multiple futures and builds a One Water foundation by understanding the potential needs of Southern California in the next quarter-century.

Metropolitan's stated goal is 100 percent reliability for all its Member Agencies. The first step toward achieving this goal is to identify potential shortcomings, which speaks to the wisdom of analyzing different plausible futures. The scenario analyses revealed conceivable reliability outcomes through

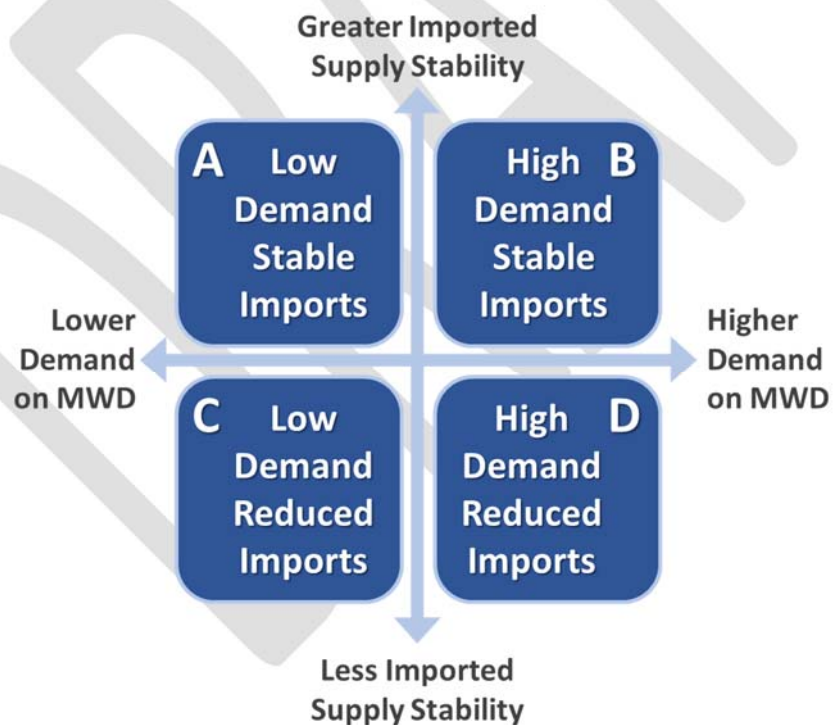
2045. The potential annual net shortage ranged from none under the Low Supply/Stable Imports Scenario (A) to as high as 1.2 million acre-feet (MAF) under the High Demand/Reduced Imports Scenario (D). As Metropolitan proceeds towards implementation in the next phase of the IRP, actions will address these gaps consistent with the portfolio category analysis presented in Chapter 4.

The IRP Regional Needs Assessment identifies significant threats facing Southern California's water supply reliability through successive qualitative and quantitative analysis steps. The assessment sizes up the scope of reliability challenges and the management solutions that could be in store for the region by the year 2045 under a wide range of conditions. The completion of this assessment launches the "One Water Implementation" phase, which will involve extensive collaboration among Metropolitan's Board, member agencies, and other interested parties to develop an adaptive management strategy will also establish a process for monitoring key reliability indicators and find joint approaches to the regional problems and resource needs identified in this assessment. For example, Metropolitan will continue to support the development of local supplies by Member Agencies during the One Water Implementation phase.

IRP Scenario Framework

As illustrated by **Figure ES-1**, the 2020 IRP is based on four scenarios characterized by divergent outcomes of imported supply stability and water demands on Metropolitan.

Figure ES-1: 2020 IRP Scenario Framework



Key drivers of these outcomes include climate change, regulatory requirements, and the economy. These remain uncertain but significantly contribute to water supply and demands. These and other drivers of change were identified through a collaborative process. The impacts of these drivers within each scenario were quantified using Metropolitan's models.

The IRP scenarios serve as learning tools, not predictions. By contemplating four alternative but plausible outcomes, they shed light on what could happen between now and 2045. They also signal the need for future “signposts” to indicate emerging needs that may require the re-prioritization of future investments and other adaptive actions.

Technical Results

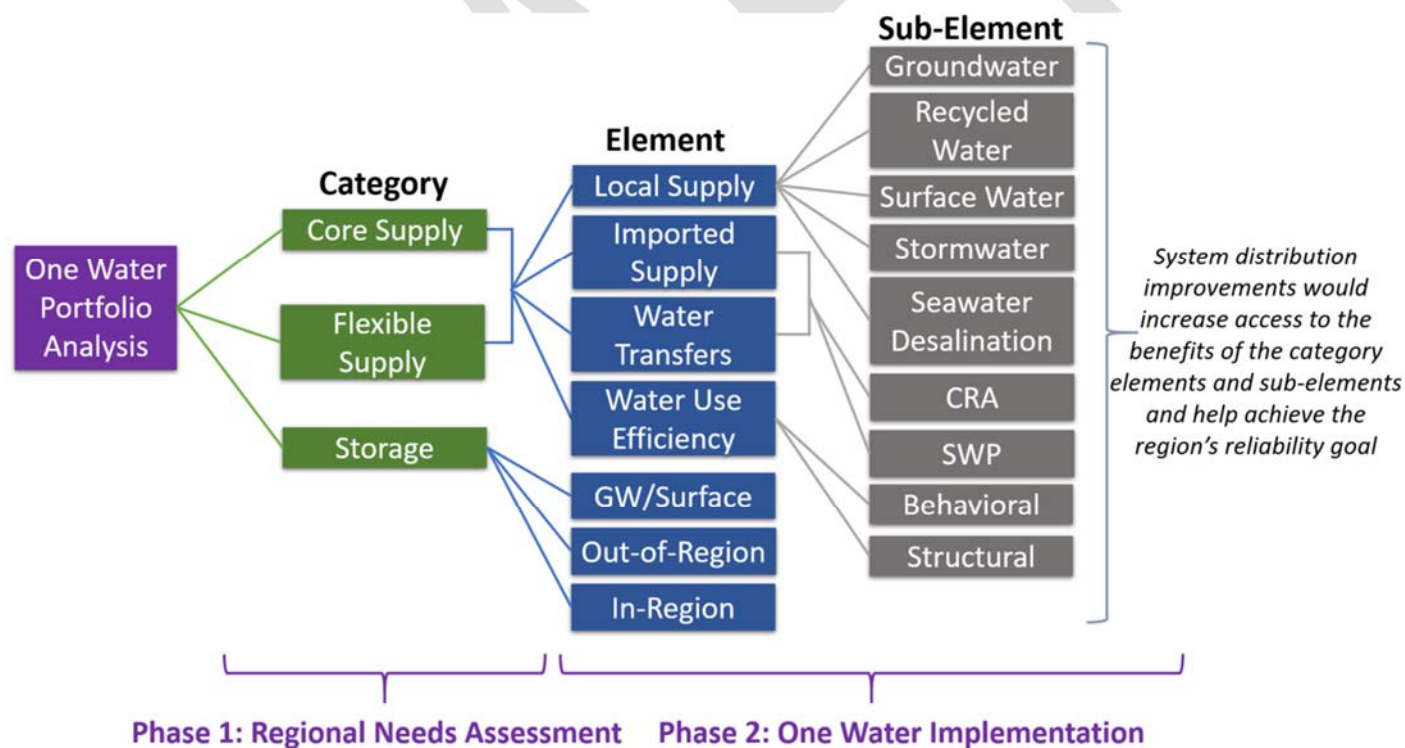
The technical results of the Regional Needs Assessment were based on two analytical processes:

- Reliability assessment to define and quantify potential “gaps” for each scenario, and
- Portfolio analyses to quantify high-level categories of actions that would be needed to achieve reliability in each scenario.

Scenario A (Low Demand/Stable Imports) posed the least challenge to reliability, Scenario D (High Demand/Reduced Imports) the greatest.

As shown in **Figure ES-2**, the portfolio analysis explored the effectiveness of supply categories to reduce or eliminate gaps. The three supply types include core, flexible, and storage. The evaluation determined an effective resource mix for each scenario at the category level.

Figure ES-2: Levels of One Water Portfolio Analysis



Note: The elements and sub-elements identified are examples and not meant to be an exhaustive list.

This report, which completes the IRP Regional Needs Assessment phase, offers findings, quantifies supply-demand gaps, and examines the effectiveness of generalized portfolio categories to inform implementation. The One Water Implementation phase will analyze solution portfolios at the Element and Sub-Element levels, consistent with the core supply, flexible supply, and storage configurations identified here.

These results and findings impart optimism for Southern California's water future. Metropolitan has identified the tools necessary to successfully adapt to various plausible futures using the full suite of available solutions — a comprehensive One Water approach. It is also well within Southern California's control to avoid a future with unsustainable increased per-capita water use and demands. With the development of an adaptive management strategy, Southern California can adjust its portfolio of water actions to keep up with our changing times.

DRAFT

Chapter 1 - Introduction

The Evolution of Metropolitan's Integrated Water Resource Planning

The Integrated Water Resources Plan (IRP) is Metropolitan's key planning effort that establishes a long-term, comprehensive water resources strategy to provide the region with a reliable and affordable water supply. At its core, the IRP process is a collaborative effort between key interested parties – Metropolitan, its Member Agencies, other local water agencies, and community, business, environmental, and agricultural interests – to identify preferred solutions to long-term water resource reliability challenges and develop strategies to address those challenges.

The IRP is adaptive – as regional water resource issues evolve, so does the IRP. Since the inaugural IRP in 1996, Metropolitan routinely monitors conditions and measures progress in achieving the plan's objectives. As such, the IRP has been periodically updated to expand Metropolitan's strategy to address changing conditions that affect water resource reliability.

Regional Assemblies and the 1996 IRP

The 1987-1992 drought (California Department of Water Resources, 2021, pp. 4-6) exposed Southern California to significant water supply challenges across six years, prompting a change in water management, investment, and planning. In response, Metropolitan initiated regional assemblies of Metropolitan's board and senior management, member agency managers, local water agencies, and invited public officials. The assemblies established principles for agencies in the service area that would guide the development and adoption of future IRPs:

- Every water supplier, to varying degrees, relies upon the regional imported water supply distribution and storage system.
- Metropolitan is a lead agency in the region's water management.
- Every water supplier is responsible for promoting a strong water ethic to their constituents and is committed to the transparent, equitable, and fair development and implementation of water management programs to achieve regional goals.

With this foundation, Metropolitan developed the first Integrated Water Resources Plan (MWDSC, 1996). The 1996 IRP identified a "Preferred Resource Mix" based on cost-effectiveness, diversification, and reliability to supply the region through 2020. This portfolio balanced the investments between imported supply, local supply, and conservation. Additionally, the 1996 IRP emphasized the need for a coordinated network of surface and groundwater storage.

2004 IRP Update

After the 1996 IRP, drought within the Colorado River Basin resulted in the loss of surplus supplies available to Metropolitan. In 2003, the Quantification Settlement Agreement (QSA) and other related agreements established water use caps for higher-priority users in California, enabling several new water transfer programs to augment Metropolitan's basic apportionment. The 2004 IRP Update updated the original goals set in 1996, quantified the impact of changing conditions, and revised resource development targets through 2025. This first update recognized the need to adapt to changing conditions and anticipate uncertainties. These uncertainties ranged from population and economic growth, increasingly stringent water quality regulations, endangered species protections, and a shifting climate and hydrology. The update addressed these uncertainties by including a planning buffer of

10 percent of regional demands (500,000 AF) that identified additional local supplies and imported supply transfers or exchanges that could be implemented as needed.

2010 IRP Update

By 2010, the Colorado River had experienced below-average precipitation for a decade. The SWP faced new environmental and water quality protections that reduced the Sacramento-San Joaquin Delta supplies, particularly during the 2007-2009 drought. The 2010 IRP Update established adaptive management as a strategy to meet demands under observed hydrology and future uncertainty to address these changed conditions. Elements of the adaptive management strategy included:

- **Core resources.** A strategy to maintain reliability under planned conditions such as published demographic forecasts and historical hydrology.
- **Supply buffer.** This strategy expanded the earlier concept of a planning buffer to respond to shorter-term variability outside of planned conditions. This preventive action included expanding water-use efficiency and local supplies beyond the core resources.
- **Future supply actions.** This new strategy addressed long-term uncertainty by accelerating the development of new water supplies through driving feasibility studies, technological research, and regulatory review.

With the 2010 IRP Update, Metropolitan's planning efforts began to lay the foundation for a more proactive strategy to address future uncertainties.

2015 IRP Update

The 2012-2016 drought (DWR, 2021) further strained imported supplies and local groundwater basins that were already in decline from extended dry conditions and regulatory constraints. However, the region entered this drought with a record quantity of water stored within Metropolitan's network of reservoirs and groundwater banks at the time, highlighting the success of Metropolitan's investments in storage guided by the IRP. These critically dry years acted as both a stress test for Metropolitan's adaptive management strategy and a further indication of the severe challenges the future could hold. The 2015 IRP Update revised resource targets, identified transfers and exchanges to address short-term risk, and reaffirmed the importance of taking action today to accelerate the development of new water supplies through future supply actions. As such, the 2015 IRP Update developed approaches for how Metropolitan could advance conservation and local resources development and maximize its storage reserves in a future that may see more severe and frequent drought.

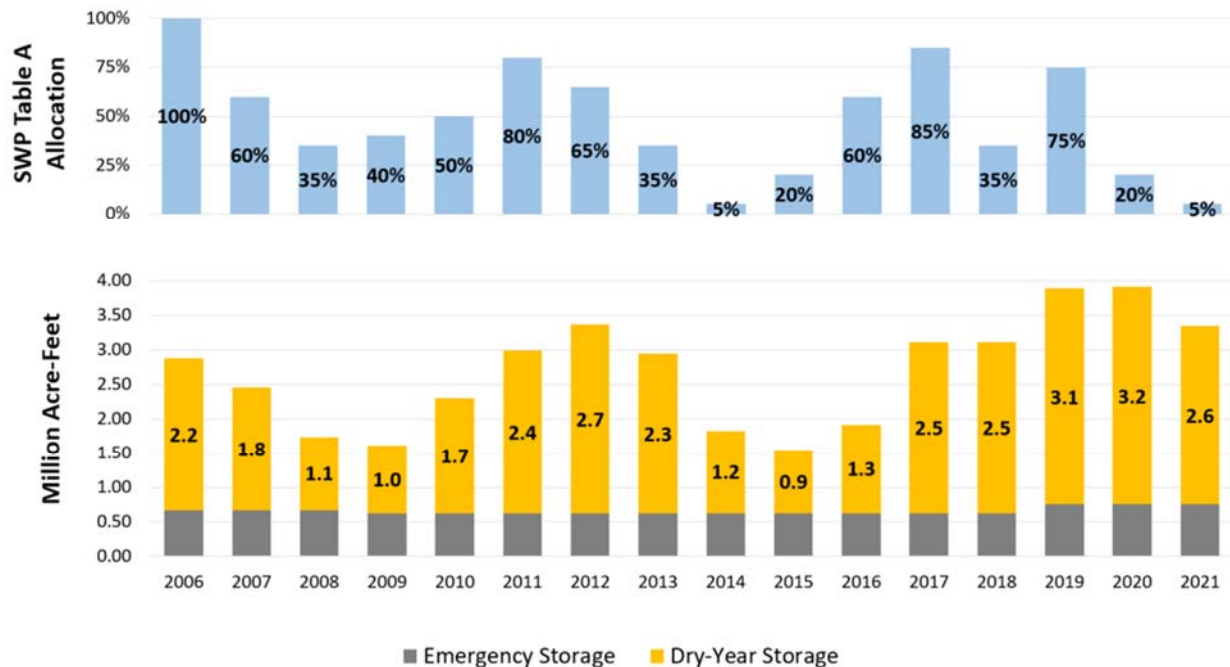
Conditions Underlying the 2020 IRP and Future Uncertainty

After the 2015 IRP Update, the region received a brief respite from drought. From 2016 to 2020, Metropolitan leveraged its prior investments in conservation, local projects, regional storage, distribution, and treatment infrastructure to rapidly improve its water supply position. Metropolitan moved a record amount of water into storage in 2017 and reached a record-high storage balance by the end of 2020 as shown in **Figure 1-1**. This figure also illustrates that Metropolitan has, through these investments, stored water in wet years when the SWP allocation was higher (2010-2012, and 2016-2017, and 2019) for use in drought years when the SWP

Metropolitan Imported Supplies Finding: SWP supplies are highly susceptible to varying hydrologic conditions, climate change, and regulatory restrictions.

allocation was lower (2008-2009, 2013-2015, and 2020-2021). Metropolitan's diverse portfolio investments guided by the IRP made this management of wetter hydrologic conditions possible. The region's ability to continue to effectively manage surplus water during wet years to quickly recover from dry conditions will prove vital for managing through future droughts.

Figure 1-1: SWP Allocation and End of Year Storage Balance



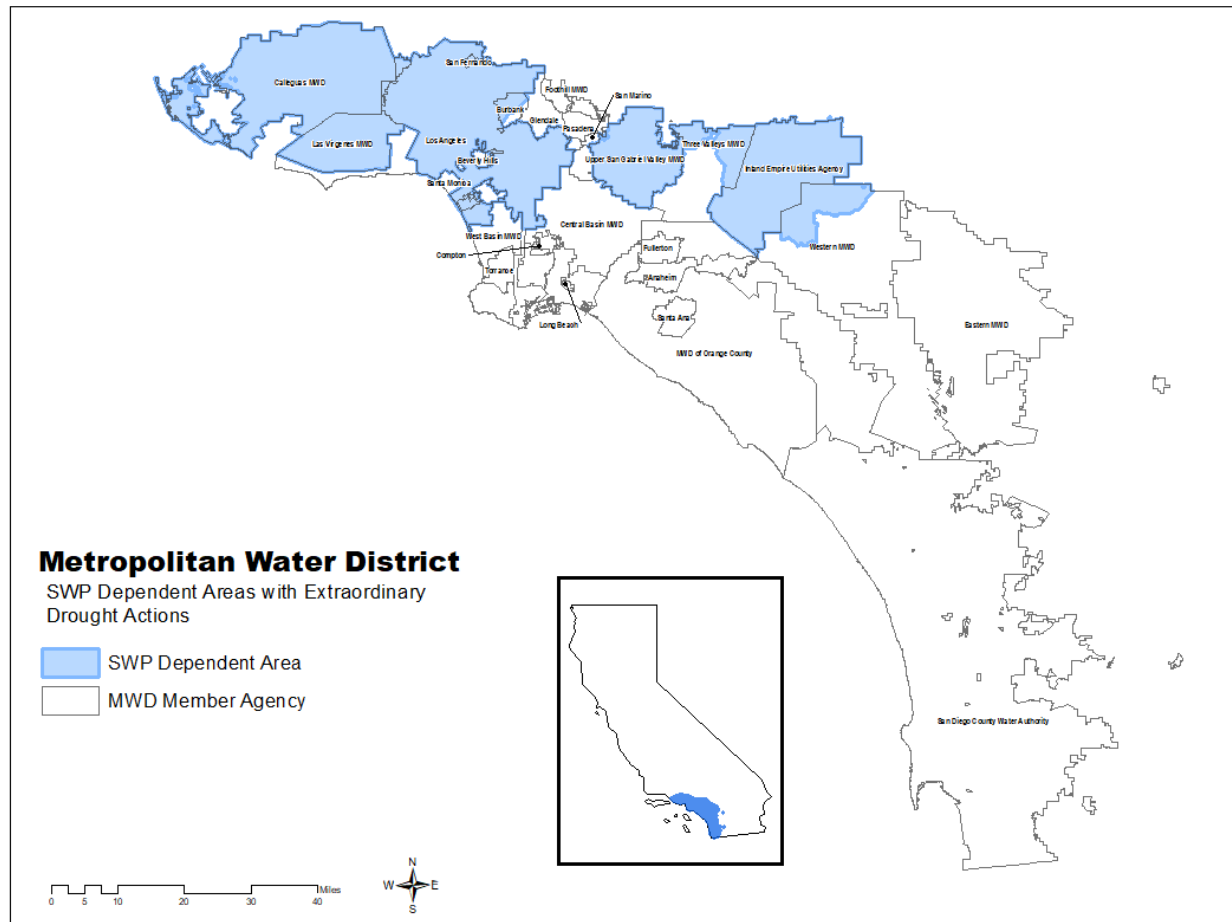
Note: End of year 2021 balance subject to DWR adjustments and USBR final accounting.

The current drought once again brought the need for regional planning sharply into focus. Despite the record amounts of water in storage at the end of 2020, consecutive low SWP allocations in 2020 (20 percent) and 2021 (5 percent) highlighted a critical vulnerability within Metropolitan's existing distribution system. Colorado River supplies cannot serve some parts of the service area that are not otherwise self-sufficient with local supplies. A key challenge for Metropolitan in 2021 was in meeting water demands in these "SWP Dependent Areas," shown in **Figure 1-2**. The very low SWP allocation of 5 percent made it imperative to safeguard the limited SWP supplies. A combination of storage withdrawals, voluntary conservation efforts, and expanded access to Colorado River supplies through extraordinary drought actions preserved SWP Table A supplies and SWP storage to meet SWP Dependent Area demands in 2021.

Vulnerability of the SWP Dependent Areas is both a near-term and long-term concern, as the findings of this 2020 IRP Regional Needs Assessment Report will emphasize. As of the writing of this report, ensuring water reliability for the SWP Dependent Areas continues to be a challenge. Metropolitan declared a regional drought emergency in November 2021 because the SWP Dependent Areas were approaching shortage. On December 1, 2021, the California Department of Water Resources (DWR) announced a zero percent initial SWP Table A allocation for 2022 based on low reservoir levels and dry hydrologic conditions; DWR later increased the 2022 SWP allocation to 15 percent in January 2022 after

favorable precipitation events in December³. Under a zero percent SWP allocation, there would have been insufficient SWP supplies to fully meet consumptive demands not deemed essential to human health and safety needs in the SWP Dependent Areas. Additionally, Metropolitan would be unable to replenish its regional storage in Diamond Valley Lake. As such, it is vital to maintain and preserve SWP deliveries to ensure reliability throughout Metropolitan's service area. If conditions for Metropolitan's crucial imported supply systems continue to worsen, then the region may increasingly face similar prospects in the future.

Figure 1-2: State Water Project Dependent Areas with Extraordinary Drought Actions



The extreme changes in hydrologic conditions since the 2015 IRP Update underscore why it is vital that the IRP evolves. While past investments have played a key role in managing through the changing conditions experienced over the past 25 years, the continued evolution of the IRP will be essential for guiding the next 25 years of investments. Today, as the forecasts of past IRPs draw inevitable comparisons to present conditions, there is a growing appreciation of the limitations inherent to any projection based on a single set of assumptions. An array of factors shaped water supply and demand trends between then and now, and many uncertainties out of Metropolitan's control loom on the

³ As of this writing, the SWP allocation of 15 percent is not finalized for 2022. Continued dry conditions may result in a lowering of the allocation.

horizon. Mounting evidence of an increasingly varied climate and a proliferation of other external uncertainties suggest that previous IRPs may have relied on too narrow of a range of outcomes to ensure the avoidance of shortages in the future.

Figure 1-3: Evolution of IRP Retail M&I Demand Forecast Range and Observed Historical Demand

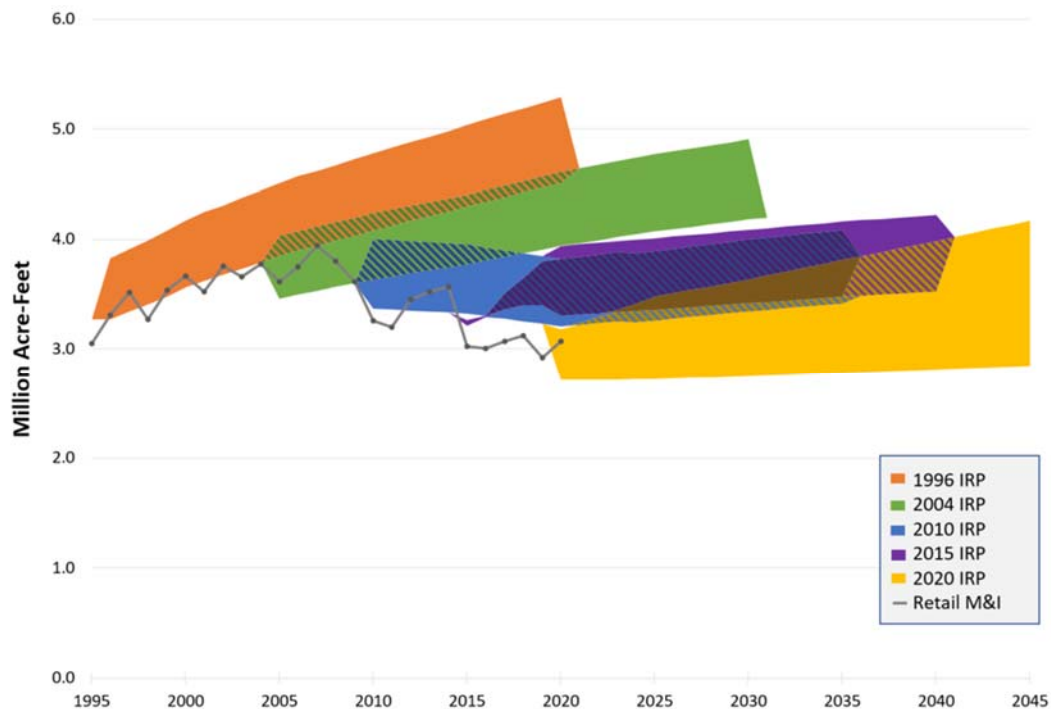


Figure 1-3 illustrates that Metropolitan recalibrated to current conditions as a baseline for each IRP update. Additionally, each IRP update incorporated new knowledge on uncertainties in the forecasts. The 2020 IRP in the yellow shaded area of the chart offers a wider range of retail demand forecasts than previous IRPs. It encompasses a range of assumptions comprising four distinct scenarios. It also takes a step forward from prior IRPs by examining a broader range of outcomes for these uncertainties, rather than just one set of assumptions as in past IRPs. For the 2020 IRP, all four scenarios launch and diverge over time from a common baseline of observed conditions leading up to the year 2020.

The 2020 Integrated Water Resource planning process features a regional needs assessment, as its first phase, that evaluates the impacts of future uncertainties on water resource reliability. This effort resulted in a comprehensive list of findings, the focus of this report, to help guide actions to address those uncertainties. Going forward, Metropolitan has the process and tools to evaluate specific investments and program actions under a range of future scenarios — developing an adaptive management strategy through the One Water Implementation that can guide implementation.

Chapter 2 – IRP Scenario Process

Planning for an Uncertain Future

It is increasingly clear that the underlying mechanisms and assumptions used to make past IRP projections are unpredictable. This means that a single long-term prediction on Southern California's water supplies and demands will provide an underestimation of the uncertainties and overconfidence in a specific presumed future. In this light, being aware of the range of alternative prospects is more useful than relying on a single projection. Thus, a new analytical framework was developed to:

- Define and account for uncertainties affecting water reliability
- Develop a method to assess and communicate the impacts of those uncertainties
- Explain the uncertainties and their relevance in a clear and transparent way
- Allow integration with an adaptive management strategy that will provide ongoing decision support, information generation, and reporting as essential components

Early on, scenario planning was selected to fulfill these objectives (Metropolitan Water District of Southern California, 2020g). Scenario building involves creativity, imagination, introspection, and reality checks based on political, economic, and scientific reasoning. To come up with a broad view of water-related uncertainties and plausible outcomes, Metropolitan undertook a comprehensive engagement process with its Board, member agency staff, other interested parties, and expert consultants.

In shaping the region's long-term water reliability, Metropolitan understood the importance of consensus on uncertainties and evaluating their impact. Public outreach and involvement for the 2020 IRP followed a different approach than before. Due to the onset of the COVID-19 pandemic in 2020, public outreach events pivoted to online presentations and workshops with additional information and public comment opportunities at IRP Committee meetings. The IRP microsite on Metropolitan's website provided access to expert panel discussions, data and analysis, presentations, and white papers. The online outreach broadened the opportunities for interested parties to engage throughout the IRP process.

Reliability Goal

Metropolitan's Board established the Integrated Resources Plan Special Committee (IRP Committee) to provide oversight and input during the development of the 2020 IRP. Early in the process, the IRP Committee reaffirmed a goal to provide 100 percent water supply reliability for the service area. This overarching goal set the tone for the IRP planning process and the basis for the subsequent analyses.

Given the Board's commitment to avoid shortages, scenario planning helped identify critical vulnerabilities and patterns that can mitigate potential shortages with timely interventions. The One Water Implementation phase will be designed to consider reliability measures under multiple scenarios.

Why Scenario Planning?

A look back since the previous 2015 IRP Update validated the collective, integrated efforts to secure water reliability for the 19 million people of Southern California (MWDSC, 2020e). When developing the 2015 IRP Update, California was enduring a historic drought, and the Colorado River watershed moved into its second decade of drought. But with a concerted drought response consistent with

Governor Brown's and the State Water Board's imposed mandatory conservation and Metropolitan's planning and policy efforts, the collective actions of water agencies throughout the region reduced per-capita water demands to historic lows. Combined with decades of planning and infrastructure investment since the original 1996 IRP, the area experienced a remarkable turnaround in water supply reliability. The efforts of individual consumers, local retail agencies, member agencies, and Metropolitan all contributed (MWDSC, 2020e).

Despite this success, long-term threats remain. Although persistently low demands since 2015 allowed storage to recover quickly, questions remain about whether per-capita demand will continue its downward trend. Further, the implication of continuing low demands on Metropolitan and the region's other potable and recycled water suppliers must be considered. For example, lower indoor use results in less wastewater with more highly concentrated effluent. This potentially increases the cost of recycling. Coming full circle, California again faces severe drought, conditions on the Colorado River worsen, and the disruption of the COVID-19 global pandemic has shaken society's conceptions of normality, perhaps causing yet unseen ripple effects in water-using behavior trends (AWWA and AMWA, 2020; MWDSC, 2020f; Smull et al., 2021).

The future can quickly move in unexpected directions. Reliability is a constant concern, both today and over the long term. Financial advisors warn investors that past performance is no guarantee of future results. Even the best-laid plans based on past and recent experience may not be resilient in a highly uncertain future. Because interventions to increase reliability come with different costs and benefits, decision-makers must consider affordability, environmental, and equity tradeoffs when deciding upon the timing and scale of those investments. Within this backdrop of emerging and unpredictable threats to water supply reliability and affordability, Metropolitan has considered the potential effects of major drivers and long-term threats as it moves into the IRP's One Water Implementation phase. Scenario planning offers a powerful tool to address these uncertainties.

With scenario planning, plausible futures are envisioned and explored. As described by Varum and Melo (2010), scenario planning helps one "gain confidence by 'pre-experiencing' future scenarios" (p. 361). This approach improves understanding of a broader range of potential outcomes. In turn, those outcomes allow a greater understanding of potential challenges to water supply reliability and the impacts of possible policy direction, helping to inform actions.

Throughout 2020 IRP's scenario planning process, the following points should be considered:

- Scenarios represent outcomes resulting from groupings of drivers of change, which are selected to be internally consistent and whose outcomes are outside of Metropolitan's control
- No scenario should be regarded as "most likely" or "preferred" as each scenario has outcomes that are entirely plausible relative to each other, and there are many other plausible scenarios that could be considered
- Each scenario reveals the potential challenges and choices that Metropolitan could face given the conditions of the scenario
- The value of scenario planning to Metropolitan is to increase awareness and preparedness, with no attempt to control, select, or predict the likelihood of the uncertain and uncontrollable conditions found in the scenario

As a decision support method, scenario planning provides Metropolitan a means to confront uncertain futures with choices that increase preparedness, improve resiliency, and manage vulnerabilities across a broad range of plausible outcomes. It also allows Metropolitan to properly weigh the tradeoffs and opportunity costs for those choices under a broad range of contingencies. Choices that perform well in several scenarios are potentially more beneficial than those that only perform well under a single group of assumptions.

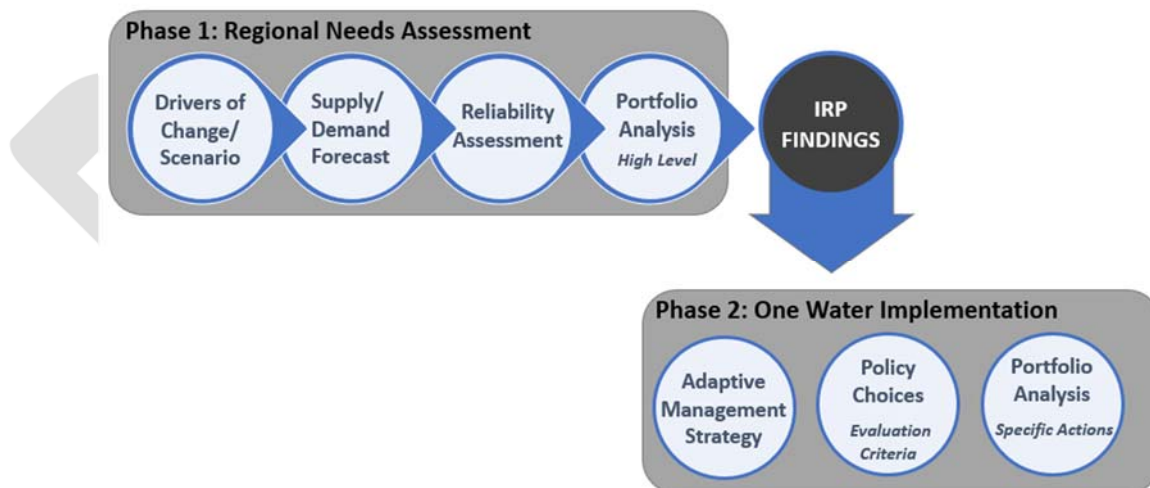
IRP Process Roadmap

With the 2020 IRP decision support method, Metropolitan explicitly examined underlying drivers of change for the water supply and demand outlook for Southern California. It used that knowledge to follow the causes and consequences of different outcomes logically. The 2020 IRP process followed the roadmap depicted in **Figure 2-1** and is divided into two phases:

- Phase 1: Regional Needs Assessment
- Phase 2: One Water Implementation

This report completes the IRP Regional Needs Assessment phase and offers findings to inform implementation. In the One Water Implementation phase, portfolios will be advanced by identifying policies, programs, and projects which provide regional solutions to the IRP Regional Needs Assessment findings. A comprehensive, adaptive management strategy will be developed in the One Water Implementation phase to guide these specific actions.

Figure 2-1: Roadmap for Phases 1 and 2 of 2020 IRP



Identify Drivers of Change

The first step of the Regional Needs Assessment was to identify major sources of unavoidable and external uncertainty, or “drivers of change.” This step included engaging stakeholders to help identify the drivers and select major ones to move forward into the scenario analysis. Key drivers such as climate change, regulatory requirements, population growth, and the economy have uncertain but potentially significant effects on both water supply and demands in Southern California. Outcomes of these factors greatly affect future water supply reliability.

Drivers of change were investigated through a collaborative and iterative process. Metropolitan staff engaged with the Board, member agencies, and other interested parties to solicit input on drivers of change. This involved defining and grouping a coherent set of drivers and assessing their relative impacts on Southern California's water supplies and demands. This process included an online survey collecting input from Board, member agencies, and other interested parties, asking respondents to indicate the relative importance of drivers of change. The most important drivers that emerged from the process ultimately became the basis for the IRP Scenarios discussed in this report. **Table 2-1** shows the rank order of the drivers of change based on the survey (MWDSC, 2020c).

Table 2-1: Metropolitan's Drivers of Change Survey, Ranked by Cohort

Board Members		Member Agencies		External Interested Parties	
	%		%		%
Colorado River Cooperation	95%	Colorado River Cooperation	91%	Hydrologic Variations	92%
Hydrologic Variations	90%	Stress on River Basins	87%	Outages & Disasters	87%
Stress on River Basins	90%	Direct Potable Reuse	83%	Stress on River Basins	84%
Emerging Regulations	86%	Hydrologic Variations	83%	Direct Potable Reuse	81%
Direct Potable Reuse	76%	Groundwater Contamination	78%	Groundwater Contamination	78%
Outages & Disasters	76%				

Note: Percentages are based on responses that indicated each driver of change to be either "extremely important" or "very important."

Develop Scenarios

The next step of Phase 1 was to establish alternative planning scenarios. This involved the development of separate sets of assumptions for the key drivers of change. These sets of assumptions became the basis for IRP scenarios.

Metropolitan then developed three increasingly refined iterations of IRP scenarios. The first iteration used hypothetical "Strawman Scenarios" as a proof of concept to demonstrate the feasibility of constructing scenarios from the drivers of change (MWDSC, 2020a). In September 2020, staff presented a draft set of "preliminary scenarios" that used initial drivers of change assumptions (MWDSC, 2020b). Staff incorporated extensive feedback by Board members, member agency staff, groundwater basin managers, and experts in demographics, water demand, and climate science. This process resulted in the "refined scenarios." The refined scenarios are the final scenarios that formed the basis for the reliability assessment analyses and resulting findings discussed in this report.

Supply and Demand Forecasts

The work to this point was largely qualitative. The next step was to quantify the impacts on supply and demand given the drivers-of-change assumptions for each scenario. Metropolitan conducted extensive modeling to forecast the region's retail demand, local supply projections, and resultant demand on Metropolitan over the 25-year time horizon. Additional modeling was performed to determine Metropolitan's imported supply capability for the conditions reflected in each scenario. For each of the three iterations of the four scenarios leading up to the "refined scenario," a corresponding set of retail demand forecasts, local supply projections, demands on Metropolitan, and supply capability were produced and presented to the Board IRP Committee, member agencies, and external workshops.

Reliability Assessment

After the scenarios were quantified in terms of supply and demand, the next step was to perform the reliability assessment. This began by establishing what was projected to occur if the trends identified in the scenarios continued without intervention. These was labeled the “Take No Action” case. Here, “Take No Action” means what would happen to water supplies and demands without intervention and as a result of the scenario’s assumptions such as externalities outside of Metropolitan’s control. The “Take No Action” case showed what would happen if Metropolitan relied solely on existing supply resources and trends. The resulting difference between supplies and demands became the “supply-demand gap,” which quantifies levels of reliability.

This analytical technique isolated reliability problems posed by each scenario from the influence of presupposed solutions, allowing like-for-like comparisons between scenarios. The next analytical step enabled a clean slate for applying quantified solutions appropriate to each scenario’s unique circumstances. The reliability assessment modeling was performed on each scenario to quantify the supply-demand gap projected to occur over a 25-year planning horizon ending in 2045. Reliability assessments for the preliminary and refined scenarios were presented to the Board IRP Committee in December 2020 and June 2021, respectively (MWDSC, 2020d; MWDSC, 2021a).

High-Level One Water Portfolio Analysis

The final step of the IRP Regional Needs Assessment was completing a portfolio analysis. This analysis examined each scenario to determine, in concept, what combinations of investments would be necessary to fill the gaps identified in the reliability assessment. This analysis used three mutually exclusive supply categories: core, flexible, and storage. These categories encompass different characteristics, and all resource management options are subsets of these categories. **Core supplies** are resource management actions that augment supply or reduce Metropolitan demand and remain available each year. **Flexible supplies** are implemented as needed and include savings from deliberate efforts to change water use behavior. **Storage supplies** are the capability to save water supply to meet demands later. Using a combination of three supply categories allows for a more diverse and balanced portfolio approach.

The results of these high-level portfolio analyses were presented to the Board IRP Committee in July and September 2021 (MWDSC, 2021a, 2021c). Draft findings were presented at the November 2021 Board IRP Committee (MWDSC, 2021b). The quantitative work of the Regional Needs Assessment is described in detail in Chapter 4, “Results: Phase 1 Regional Needs Assessment” of this report. Findings from the Phase 1 Regional Needs Assessment are discussed in Chapter 5, “Findings.”

Phase 2: One Water Implementation

The next phase of the IRP will take the results and findings of the Phase 1 Regional Needs Assessment into a collaborative, deliberative process to come up with regional, integrated solutions. Using a One Water approach, the implementation phase will translate Phase 1’s high-level portfolio analysis into potential policies, programs, and projects needed to address the findings and mitigate the potential shortages identified in this work. A comprehensive, adaptive management strategy and evaluation criteria will be developed in the implementation phase to guide these specific actions. The adaptive management strategy will also establish a process for monitoring key reliability indicators to support policymaking.

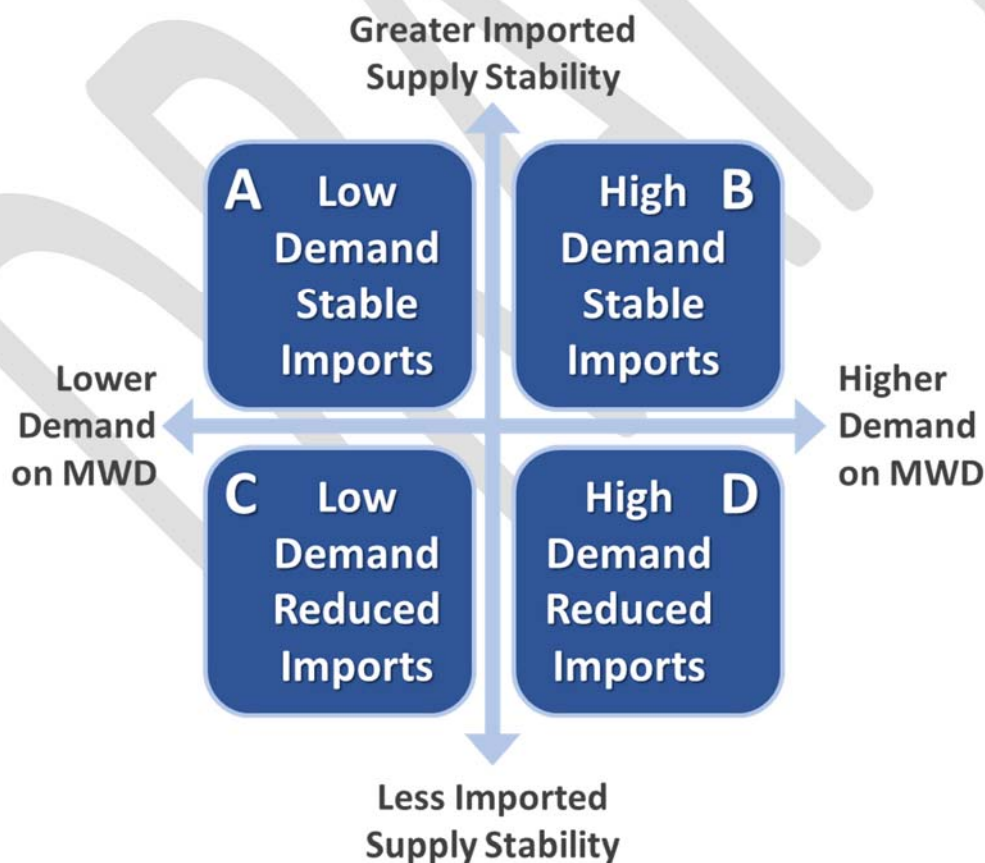
Chapter 3 – Quantifying Uncertainties

Scenario Framework and Descriptions

Quantifying uncertainties began with developing scenarios built on a comprehensive identification of drivers of change that affect supply stability and demands on Metropolitan. These drivers of change encompass basic phenomena such as climate change, economic trends, regulations, and demographic growth outside of Metropolitan's ability to control (i.e., exogenous) but fundamentally shape water reliability. Drivers of change were quantified where possible and defined to avoid double-counting their individual effects and establishing linkages between drivers.

Building on input received from the Board, member agencies, and the expert consultants, **water demands on Metropolitan** and **stability of imported supply** were identified as being the most impactful to water reliability for the region. Metropolitan then examined the drivers of change within this framework, ensuring internal consistency. This resulted in four plausible scenarios. Metropolitan then quantified the associated assumptions to reveal supply-demand gaps, against which actions could be tested. These four scenarios are shown in **Figure 3-1**.

Figure 3-1: 2020 IRP Scenario Framework



As illustrated by **Figure 3-1**, the scenario framework contrasts four distinct plausible scenarios for water supply reliability planning in Metropolitan's service area. Each scenario examined a range of plausible high/low water demand coupled with a range of potential stable/reduced imported water supplies to meet the region's water demand. Inherent in determining demands on Metropolitan are consideration of local supply resources.

The major themes and narrative for the four scenarios are:

- **Scenario A – Low Demand/Stable Imports:** Gradual climate change impacts, low regulatory impacts, and slow economic growth.

This scenario is characterized by lower retail water demands and stable regional and local supplies. Demands are impacted by lower economic and demographic growth and a continuing water use ethic across the region. Both regional and local supplies show more stable production due to less severe climate change, less restrictive regulatory constraints on existing water supply projects, and relatively robust implementation of new water supply projects at the local level.

- **Scenario B – High Demand/Stable Imports:** Gradual climate change impacts, low regulatory impacts, high economic growth.

This scenario is characterized by higher retail demands and stable regional and local supplies. Demand is impacted by higher economic and demographic growth and a rebound of water use. Both regional and local supplies show more stable production due to less severe climate change impacts, less restrictive regulatory constraints on existing water supply projects, and relatively robust implementation of new water supply projects at the local level.

- **Scenario C – Low Demand/Reduced Imports:** Severe climate change impacts, high regulatory impacts, slow economic growth.

This scenario is characterized by lower retail water demands and less stable imported supplies. Demand on Metropolitan is suppressed by lower economic and demographic growth and successful efforts among member agencies to manage water-use behavior and drought-proof local supplies. This scenario couples a struggling economy (i.e., slow growth) with the rapid onset of climate change impacts affecting imported supplies more than less-vulnerable local supplies.

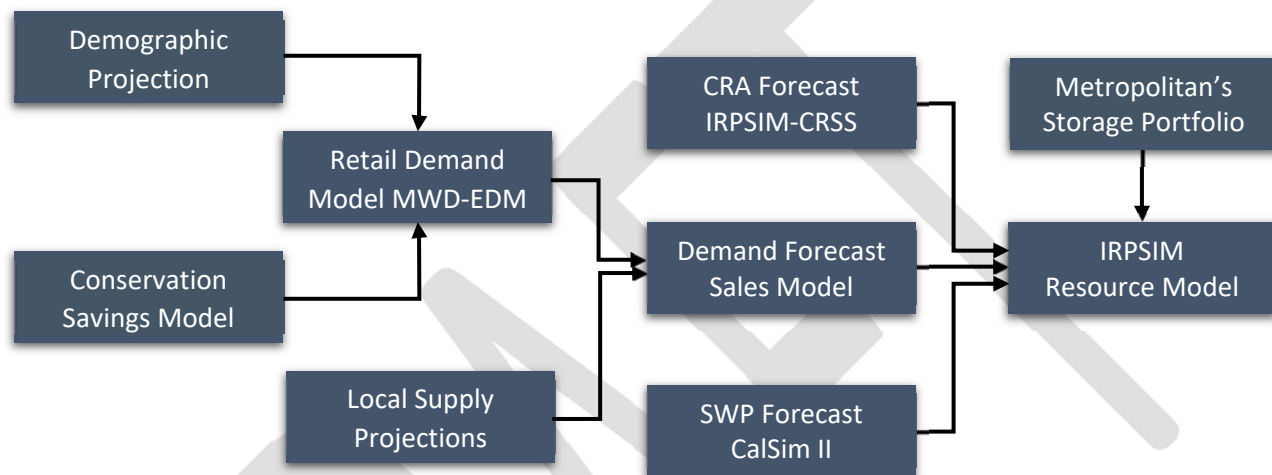
- **Scenario D – High Demand/Reduced Imports:** Severe climate change impacts, high regulatory impacts, and high economic growth.

This scenario is characterized by higher retail demands, unstable imported, and diminishing local supplies. Demands are impacted by higher economic and demographic growth and a rebound of water use. In this scenario, severe climate change impacts both imported and local supplies. Demands on Metropolitan are increasing due to rapidly increasing demands and diminishing yield from local supplies. Local efforts to develop new local supplies are unable to mitigate these losses. Losses of regional imported supplies are equally dramatic.

Forecasting Supplies and Demands

Reliability means meeting all of the region's water demands through a combination of Metropolitan supplies, local supplies, and increased conservation. The Regional Needs Assessment quantified the range of plausible future water needs for the region through a detailed projection of demographic growth, conservation, local supply production, and the resultant need for imported water. **Figure 3-2** shows the modeling components which create the demand forecast. The demand forecast is then combined with the imported supply forecasts and the storage portfolio to assess reliability.

Figure 3-2: Metropolitan's modeling framework for quantifying uncertainties.



Total Retail Demand

Total demand includes M&I, agriculture, seawater barrier, and replenishment uses. Metropolitan's IRP modeling framework assesses each demand category by member agency based on characteristics unique to the member agencies.

Retail M&I Demand Forecast

Metropolitan uses a retail demand model, known as MWD Econometric Demand Model (MWD-EDM), to forecast future retail municipal and industrial (M&I) demands for each scenario using projected demographic growth and conservation savings for each of the four IRP scenarios. Metropolitan constructed demographic growth projections for Southern California with assistance from the Center for Continuing Study of the California Economy (CCSCE). CCSCE's projections were based on studies published by the U.S. Census Bureau. In addition to demographic growth, MWD-EDM also included drivers of change such as smaller lot size for future homes, future conservation, and water use ethic and rebound. MWD-EDM produces retail M&I forecasts for each scenario and member agency.

Conservation savings input for MWD-EDM were estimated using Metropolitan's Conservation Savings Model to produce post-conservation forecasts. The model calculates savings from plumbing code compliance, savings from conservation programs administered by Metropolitan and member agencies, and from price-effect conservation where water saving is realized by retail customers attributable to the effect of changes in the price of water. The Conservation Savings Model calculated conservation savings for each scenario and member agency.

At the retail consumer level, some types of water use vary more than others. Much more variability (i.e., discretion) in water using behavior is associated with outdoor use than indoor use. Because most outdoor use is for watering lawns and gardens, it makes sense that outdoor use and overall water use would increase during warmer and drier weather conditions, all else being equal. Metropolitan's modeling framework simulates the effects of weather conditions on retail demand over time.

However, not all things are held equal over time. Consumer behavior and ethics appear to have changed significantly since the 2015 IRP Update, as can be inferred from regional per capita water use that has remained relatively low since the 2015 drought. Consumers are influenced to reduce their water using behaviors through greater environmental awareness, rising water prices, and conservation messaging and restrictions. These consumer signals have been increasing in frequency and intensity, coinciding with the severity of recent droughts, which in turn may be a symptom of climate change. For instance, with incentives from Metropolitan and local water agencies and perhaps encouraged by the example of early-adopter neighbors, more and more Southern California residents have taken action to permanently reduce outdoor water use by removing their lawns since 2015. Conscientious outdoor water use reinforced by ongoing drought conservation measures, combined with the improving efficiency of new water using devices, have kept the region's retail water demands relatively low every year through 2019, the year that Metropolitan used to calibrate its demand projections for the 2020 IRP Regional Needs Assessment. This is despite fluctuations in weather conditions that would have otherwise driven demands higher. This is not to say that consumer ethic would not revert back to higher-use, especially in the absence of continued intervention. With regard to scenario planning, consumer water use ethic will continue to be a considerable force for greater or lesser water reliability, and future trends are uncertain in a long-term planning horizon. This uncertainty is reflected in the scenarios.

MWD-EDM calibrates the forecast to 2019 M&I water use by member agency, which serves as the anchor point of the forecast. Calibrating the model to 2019 assumes that the water-use ethic from 2019 would continue. However, the IRP scenarios also assume some rebound in water use. Conservation savings were categorized as (1) **structural** based on efficiency improvements such as replacing water fixtures with more efficient ones, and (2) **behavioral** reflecting changing consumer water use behavior in response to conservation messaging and education. Structural conservation is more permanent and unidirectional, while behavioral conservation can fluctuate over time. For example, outdoor behavioral conservation such as reducing the number of watering days for lawns during a drought reduces water use. Returning to previous watering schedules after the drought would increase water use which can be described as a demand rebound. If a complete rebound were to occur, overall retail demand would be more than 10 percent higher than a forecast without any rebound.

Retail Demand/Demand Management Findings:

- 1) Variability in retail demand largely comes from changes in outdoor water use. Outdoor water use behavior is complex, influenced by weather and climate and by awareness of water scarcity and other conservation measures.*
 - 2) It is important to pay attention to demand rebound, demand growth, and demand reductions, and take appropriate regional measures as necessary.*
-

Other Retail Demand Forecast

In addition to retail M&I demand, the IRP reliability assessment considered retail agricultural, seawater barrier, and replenishment demands. Retail agricultural demand consists of water use for commercial irrigation of crops. Uncertainties about agricultural use include land-use changes, regulatory requirements, and economic conditions, which ultimately impact the operation cost for agricultural water users. Higher costs for agriculture could plausibly lead to a decline in water use. Additionally, a warmer climate could increase the water use requirements of existing crops. For the 2020 IRP, Metropolitan coordinated with member agencies to develop agricultural demand projections.

Seawater barrier demand prevents seawater intrusion into coastal groundwater basins. Metropolitan worked with groundwater basin managers to determine the barrier requirements based on groundwater levels, injection wells, and regulatory permits. Uncertainties include climate change impacts from rising sea levels. For example, overcoming hydraulic pressure from rising seas necessitates increasing seawater barrier demands from local recycled water projects and supplementing imported water. For the 2020 IRP, Metropolitan assumed seawater barrier demands could plausibly increase in scenarios with higher relative sea-level rise associated with severe climate change impacts.

Replenishment demand maintains sustainable groundwater basin health and production. Metropolitan quantified replenishment demand only from recycled water and imported water. Replenishment demand projections provided by member agencies are informed by groundwater basin management policies, groundwater production, and natural and artificial recharge assumptions. For the 2020 IRP, Metropolitan held workshops with groundwater basin managers and member agencies to discuss impacts to replenishment demands, including climate change and regulatory requirements. Outcomes of these discussions highlighted the importance of the timing and implementation of indirect potable reuse and stormwater capture projects and potential changes to natural and artificial recharge due to climate change. Feedback from these workshops was incorporated into replenishment demand projections for each scenario.

Local Supply Projections

Local supplies are produced to meet individual agency demands and are key to determining how much Metropolitan supply is needed. They include groundwater, surface water, the Los Angeles Aqueduct, recycled water, groundwater recovery, and seawater desalination. Local supply projections use information from several sources, including local Urban Water Management Plans, Metropolitan's annual local supply survey, and coordination with local agency staff.

For the 2020 IRP, Metropolitan held focused workshops with the member agencies to gain insights on the challenges facing local supplies and the potential impact on water reliability. These workshops discussed the same drivers identified earlier (economic conditions, climate change, and regulatory restrictions). Through these workshops, the effect of the drivers on existing local supplies and the timing and implementation of future local supply projects was considered.

From these discussions, Metropolitan developed local supply projections that examined the degradation of existing supplies in combination with different timing and implementation of the inventory of future

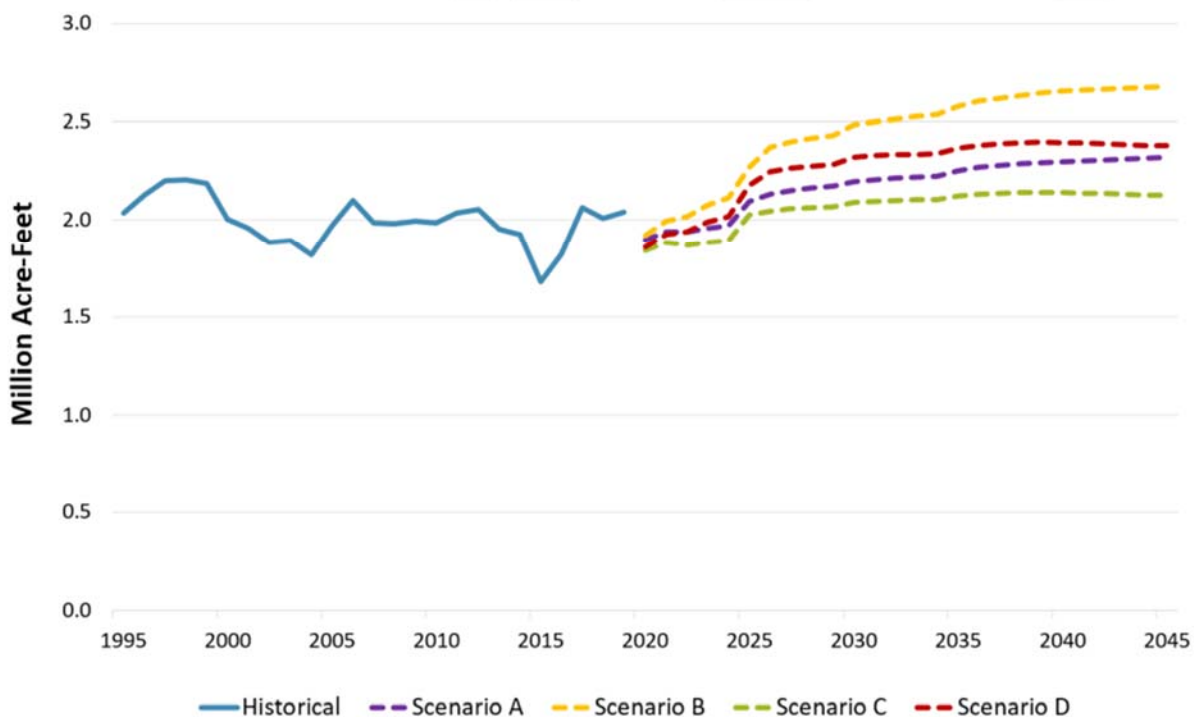
local supply projects provided by member agencies. One example of local supply degradation is decreased groundwater production due to a loss of replenishment from changing precipitation patterns or reduced return flows from outdoor irrigation. Additionally, while there was a large inventory of future local supply projects, many still require additional permitting and design. Thus, there remains uncertainty in when projects will come online and how much new water those projects will produce.

Figure 3-3 demonstrates the broad range of potential outcomes of local supply production. Depending on the region's success in implementing new projects and preventing the degradation of existing supplies, the region may continue to see modest growth in local production. The level of growth in future local supply is important to offset varying levels of growing demands, as any growth in demand that cannot be offset by new local supply adds additional demand on Metropolitan.

Local Supply Findings:

- 1) *Impacts to reliability occur if local supply assumptions are not achieved; therefore, it is important to track the progress of local supply development as one of the signposts in the One Water Implementation phase.*
 - 2) *Additional actions may be needed should existing and future local supply levels deviate from IRP assumptions.*
-

Figure 3-3: Total Local Supply under Average Conditions



Determining Demands on Metropolitan

Once retail demand forecasts and local supply projections are developed, the next step is to calculate future demand on Metropolitan. Imported water from Metropolitan serves as a supplemental supply source for its 26 member agencies. For some member agencies, their primary sources of water are

produced locally. When local supplies are insufficient to meet retail demands, member agencies purchase supplemental water from Metropolitan. These purchases constitute the demands on Metropolitan.

Demands on Metropolitan are calculated using Metropolitan's Sales Model. This model accounts for weather-related variations to retail demands and local supplies and ultimately produces a range of forecasted demand on Metropolitan. For the 2020 IRP, Metropolitan engaged with climate expert consultants to develop techniques to incorporate climate change impacts to local precipitation within the Sales Model's existing 96 hydrologic sequence methodology. These modifications increased the frequency and intensity of dry years and decreased the frequency of wet years (but increased their intensity) while maintaining a similar long-term average precipitation. The Sales Model forecasts a range of demands on Metropolitan for each IRP scenario as shown in **Figure 3-4**.

Retail Demand/Demand Management Finding:
Metropolitan's future supply reliability may fluctuate based on demand increases and decreases.

Figure 3-4: Total Net Demand on Metropolitan

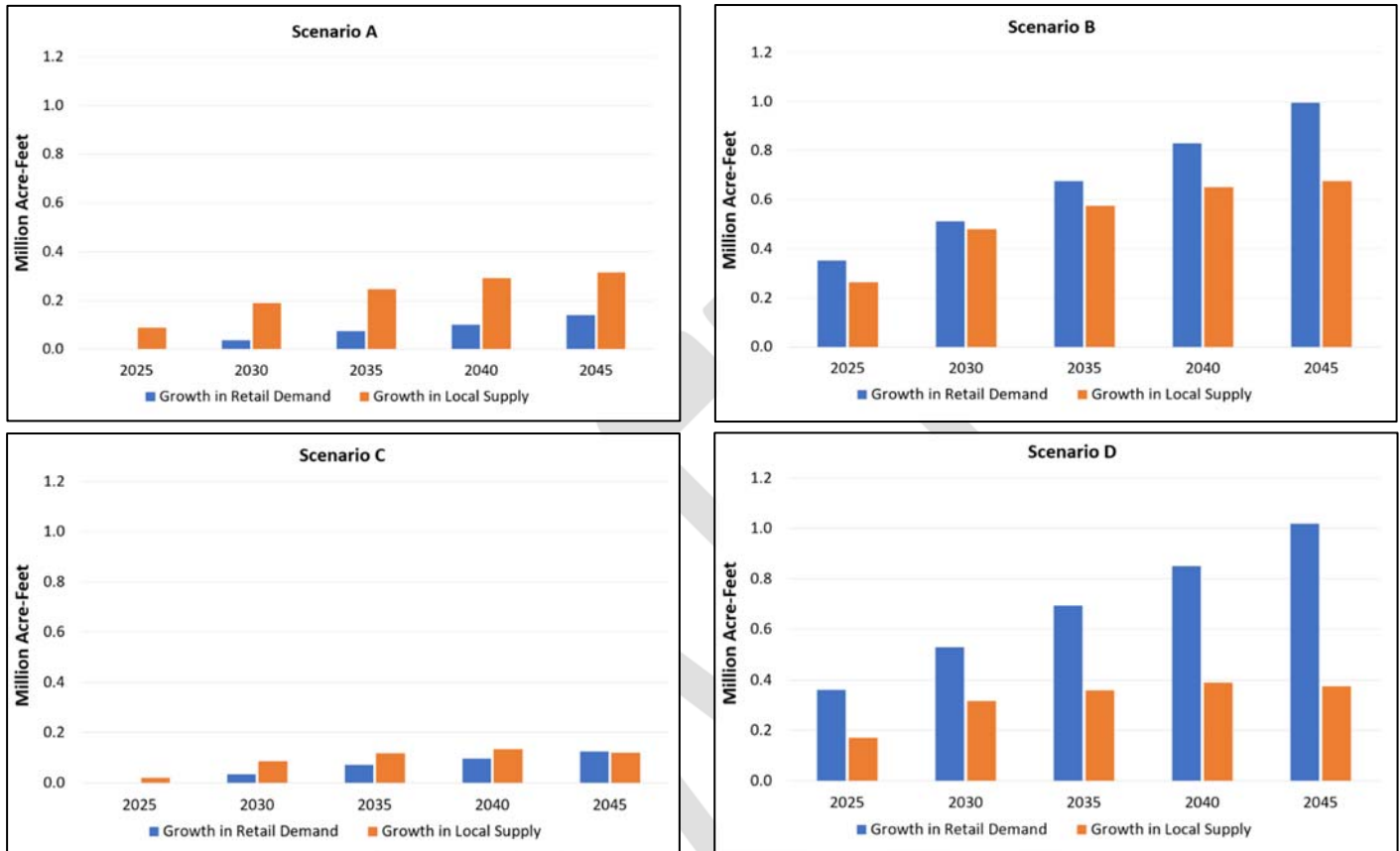


Local Supply Finding:
Maintaining existing and developing new local supplies is critical in helping manage demands on Metropolitan.

Demand on Metropolitan is driven by the relative growth of the region's retail demand and local supply production. The difference between retail demand and local supply production is the assumed demand on Metropolitan. **Figure 3-5** shows the relative growth compared to 2020 of retail demand versus local supply production growth for each scenario. In Scenarios B and D, where retail demand growth is high, the proportion of unmet demand needed to be

satisfied by Metropolitan is larger than the proportion for the lower demand Scenarios A and C. Despite having the highest assumed local supply growth in Scenario B, retail demand growth outpaces local supply production growth and additional actions would be needed to manage growing demands on Metropolitan in that scenario. In Scenarios A and C, the projected growth in local supply production is greater than the forecasted growth in demand, highlighting the importance in growing and maintaining local supply production in all scenarios.

Figure 3-5: Growth in Demand vs. Growth in Local Supply Production Relative to 2020 in Average Conditions, Scenarios A, B, C, and D

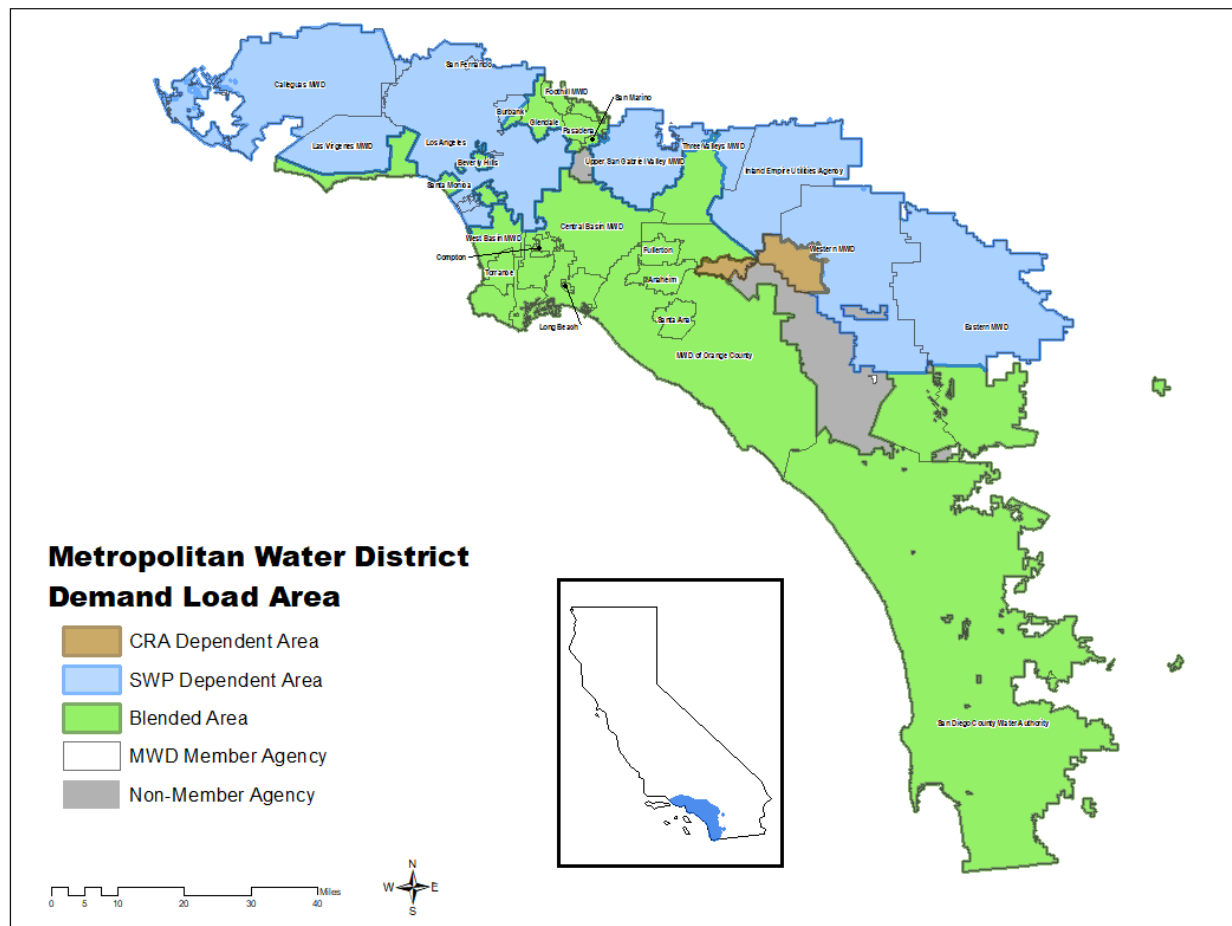


IRPSIM Resource Model

Water supply-demand gaps for the scenarios were analyzed with IRPSIM Resource Model (IRPSIM). IRPSIM is a water supply and demand mass balance simulation model. IRPSIM simulates water resources needed to meet demands, which allows Metropolitan to identify supply-demand gaps and measure whether a potential resource mix is likely to be reliable. IRPSIM considers the availability and accessibility of its imported water supply sources, including its storage portfolio to the demand load areas. The forecasted demands on Metropolitan are allocated to different portions of Metropolitan's regional distribution system, referred to as demand load areas.

IRPSIM models three primary demand load areas. The first is the "SWP Dependent Area," shown in **Figure 3-6**, where demands can only be satisfied with SWP supplies and associated storage programs. The second and smallest is the "Colorado River Dependent Area," where demands can only be satisfied with Colorado River supplies and associated storage programs. The third and largest is the "Blended Area," where demands can be satisfied by both SWP and Colorado River supplies and their respective storage programs.

Figure 3-6: Demand Load Area Map



Through entitlements and the development of long and short-term supply programs, Metropolitan has secured the ability to deliver the full capacity of the Colorado River Aqueduct of roughly 1.2 million acre-feet in any given year. In conjunction with local supply production and storage, this supply can satisfy demands in the blended areas. The SWP has system capacity and hydrologic variability that creates an annual supply that historically ranged from 100 TAF to 1.9 MAF. When the SWP supply exceeds the SWP Dependent area demand, water can be stored directly into SWP storage facilities and/or used in the blended areas, enabling Metropolitan to store imported supply within Colorado River storage facilities.

IRPSIM uses a sample of 96 years of historical hydrology (1922--2017) as a reliability test. This methodology generates 96 different outcomes for each forecast year and thus allows Metropolitan to evaluate

the probabilities of surpluses and shortages over the 25-year planning horizon. IRPSIM generates the magnitude and frequency of shortages, which is the metric of reliability used in the reliability assessment analyses. Shortages within an IRPSIM simulation occur when there is insufficient supply to satisfy a demand or when available supplies are not accessible, resulting in an unmet need within Metropolitan's service area.

As represented in **Figure 3-2**, IRPSIM has four key inputs: demands on Metropolitan, SWP supply, CRA supply, and Metropolitan's storage portfolio. The Sales Model provides the input for demands on Metropolitan as described in the previous section. IRPSIM is where scenario-specific impacts related to Metropolitan's Colorado River and SWP imported water supplies are considered in the analysis. In addition, IRPSIM simulates Metropolitan's entire storage portfolio by considering operational constraints, put and take capacities, contractual arrangements, and other operational considerations. IRPSIM balances the needs for imported supply and storage as detailed below.

SWP Forecast-CalSim II

Forecasts of SWP supplies were based on modeling studies produced by DWR using their CalSim-II model. The results of the CalSim-II model are published in DWR's 2019 Delivery Capability Report (DCR) (DWR, 2020). The 2019 DCR provides SWP supply estimates for an existing condition that does not

Metropolitan Imported Supplies Finding: Existing imported supplies are at risk from various drivers of uncertainty.

include climate change and a future condition that includes climate change. As shown in **Figure 3-7**, the SWP reliability curve for Scenarios A and B reflect a moderate climate change and regulatory future while Scenarios C and D reflect severe climate change and regulatory impacts.

Metropolitan used the 2019 DCR existing and future study projections as a starting point and guidance from climate experts to reflect the regulatory and climate change impacts assumed in the IRP scenarios.

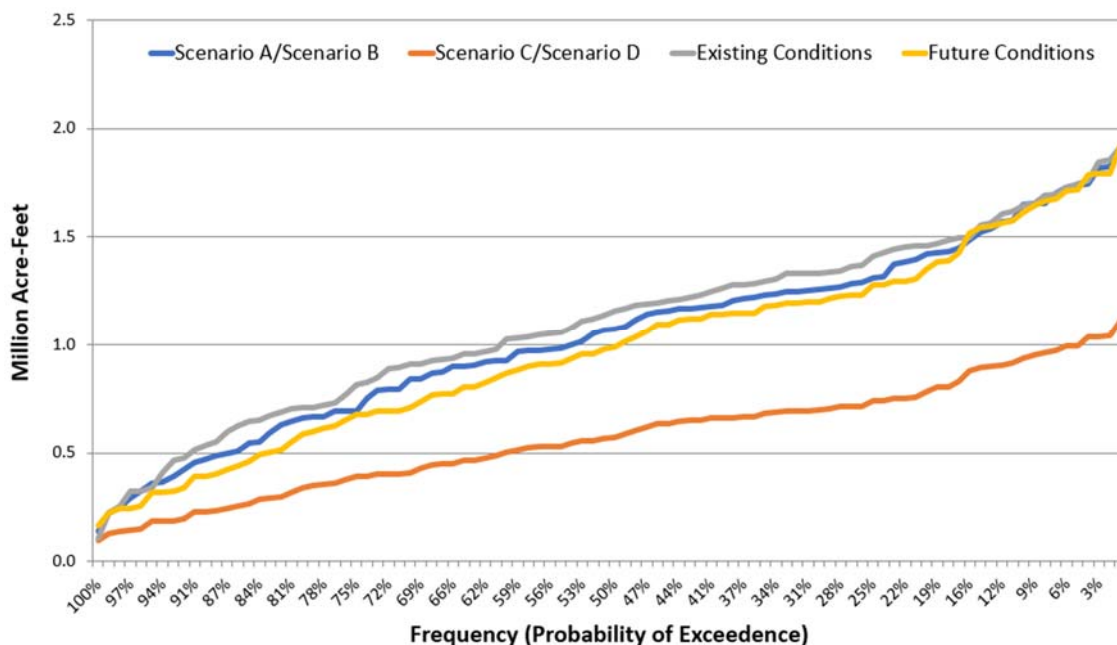
Metropolitan Imported Supplies

Finding: Variability and capacity in SWP supplies provide opportunities to store water during wet periods for use in dry years, including Colorado River storage.

Metropolitan's ability to distribute or store SWP supplies when they materialize will enhance the region's reliability, particularly the SWP Dependent Areas. The Colorado River system and Colorado River Aqueduct capacity do not offer the same opportunities concerning SWP storage.

The resulting SWP deliveries for Metropolitan in 2045 are shown in **Figure 3-7** and compared to the 2019 DCR existing and future condition projections.

Figure 3-7: Metropolitan's 2045 SWP Imported Supply Reliability Based on the 2019 DCR



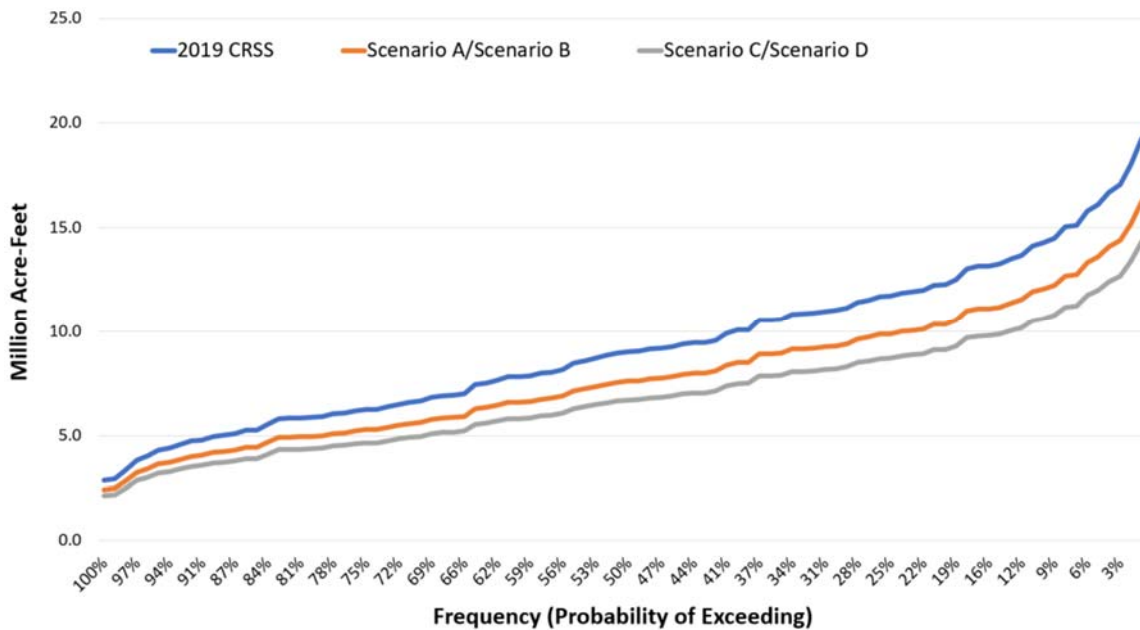
CRA Forecast - IRPSIM and CRSS

Forecasts of base supplies from the Colorado River were generated within IRPSIM with hydrological inputs provided by the United States Bureau of Reclamation (USBR).

In prior IRPs, projections for Colorado River supplies were generated directly by the Colorado River Simulation System Model (CRSS) and used in IRPSIM. This is a modeling package developed, maintained, and used by USBR to simulate future operations and deliveries of the Colorado River reservoir system. Given major changes in the operations of the Colorado River and to better reflect Metropolitan's use of its Intentionally Created Surplus storage account, Metropolitan now generates its own surplus and shortage characterization of the Colorado River system. IRPSIM still uses the same inputs as CRSS, including initial reservoir conditions and hydrologies for Lake Powell and Lake Mead. The model inputs used in the 2020 IRP are used in USBR's January 2020 official CRSS run (USBR, 2021).

As previous chapters have discussed, Scenarios A and B are characterized by stable imported supplies, and Scenarios C and D by unstable imported supplies. For future Colorado River supplies, this stability is influenced by differing assumptions for climate change and future cooperation between the lower basin states in Colorado River operations.

Climate change is incorporated into CRA supplies by adjusting the Lake Powell and Lake Mead inflow hydrologies and evaporation rates. Through consultation with climate change experts and previous research, a relationship between the decrease in runoff and increase in atmospheric temperature was incorporated in the hydrology (Woodhouse, et al 2021). **Figure 3-8** shows the reduction of Powell inflows due to modeled climate change for the IRP scenarios.

Figure 3-8: 2045 Lake Powell Inflows

Future operations of the Colorado River and cooperation between the lower basin states and Mexico also influence the stability of Colorado River supplies. The Interim Guidelines, Binational Agreement 323 and the Drought Contingency Plan (DCP) all act to stabilize the elevation of Lake Mead and prevent shortages. The 2007 Interim Guidelines for Lower Basin Shortages and the Coordinated Operations for Lake Powell and Lake Mead (Interim Guidelines), DCP and Minute 323 will expire in 2026. Without a future agreement taking its place this could lead to a greater chance of shortage and less available Colorado River water in the future. For Scenarios A and B that reflect stable imported supply, these three agreements were assumed to extend through the life of the forecast. For Scenarios C and D that reflect less stable imported supplies, the Interim Guidelines were extended, but the DCP and Minute 323 were modeled to expire in 2026.

Chapter 4 – Results: Phase 1 Regional Needs Assessment

Technical results for the Regional Needs Assessment were based on two distinct analytical processes:

1. Reliability Assessment
2. High-Level Portfolio Analysis

The reliability assessment defined and quantified the problems presented by various scenarios. The high-level portfolio analysis explored how different categories of actions could address the reliability needs of each scenario. These results inform the forthcoming IRP One Water Implementation phase. This chapter provides details of the results and explains how to interpret those results (**Figures 4-1 through 4-3**).

Reliability Assessment

The reliability assessment used IRPSIM to quantify the frequency and magnitude of shortage or surplus for each scenario on an annual basis between 2020 through 2045. For ease of interpretation, results are either presented in five-year increments (beginning with 2025 and ending in 2045) or in a single year (2045). The assessment also considers Metropolitan's storage capacity. The terms "gross" and "net" are used to describe the types of surplus and shortage conditions that occur. **Gross shortage** refers to supply-demand gaps before any take from available storage; **net shortage** refers to the remaining supply-demand gap after using available storage. Similarly, **gross surplus** refers to supplies before filling storage, while **net surplus** refers to surplus supplies that occur after all available storage has been filled. The following section summarizes the results for each scenario.

Low Demand/Stable Imports Scenario A

Scenario A was characterized by **low** demands on Metropolitan and **stable** local and imported supplies. The reliability assessment for Scenario A highlights how gaps can be addressed with existing resources and storage programs/supplies. As a result, there are no net shortages throughout the forecast horizon through 2045, as seen in **Figure 4-4**.

Scenario A reliability assessment details are shown for the forecast year 2045 in **Figures 4-5 and 4-6** with highlights listed below:

- All of the gross shortages are met with available storage, leaving no net shortage.
- Metropolitan's existing conveyance and storage capacity would only manage a portion of the gross surplus supplies, leaving up to 770 TAF of net surplus supply occurring 50 percent of the time.
- End-of-year storage is expected to be full 87 percent of the time.
 - Supplies above capacity regularly remain after satisfying the supply-demand gaps identified in this scenario and present an opportunity for new exchanges or to fill new storage capacity and improve water reliability in the Southwest.

High Demands/Stable Imports Scenario B

Scenario B is characterized by **high** demands on Metropolitan and **stable** imported supplies. Net shortages occur between 1 to 5 percent of the time during the planning horizon, as shown in **Figure 4-7**. All net shortages occur in the SWP Dependent Areas (**Figure 3-6**). There are no net shortages in the blended areas (areas that receive both SWP and CRA water) or areas that receive just

CRA water, indicating that accessibility or lack thereof to CRA water is not driving shortages. When system constraints are removed in IRPSIM (e.g. when Colorado River water and blended area storage is allowed to reach SWP Dependent Areas) the shortages in Scenario B are eliminated as seen in **Table 4-8**. This further supports the finding that for Scenario B, the projected shortages may be reduced with system flexibility investments.

Scenario B reliability assessment details are shown for the forecast year 2045 in **Figures 4-8** and **4-9** with highlights listed below:

- A majority of the gross shortages can be reduced with available storage, decreasing the probability of net shortage to 5 percent.
- Maximum net shortage is expected to be up to 300 TAF.
- Metropolitan's existing conveyance and storage capacity would only manage a portion of the gross surplus, leaving up to 400 TAF of net surplus supplies occurring 25 percent of the time.
- The end-of-year storage is expected to be full approximately 45 percent of the time.
 - Metropolitan would face challenges storing available supplies, presenting an opportunity for new exchanges or to fill new storage capacity and improve water reliability in the Southwest.

Low Demands/Reduced Imports Scenario C

Scenario C is characterized by **low** demands on Metropolitan and **reduced** imported supplies. Net shortages occur between 1 to 5 percent of the time during the planning horizon, as shown in **Figure 4-10**. Note that no net shortages occur in the forecast year 2030, due to the Arvin-Edison Banking Program assumed to return online in 2025. With low demands in this scenario, the additional storage capacity provided by this banking program is sufficient to meet the supply-demand gap in 2030. Similar to Scenario B, all shortages occur in SWP Dependent Areas. When system constraints are removed in IRPSIM, the shortages are eliminated as seen in **Table 4-8**. This further supports the finding that for Scenario C, the projected shortages may be reduced with system flexibility investments.

Scenario C reliability assessment details are shown for the forecast year 2045 in **Figures 4-11** and **4-12**, with highlights listed below:

- The majority of the gross shortages can be reduced with available storage, leaving a 5 percent probability of net shortage.
- The maximum net shortage is expected to be up to 200 TAF.

SWP Dependent Area

Findings:

- 1) *Vulnerabilities in the SWP Dependent Areas are more severe given reduced reliability of SWP supplies and Metropolitan distribution system constraints. Actions identified in the implementation phase must prioritize addressing the SWP Dependent Area's reliability challenge.*
 - 2) *New core supplies must be accessible to the SWP Dependent Areas. Greater access to existing core supplies can also increase SWP Dependent Area reliability.*
 - 3) *Enhanced accessibility to core supplies and storage, both existing and new, will improve SWP Dependent Area and overall reliability. This includes improvements to Metropolitan's distribution system and capacity to deliver non-SWP supply and storage.*
-

- After filling gross surplus supplies in available storage, Metropolitan could still expect up to 350 TAF of net surplus supplies occurring 25 percent of the time.
- The end-of-year storage is full roughly 41 percent of the time.
 - Metropolitan would face challenges storing available supplies presenting an opportunity for new exchanges or to fill new storage capacity and improve water reliability in the Southwest.

High Demands/Reduced Supplies Scenario D

Scenario D is characterized by high demands on Metropolitan and **reduced** imported supplies.

Shortages occur between 2 to 66 percent of the time during the planning horizon, as seen in **Figure 4-13**.

Before 2035, the net shortages occur exclusively in the SWP Dependent Areas. After 2035 the likelihood and magnitude of these net shortages increase, but net shortages also emerge in blended areas. The expanded net shortages point to impacts from not enough Colorado River supply. Shortages occurring in both the SWP Dependent and blended areas in later forecast years highlight that current imported supplies may be insufficient for Metropolitan to meet its reliability goal for the entire service area.

Metropolitan Imported Supplies Finding: Shortages on the Colorado River will limit the reliability of Colorado River Aqueduct deliveries as a core supply in the future.

When system constraints are removed in IRPSIM, the shortages are eliminated or decreased in years prior to 2040 as seen in

Table 4-8. However, the same analysis does not show a decrease in shortages in the later years and also shows that there is a slight increase in shortages in 2040 and 2045. This further supports the finding that for Scenario D, the projected shortages may be reduced with system flexibility investments until such time where challenges to Colorado River and other blended area supplies become more severe. The later increase in shortage magnitude is a result of Colorado River water being utilized to meet demands in the SWP Dependent Areas in earlier years. Because of this, there is less Colorado River and blended area supplies being stored and available to meet the total demands of the service area in later years.

Scenario D reliability assessment details are shown for the forecast year 2045 in **Figures 4-14** and **4-15** with highlights listed below:

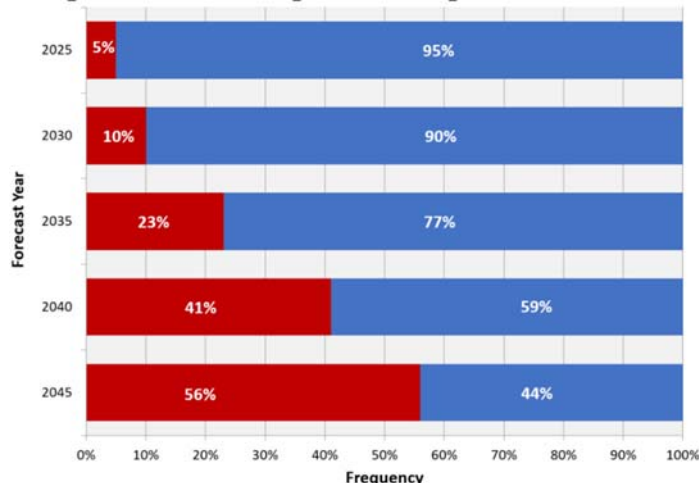
- The majority of the gross shortages cannot be reduced with available storage, leaving a 66 percent probability of net shortage conditions.
- The maximum net shortage is expected to be up to 1.22 MAF.
- Under Scenario D, frequent shortages and fewer surplus conditions indicate that storage and conveyance capacity alone will not solve the reliability problem without supply improvements.
- Scenario D shows there will not be enough surplus water for Metropolitan to fill storage.
 - This stems from the impacts of climate change and regulatory restrictions limiting imported water supply development, paired with the need to use stored supplies to satisfy demands.

The next section shows a series of example graphs and their related interpretations, followed by detailed graphs corresponding to each scenario.

Detailed Reliability Assessment Results

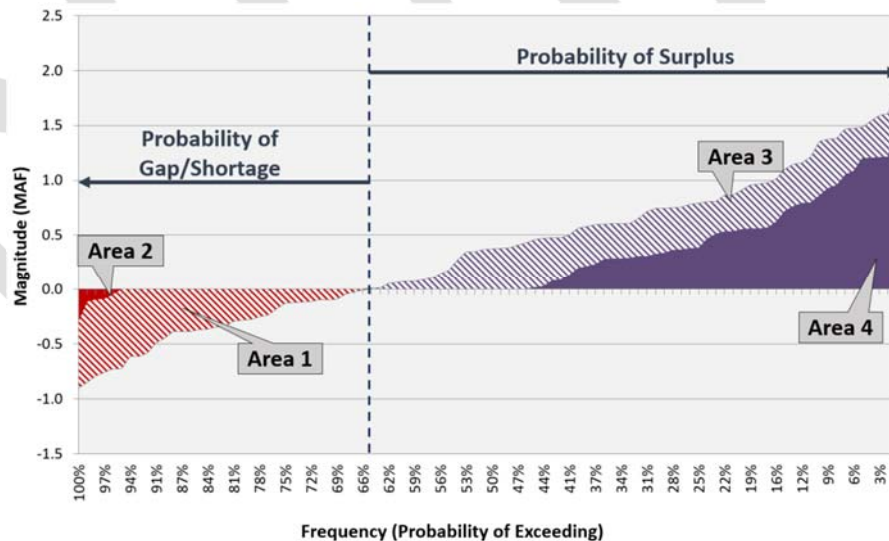
Figures 4-1 to 4-3 are examples of the three graphics that detail the reliability assessment results. These examples are illustrative to aid the reader in interpreting the later graphs.

Figure 4-1: Example *Net Shortage* Assessment through the Planning Horizon



Net Shortage Assessment – This graph shows the frequency and timing of net shortage conditions (red) and all other conditions (blue). Net shortages are defined when all available supplies, including accessible storage, are depleted and there remains an unmet demand. All other conditions are defined when storage is withdrawn to satisfy a demand, and/or when water is available and stored to manage supplies not needed to meet a demand.

Figure 4-2: Example *Shortage/Surplus* Probability Assessment for 2045



Shortage/Surplus Probability Assessment – This exceedance curve provides magnitude and probability of gross and net shortages/surpluses and the impact of storage actions.

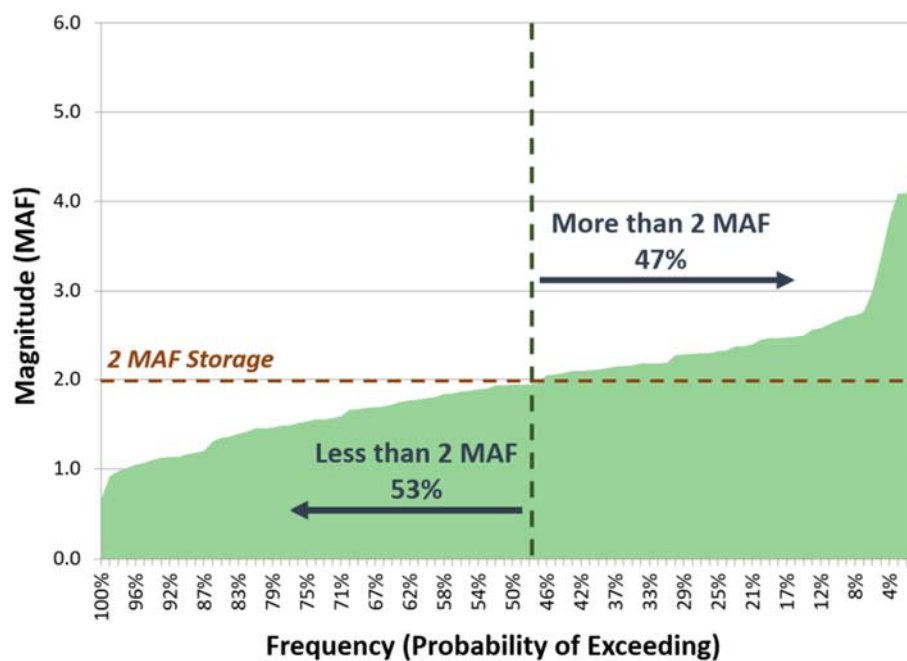
Area 1 & 2 – Gross Shortage: Magnitude and frequency of supply-demand gap prior to taking from available storage

Area 2 – Net Shortage: Magnitude and frequency of supply-demand gap after taking from available storage

Area 3 & 4 – Gross Surplus: Magnitude and frequency of surplus prior to putting into available storage

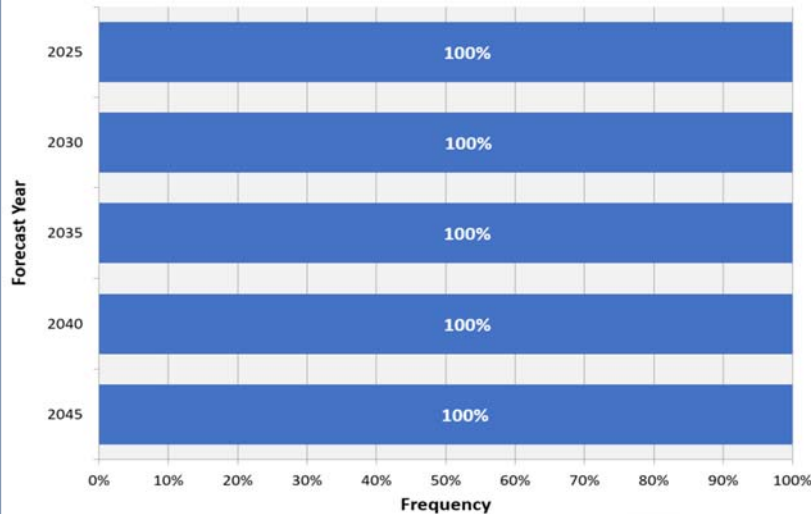
Area 4 – Net Surplus: Magnitude and frequency of surplus after putting into available storage

Actions that decrease shortage probabilities and magnitudes generally appear as an increase in surplus probability and/or magnitude. Eliminating shortage requires an increased probability/magnitude of surplus.

Figure 4-3: Example Storage Graph for 2045

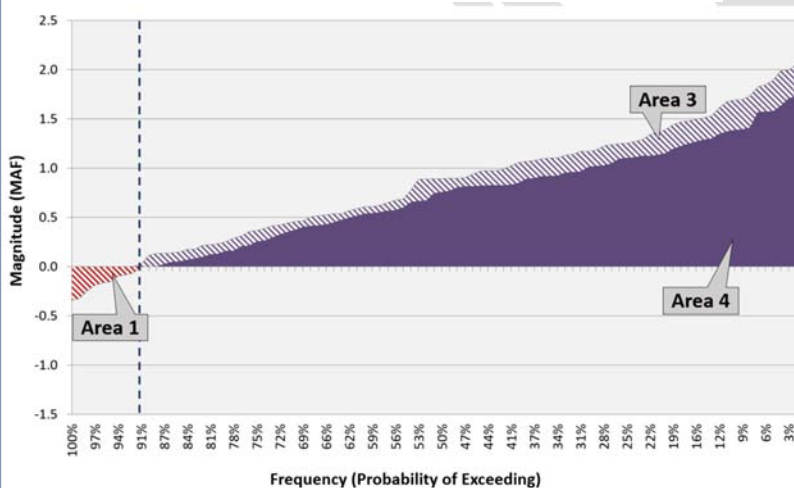
Storage Graph – This graph shows end of year storage level probabilities. The probability of a given end of year storage level can be determined by locating the intersection of a selected storage level (y-axis) with the storage curve (green shaded region). To the left of the intersection shows the probability of an end of year storage less than the desired amount, while the right of the intersection shows the probability of more than the desired amount. The volume of water necessary to achieve full storage varies by scenario based on hydrologic conditions, contractual arrangements, and program operations.

Low Demands/Stable Imports Scenario A Reliability Assessment Results

Figure 4-4: Scenario A – Net Shortage Assessment through the Planning Horizon

Scenario A: **Low demands**
Stable imports

All supply-demand gaps can be managed through available storage. This scenario shows 100% reliability across the planning horizon.

Figure 4-5: Scenario A – Shortage/Surplus Probability in 2045

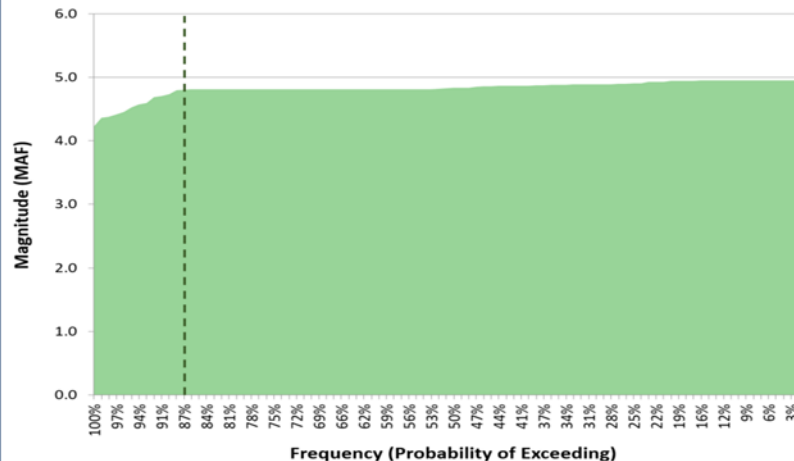
Prior to taking available storage actions, surplus conditions have a 91% frequency and shortages conditions have a 9% frequency.

Area 1 & 2 – All supply-demand gaps are managed by taking from available storage

Area 2 (Not shown) – No net shortage

Area 3 & 4 – Gross surplus

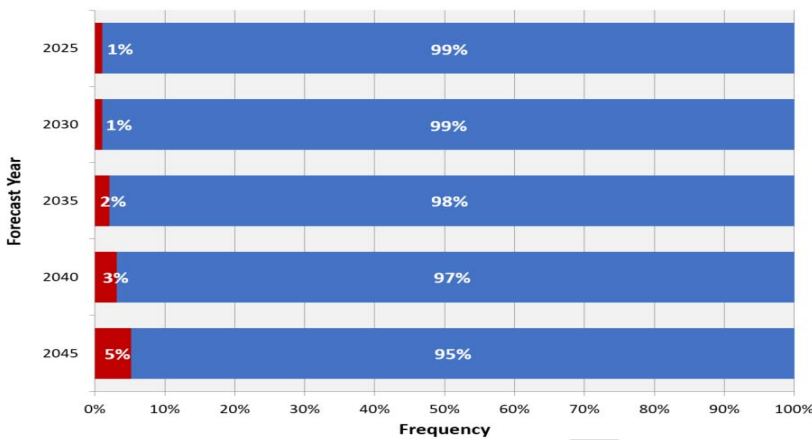
Area 4 – Up to 770 TAF of net surplus supply occurs 50% of the time

Figure 4-6: Scenario A – Storage Probability in 2045

Storage expected full 87% of the time.

The probability of total storage less than 1.0 MAF is 0%.

High Demands/Stable Imports Scenario B Reliability Assessment Results

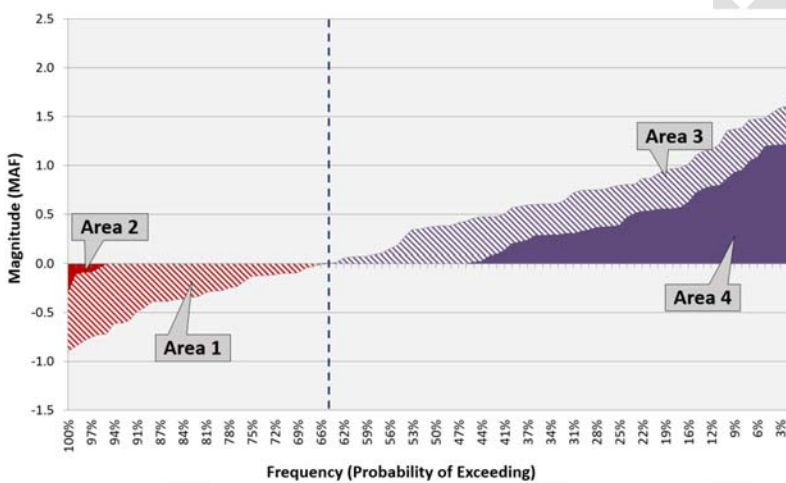
Figure 4-7: Scenario B – Net Shortage Assessment through the Planning Horizon

Scenario B: **High demands**
Stable imports

Net shortages possible across entire planning horizon.

Net shortage probability grows from 1% in 2025 to 5% in 2045.

Net shortages occur only in **SWP Dependent Areas**.

Figure 4-8: Scenario B – Shortage/Storage Probability for 2045

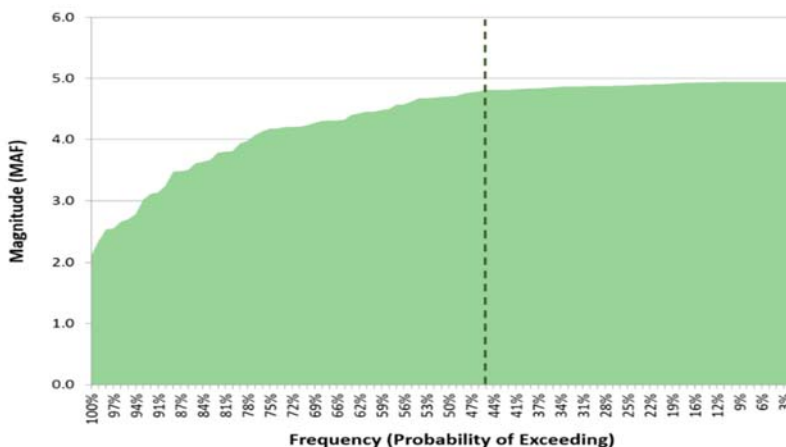
Prior to taking available storage actions, surplus conditions have a 65% frequency and shortage conditions have a 35% frequency.

Area 1 & 2 – Gross shortage

Area 2 – Net shortages occur 5% of the time with a maximum magnitude of 300 TAF

Area 3 & 4 – Gross surplus

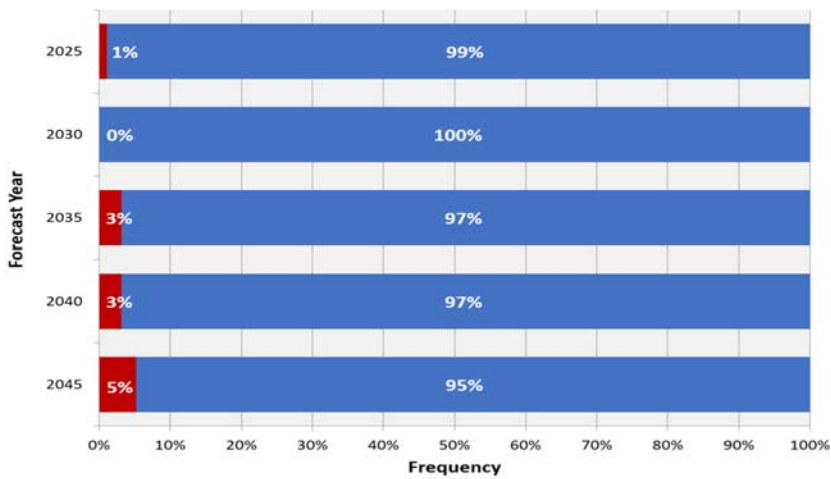
Area 4 – Up to 400 TAF of net surplus supply occurs 25% of the time

Figure 4-9: Scenario B – Storage Probability for 2045

Full storage expected 45% of the time.

The probability of total storage less than 1.0 MAF is 0%.

Low Demands/Reduced Imports Scenario C Reliability Assessment Results

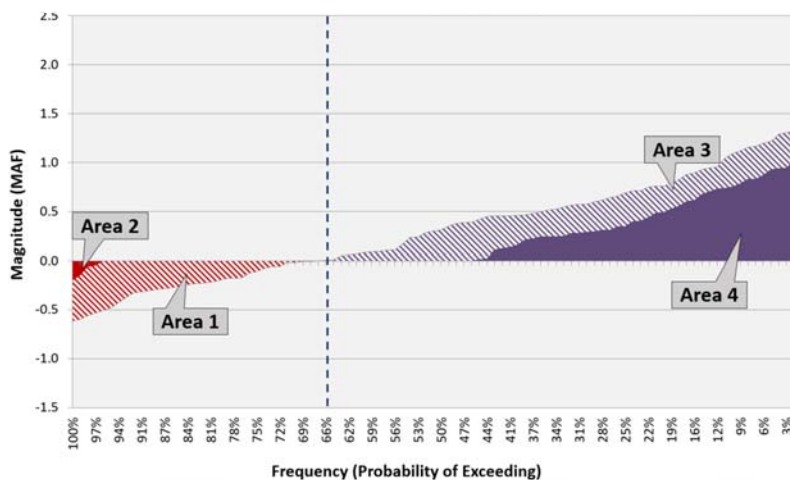
Figure 4-10: Scenario C – Net Shortage Assessment through the Planning Horizon

Scenario C: **Low demands**
Reduced imports

Net shortages possible across entire planning horizon.

Net shortage probability grows from 1% in 2025 to 5% in 2045.

Net shortages occur only in **SWP Dependent Areas**.

Figure 4-11: Scenario C – Shortage/Surplus Probability for 2045

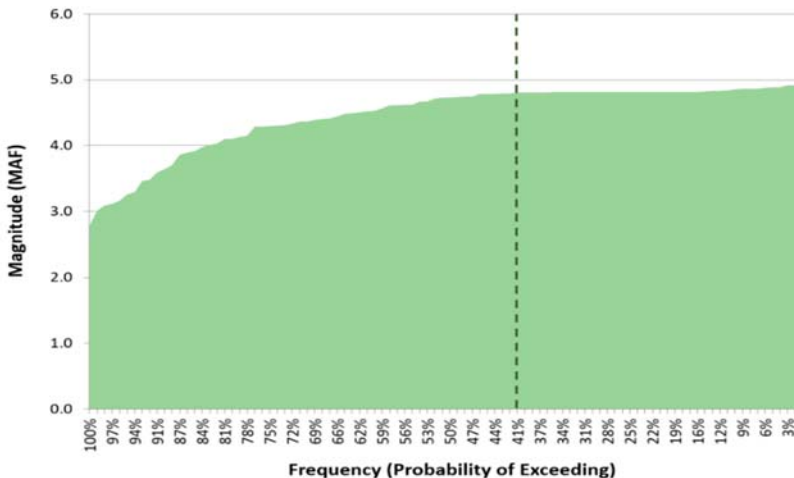
Prior to taking available storage actions, surplus conditions have a 66% frequency and shortage conditions have a 34% frequency.

Area 1 & 2 – Gross shortage

Area 2 – Net shortages occur 5% of the time with a maximum magnitude of up to 200 TAF

Area 3 & 4 – Gross surplus

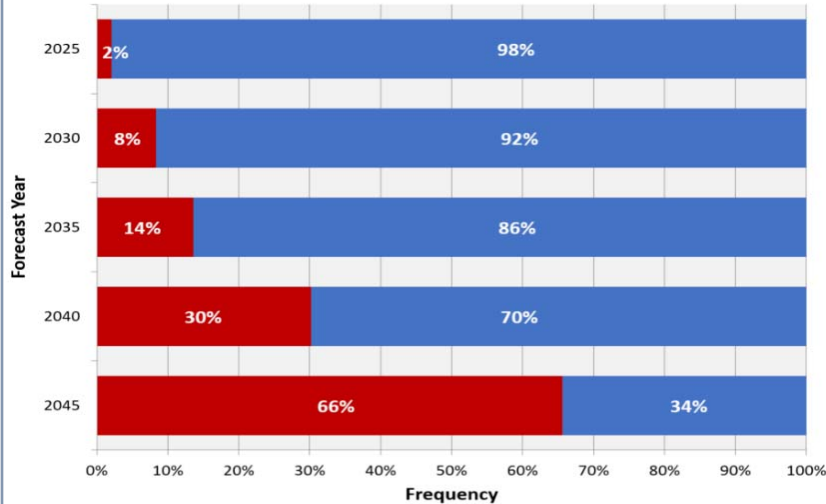
Area 4 – Up to 350 TAF of net surplus supply occurs 25% of the time

Figure 4-12: Scenario C – Storage Probability for 2045

Full storage expected 41% of the time.

The probability of total storage less than 1.0 MAF is 0%.

High Demands/Reduced Imports Scenario D Reliability Assessment Results

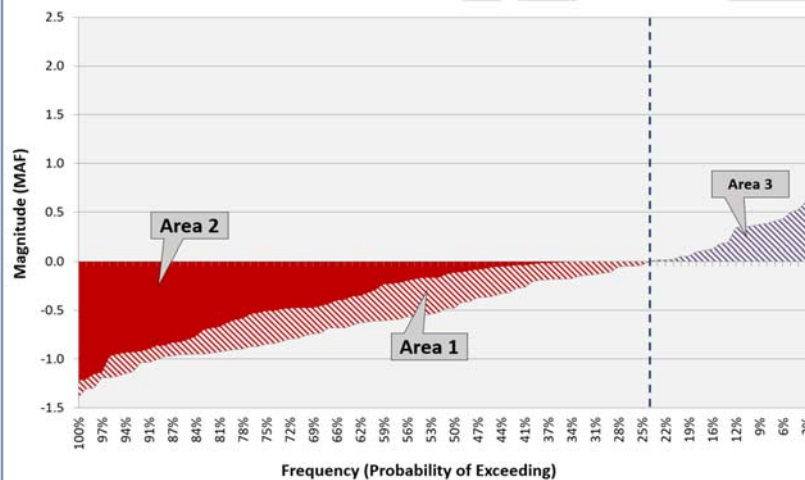
Figure 4-13: Scenario D – Net Shortage Assessment through the Planning Horizon

Scenario D: **High demands**
Reduced imports

Net shortages possible across entire planning horizon, and greater than 10% after 2030.

Net shortage probability grows sharply from 2% in 2025 to 66% in 2045.

Net shortages occur **system-wide** beyond 2035.

Figure 4-14: Scenario D – Shortage/Surplus Probability for 2045

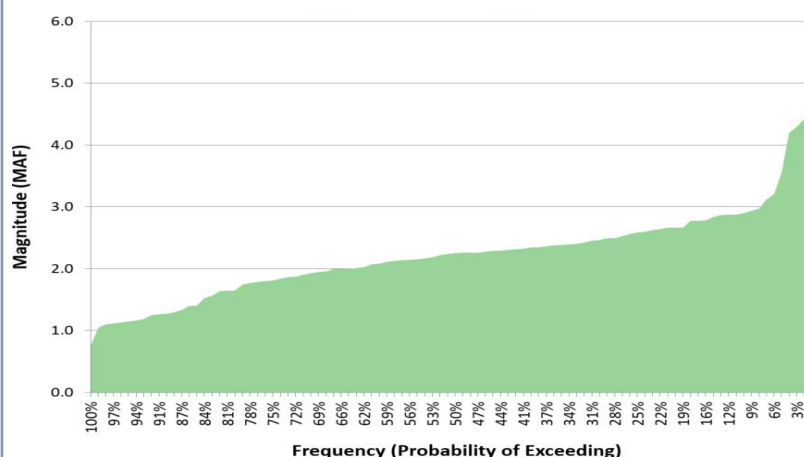
Prior to taking available storage actions, surplus conditions have a 24% frequency and shortage conditions have a 76% frequency.

Area 1 & 2 – Gross shortage

Area 2 – Net shortages occur 66% of the time with a maximum magnitude of 1.22 MAF

Area 3 – Gross surplus

Area 4 (Not shown) – Does not exist in this scenario. Supplies, when available, can be stored

Figure 4-15: Scenario D – Storage Probability for 2045

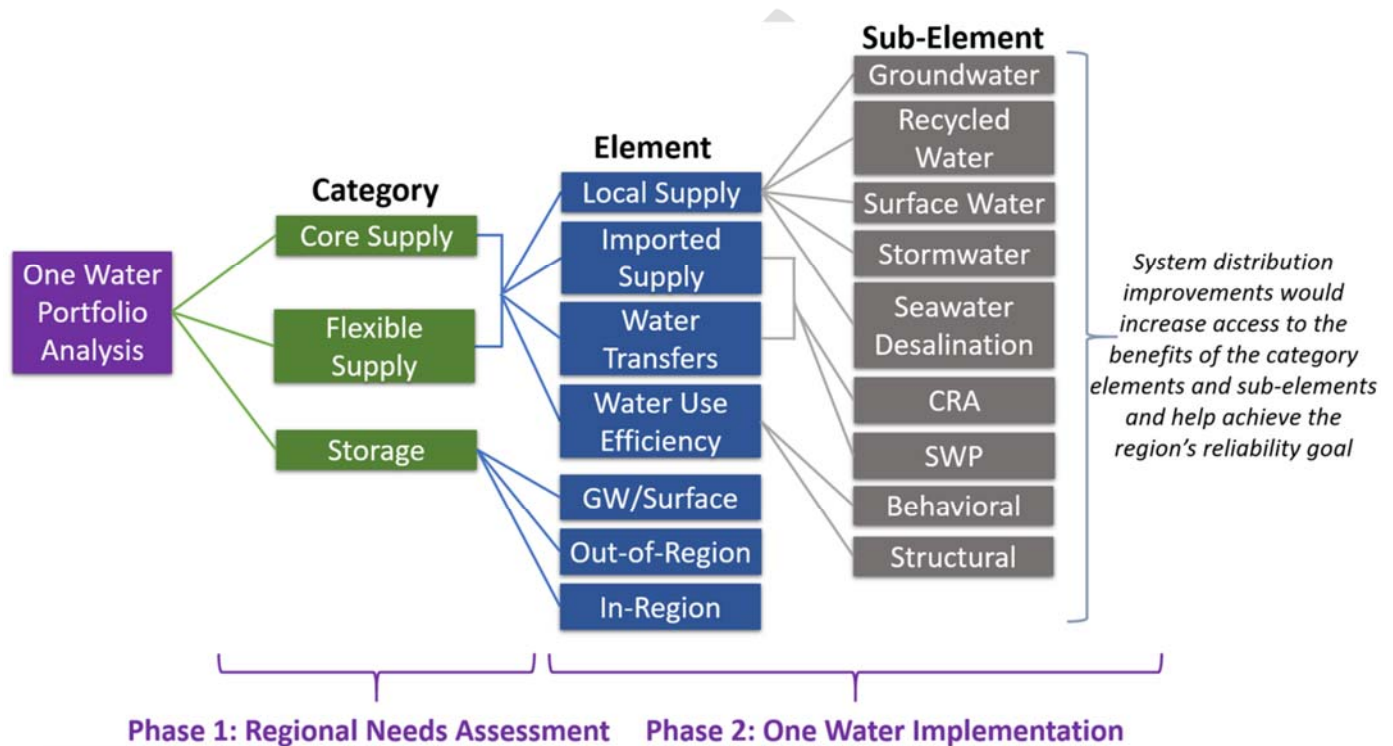
Full storage not expected in 2045. Limited imported supply along with the need to use stored supplies to satisfy demands prevents this scenario from filling storage capacity.

The probability of total storage less than 1.0 MAF is less than 2%.

High-Level One Water Portfolio Analysis Results

While the reliability assessment identified the potential shortages in each scenario, the portfolio analysis aimed to determine a high-level resource mix that tackles the supply-demand imbalances faced within each scenario. Eliminating the identified shortages would allow Metropolitan to meet its 100 percent reliability goal.

Figure 4-16: Levels of One Water Portfolio Analysis



The 2020 IRP's One Water portfolio analysis uses a hierarchical framework, shown in **Figure 4-16**, to characterize the different actions and investments. Metropolitan tested configurations at the highest "Category" level as part of the Regional Needs Assessment. Each category refers to one of three different types of supply (core, flexible, and storage), further defined in **Table 4-1**. With the preferred technical feasibility determined at the category level in the Regional Needs Assessment, further policy direction will be sought in the One Water Implementation phase to establish the basis for a more specific resource mix from the full spectrum of elements and sub-elements that comprise a holistic One Water approach. Below the "Category" level, element-level resource options such as water use efficiency can sometimes fulfill the role of either core supply or flexible supply but not both at the same time. Whether it serves the function of a core supply or flexible supply depends on the nature of the project or program. For example, structural water use efficiency programs that replace fixtures and repair leaks resemble a core supply because they provide a reliable, constant stream of water savings into the future. A conservation media campaign to encourage conscientious water consumption during a drought resembles a flexible supply because it is implemented on an as-needed basis.

Table 4-1: Category Definitions

Category	Definition	Notes	Examples
Core Supply	A supply that is generally available and used every year to meet demands under normal conditions and may include savings from efficiency gains through structural conservation.	High reliability and value if used often. Expensive otherwise.	<ul style="list-style-type: none"> • Colorado River basic apportionment • IID/Metropolitan conservation agreement • Code-based conservation
Flexible Supply	A supply that is implemented on an as-needed basis and may or may not be available for use each year and may include savings from focused, deliberate efforts to change water use behavior.	Expensive if used too much or too often. Better value if used occasionally.	<ul style="list-style-type: none"> • Palo Verde Land Management, Crop Rotation, and Water Supply Program • North-of-Delta annual transfers • Water Supply Alert • Conservation advertising campaigns
Storage	The capability to save water supply to meet demands at a later time.	Converts core supply into flexible supply. Evens out variability in supply and demand.	<ul style="list-style-type: none"> • Diamond Valley Lake • SWP Article 56 carryover • SWP flexible storage • Antelope Valley-East Kern High Desert Water Bank

Several assumptions were incorporated into the methodology to determine appropriate high-level resource mixes for Scenarios B, C, and D. Resource mixes for new portfolio actions are comprised of three categories: 1) core supply, 2) flexible supply, and 3) storage (see **Table 4-1** above).

The Regional Needs Assessment showed that net shortages were occurring in the SWP Dependent Areas (areas that cannot receive Colorado River supplies) for Scenarios B, C, and D. As such, additional core supply and storage were modeled as supplies that could reach the SWP Dependent Areas. These modeled supplies could also be used to meet water demand in the blended area (areas that receive SWP and Colorado River water). The additional flexible supply is not location-specific but is assumed to be available wherever the shortage is occurring (SWP Dependent or blended).

The portfolio analyses tested how the supply-demand gap in each scenario might be met using each category (core, flexible, and storage) separately. ***These category-specific tests enabled Metropolitan to conclude that rather than relying on any single category of portfolio actions, it is more practical in every scenario to pursue a more balanced and diversified mix.*** This provided a valuable starting point in determining the most suitable resource mix for each scenario.

After the portfolio categories were modeled in isolation, a mix of all three categories was modeled for each scenario. This analysis examined a range of additional storage to identify a more practical core and

flexible supply requirement. The following methodology was used in the portfolio analysis to determine the high-level resource mix for each scenario:

1. **Flexible Supply**

Identify an achievable, flexible supply threshold not to be exceeded in any given year

- The flexible supply threshold was set at 100 TAF and represents a realistic supply that can be secured in dry years when they are likely to be needed. Past experience has shown that SWP transfers supplies, an example of flexible supply, has limited availability, high cost, and losses associated with securing those supplies.
- Absent core supply and storage development, the flexible supply identified is equivalent to the maximum shortage amount in any given forecast year.
- Development of core supply and storage helps reduce the need for flexible supplies and achieve the established threshold.

2. **Storage**

Establish a range of additional storage to complement core supply development for each scenario

- The assessment looked at an additional storage capacity of 0, 100, 250, and 500 TAF.
- Put/takes for the additional storage were defined as half of the capacity (e.g., 50 TAF put/take for a capacity of 100 TAF). This represents a realistic “middle-of-the-road capability”(between a surface water reservoir and a groundwater banking type program) appropriate for planning purposes.
- The additional storage was modeled to come online in 2035 to provide a realistic timeline for acquisition, permitting, construction, and other implementation-related requirements. Existing storage programs were extended through 2045 with the assumption that current contracts will be renewed with the same terms.

3. **Core Supply**

Determine core supply needed to achieve the reliability goal by testing the range of additional storage while not exceeding the flexible supply threshold

- This core supply is not static and may increase throughout the forecast to ensure that the maximum flexible supply target (shortage amount) is not surpassed.

Low Demands/Stable Imports Scenario A Portfolio Analysis Results

Scenario A is characterized by **low demands** on Metropolitan and **stable local and imported supply**.

In this future, there is no net shortage and no intervention is needed by Metropolitan; the reliability goal is achieved through consumer demand reduction efforts and sufficient local supply development. As such, no new investments in core, flexible or storage are necessary.

High Demands/Stable Imports Scenario B Portfolio Analysis Results

The challenges presented in Scenario B mainly result from **increasing demands** throughout the service area. The portfolio analysis first looked at the development needed for each portfolio category alone to achieve reliability, as shown in **Table 4-2** for the forecast year 2045.

Table 4-2: Scenario B – Forecast Year 2045 Portfolio Category Need – Not Combined

New Storage	New Flexible Supply	New Core Supply
TAF 500 TAF (250 TAFY put/take capacity)	300 TAF	150 TAF

The results revealed that upwards of 300 TAF of flexible supplies would be needed to achieve reliability, or a new 500 TAF storage capacity surface reservoir would be required. It was deemed unrealistic and risky to depend on such a large amount of flexible supply in a dry year when these supplies would typically be needed, and excessive to build a reservoir similar in size and scope as Diamond Valley Lake. Instead, to identify possible efficiencies gained through combining these portfolio categories, a mix of these categories was investigated. The results of that analysis are shown in **Table 4-3**.

Table 4-3: Scenario B – Forecast Year 2045 Portfolio Category Need – Combined

Modeled Storage	Core Supply Needed by 2045
0 TAF	100 TAF
100 TAF	70 TAF
250 TAF	30 TAF
500 TAF	30 TAF

Table 4-3 illustrates how various surface reservoir sizes impact core supply development need while staying within the flexible supply threshold. Without new storage, 100 TAF of additional core supply is needed by 2045 to eliminate net shortages. The core supply need reduces from 100 TAF to 30 TAF with 250 TAF of new storage capacity. The analysis also reveals no additional reduction in the core supply need if new storage capacity is increased to 500 TAF. This suggests that a new storage capacity above 250 TAF is unnecessary to reduce the core supply need and may be an overinvestment.

Low Demands/Reduced Imports Scenario C Portfolio Analysis Results

Scenario C is characterized by **low demands** on Metropolitan and **unstable local and imported** supplies due to a more severe climate change future. The shortages in Scenario C are mainly due to decreasing local and imported supplies. The magnitude of the net shortages in Scenario C are slightly less than those in Scenario B and indicate that higher demands have a more significant impact on reliability than the modeled unstable local and imported supplies. **Table 4-4** shows the development of each portfolio category alone for the forecast year 2045 to achieve 100% reliability.

Table 4-4: Scenario C – Forecast Year 2045 Portfolio Category Need – Not Combined

New Storage	New Flexible Supply	New Core Supply
TAF 500 TAF (250 TAFY put/take capacity)	200 TAF	100 TAF

Results show that developing 100 TAF of new core supply could alone eliminate net shortages in this scenario without the need for additional storage or flexible supply. Additionally, approximately 200 TAF of flexible supplies would be needed to achieve reliability, or a 500 TAF storage capacity surface reservoir would be required. Like Scenario B, the amount of additional storage or flexible supply alone was too great to be a realistic solution in a dry year and a combination of these portfolio categories was examined. The results of that analysis are shown in **Table 4-5**.

Table 4-5: Scenario C – Forecast Year 2045 Portfolio Category Need – Combined

Modeled Storage	Core Supply Needed by 2045
0 TAF	50 TAF
100 TAF	15 TAF
250 TAF	15 TAF
500 TAF	15 TAF

Scenario C required less additional core supply than Scenario B under all modeled storage conditions. If no additional storage is contemplated, 50 TAF of additional core supply is needed by 2045 to eliminate net shortages. The core supply need reduces from 50 TAF to 15 TAF with the addition of 100 TAF of new storage capacity. The analysis also reveals no additional reduction in the core supply need if new storage capacity is increased to 250 TAF. This suggests that a new storage capacity above 100 TAF is unnecessary to reduce the core supply need and would be a potential over-investment.

High Demands/Reduced Imports Scenario D Portfolio Analysis Results

Scenario D experiences larger impacts than the other three scenarios due to both **higher demands** on Metropolitan and **unstable imported supplies**. The compounded effects lead to shortages of substantially greater magnitude with a higher likelihood. The efficacy of the individual portfolio categories was determined by first modeling them separately, with results shown below in **Table 4-6**.

Metropolitan Imported Supplies

Finding: Maintaining existing imported supply reliability reduces the need for new core supply development and leverages years of investments.

Table 4-6: Scenario D – Forecast Year 2045 Portfolio Category Need – Not Combined

New Storage	New Flexible Supply	New Core Supply
Storage up to 1.5 MAF with put/take capacity of 750 TAF/year still does not provide 100% reliability.	1.2 MAF	650 TAF

Adding new storage up to 1.5 MAF with a put/take capacity of 750 TAF were modeled. As the amount of modeled storage increased, results showed diminishing returns regarding decreasing probability and magnitude of net shortage. ***This led to the conclusion that there is no realistic amount of additional storage that could be modeled that would eliminate net shortage in Scenario D.*** Results also indicate that it would take 1.2 MAF of flexible supply or 650 TAF of new core supply to eliminate net shortage

alone, both of which are unrealistic management strategies. Even more than Scenarios B and C, a combination of portfolio categories is vital to eliminating net shortages. As with the other scenarios, a combined approach was modeled, and the results of this combination of portfolio categories is shown below in **Table 4-7**.

Table 4-7: Scenario D – Forecast Year 2045 Portfolio Category Need – Combined

Modeled Storage	Core Supply Needed by 2045
0 TAF	650 TAF
100 TAF	600 TAF
250 TAF	550 TAF
500 TAF	500 TAF

Storage Finding: Expanding existing or developing new storage programs and investments in Metropolitan's distribution system can reduce the need for new core supply development to meet potential future shortages and adapt to climate change.

Scenario D highlights the need for investments in a combination of core, flexible, and storage supplies. Additions of new core supply and storage work together in tandem; more water in storage reduces how much core supply is needed, while in turn, more core supplies mean water is readily available in non-dry years to accumulate in storage over time. More specifically, Scenario D requires significantly greater amounts of additional core supply than Scenarios B and C. With 500 TAF of additional storage capacity, there is still a need for an additional 500 TAF of core supply by 2045. When extra storage is reduced, the corresponding core supply increases.

Table 4-8: Probability of Shortage With and Without Distribution System Constraints

Year	Scenario B		Scenario C		Scenario D	
	Constraints	No Constraints	Constraints	No Constraints	Constraints	No Constraints
2025	1%	0%	1%	0%	2%	0%
2030	1%	0%	0%	0%	8%	0%
2035	2%	0%	3%	0%	14%	5%
2040	3%	0%	3%	0%	30%	31%
2045	5%	0%	5%	0%	66%	67%

Table 4-8 shows the probability of shortage with and without distribution system constraints that restrict deliveries of Colorado River water and other blended area supplies to portions of Metropolitan's service area. This was analyzed by comparing two IRPSIM model runs. The first run contained the existing system configuration that reflects current capacity to deliver water to the SWP Dependent areas. The second run reflects a theoretical removal of these system constraints.

General Observations

The portfolio category analysis revealed similar patterns across scenarios. As a general rule, less core and flexible supply were necessary to achieve the reliability goal when after adding storage. Additionally, there was a notable drop in the flexible supply need in the forecast year 2025 when the Arvin-Edison Banking Program is assumed to return to service after being shut down due to water quality concerns. ***This shutdown shows how important SWP banking programs are to Metropolitan's reliability in light of vulnerabilities in the SWP Dependent Areas.***

Currently IRPSIM models all SWP banking programs to operate throughout the planning horizon. The Arvin-Edison Banking Program result shows that ***extending the contract terms for the other SWP banking programs is vital to Metropolitan's long-term reliability.*** Maintaining existing imported supplies that utilize existing storage programs, including SWP banking, is necessary and may reduce the need for new core supply development and leverages years of investments.

SWP Dependent Areas and Storage Finding:

Storage capacity, put/take capabilities, and accessibility are critical considerations for the SWP Dependent Area. New storage capacity and put/take capabilities should be consistent with the portfolio analysis. New storage must be accessible to the SWP Dependent Areas.

Storage Findings:

- 1) Maintaining Metropolitan's existing storage portfolio is critical, including the consideration of re-negotiating contracts when they expire.*
 - 2) When evaluating storage options, put/take capabilities are essential; even storage programs with modest put/take capabilities help reduce the need for flexible supply.*
-

Chapter 5 - Findings

The IRP's goal in guiding Metropolitan's investments is to avoid retail water shortages and mandatory end-user cutbacks. This reliability goal recognizes that although tolerance for voluntary conservation measures varies among member agencies, Southern Californians clearly distinguish voluntary and responsible conservation from mandatory cutbacks. A vision for regional success is for every Southern California consumer and business to have access to affordable, high-quality water at all times. To this end, the Regional Needs Assessment highlights important areas of vulnerability to Metropolitan's reliability goal. Findings from the Regional Needs Assessment fall within five key focus areas:

1. SWP Dependent Areas
2. Storage
3. Retail Demand/ Demand Management
4. Metropolitan Imported Supplies
5. Local Supply

These findings are summarized and discussed below. The scenario analyses found plausible reliability outcomes by the year 2045, with potential shortages ranging from no net shortage at all under Scenario A to as high as 1.2 MAF under Scenario D. As Metropolitan proceeds towards implementation in the next phase of the IRP, specific actions must address these gaps in a manner consistent with the portfolio category analysis identified in Chapter 4.

SWP Dependent Areas Findings

- *Vulnerabilities in the SWP Dependent Areas are more severe given reduced reliability of SWP supplies and Metropolitan distribution system constraints. Actions identified in the implementation phase must prioritize addressing the SWP Dependent Area's reliability challenge.*
- *New core supplies must be accessible to the SWP Dependent Areas. Greater access to existing core supplies can also increase SWP Dependent Area reliability.*
- *Enhanced accessibility to core supplies and storage, both existing and new, will improve SWP Dependent Area and overall reliability. This includes improvements to Metropolitan's distribution system and capacity to deliver non-SWP supply and storage.*
- *Storage capacity, put/take capabilities, and accessibility are critical considerations for the SWP Dependent Area. New storage capacity and put/take capabilities should be consistent with the portfolio analysis. New storage must be accessible to the SWP Dependent Areas.*

Water demand in Metropolitan's service area is met by combining its imported supplies via the SWP and Colorado River Aqueduct, storage reserves, and local supply production. These spatially diversified water supplies increase reliability by buffering supply impacts with any one source. In general, when one or more supply sources are challenged, the other sources are depended on more to satisfy the region's demand.

Portions of Metropolitan's service area, however, cannot receive water from both imported supply sources and do not have enough local supply to meet demand. Those portions of Metropolitan's service area where Colorado River supply cannot access, referred to as "SWP Dependent Areas" as shown in **Figure 3-6**, are of particular concern if low SWP Table A Allocations become more frequent.

A crucial finding of this IRP recognizes that SWP Dependent Areas present a severe vulnerability to regional water reliability. Across scenarios, this vulnerability emerges as a common thread among foreseeable risks. Whenever shortages occur in any scenario, they involve a mismatch between accessible supplies and demands in the SWP Dependent Areas. This puts additional pressure on the Colorado River, local, and storage supplies to satisfy a larger proportion of the regional demand. Consequently, resolving reliability issues for the SWP Dependent Areas will address the larger reliability issues for the entire region.

As SWP core supplies become less reliable over time, as analyzed in the four scenarios, the risks to reliability posed by the SWP Dependent Areas are exacerbated. Because of these vulnerabilities, actions identified in the One Water Implementation phase should prioritize addressing SWP Dependent Areas. New core supplies and new/or existing storage must first address and reach SWP Dependent Areas. However, investing in conveyance and distribution to improve core, local, and storage supply access to the SWP Dependent Areas should also be evaluated to determine if overall system reliability is compromised. Additionally, potential shortages in the Colorado River, as seen in Scenario D, can limit the effectiveness of system improvements.

Storage Findings

- *Storage capacity, put/take capabilities, and accessibility are critical considerations in maintaining reliability under the region's current and future conditions, especially for SWP Dependent Areas.*
- *Maintaining Metropolitan's existing storage portfolio is critical, including the consideration of re-negotiating contracts when they expire.*
- *Expanding existing or developing new storage programs and investments in Metropolitan's distribution system can reduce the need for new core supply development to meet potential future shortages and adapt to climate change.*
- *When evaluating storage options, put/take capabilities are essential; even storage programs with modest put/take capabilities help reduce the need for flexible supply.*

Storage is vital to reliability under current and plausible future conditions. Core supplies and storage capabilities work together in tandem; dependable core supplies are needed to fill and refill storage before and after dry years, and ample storage capacity is needed to make the most of opportunities for core supplies when they become available. Three major conclusions related to storage emerge from the IRP analysis:

1. Expanding existing or developing new storage programs will be needed to help balance new core supply development and mitigate future shortages. This may include policies and programs enabling Metropolitan's use of local storage during drought conditions.
2. A holistic approach is essential when evaluating storage options. Evaluation of put-and-take capabilities should take into account the amounts and timing of water that can be moved and

spatial considerations, such as the source of water and access to the various parts of Metropolitan's distribution system. New storage development and or expanding distribution flexibility to move existing storage to the SWP Dependent Areas should be investigated in the implementation phase.

3. Furthermore, several of Metropolitan's existing storage programs will expire over the next 15 years, within the planning horizon of the 2020 IRP. Without further action to extend these agreements, Metropolitan will lose more than 1.6 MAF of total storage volume by 2037. The IRP reliability analyses assume that these programs will remain in place. Still, their possible expiration remains a threat to regional reliability until such programs are extended or replaced. This is an example of the active management that is constantly required and highlights the ongoing need for collaboration with Metropolitan's banking partners. These known administrative risks are apart from other, more uncertain operational risks, such as contamination, new regulatory restrictions, and seismic disturbances.

Retail Demand/Demand Management Findings

- *Metropolitan's future supply reliability may fluctuate based on demand increases and decreases.*
- *Variability in retail demand largely comes from changes in outdoor water use. Outdoor water use behavior is complex, influenced by weather and climate and by awareness of water scarcity and other conservation measures.*
- *It is important to pay attention to demand rebound, demand growth, and demand reductions, and take appropriate regional measures as necessary.*
- *Managing long-term demands through the efficient use of water reduces dependency on supplies, helps preserve storage, and helps reduce the need for extraordinary conservation measures.*

Conservation has long underpinned Metropolitan's long-term water supply reliability strategy. Metropolitan administers regional conservation programs and co-funds member agency conservation programs designed to increase water use efficiency and bolster water conservation ethics. Conservation comes from two areas of change: structural conservation which involves increases in water use efficiency, and behavioral conservation, which involves modifying consumer water-using behavior through messaging, education, pricing, and mandates. Of these two forms of conservation, structural conservation is more permanent, akin to a core supply. Water-efficient device retrofits, landscape conversions, plumbing codes, and leak prevention contribute to ongoing structural water savings. Conservation device retrofits help recover storage in future years by lowering demands in all years, not only drought years. In contrast, behavioral conservation is less permanent and can wax and wane due to various influences outside of Metropolitan's direct control. The IRP recognizes water use behavior, represented by per capita water use, as a major uncertainty for regional demands over time. The IRP scenarios confirm that Metropolitan's future reliability is highly sensitive to changes in water demands. Under Scenario A, with low demands and

Retail Demand/Demand Management Finding:
Managing long-term demands through the efficient use of water reduces dependency on supplies, helps preserve storage, and helps reduce the need for extraordinary conservation measures.

stable imports, no net shortages are anticipated through the year 2045. Demands also remain low in Scenario C, with low frequencies of net shortages occurring throughout the planning horizon. Meanwhile, Scenarios B and D consider what might happen if per capita water demands rebound to levels approaching historical usage. While Scenario B shows similar frequencies of net shortages as Scenario C, the magnitudes of such shortages are greater. Under Scenario D, where there is both increase in demands on Metropolitan and significant loss of imported core supply, there is a high risk of shortage and an inability to ever refill storage to capacity by the year 2045.

Increased demands, whether from growth or from per capita use, represent a major risk to reliability. Demands can increase from rebounding per capita water use, but even with efficient use, total demands can still increase as the population and economy grow over time. Variability in retail-level demands mostly comes from outdoor water use, which is influenced by weather and climate and other factors that affect water-using behaviors. Baseline conservation programs help with every scenario. Monitoring demands and intervening as appropriate will be critical. Managing demands through efficient use of water reduces dependency on costly supplies, helps preserve storage, and defers the need for disruptive extraordinary conservation measures such as emergency declarations and water supply allocations.

Metropolitan Imported Supplies Findings

- *Existing imported supplies are at risk from various drivers of uncertainty.*
- *Maintaining existing imported supply reliability reduces the need for new core supply development and leverages years of investments.*
- *SWP supplies are highly susceptible to varying hydrologic conditions, climate change, and regulatory restrictions.*
- *Variability and capacity in SWP supplies provide opportunities to store water during wet periods for use in dry years, including Colorado River storage. Metropolitan's ability to distribute or store SWP supplies when they materialize will enhance the region's reliability, particularly the SWP Dependent Areas. The Colorado River system and Colorado River Aqueduct capacity do not offer the same opportunities concerning SWP storage.*
- *Shortages on the Colorado River will limit the reliability of Colorado River Aqueduct deliveries as a core supply in the future.*

Imported supplies remain essential as core supplies to the region. They are a valuable legacy of decades of planning and investment. As source waters, they provide good water quality and supply benefits that, once lost, are very difficult to replace. Metropolitan's core supplies from the Colorado River Aqueduct are generally less susceptible to volatility from year-to-year hydrologic conditions than Metropolitan's core supplies from the SWP. However, all of the region's imported supplies face significant threats from various drivers of uncertainty, including climate change. While there is little scope for obtaining new additional imported core supplies, taking action to preserve the region's legacy imported supplies is crucial for several reasons.

Imported supplies, primarily the SWP supplies, uniquely reinforce reliability by their ability to leverage Metropolitan's storage capacity in wet periods for use in dry years and by diversifying supply sources across multiple watersheds. Because water resources available to the Metropolitan service area come from three geographically distinct regions—Northern California, the Colorado River, and local

resources—a relatively dry year affecting one of these three regions can be offset by relatively abundant supplies from the other two regions. For example, a year of ample precipitation within Metropolitan’s service area tends to depress demand and enhances local water resources, further reducing demands on imported supplies. A wet year in the Sacramento-San Joaquin watersheds increases the SWP Table A allocation, facilitating reduced diversions from the Colorado River in favor of storing supplies in Lake Mead or in the Desert Water Agency/Coachella Valley Water District Advanced Delivery Account.

Conversely, a shortfall on the SWP may require system operational modifications to maximize Colorado River diversions and the delivery of Colorado River supplies to the SWP Dependent Areas. Each increment of existing imported supply reliability prevented from loss offsets the need to develop new alternative core and flexible supplies that may be more costly, may take considerable lead time to bring online, and may not be easily integrated into the region’s water distribution system. SWP Dependent Areas are so-called because they currently rely on SWP water to meet at least part of their demands; any practical alternative supplies to meet SWP Dependent Area demands would also have to be potable and accessible to those relatively isolated portions of Metropolitan’s distribution system.

Local Supply Findings

- *Maintaining existing and developing new local supplies is critical in helping manage demands on Metropolitan.*
- *Impacts to reliability occur if local supply assumptions are not achieved; therefore, it is important to track the progress of local supply development as one of the signposts in the One Water Implementation phase.*
- *Additional actions may be needed should existing and future local supply levels deviate from IRP assumptions.*

Demand on Metropolitan's imported supplies are a function of total regional demands and the local supplies available within the region to meet them. Local supplies are the front line in securing regional reliability. Local supplies regularly meet roughly half of the region's total urban demands; in some years it can be more than 60 percent. Because imported core supplies cannot be expected to increase even in the face of population and economic growth, the region's reliance on existing and new local supplies relative to imported supplies will only grow in the future. The IRP scenarios reveal that safeguarding the region's vast inventory of existing local supplies is as crucial as preserving existing imported supplies.

Continued performance of local supplies cannot be taken for granted, for as with imported supplies, many factors can impede local supply development and production, including funding, contamination, changing regulatory requirements, and climate change. For example, there has been a decline in groundwater production in the past 20 years, affected by limited availability of imported supplies for replenishment, variability in natural replenishment from rainfall, and emerging contaminants. At the same time, the region has made substantial gains in recycled water development, but continued success will be more difficult moving forward. This is due to the reduction of available of wastewater effluent, which stems from conservation, constraints in distribution systems, and rising costs from increasing salinity.

The region’s reliability is highly sensitive to local supplies, as it comprises such a large portion of the region’s total supply. As a part of the Regional Needs Assessment, Metropolitan engaged with member

agencies and basin managers to identify the potential timing and implementation of planned projects and operation of groundwater basins appropriate for each IRP scenario. Impacts to reliability will occur if local supply assumptions are not achieved; therefore, it will be important to track progress of local supply development as part of the signposts in the One Water Implementation phase. Metropolitan currently fosters local supplies through various programs and funding support, including its Local Resources Program. Metropolitan will continue to support the development of local supplies by Member Agencies.

DRAFT

Conclusion: Reason for Optimism with a *One Water Approach*

Collectively, these findings instill a sense of optimism about Southern California's water future. Metropolitan has identified the tools necessary to adapt to a variety of plausible futures successfully. It is also well within Southern California's control to avoid a fate with increased per-capita water use and higher demands that would prove unsustainable.

One Water is the collaborative, community approach that matches the right tools for the emerging needs of the future. The precise combination of actions will emerge as more is known about the future that we actually face. Southern California is poised to be agile enough to adjust its portfolio of water actions to keep up with our changing times.

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Adopt the 2020 IRP Regional Needs Assessment

Integrated Resources Plan Special Committee

Item 7-1

March 22, 2022

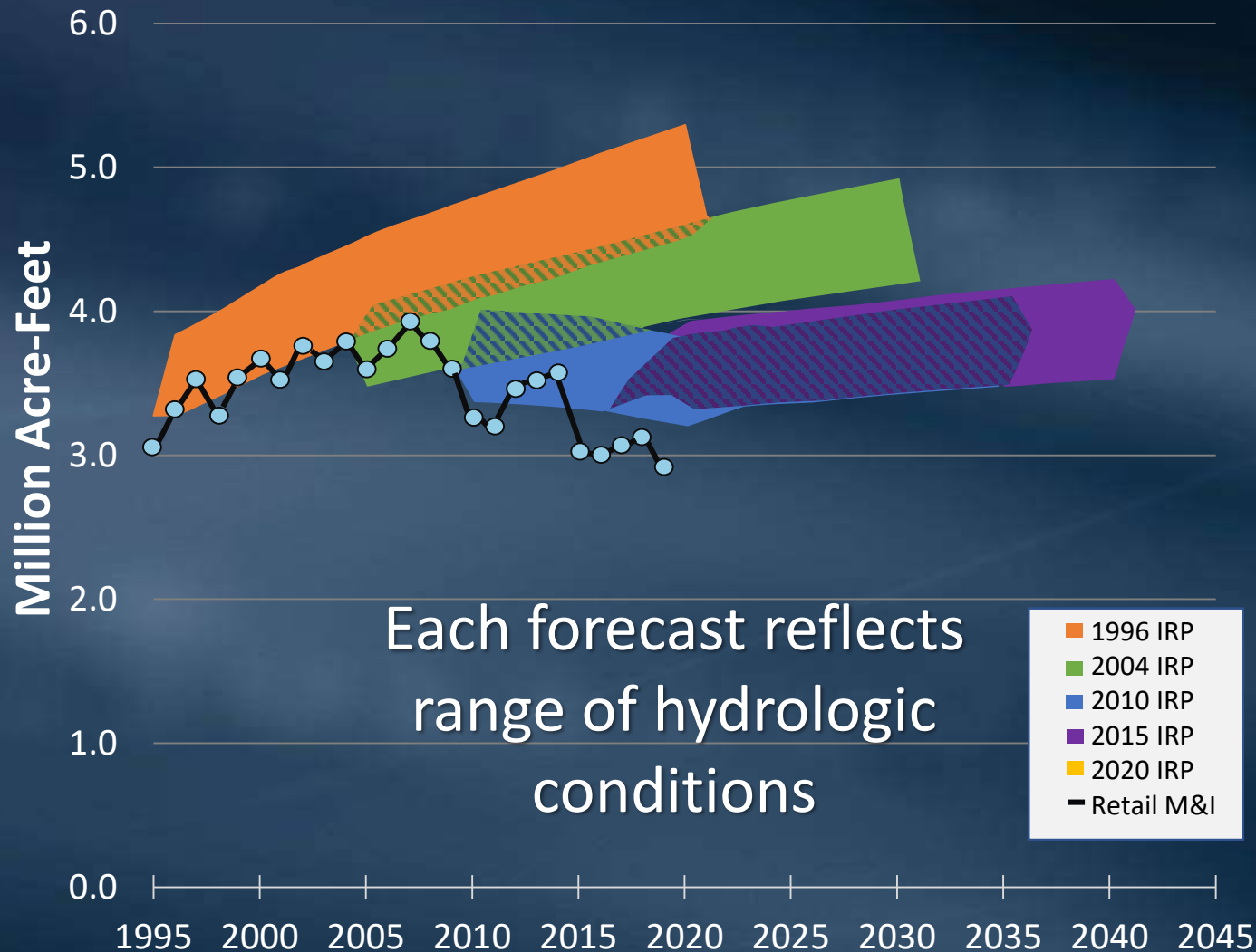
Outline

- IRP Purpose and Evolution (1996 to present)
- Findings
- Collaboration and Analysis

Ensuring Regional Water Reliability

- The Integrated Water Resources Plan (IRP) establishes a long-term comprehensive water resources strategy
- Since its inception, the IRP has been at the forefront of innovative ways to address water reliability and is consistent with and supports the One Water philosophy
- Metropolitan is guided by statutory directives (MWD Act Sections 130.5 (b) and 130.7) that set priorities for new water supply investments
- 2020 IRP incorporates scenario planning to address wide-ranging uncertainties

Evolution of the IRP



1996 IRP

- 1987-1992 Drought
- Preferred Resource Mix



2004 IRP

- Colorado River cutbacks
- Planning Buffer



2010 IRP

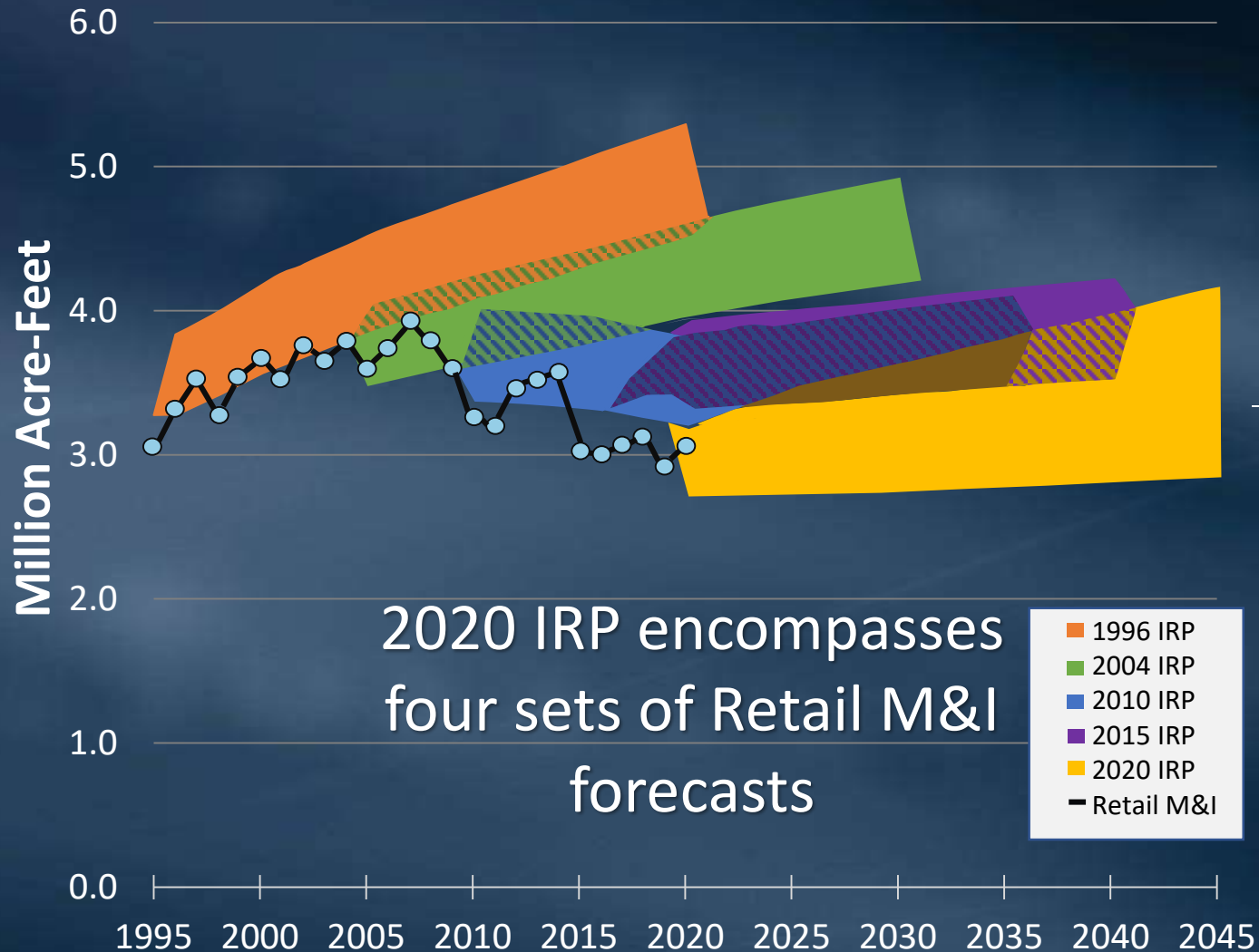
- SWP cutbacks
- Adaptive Management Strategy



2015 IRP

- 2012-2016 Recession and Drought
- Emphasis on outdoor conservation and local resource protection and development

Evolution of the IRP



- Scenario planning takes a step forward from prior IRPs
- Reflects a range of hydrologic conditions and incorporates a broader range of outcomes for underlying uncertainties
- Increases preparedness, improves resiliency, and manages vulnerabilities

A Phased Approach to the IRP

Phase 1: Regional Needs Assessment

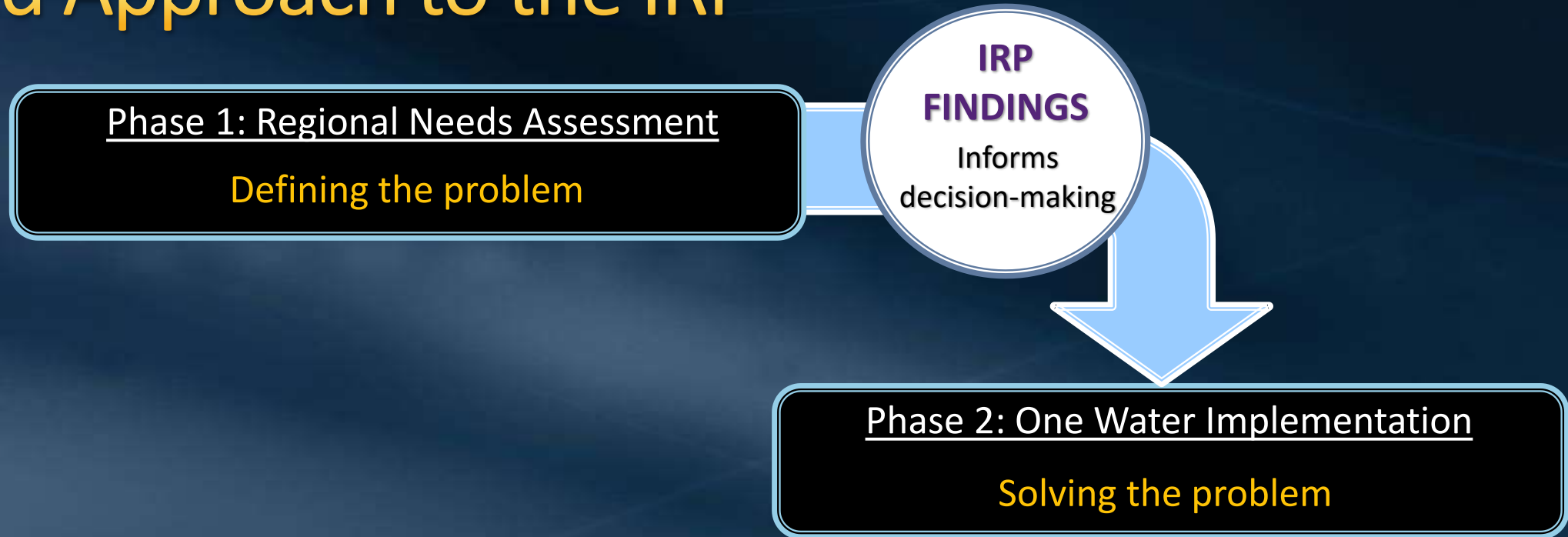
Defining the problem

IRP
FINDINGS

Informs
decision-making

- Phase 1: Regional Needs Assessment serves as a stand-alone guide for Southern California's uncertain water supply future

A Phased Approach to the IRP



- Phase 2: One Water Implementation will use the results and findings from Phase 1 as a basis for development and evaluation of potential policies, programs, and projects
- Phase 2 should also develop a comprehensive adaptive management strategy and evaluation criteria based on the key drivers of uncertainty to guide specific actions



Recommending Adoption of IRP Assessment

- Surplus/Shortage - Quantified for each scenario
- Portfolio Categories - Examined for effectiveness
- Findings - Grouped into five focus areas



SWP Dependent
Area

Storage

Retail Demand/
Demand
Management

MWD
Imported
Supplies

Local
Supply



FINDINGS – SWP Dependent Areas

- Vulnerabilities in the SWP Dependent Areas are more severe given reduced reliability of SWP supplies and Metropolitan distribution system constraints. Actions identified in the implementation plan will address the area's reliability challenge.
- New core supplies and existing core supplies are more severe due to reduced SWP supply reliability and limited access to existing storage and CRA supplies.
- Enhanced accessibility to SWP Dependent Areas and Metropolitan distribution system will improve access to Metropolitan's storage and CRA supplies.
- Storage capacity, performance, and reliability for the SWP Dependent Areas should be consistent with the portfolio analysis. New storage must be accessible to the SWP Dependent Areas.

**Vulnerabilities in the SWP
Dependent Area are more severe
due to reduced SWP supply
reliability and limited access to
existing storage and CRA supplies**



FINDINGS – SWP Dependent Areas

- Vulnerabilities in the SWP Dependent Areas are more severe given reduced reliability of SWP supplies and Metropolitan distribution system constraints. Actions identified in the implementation phase must prioritize addressing the SWP Dependent Area's reliability challenge.
- New core supplies must be accessible to the SWP Dependent Areas. Greater access to existing core supplies can also increase SWP Dependent Area reliability.
- Enhanced accessibility to core supplies and storage, both existing and new, will improve SWP Dependent Area and overall reliability. This includes improvements to Metropolitan's distribution system and capacity to deliver non-SWP supply and storage.
- Storage capacity, put/take capabilities, and accessibility are critical considerations for the SWP Dependent Area. New storage capacity and put/take capabilities should be consistent with the portfolio analysis. New storage must be accessible to the SWP Dependent Areas.



FINDINGS – Storage

- Storage capacity, put/take capabilities, and accessibility are critical considerations in maintaining reliability for SWP Dependent Areas, especially during the
- Maintaining Metropolitan's development to
- Expanding existing Metropolitan's development to
- When evaluating programs with modest put/take capabilities help reduce the need for flexible supply.

New storage helps. Increasing accessibility to existing storage and/or developing new storage accessible to the SWP Dependent Area helps achieve reliability.



FINDINGS – Storage

- Storage capacity, put/take capabilities, and accessibility are critical considerations in maintaining reliability under the region's current and future conditions, especially for SWP Dependent Areas.
- Maintaining Metropolitan's existing storage portfolio is critical, including the consideration of re-negotiating contracts when they expire.
- Expanding existing or developing new storage programs and investments in Metropolitan's distribution system can reduce the need for new core supply development to meet potential future shortages and adapt to climate change.
- When evaluating storage options, put/take capabilities are essential; even storage programs with modest put/take capabilities help reduce the need for flexible supply.



FINDINGS – Retail Demand/Demand Management

- Metropolitan's future supply reliability may fluctuate based on demand increases and decreases.
- Variability in retail water use. Outdoor water use is highly variable due to weather and by climate and by conservation measures.
- It is important to manage retail water demand reduction measures can help mitigate the impacts of climate change.
- Managing long-term water demand dependency on retail water reduces the need for extraordinary conservation measures.

Managing retail water demand is very important. Focusing on outdoor water use efficiency measures can help mitigate the impacts of climate change.



FINDINGS – Retail Demand/Demand Management

- Metropolitan's future supply reliability may fluctuate based on demand increases and decreases.
- Variability in retail demand largely comes from changes in outdoor water use. Outdoor water use behavior is complex, influenced by weather and climate and by awareness of water scarcity and other conservation measures.
- It is important to pay attention to demand rebound, demand growth, and demand reductions, and take appropriate regional measures as necessary.
- Managing long-term demands through the efficient use of water reduces dependency on supplies, helps preserve storage, and helps reduce the need for extraordinary conservation measures.



FINDINGS – MWD Imported Supplies

- Existing imported supplies are at risk from various drivers of uncertainty.
- Maintaining existing imported supply reliability reduces the need for new core supply development and the associated costs.
- SWP supplies are subject to regulatory restrictions and variability.
- Variability and capacity constraints for use in periods for use in the future to distribute or store water for reliability, particularly during the Colorado River Aqueduct storage.
- Shortages on the Colorado River Aqueduct deliveries as a core supply in the future.

Stable imported water supplies help achieve reliability and leverage storage. Further erosion of imported supplies increases the need for potentially costly new core supply development.



FINDINGS – MWD Imported Supplies

- Existing imported supplies are at risk from various drivers of uncertainty.
- Maintaining existing imported supply reliability reduces the need for new core supply development and leverages years of investments.
- SWP supplies are highly susceptible to varying hydrologic conditions, climate change, and regulatory restrictions.
- Variability and capacity in SWP supplies provide opportunities to store water during wet periods for use in dry years, including Colorado River storage. Metropolitan's ability to distribute or store SWP supplies when they materialize will enhance the region's reliability, particularly the SWP Dependent Areas. The Colorado River system and Colorado River Aqueduct capacity do not offer the same opportunities concerning SWP storage.
- Shortages on the Colorado River will limit the reliability of Colorado River Aqueduct deliveries as a core supply in the future.



FINDINGS – Local Supply

- Maintaining existing and developing new local supplies is critical in helping meet the demand of Metropolitan Water
- Impacts to reliability are not achieved; the success of local supply development is Water
- Additional and future local supply

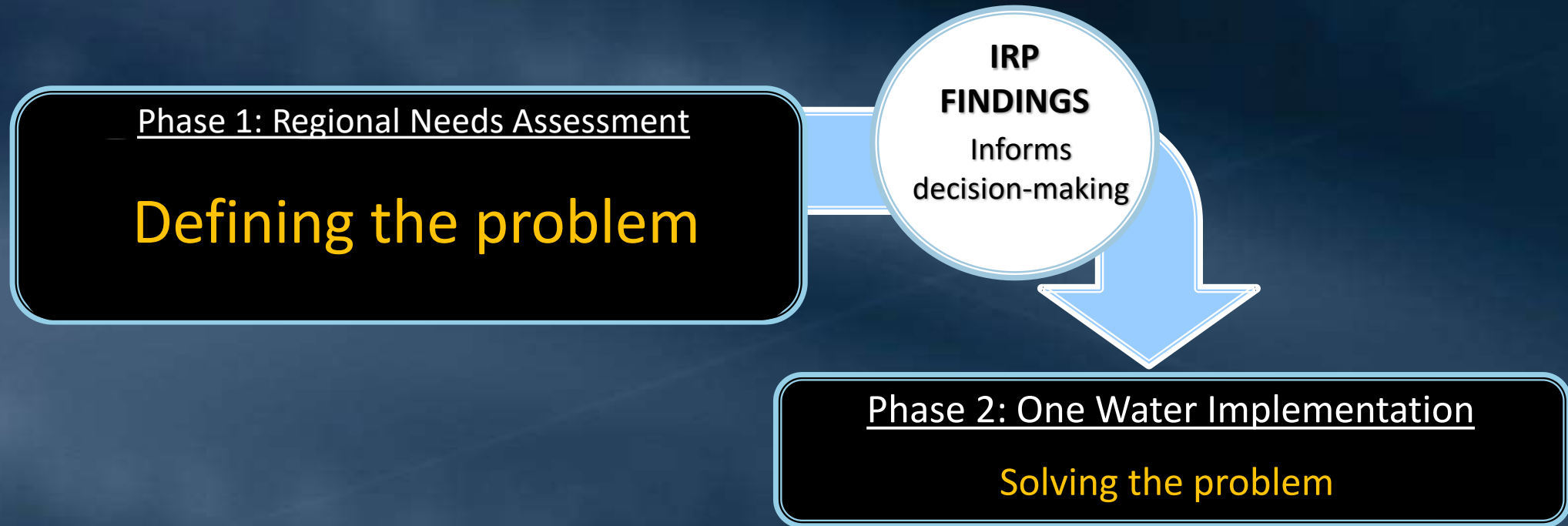
Demand on Metropolitan is affected by local supply production. Lower than assumed local supply will impact reliability and need for further investment



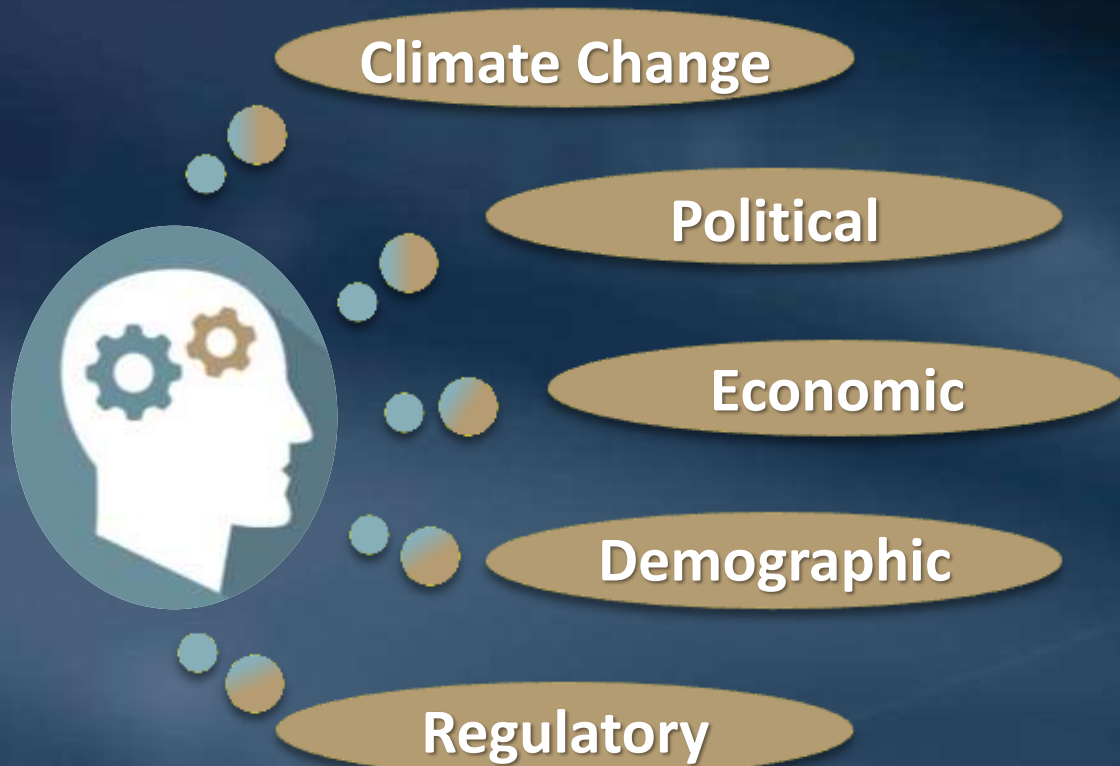
FINDINGS – Local Supply

- Maintaining existing and developing new local supplies is critical in helping manage demands on Metropolitan.
- Impacts to reliability occur if local supply assumptions are not achieved; therefore, it is important to track the progress of local supply development as one of the signposts in the One Water Implementation phase.
- Additional actions may be needed should existing and future local supply levels deviate from IRP assumptions.

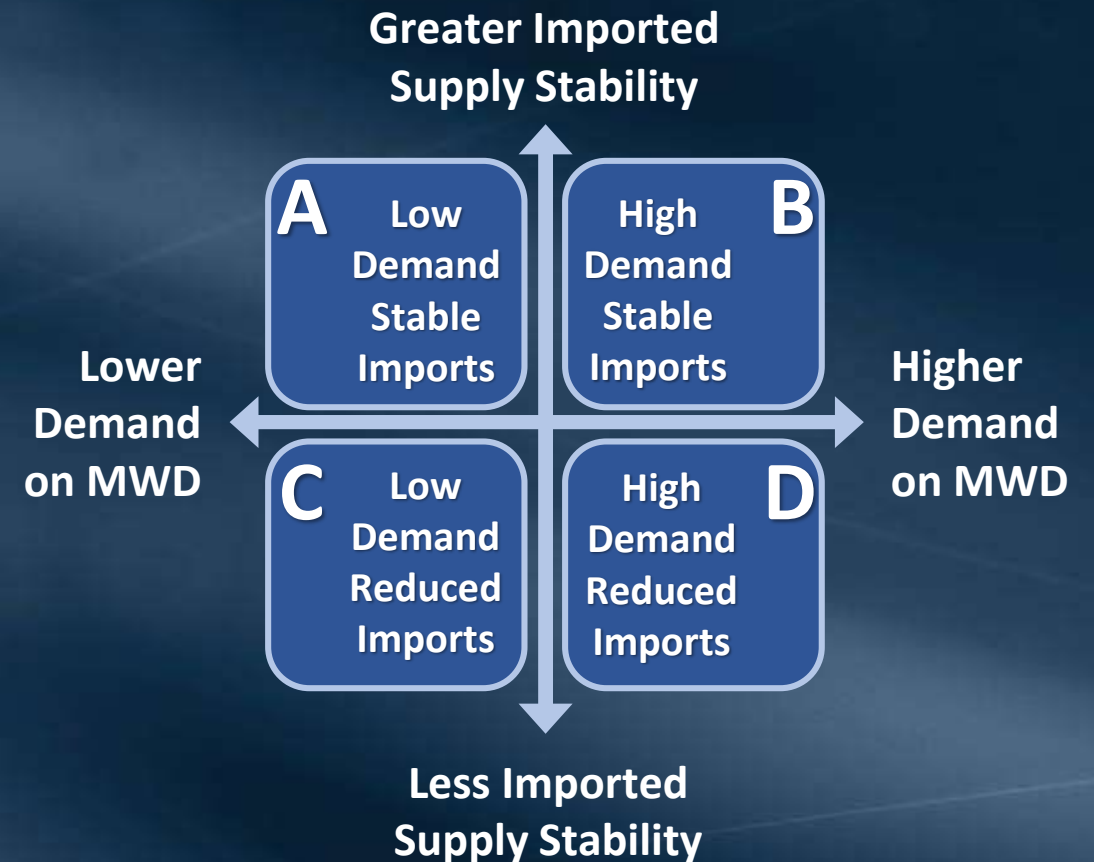
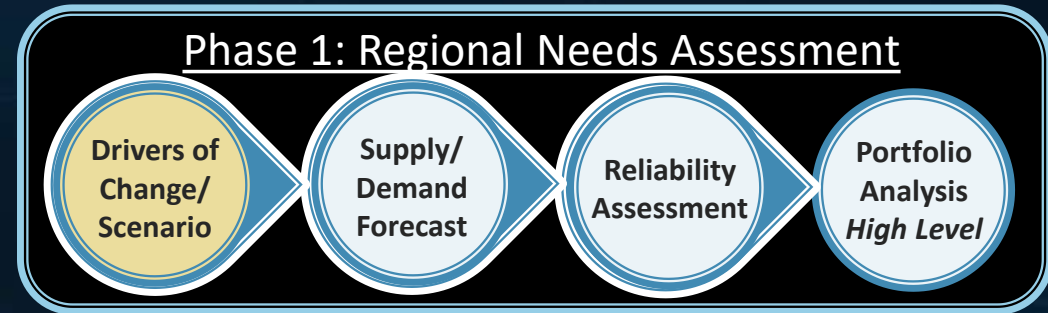
Stepping Through the Process



Uncertainties



Brainstormed Drivers of Change: Conducted surveys and workshops, and collaborated with MWD Board, member agency staff, climate and demand experts, and other interested parties



Assumptions

Phase 1: Regional Needs Assessment

Drivers of
Change/
Scenario

Supply/
Demand
Forecast

Reliability
Assessment

Portfolio
Analysis
High Level

Feedback Received

- Member Agencies
- Groundwater Basin Managers
- Climate Experts
- Demand Experts
- Other interested parties

Four Scenario Projections

Retail
Demand

Local Supply
Production

Imported
Water Supply

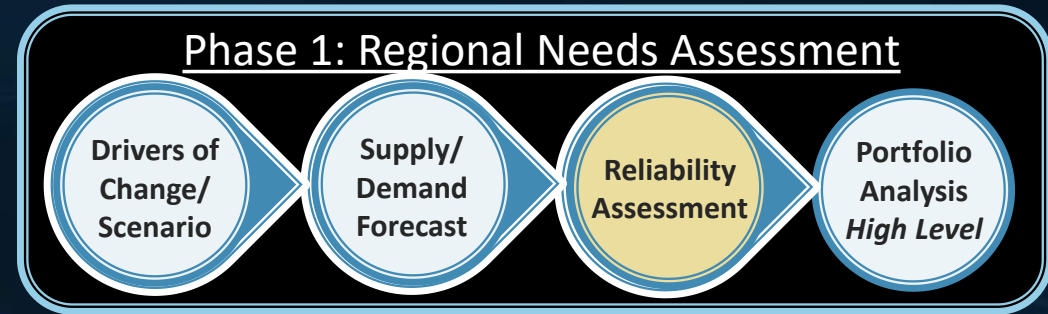
Difference
equates to
demand
on MWD

Model Results

- 25-year planning horizon
- Projected variable weather outcomes
- Based on 4 sets of assumptions for each Scenario

Quantification

Identifying Shortage and Surplus



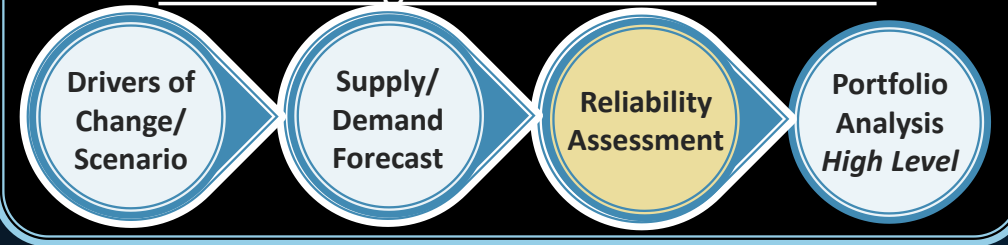
IRPSIM modeling provides:

- Magnitude and probabilities of net surpluses and shortages for each forecast year
 - *Net shortage refers to the magnitude and frequency of a supply-demand gap after taking from available storage*
 - *Net surplus refers to the magnitude and frequency of surplus after filling available storage*

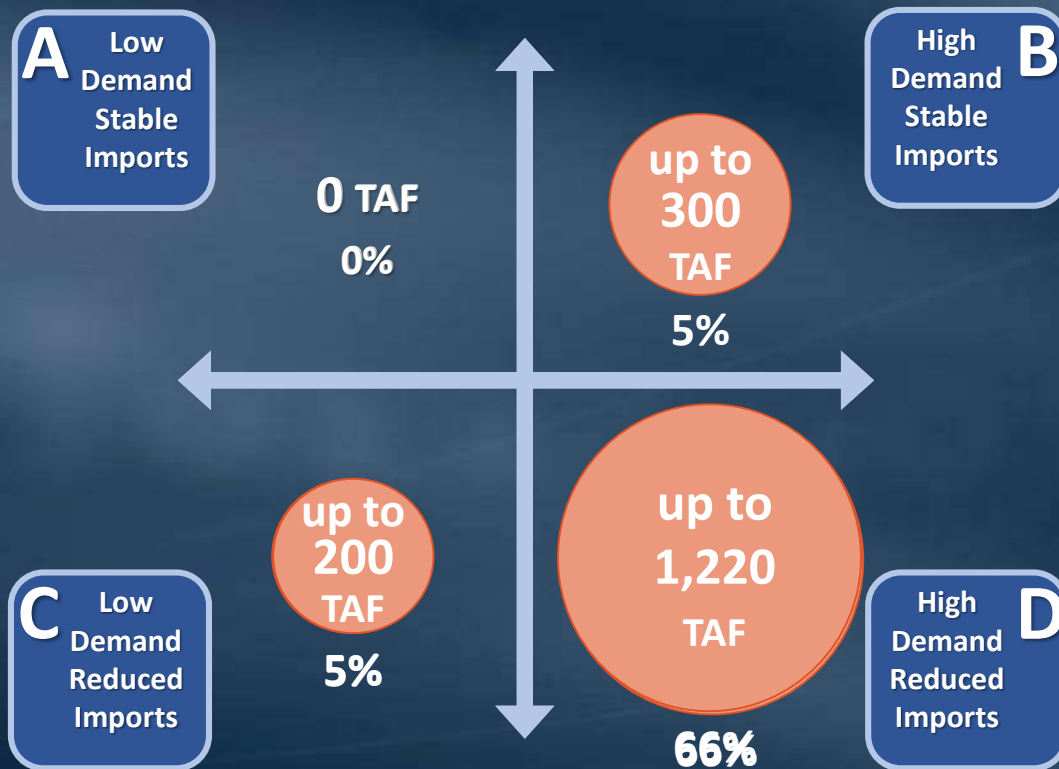
Quantification

Identifying Shortage and Surplus

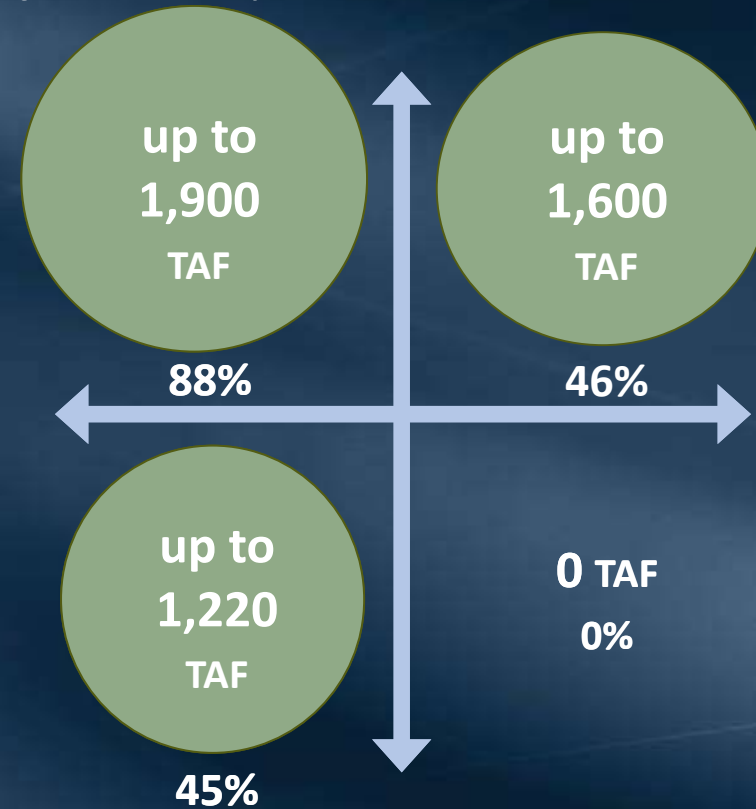
Phase 1: Regional Needs Assessment



Maximum Magnitude (TAF) and Frequency (%) of a Net Shortage in Forecast Year 2045



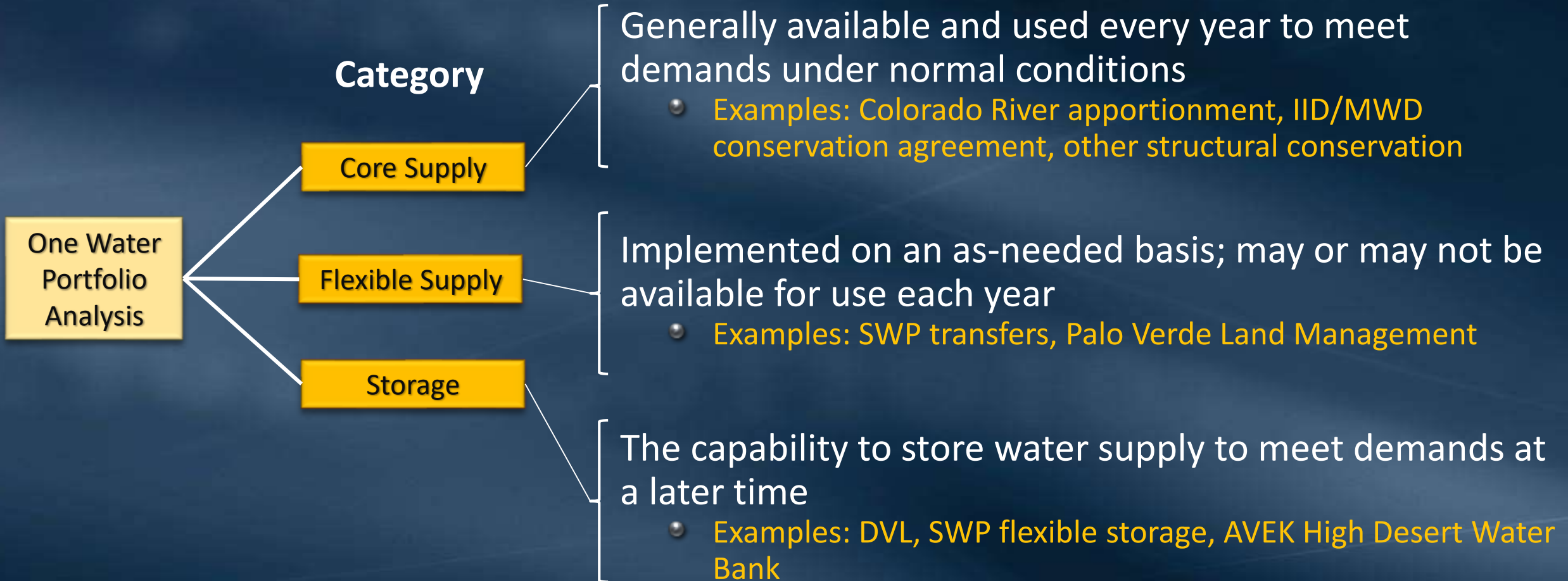
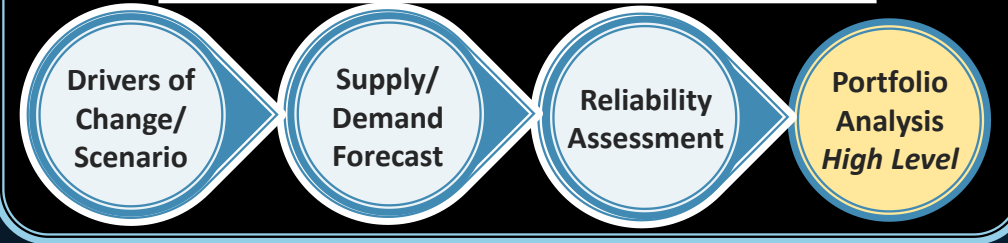
Maximum Magnitude (TAF) and Frequency (%) of a Net Surplus in Forecast Year 2045



Quantification

Examining Effectiveness of High-Level Supply Categories

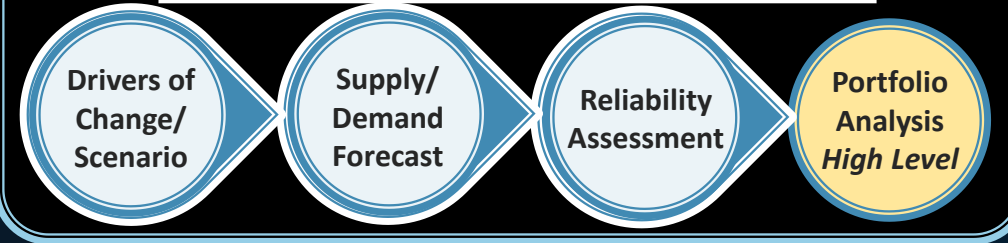
Phase 1: Regional Needs Assessment



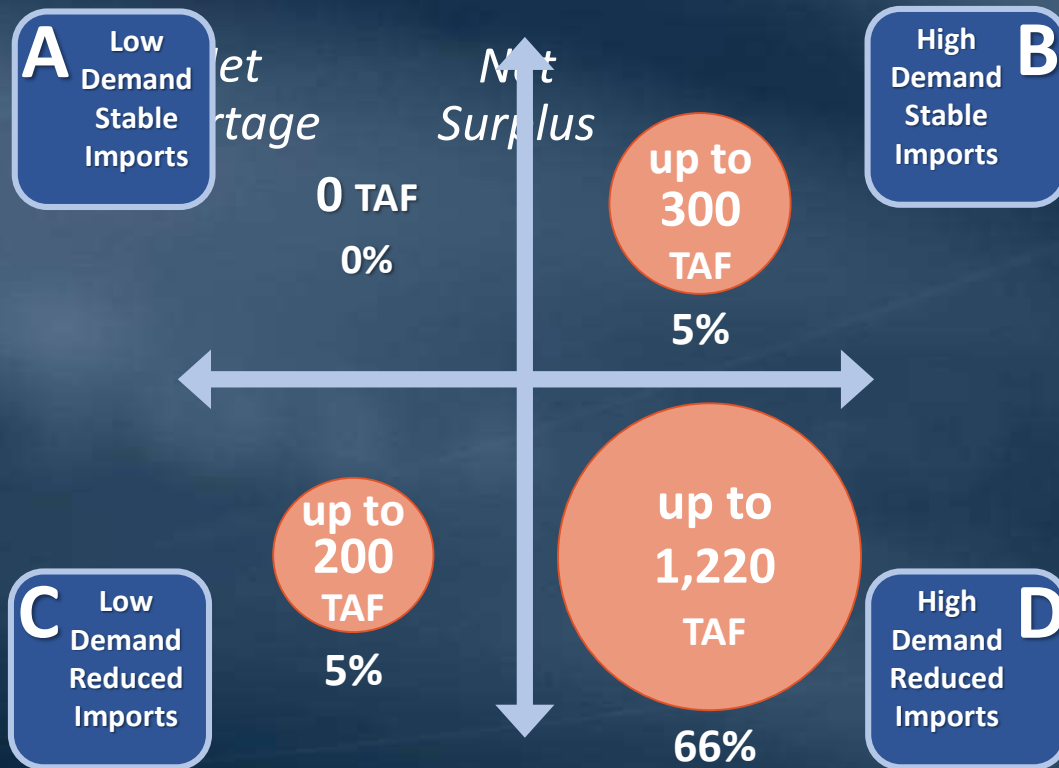
Quantification

Examining Effectiveness of High-Level Supply Categories

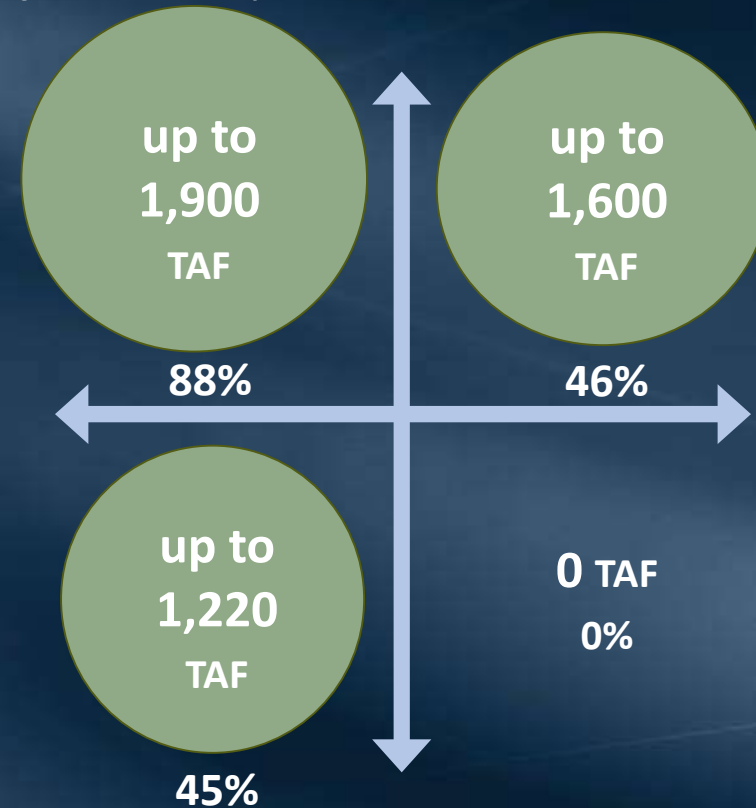
Phase 1: Regional Needs Assessment



Maximum Magnitude (TAF) and Frequency (%)
of a Net Shortage in Forecast Year 2045



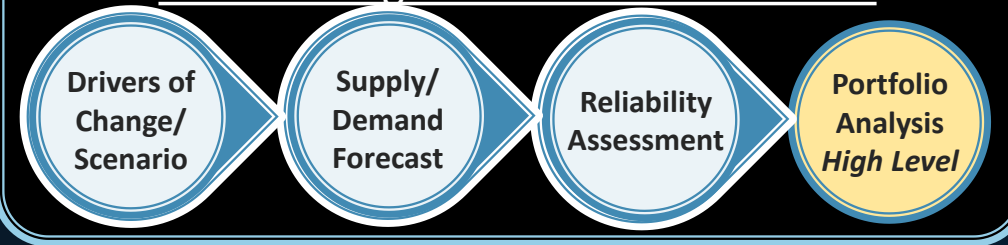
Maximum Magnitude (TAF) and Frequency (%)
of a Net Surplus in Forecast Year 2045



Quantification

Examining Effectiveness of High-Level Supply Categories

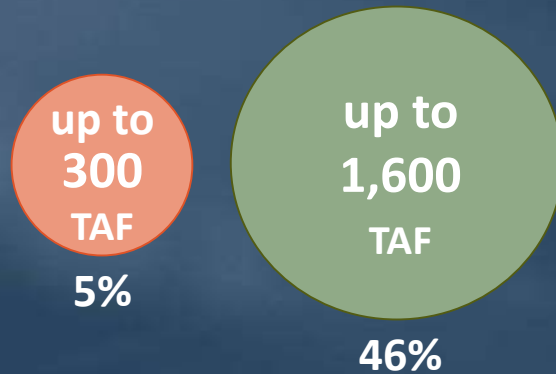
Phase 1: Regional Needs Assessment



Reliability Assessment Forecast Year 2045

Net
Shortage

Net
Surplus



High
Demand
Stable
Imports

B

Scenario B Portfolio Category Need – Not Combined Forecast Year 2045

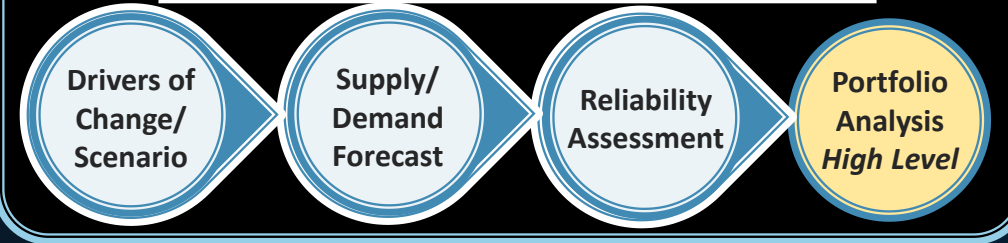
New Core Supply (TAF)	New Flexible Supply (TAF)	New Storage Capacity (TAF)
150	300	500 (250 TAFY put/take capacity)

Unrealistic and risky to depend on
such a large amount of flexible
supply in a dry year

Quantification

Examining Effectiveness of High Level Supply Categories

Phase 1: Regional Needs Assessment



Reliability Assessment Forecast Year 2045

Net
Shortage

Net
Surplus

High Demand
Stable Imports
B

up to
300
TAF
5%

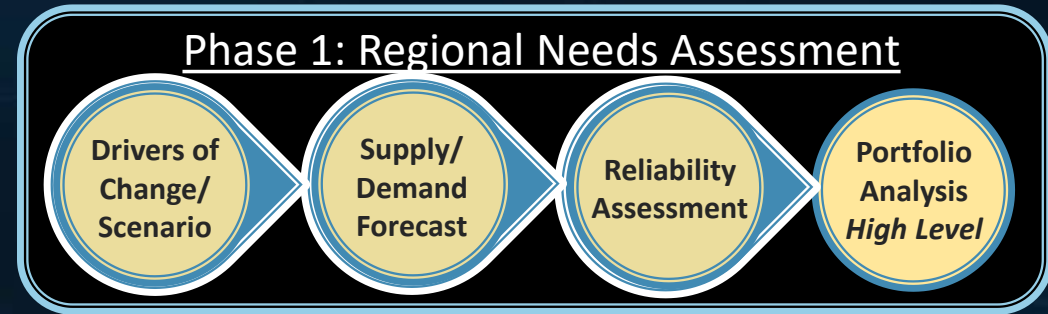
up to
1,600
TAF
46%

Scenario B Portfolio Category Need - Combined Forecast Year 2045

New Storage Capacity (TAF)	Flexible Supply (TAF)	Core Supply Needed by 2045 (TAF)
0	Capped at 100	100
100		70
250		30
500		30

No additional reduction in core supply if new storage capacity above 250 TAF

Open Process Seeking Input



Board

Member
Agencies

Interested
Parties

Next Steps

- Seeking IRP Special Committee recommendation to adopt the 2020 Integrated Water Resources Plan Regional Needs Assessment today
 - Follows two years of an open collaborative process with the Board, Member Agencies, and other interested parties
- Seek Board adoption of the 2020 Integrated Water Resources Plan Regional Needs Assessment on April 12, 2022
- Initiate Phase 2: One Water Implementation following adoption of the 2020 Integrated Water Resources Plan Regional Needs Assessment

Board Actions

- Option 1
 - Authorize the General Manager to adopt the 2020 Integrated Water Resources Plan Regional Needs Assessment.
- Option 2
 - Do not adopt the 2020 Integrated Water Resources Plan Regional Needs Assessment.

Staff Recommendation

- Option 1





● **Board of Directors**
Finance and Insurance Committee

4/12/2022 Board Meeting

7-2

Subject

Adopt the resolution finding that the ad valorem property tax rate limitation of Metropolitan Water District Act Section 124.5 is not applicable because it is essential to Metropolitan's fiscal integrity to collect ad valorem property taxes in excess of the limitation for fiscal years 2022/23 through 2025/26 or 2022/23 through 2023/24; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA

Executive Summary

Staff proposes that Metropolitan's Board make a determination that it is essential to its fiscal integrity to continue to collect property taxes in excess of the limits found in Metropolitan Water District Act (MWD Act) Section 124.5, based on the supporting financial information and the budget, rates, charge, and ten-year financial forecast's assumptions of property taxes being set at the current rate of 0.0035 percent. The proposal in this letter was first presented to the Board in an informational letter for the Finance and Insurance (F&I) Committee in February of this year. Since then, the F&I Committee and the Board have: (1) heard presentations; (2) received information and presentations related to the proposed biennial budget and rates; and the ten-year financial forecast; (3) held a public hearing; and (4) participated in workshops to address Metropolitan's financial conditions for the upcoming biennium and ten-year forecast. This letter summarizes the conditions and circumstances that support staff's recommendation. Additional information on the financial circumstances that support the proposed determinations is also available at: <https://www.mwdh2o.com/who-we-are/budget-finance/property-tax-rate-for-fy-202021/>, which contains information relating to the Board's last determination in 2020 and the currently proposed determination for fiscal years 2022/23 through 2025/26. This letter also contains an alternative option for the Board to make the determination for a shorter period of two years, from fiscal years 2022/23 through 2023/24.

Details

Background on Statutory Authority to Collect Property Taxes

Metropolitan has the statutory authority to levy property taxes to pay its expenses pursuant to the Metropolitan Water District Act (MWD Act). MWD Act, § 124. Since its creation, voters in Metropolitan's service area have approved the use of property taxes to pay for Metropolitan's major system investments and improvements, including for the Colorado River Aqueduct, other improvements, and for Metropolitan's participation in the State Water Project (SWP). More recently in Metropolitan's history, Section 124.5 of the MWD Act was enacted to provide a mechanism to limit Metropolitan's ad valorem property taxes, but it does not apply if the Board of Directors makes the required determination that it is essential to Metropolitan's fiscal integrity to collect property taxes in excess of that limit.

Section 124.5 limits property taxes to the amount needed to pay: (1) Metropolitan's general obligation bonded indebtedness (GO bonds); and (2) Metropolitan's portion of bonds used to finance construction of SWP facilities for the benefit of Metropolitan (Burns-Porter bonds). However, the Section also provides that "the restrictions contained in this Section *do not apply* if the board of directors of the district, following a hearing held to consider that issue, finds that *a tax in excess of these restrictions is essential to the fiscal integrity of the district*," and written notice is provided to the Legislature in the manner specified therein. (Emphasis added.) The Section 124.5 limitation, if applicable, does not affect the collection of property taxes to pay Metropolitan's general obligation bonds. If applicable, the Section does limit collection of property taxes to pay Metropolitan's

State Water Contract (SWC) obligations for the SWP. Since fiscal year (FY) 2013/14, the Board has determined that it was essential to Metropolitan's fiscal integrity to collect property tax revenues in excess of the Section 124.5 limit and has maintained the current 0.0035 percent property tax rate to ensure payment of a portion of the SWC obligations in excess of the statutory limit. The rate of 0.0035 percent is the lowest property tax rate ever collected by Metropolitan.

Summary of Process

Metropolitan staff and the Board have taken several steps leading to the currently proposed board action on the above-referenced subject. First, in February 2022, the Board approved a hearing date in order to satisfy the Section 124.5 determination procedural requirements and received informational Board Letter 9-2 explaining the proposed budget and rates that form the basis for staff's recommendation. Second, on February 24, 2022, staff provided notice to the Legislature of the Board's hearing regarding its review of the applicability of Section 124.5 ad valorem property tax limitation for fiscal years 2022/23 through 2025/26. Third, in March 2022, staff submitted informational Board Letter 9-2 with an accompanying presentation for the Board's consideration (**Attachment 1**), which covered the substantive bases for the recommended determination. **The Board also held the required public hearing, after it was duly noticed, on March 8, 2022,** and the proposed biennial budget for FYs 2022/23 and 2023/24, rates for CYs 2023 and 2024, and charges for CY 2023.

Staff also assembled a website that contains the key supportive documents for its findings and recommendation to the Board on this matter (<https://www.mwdh2o.com/who-we-are/budget-finance/property-tax-rate-for-fy-202021/> under the section *Review of Applicability of Property Tax Limit – FYs 22/23-25/26*). The information on the website was available to the public at least ten days prior to the hearing on March 8, 2022.

Summary of Substantive Review

Continuing an Ad Valorem Property Tax Rate at the Existing Rate is Essential to Fiscal Integrity

Metropolitan's current budget and rate proposal assumes the application of a 0.0035 percent property tax rate. The proposed budget for FYs 2022/23 and 2023/24 and rates and charges for calendar years (CYs) 2023 and 2024 presented to the Finance and Insurance Committee in February included a projection of approximately \$166 million per year in property tax revenues, which assumes the tax rate remains at 0.0035 percent, yet the initial biennial proposal still consisted of 8 percent overall rate increases for each year. The ten-year financial Forecast also uses a 0.0035 percent property tax rate assumption for its projections.

This letter recommends a Section 124.5 determination for the next four fiscal years, which covers a transitional financial and strategic planning period for Metropolitan. During the four-year period, Metropolitan will be completing the 2020 Integrated Resources Plan, continuing with a rate refinement review process, undertaking a long-term financial plan, and addressing Metropolitan's role as it approaches 100 years. Accordingly, the four-year proposed determination provides certainty with regards to property tax revenue assumptions for those processes and better aligns with the inherent volatility of Metropolitan's water revenues under its current rate structure, which spans more than a two-year biennial budget period.

The March 2022 Board Letter 9-2 included a detailed analysis of Metropolitan's historical revenues, including property taxes, SWP costs, and the meaning of "essential to fiscal integrity" in Section 124.5. All historical data and analysis are incorporated herein by reference.

Considering the significance of achieving a financially healthy mix between variable and fixed revenue sources, it is important that the Board maintain fixed sources in line with growing increased SWP fixed costs, especially at a time when Metropolitan and its member agencies are working to reduce the overall rate increases from 8 percent per year to a rate closer to 5 percent per year. Property taxes provide revenue that was previously approved by the service area voters for the purpose of paying Metropolitan's SWC obligations, which are projected to be approximately \$699 million and \$781 million for FYs 2022/23 and 2023/24, respectively. If the property tax rate continues at its current 0.0035 percent rate, property tax revenue would pay about 22 percent of that SWC obligation. If the property tax rate were reduced to the Section 124.5 limits, property tax revenue would pay less than one-tenth of 1 percent of the SWC obligation. Setting a tax rate in excess of the limits of Section 124.5 significantly contributes to strengthening Metropolitan's current and long-term fiscal health and stability. It maintains diversity in fixed revenue sources, balancing the mechanisms for funding the immediate and anticipated obligations of the SWC. It also helps maintain Metropolitan's creditworthiness as measured by various national

credit rating agencies through their established methodologies. Maintaining Metropolitan's fixed revenue sources also provides the Board with flexibility to fund Metropolitan's SWC obligations.

Maintenance of fixed revenues also supports Metropolitan's financial policies. Metropolitan has adopted a set of financial policies, including revenue bond coverage and fixed-charge coverage targets, capital paid from revenues (Pay-As-You-Go, or PAYGO), and reserve policies that support Metropolitan's strong credit ratings. An important element of these financial policies is a diversity of revenue sources and fixed revenue sources. Utilities funded primarily from variable volumetric charges face economic risks because volumes of deliveries are subject to declines in revenue based on hydrology and consumption changes.

Property taxes are also important to fiscal health because they help Metropolitan equitably distribute the costs of Metropolitan's services. As a wholesale water agency, Metropolitan's customers are its 26 member agencies. Each member agency pays volumetric rates based on the amount of water Metropolitan sells and delivers to it. In contrast, property taxes are levied directly on residents and businesses that are property owners within Metropolitan's service area. All property owners within Metropolitan's service area benefit from the water system that allows water to be sold and delivered in Southern California, thereby enhancing those properties. Property taxes ensure that residences and businesses pay a modest share of the costs of maintaining and improving the Metropolitan water delivery system.

Four-Year Determination of the Applicability of the MWD Act Section 124.5 Limitation is Appropriate

Staff proposes that a four-year determination of the applicability of Section 124.5 is appropriate given the:

(1) flexibility required to manage Metropolitan's finances during current drought conditions; (2) time required to complete ongoing financial and strategic planning efforts; (3) inherent volatility found in Metropolitan's financial profile; and (4) scope of financial planning timeframes.

First, Metropolitan is currently managing an ongoing drought emergency, during which it is essential to maintain financial flexibility to ensure the reliability of Metropolitan's services. It is essential that Metropolitan maintain its dedicated fixed revenue sources to pay at least a portion of the SWC costs the voters approved and intended for Metropolitan to pay with property taxes, thereby freeing up volumetric revenues to address current emergency drought conditions.

Second, Metropolitan is currently undergoing and commencing various financial and strategic planning processes, and it is appropriate to fix the Section 124.5 determination during this timeframe required to complete and implement those processes. For example, Metropolitan is undergoing a rate refinement review process that is likely to span longer than the next biennial budget cycle, and in that process, the Board will consider whether "Property Tax Alternatives" should be incorporated into Metropolitan's rate structure. Similarly, the ten-year term for the member agencies' Purchase Orders and the applicability of the Tier 2 Supply rate ends December 31, 2024. The Board will need to consider whether to adopt any alternative to the Purchase Order structure. Accordingly, maintaining a set determination through the time period of these significant reviews provides more financial certainty to Metropolitan investors. The four-year term will also provide the Board with time to consider whether Section 124.5 continues to be necessary or appropriate given updated circumstances and following any updates to Metropolitan's rate structure. The additional time of this determination will also allow the Board to discuss whether to seek legislative amendment of Section 124.5 to establish a different standard than what is currently required.

Third, the recommended four-year timeframe of this determination better aligns with the inherent volatility of Metropolitan's water revenues, which spans more than a two-year biennial budget period.

Fourth, the timeframe of a four-year determination is within the scope of typical time horizons used in the financial sector for various projections and analysis. For example, three- to five-year business plans, five-year or greater coverage projections for revenue bond disclosures, Fitch's rating stress-test scenarios covering a five-year horizon, and in fact, Metropolitan's own ten-year financial forecast all support the reasonableness of the timeframe of this proposed determination.

This letter also contains an alternative option for the Board to make a determination only for the next biennium. Although the shorter period would not cover the anticipated period of time in which Metropolitan will be engaging in key strategic planning, it would cover the time period of the upcoming biennial budget.

Policy

Metropolitan Water District Act Section 124: Taxes, Levy and Limitation

Metropolitan Water District Act Section 124.5: Ad Valorem Tax Limitation

Metropolitan Water District Act Section 130: General Powers to Provide Water Services

Metropolitan Water District Act Section 133: Fixing of Water Rates

Metropolitan Water District Act Section 134: Adequacy of Water Rates; Uniformity of Rates Metropolitan Water District Act Section 134.5: Water Standby or Availability of Service Charge

Metropolitan Water District Administrative Code Section 4301: Cost of Service and Revenue Requirement

Metropolitan Water District Administrative Code Section 4304: Apportionment of Revenues and Setting of Water Rates

Metropolitan Water District Administrative Code Section 5107: Biennial Budget Process

Metropolitan Water District Administrative Code Section 5109: Capital Financing

Metropolitan Water District Administrative Code Section 5112: State Water Contract Payments

Metropolitan Water District Administrative Code Section 5200(b): Funds Established

Metropolitan Water District Administrative Code Section 11104: Delegation of Responsibilities

California Environmental Quality Act (CEQA)

CEQA determination for Option #1:

The proposed action is not defined as a project under CEQA because it involves continuing administrative activities, such as general policy and procedure making (Section 15378(b)(2) of the State CEQA Guidelines). In addition, the proposed action is not subject to CEQA because it involves other government fiscal activities, which do not involve any commitment to any specific project which may result in a potentially significant physical impact on the environment. (Section 15378(b)(4) of the State of CEQA Guidelines).

CEQA determination for Option #2:

None required

CEQA determination for Option #3:

None required

Board Options

Option #1

Adopt the resolution finding that for fiscal years 2022/23 through 2025/26, the ad valorem property tax rate limitation of Metropolitan Water District Act Section 124.5 is not applicable because it is essential to Metropolitan's fiscal integrity to collect ad valorem property taxes in excess of the limitation (**Attachment 2**)

Fiscal Impact: Provides the foundation for collection of property taxes over the Section 124.5 limitation to meet targeted budgetary needs related to qualified cost recovery at an average of approximately \$171 million per fiscal year over the next four fiscal years.

Business Analysis: Making the determination pursuant to Section 124.5 allows the Board to set a rate in August of each fiscal year from 2022/23 through 2025/26, in an amount that exceeds the Section 124.5 limits. The Board is not setting a tax rate with this action.

Option #2

Adopt the resolution finding that for fiscal years 2022/23 and 2023/24, the ad valorem property tax rate limitation of Metropolitan Water District Act Section 124.5 is not applicable because it is essential to Metropolitan's fiscal integrity to collect ad valorem property taxes in excess of the limitation (**Attachment 3**)

Fiscal Impact: Provides the foundation for collection of property taxes over the Section 124.5 limitation to meet targeted budgetary needs related to qualified cost recovery at an average of approximately \$166 million per fiscal year.

Business Analysis: Making the determination pursuant to Section 124.5 allows the Board to set a rate in August of each fiscal year from 2022/23 through 2023/24, in an amount that exceeds the Section 124.5 limits. The Board is not setting a tax rate with this action.

Option #3

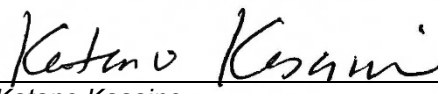

Make no determination and allow the Section 124.5 limitation to apply.

Fiscal Impact: If the Section 124.5 limitation applies and property tax revenues are reduced, revenue requirements from rates and charges will need to increase by an additional 9 percent to recover costs.

Business Analysis: Without the necessary finding, the Board may not set rates that exceed the Section 124.5 limit, thereby requiring revisions to the Proposed Biennial Budget for fiscal years 2022/23 and 2023/24 and the rates and charges proposed for calendar years 2023 and 2024.

Staff Recommendation

Option #1

	4/6/2022
Katano Kasaine	Date
Chief Financial Officer/ Assistant General Manager	
	4/6/2022
Adel Hagekhalil	Date
General Manager	

Attachment 1 – March 8, 2022 MWD Board Letter 9-2 on the Review of the Applicability of the Metropolitan Water District Act Section 124.5 Ad Valorem Property Tax Limitation for Fiscal Years 2022/23 through 2025/26; and the Accompanying Presentation

Attachment 2 – Resolution Finding that for Fiscal Years 2022/23 through 2025/26 the Ad Valorem Property Tax Limitation in Section 124.5 of the Metropolitan Water District Act is not Applicable Because it is Essential to Metropolitan's Fiscal Integrity to Collect Ad Valorem Property Taxes in Excess of that Limitation (Option 1)

Attachment 3 – Resolution Finding that for Fiscal Years 2022/23 and 2023/24 the Ad Valorem Property Tax Limitation in Section 124.5 of the Metropolitan Water District Act is not Applicable Because it is Essential to Metropolitan's Fiscal Integrity to Collect Ad Valorem Property Taxes in Excess of that Limitation (Option 2)

Ref# cfo12682039



THE METROPOLITAN WATER DISTRICT
OF SOUTHERN CALIFORNIA

INFORMATION

- **Board of Directors**
Finance and Insurance Committee

3/8/2022 Board Meeting

9-2

Subject

Review of the applicability of the Metropolitan Water District Act Section 124.5 ad valorem property tax limitation for fiscal years 2022/23 through 2025/26

Executive Summary

Metropolitan has the statutory authority to levy property taxes to pay its expenses pursuant to the Metropolitan Water District Act (MWD Act). MWD Act, § 124. Since its creation, voters in Metropolitan's service area have approved the use of property taxes to pay for Metropolitan's major system investments and improvements, including for the Colorado River Aqueduct (CRA), other improvements, and for Metropolitan's participation in the State Water Project (SWP). More recently in Metropolitan's history, Section 124.5 of the MWD Act was enacted to provide a mechanism to limit Metropolitan's ad valorem property taxes, but it does not apply if the Board of Directors makes the required determination that it is essential to Metropolitan's fiscal integrity to collect property taxes in excess of that limit.

Section 124.5 limits property taxes to the amount needed to pay: (1) Metropolitan's general obligation bonded indebtedness (GO bonds), and (2) Metropolitan's portion of bonds used to finance construction of SWP facilities for the benefit of Metropolitan (Burns-Porter bonds). However, the Section also provides that "the restrictions contained in this Section *do not apply* if the board of directors of the district, following a hearing held to consider that issue, finds that *a tax in excess of these restrictions is essential to the fiscal integrity of the district*," and written notice is provided to the Legislature in the manner specified therein. (Emphasis added.) The Section 124.5 limitation, if applicable, does not affect the collection of property taxes to pay Metropolitan's general obligation bonds. If applicable, the Section does limit collection of property taxes to pay Metropolitan's State Water Contract (SWC) obligations for the SWP. Since fiscal year (FY) 2013/14, the Board has determined that it was essential to Metropolitan's fiscal integrity to collect property tax revenues in excess of the Section 124.5 limit and has maintained the current 0.0035 percent property tax rate to ensure payment of the SWC obligations in excess of the statutory limit. The rate of 0.0035 percent is the lowest property tax rate ever collected by Metropolitan.

Metropolitan's current budget and rate proposals also assume application of a 0.0035 property tax rate. The proposed budget for FYs 2022/23 and 2023/24 and rates and charges for calendar years (CYs) 2023 and 2024 presented to the Finance and Insurance Committee in February included a projection of approximately \$166 million per year in property tax revenues, which assumes the tax rate remains at 0.0035 percent. The Ten-Year Financial Forecast also uses a 0.0035 percent property tax rate assumption for its projections.

This letter recommends a Section 124.5 determination for the next four fiscal years, which covers a transitional financial and strategic planning period for Metropolitan. During the four-year period, Metropolitan will be completing the 2020 Integrated Resources Plan, continuing with a rate refinement review process, undertaking a long-term financial plan, and addressing Metropolitan's role as it approaches 100 years. Accordingly, the four-year proposed determination provides certainty with regards to property tax revenue assumptions for those processes and better aligns with the inherent volatility of Metropolitan's water revenues under its current rate structure, which spans more than a two-year biennial budget period.

The Board will hold the required public hearing on **March 8, 2022**, and it will consider whether to make the necessary finding regarding the applicability of Section 124.5 on **April 12, 2022**, along with its consideration of the proposed biennial budget for FYs 2022/23 and 2023/24, rates for CYs 2023 and 2024, and charges for CY 2023. Notice of the hearing has been published for the public and provided to the Legislature. The public may provide comments and listen to the hearing using the information provided at <https://mwdh2o.legistar.com/Calendar.aspx>.

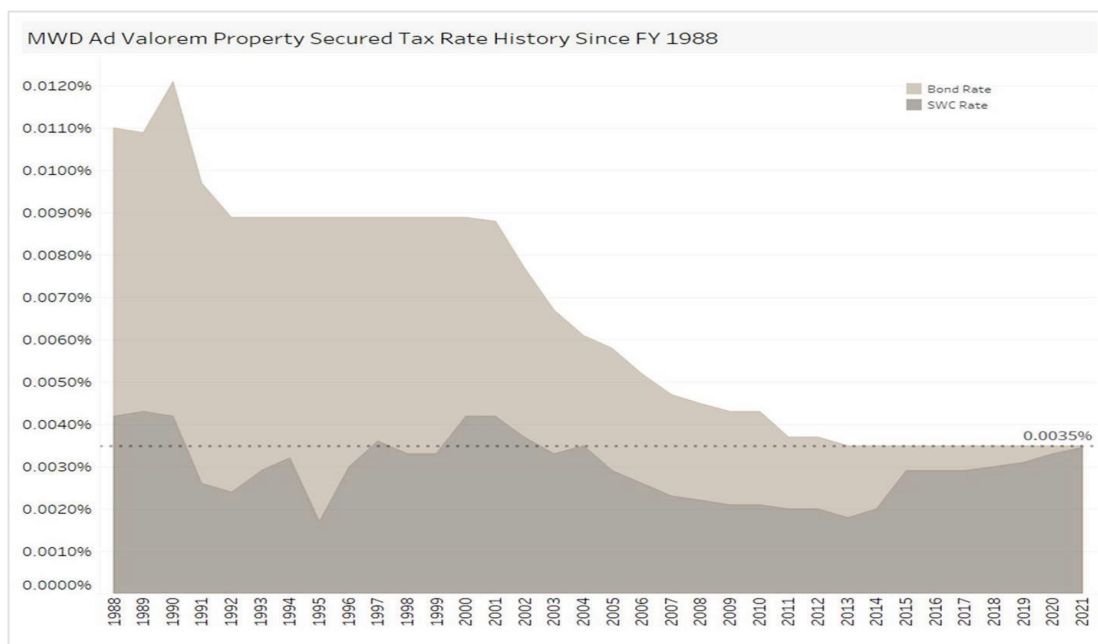
Details

History of Metropolitan's Property Tax Revenues

The shift in revenue sources from primarily property taxes to primarily water revenues provides a backdrop to Metropolitan's history. The MWD Act authorizes Metropolitan to "levy and collect taxes on all property within the district for the purposes of carrying on the operations and paying the obligations of the district," pursuant to Section 124. Prior to 1942, Metropolitan was constructing the CRA and had no water to sell; hence, all revenues came from property taxes approved by the voters for the CRA. In FY 1941/42, when Metropolitan began to sell water, most of Metropolitan's revenues were still derived from property taxes. In 1960, Metropolitan executed its SWC and the voters approved the collection of property taxes to pay for Metropolitan's SWC costs. By 1974, 50 percent of Metropolitan's revenues came from water transactions, with the remainder derived primarily from property taxes.

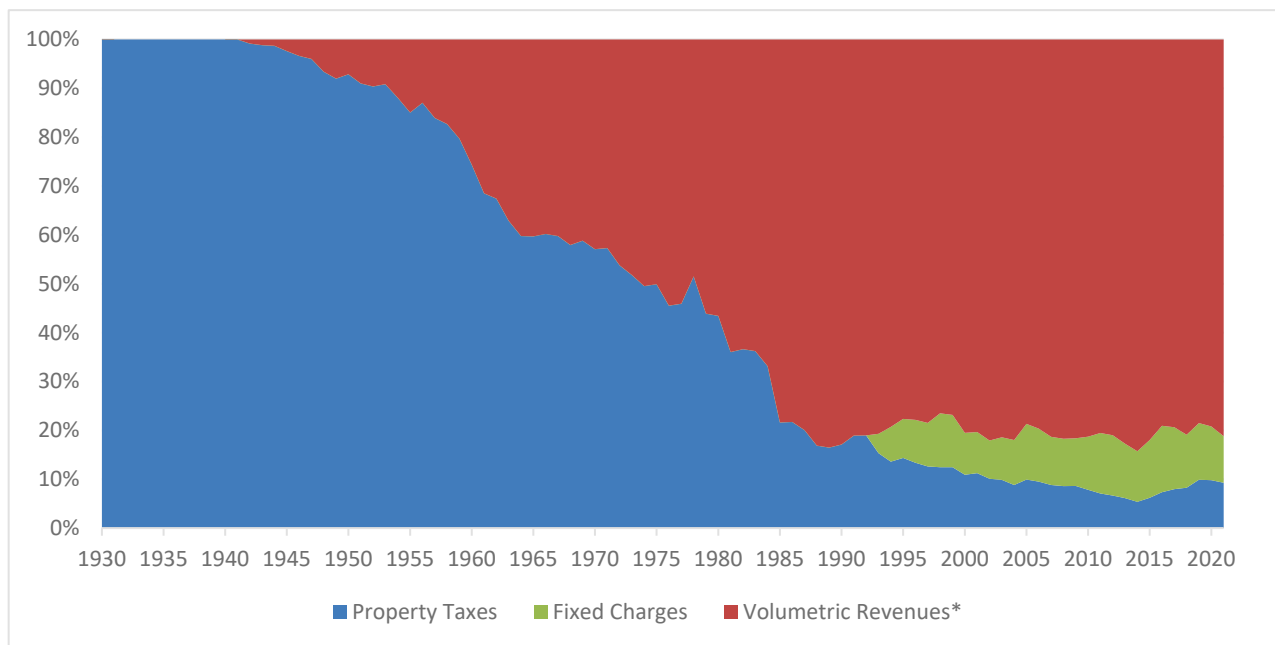
In 1984, the Legislature adopted SB 1445, amending the MWD Act to add Section 124.5, among other sections. Effective FY 1990/91, Section 124.5 limited Metropolitan's annual property tax levy at the amount needed to pay the total of annual debt service on the GO bonds and Burns-Porter bonds, unless after notice and hearing the Board finds that collecting property tax revenues beyond that limitation is essential to the District's fiscal integrity. In 1984, when SB 1445 was enacted, Metropolitan collected property taxes at the rate of 0.0237 percent, which resulted in revenues below the Section 124.5 limit at the time. However, as bond indebtedness on GO bonds and Burns-Porter bonds are paid down, the Section 124.5 limit also decreases and reduces the amount of property tax revenues that can be levied. At the same time, SWC costs continue to increase. Figure 1 shows Metropolitan's history of declining property tax rates.

Figure 1: Historical MWD Ad Valorem Property Tax Rates



Tax levy limits in Section 124.5 accelerated the shift of Metropolitan's revenues away from fixed property taxes to variable revenues. Since FY 2013/14, Metropolitan's Board has adopted a determination that it is essential to fiscal integrity to exceed the Section 124.5 limit and set the property tax rate at 0.0035 percent, approximately 1/7 of the 0.0237 percent rate in place at the time Section 124.5 was passed. In FY 2022/23, property taxes are projected to be about 9 percent of total revenue sources with water revenues from transactions accounting for about 78 percent of total revenues. Total volumetric revenues, which include power sales, interest income and other miscellaneous revenues, are about 82 percent of total revenues. Fixed Charges, which include the Readiness-To-Serve Charge and Capacity Charge, are about 9 percent of total revenues. **Figure 2** shows the history of the revenue source mix since 1930.

Figure 2: Historical Revenue Sources



* Includes water sales, exchanges, and wheeling

Background Regarding State Water Contract Obligations and Voter Approval of Property Taxes

Metropolitan is one of 29 agencies that contract with the State for participation in the SWP. Metropolitan's SWC was the first contract executed, and the prototype for the State Water Contracts that followed, and its terms were validated by the California Supreme Court in *Metropolitan Water Dist. v. Marquardt* (1963) 59 Cal.2d 159. Metropolitan is the largest participant in the SWP in terms of the number of residents in its service area, the allocation of SWP water that it has contracted to potentially receive, and the allocation of SWP infrastructure and power costs. As a result, Metropolitan pays the highest percentage of total annual payments made to the Department of Water Resources of all the agencies with State Water Contracts.

Under the SWC, Metropolitan is obligated to pay allocable portions of the cost of construction of the SWP system and ongoing operating and maintenance costs. Metropolitan is obligated to pay these fixed costs regardless of quantities of water available and received from the project. In contrast, a smaller portion of payments are based on actual deliveries of water received for the costs of power and offsets for credits received. **Approximately 70 percent of Metropolitan's SWC obligations are fixed and unrelated to the quantity of water delivered.**

The ability of State Water Contractors to levy property taxes sufficient to satisfy their SWC obligations was a foundation of the Burns-Porter Act, and a factor relied on by California voters in approving it. *Goodman v. County of Riverside* (1983) 140 Cal.App.3d 900, 905-06; see also, *Alameda County Flood Control v. Department*

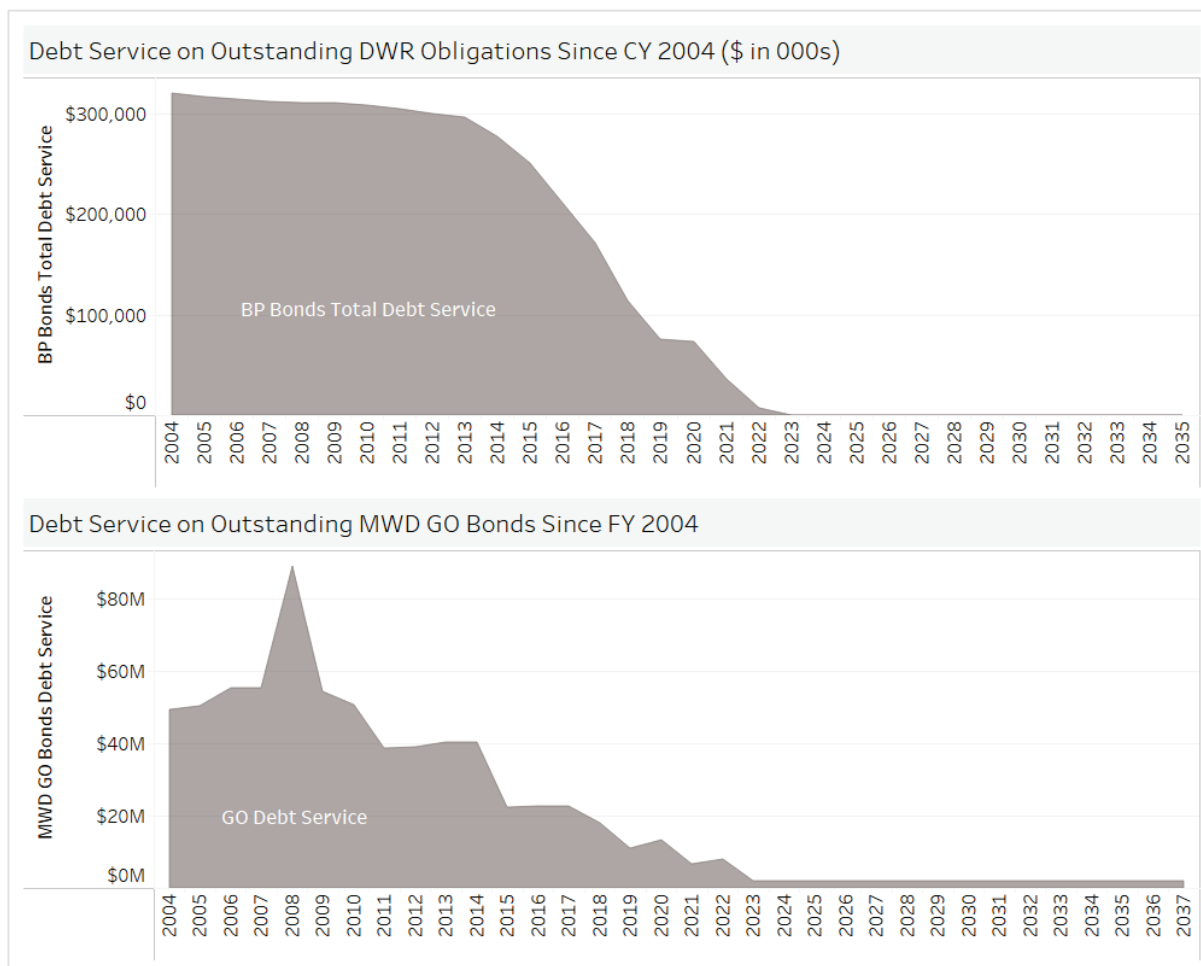
of Water Resources, *Antelope Valley-East Kern Water Agency* (2013) 213 Cal. App. 4th 1163. In approving the Burns-Porter Act, California’s voters approved “an indebtedness in the amount necessary for building, operating, maintaining, and replacing the [State Water] Project, and they intended that the costs were to be met by payments from local agencies with water contracts. Further, the voters necessarily approved the use of local property taxes whenever the boards of directors of the agencies determined such use to be necessary to fund their water contract obligations” *Goodman*, 140 Cal.App.3d at 910. Thus, SWC obligations are voter-approved indebtedness that may be funded by override property taxes (taxes above the one percent general tax limit established by Article XIII A (Proposition 13) of the State constitution).

Many SWP contractors substantially rely on property taxes to satisfy their SWC obligations. Metropolitan is unique in that since FY 1990/91, and unless otherwise determined by the Board, Section 124.5 has reduced its property taxes to a declining balance of its share of the Burns-Porter bonds—which has become an increasingly smaller portion of Metropolitan’s SWC payment obligation.

Review of State Water Project Costs

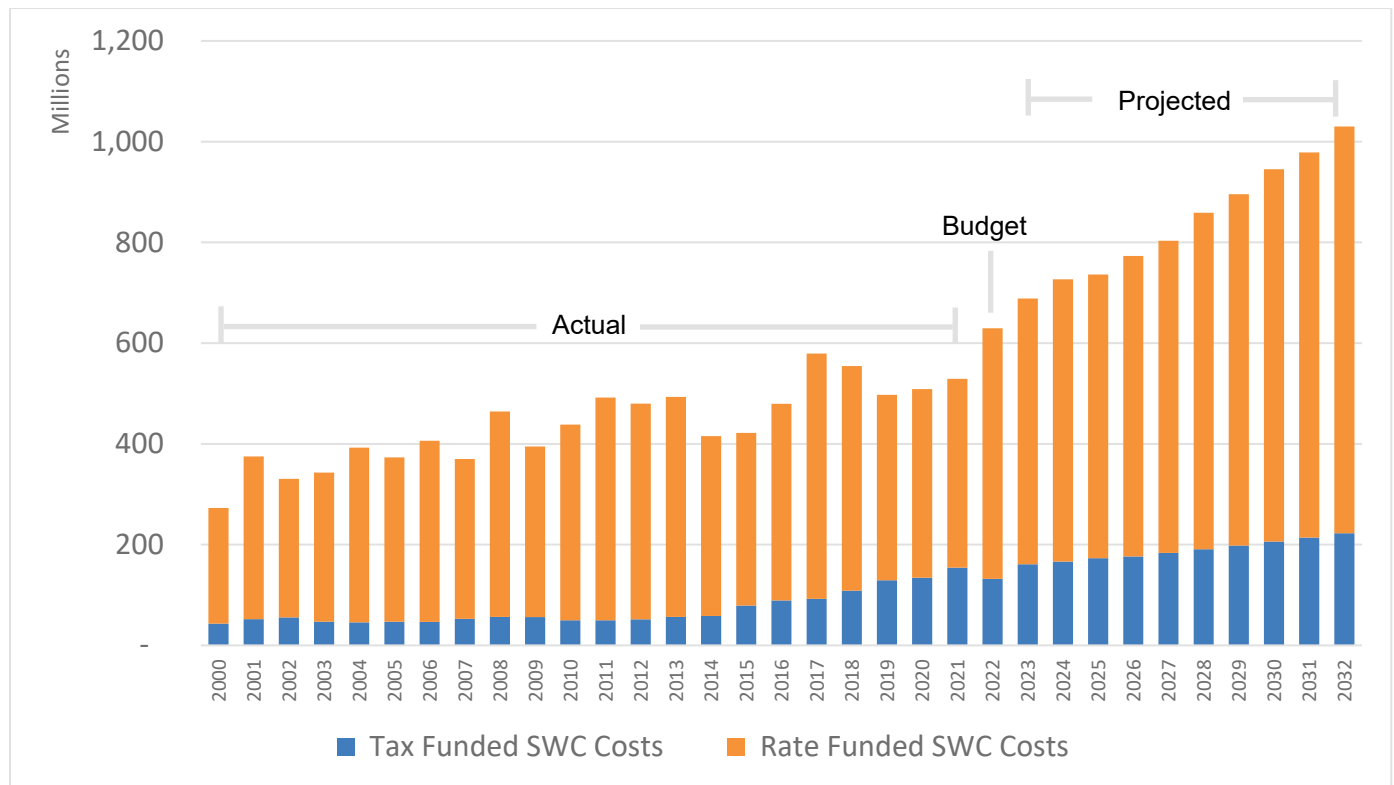
Prior to FY 2013/14, under Section 124.5’s restriction, the property tax rate had decreased steadily in line with the decreasing debt service for the GO bonds and Burns-Porter bonds. The property tax rate would continue to decrease as the GO bonds and Burns-Porter bonds are ultimately paid off; provided the Board does not make a determination that the Section 124.5 limitation would not apply. Since FY 2013/14, the Board has determined that it was essential to Metropolitan’s fiscal integrity to maintain the current 0.0035 percent property tax rate. **Figure 3** shows the declining debt service that is the subject of Section 124.5, shown since 2004.

Figure 3: Debt Service on Outstanding DWR Burns-Porter Bonds and MWD GO Bonds



Conversely, Metropolitan's SWC payment obligations have been increasing and are expected to continue to increase. For example, the State is expecting substantial costs associated with repair and replacement of the 50-year-old SWP infrastructure, such as the Oroville Spillway repair, work necessary to address subsidence damage, and California Aqueduct improvements. **Figure 4** shows the portion of SWC costs paid with property tax revenues, assuming Metropolitan maintains the 0.0035 percent in excess of the Section 124.5 limitation.

Figure 4: State Water Contract Costs



Proposed Budget SWC costs of \$688.7 million in FY 2022/23 and \$726.7 million in FY 2023/24 comprise approximately 35 percent of Metropolitan's annual expenditures and are Metropolitan's single largest cost category. If property taxes are reduced to Section 124.5 limits, in FY 2022/23 the amount of property taxes available to satisfy SWC obligations will only be approximately \$0.6 million, and the proportion of SWC obligations that would be covered would be less than one tenth of 1.0 percent, even though the voters approved use of the property taxes to pay for Metropolitan's SWC obligations.

What is the Meaning of "Essential to Fiscal Integrity" in Section 124.5?

The determination of fiscal integrity is a determination of financial health and strength. Although the Legislature set a limit on property taxes, it left the determination of necessity for fiscal integrity to the discretion of the Board. Section 124.5 does not define the meaning of "essential to fiscal integrity." Merriam-Webster defines "essential" in many ways, including "of the utmost importance," and "something necessary, indispensable, or unavoidable." "Fiscal" simply means it is related to a financial issue. And "integrity" is defined by Merriam-Webster as "an unimpaired condition: soundness," or "the quality or state of being complete or undivided." (Definitions taken from www.merriam-webster.com/dictionary.) Accordingly, "essential to fiscal integrity" is reasonably interpreted to mean important or valuable for financial soundness or to financial health/condition. "Essential to fiscal integrity" does not mean an act is necessary to avoid an emergency financial crisis. Nowhere in Section 124.5 does the Legislature reference a need for the existence of a fiscal "emergency."

In the absence of a statutory definition of the phrase “essential to fiscal integrity,” Metropolitan has looked to financial industry standards and its own financial policies to evaluate whether continuing the current fixed property tax revenues is essential to its fiscal integrity.

Financial Industry Guidance for Evaluating Fiscal Integrity

Credit rating agencies provide criteria for rating debt issued by public agencies based on various financial, demographic, legal and socio-economic factors, among others. Essentially, ratings provide an overview of an agency’s financial health, i.e., fiscal integrity, to assess risk exposure generally and (in this instance) an agency’s ability to repay its debt obligations. In the previous report to the Board on this matter, staff cited Fitch Rating’s U.S. Water and Sewer Rating Criteria, published November 29, 2018. In it, Fitch set forth relevant criteria that provided guidance on this matter. Whereas Fitch was more explicit with some of its recommended targets—specifically the proportion of fixed revenue to total revenue, today it operates under an updated set of criteria published March 18, 2021, designed to give it more flexibility in evaluating the unique circumstances of public agencies.

Instead of stating an explicit target of 30 percent or more of fixed revenue to total revenue, Fitch now more broadly describes (and relies on) “revenue defensibility” as key elements to assessing the financial health of a public agency in the water and sewer sector. Fitch’s rating process includes an analysis of a utility’s financial flexibility under certain stress-test scenarios over a five-year horizon.

“[P]articular aspects of [Fitch’s] criteria may have applicability depending on the type of operations and related risks of a given utility.” However, one criterion that stands out is the significance fixed revenue (such as Metropolitan’s property taxes) has for purposes of evaluating an agency’s fiscal health.

Fitch Criteria: Revenue Defensibility entails “...an assessment of a utility’s exposure to demand volatility and the flexibility within its rate-setting framework to recover costs of service and maintain operating profitability.”

- “In its assessment of revenue defensibility, Fitch analyzes the historical patterns of revenue performance through economic and investment cycles, as well as growth trends over time, considering the **utility’s revenue mix**, customer characteristics, contractual framework, the economic underpinnings of its service area, and its capability to preserve revenue generation through rate increases or other measures.” (Page 4.)
- “Fitch may also determine the rate flexibility assessment to be higher...if characteristics are present that would tend to...lead to overall revenue stability...**utilities who collect a significant amount of revenues from fixed charges, including revenues from property taxes or assessments, etc., may be assessed higher...given the nature of this income would...ensure greater revenue stability...**” (Page 7.)
- “Fitch evaluates a utility’s vulnerability to sudden drops in demand and the impact on revenue defensibility...” (Page 7.)

Applying Fitch’s revised criteria for fixed revenues to Metropolitan supports that maintaining property tax revenues (a fixed revenue source) is essential to Metropolitan’s fiscal integrity. Metropolitan is a voluntary cooperative with varying collective demands from its member agencies based on, among other things, hydrological conditions, availability of local resources, and availability of Metropolitan’s own water system and resources. Accordingly, fixed revenue sources help Metropolitan respond to such demand volatility. Additionally, SWP capital costs are consistently growing and are projected to continue to grow. Maintaining a fixed revenue source for that purpose enhances Metropolitan’s ability to manage growing SWP capital and other costs. Moreover, property taxes represent nearly 50 percent of Metropolitan’s fixed revenues (and 8 percent of total revenues). All fixed revenue sources for Metropolitan represent only about 18 percent of total revenues, making property tax revenues essential to Metropolitan’s fiscal integrity and supportive of its current high credit ratings, in accordance with Fitch’s stated importance of revenue defensibility.

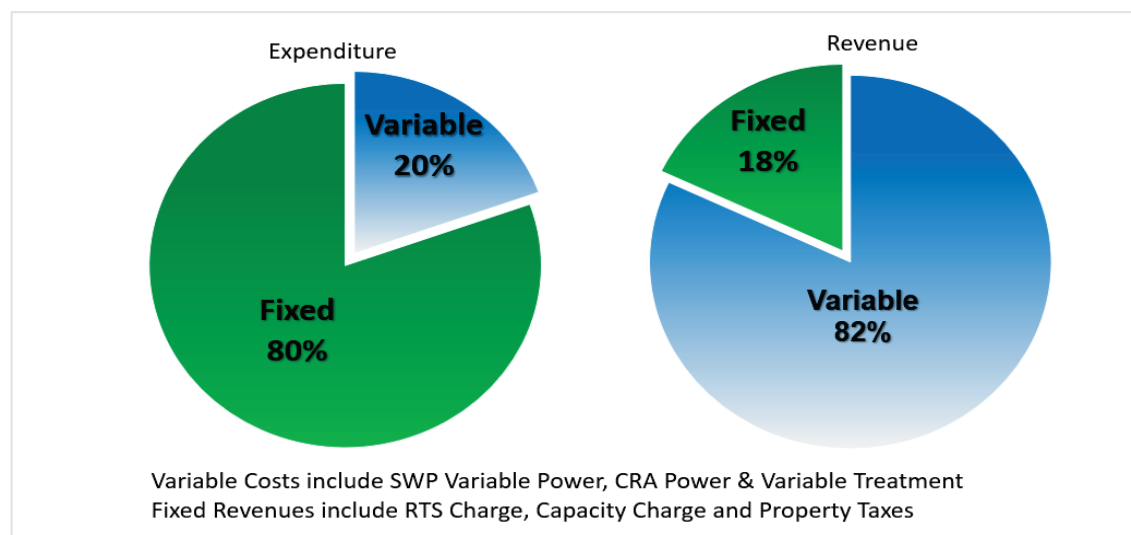
Metropolitan Financial Policies Provide Guidance for Evaluating Fiscal Integrity

Metropolitan's Board has adopted financial policies that are also relevant to determining its fiscal integrity. The Metropolitan Water District Administrative Code provides a fixed-charge coverage ratio of 1.2 times and a minimum and target for reserves at Section 5202. The Board has also adopted a revenue bond coverage target of 2.0 times. A reduction in fixed charges increases dependence on variable revenue, thereby increasing the likelihood of not meeting Metropolitan's financial policies during periods of low water transactions.

Limiting Property Taxes Pursuant to Section 124.5 Would Reduce Metropolitan's Fixed Revenues

Transfer of revenue from a fixed source to a volumetric rate or charge does not strengthen Metropolitan's financial integrity. Metropolitan's expenditures consist mostly of fixed costs (80 percent), while its fixed revenue sources make up only about 18 percent of total revenue. If the Section 124.5 limit were implemented, Metropolitan would lose about \$163 million in property tax revenues annually, or about half of its fixed revenues.

Figure 5: Fixed vs. Variable Components of Metropolitan Revenues and Expenditures – Proposed FY 2022/23 Budget



Current hydrologic conditions are less predictable and more extreme as our climate changes and, therefore, volumetric revenues have become even more unpredictable. This increased volatility in water transactions further supports a finding that maintaining fixed property tax revenues is essential to increasing revenue stability, which is key to fiscal integrity. Without Metropolitan's property tax and fixed charges, additional volumetric rates and/or higher volumetric rates would be required to cover total expenses.

Summary of Review

Continuing an Ad Valorem Property Tax Rate at the Existing Rate is Essential to Fiscal Integrity

Considering the significance of achieving a financially healthy mix between variable and fixed revenue sources, it is important that the Board maintain fixed sources in line with growing increased SWP fixed costs. Service area voters approved property tax levies for the purpose of paying Metropolitan's SWC obligations, which are projected to be approximately \$699 million and \$781 million for FYs 2022/23 and 2023/24, respectively. If the property tax rate continues at its current 0.0035 percent rate, property tax revenue would pay about 22 percent of that SWC obligation. If the property tax rate were reduced to the Section 124.5 limits, property tax revenue would pay less than 2 percent of the SWC obligation. Continuing the current tax rate of 0.0035 significantly contributes to Metropolitan's long-term fiscal health and stability. It maintains diversity in fixed revenue sources, balancing

the mechanisms for funding the immediate and anticipated obligations of the SWC. It also helps maintain Metropolitan's creditworthiness as measured by various national credit rating agencies through their established methodologies. Maintaining Metropolitan's fixed revenue sources also provides the Board with flexibility as it funds Metropolitan's SWC obligations and other obligations, and is in line with credit rating criteria.

Maintenance of fixed revenues also supports Metropolitan's financial policies. Metropolitan has adopted a set of financial policies, including revenue bond coverage and fixed-charge coverage targets, capital paid for from revenues (Pay-As-You-Go, or PAYGO), and reserve policies that support Metropolitan's strong credit ratings. An important element of these financial policies is a diversity of revenue sources and fixed revenue sources. Utilities funded primarily from variable volumetric charges face economic risks because volumes of deliveries are subject to declines in revenue based on hydrology and consumption changes.

Property taxes are also important to fiscal health because they help Metropolitan equitably distribute the costs of Metropolitan's services. As a wholesale water agency, Metropolitan's customers are its 26 member agencies. Each member agency pays volumetric rates based on the amount of water Metropolitan sells and delivers to it. In contrast, property taxes are levied directly on residents and businesses that are property owners within Metropolitan's service area. All property owners within Metropolitan's service area benefit from the water system that allows water to be sold and delivered in Southern California, thereby enhancing those properties. Property taxes ensure that residences and businesses pay a modest share of costs of maintaining and improving the Metropolitan water delivery system.

Four-Year Determination of the Applicability of the MWD Act Section 124.5 limitation is Appropriate

Staff proposes that a four-year determination of the applicability of Section 124.5 is appropriate given (1) the flexibility required to manage Metropolitan's finances during current drought conditions, (2) the time required to complete ongoing financial and strategic planning efforts, (3) inherent volatility found in Metropolitan's financial profile, and (4) the scope of financial planning timeframes.

First, Metropolitan is currently managing an ongoing drought emergency, during which it is essential to maintain financial flexibility to ensure the reliability of Metropolitan's services. It is essential that Metropolitan maintain its dedicated fixed revenue sources to pay the SWC costs the voters approved and intended for Metropolitan to pay with property taxes, thereby freeing up volumetric revenues to address current emergency drought conditions. Second, Metropolitan is currently undergoing and commencing various financial and strategic planning processes and it is appropriate to fix the Section 124.5 determination during this timeframe required to complete and implement those processes. For example, Metropolitan is undergoing a rate refinement review process that is likely to span longer than the next biennial budget cycle, and in that process, the Board will consider whether "Property Tax Alternatives" should be incorporated in Metropolitan's rate structure. Similarly, the ten-year term for the member agencies' Purchase Orders and the applicability of the Tier 2 Supply rate ends December 31, 2024. The Board will need to consider whether to adopt any alternative to the Purchase Order structure. Accordingly, maintaining a set determination through the time period of these significant reviews provides more financial certainty to Metropolitan investors. The four-year term will also provide the Board with time to consider whether Section 124.5 continues to be necessary or appropriate given updated circumstances and following any updates to Metropolitan's rate structure. The additional time of this determination also will allow the Board to discuss whether to seek legislative amendment of Section 124.5 to establish a different standard than what is currently required.

Third, the recommended four-year timeframe of this determination better aligns with the inherent volatility of Metropolitan's water revenues, which spans more than a two-year biennial budget period. Fourth, the timeframe of a four-year determination is within the scope of typical time horizons used in the financial sector for various projections and analysis. For example, three- to five-year business plans, five-year or greater coverage projections for revenue bond disclosures, Fitch's rating stress-test scenarios covering a five-year horizon, and in fact, Metropolitan's own ten-year financial forecast all support the reasonableness of the timeframe of this proposed determination.

Conclusion and Next Steps

A determination that continued collection of fixed property tax revenues in excess of the Section 124.5 limit for FYs 22/23-25/26 is supported by the information and analysis provided herein, as well as additional supporting information available at <https://www.mwdh2o.com/who-we-are/budget-finance/property-tax-rate-for-fy-202021/>, which includes information on past determinations and the currently proposed determination.

The Board will hold a **public hearing on March 8, 2022**, to receive public comments on the applicability of Section 124.5. At its regular April meeting on **April 12, 2022**, the Board will determine whether it is essential to fiscal integrity to continue to collect property taxes in excess of the Section 124.5 limit for FYs 2022/23 through 2025/26. If it makes such a finding, Section 124.5 will not apply in that timeframe. **In August of each year, the Board may then set the property tax rate for the appropriate fiscal year in excess of the Section 124.5 limit or at any rate below the 124.5 limit. The determination does not require the Board to set any particular tax rate.** However, the proposed FYs 2022/23 and 2023/24 proposed budget and CY 2023 and 2024 rates and charges contain an assumption that the property tax rate will be continued at 0.0035 percent.

Policy

Metropolitan Water District Act Section 124: Taxes, Levy and Limitation

Metropolitan Water District Act Section 124.5: Ad Valorem Tax Limitation

Metropolitan Water District Act Section 130: General Powers to Provide Water Services

Metropolitan Water District Act Section 133: Fixing of Water Rates

Metropolitan Water District Act Section 134: Adequacy of Water Rates; Uniformity of Rates Metropolitan Water

District Act Section 134.5: Water Standby or Availability of Service Charge

Metropolitan Water District Administrative Code Section 4301: Cost of Service and Revenue Requirement

Metropolitan Water District Administrative Code Section 4304: Apportionment of Revenues and Setting of Water Rates

Metropolitan Water District Administrative Code Section 5107: Biennial Budget Process

Metropolitan Water District Administrative Code Section 5109: Capital Financing


Metropolitan Water District Administrative Code Section 5112: State Water Contract Payments

Metropolitan Water District Administrative Code Section 5200(b): Funds Established

Fiscal Impact

If the Section 124.5 limitation applies and property tax revenues are reduced, revenue requirements from rates and charges will increase.


Katano Kasaine
Assistant General Manager/CFO
2/25/2022
Date


Adel Hagekhalil
General Manager
2/25/2022
Date



Review of the applicability of the Metropolitan Water District Act Section 124.5 ad valorem property tax limitation for fiscal years 2022/23 through 2025/26

Finance and Insurance Committee

Item 9-2

March 7, 2022

MWD Act Section 124.5

- Metropolitan Act Section 124.5, enacted in 1984, limits ad valorem property taxes to recover:
 - Metropolitan's general obligation bond debt service
 - A portion of its State Water Contract (SWC) obligations, limited to the debt service on state general obligation bonds (Burns-Porter bonds) for facilities benefitting Metropolitan
- The restrictions of Section 124.5 do not apply if the Board finds that collecting more is "essential to the fiscal integrity of the District"
- Since FY 2013/14, the Board has determined it was essential to Metropolitan's fiscal integrity to maintain the tax rate at .0035 percent

Essential to Fiscal Integrity

- Not defined in statute or elsewhere
- Applicability determination left to discretion of the Board
- No time period for the determination was established by the CA State Legislature
- Industry and Metropolitan metrics provide guidance

Legal Effect of 124.5 Determination

- Section 124.5 would not apply in the relevant time period
- No specific tax rate is set with this determination; no minimum or maximum tax rate established
- Tax rates are considered and set by the Board each August

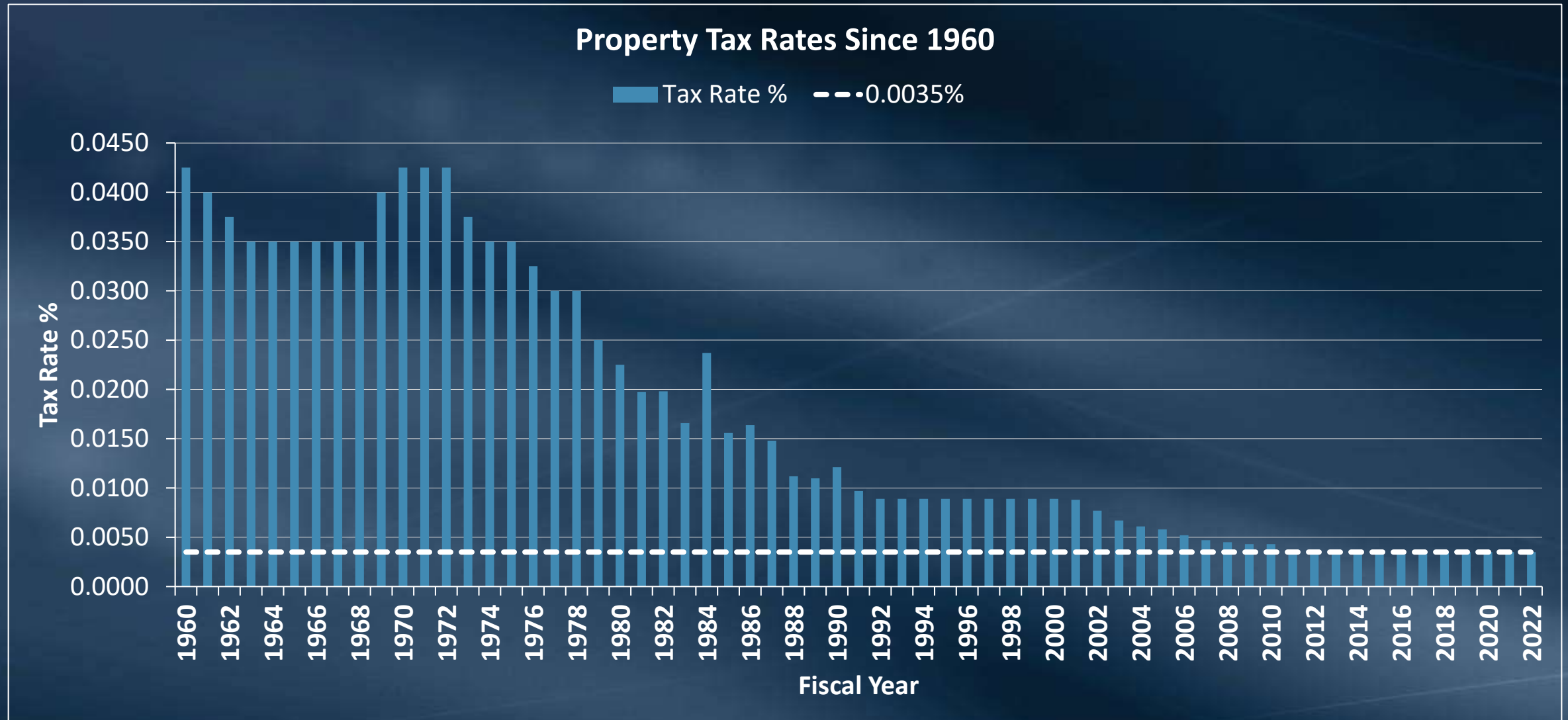
MWD Property Taxes

- Metropolitan has the statutory authority to levy property taxes to pay its expenses pursuant to the MWD Act Section 124.
- Since its creation, voters in Metropolitan's service area have approved the use of property taxes to pay for Metropolitan's major system investments and improvements:
 - CRA
 - Other improvements
 - State Water Project (SWP)

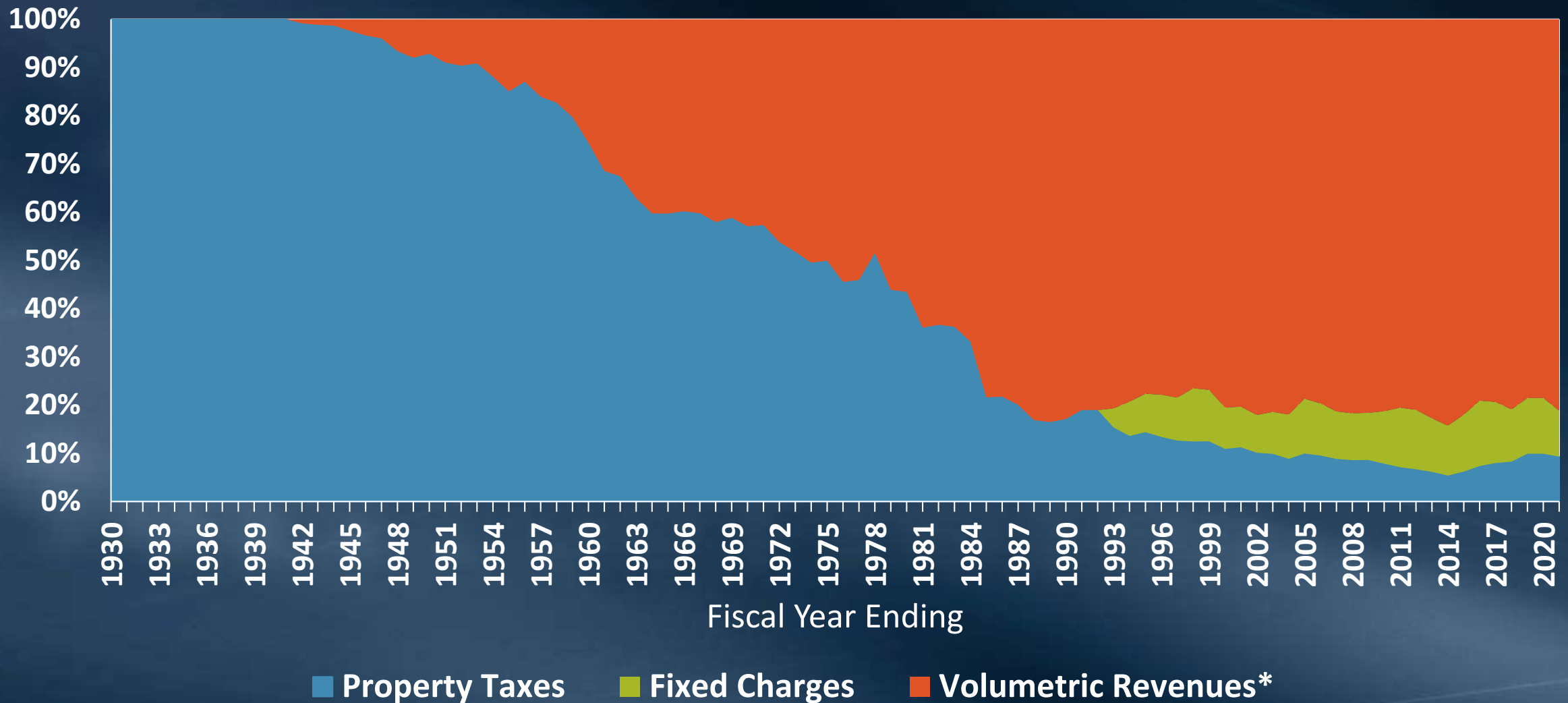
MWD Property Taxes, cont'd

- Metropolitan is one of 29 agencies that contract with the State (DWR) for participation in the SWP.
- Under the SWC, Metropolitan is obligated to pay allocable portions of the cost of construction of the SWP system and ongoing O&M costs regardless of the quantity of water delivered.
- Voters approved the use of property tax revenues for SWC expenditures, and therefore, the continued use of that revenue source would align with its intended use.

Historical Property Tax Rates



Historical Revenue Sources

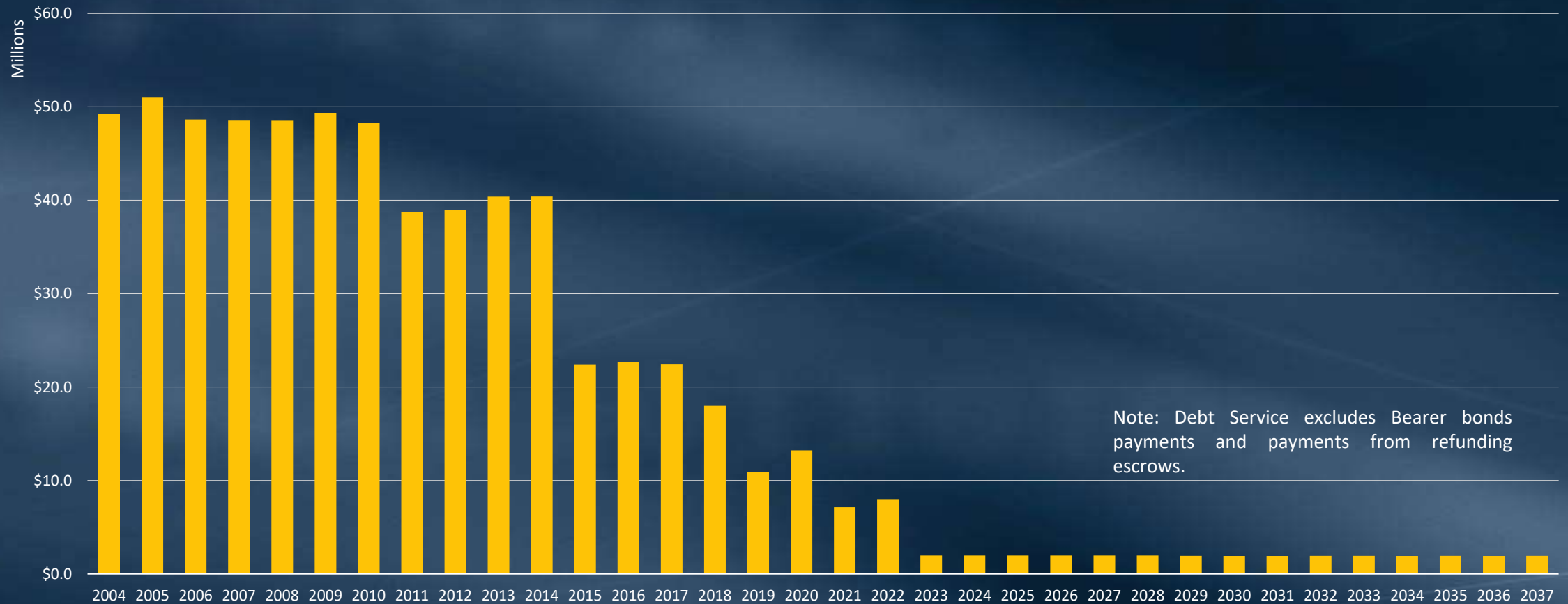


* Includes water sales, exchanges and wheeling

Outstanding Debt Service

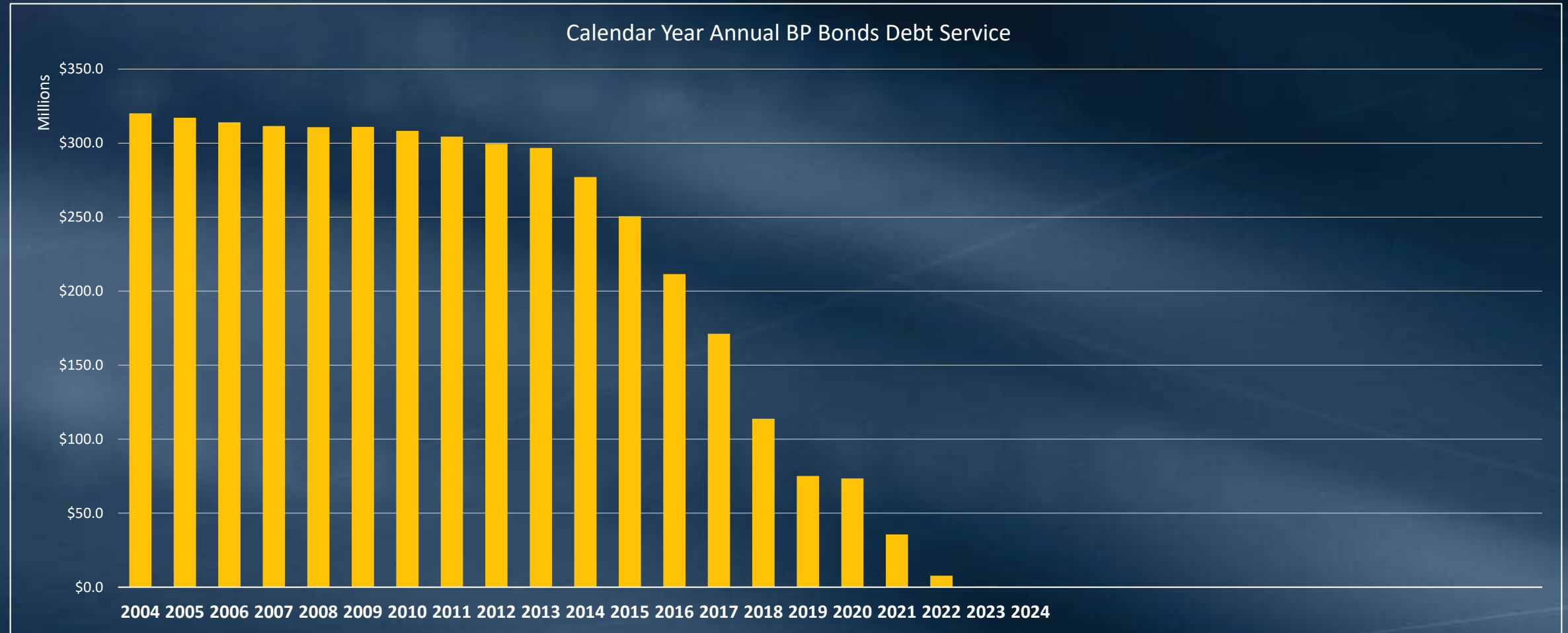
MWD GO Bonds

Fiscal Year Annual MWD GO Bonds Debt Service

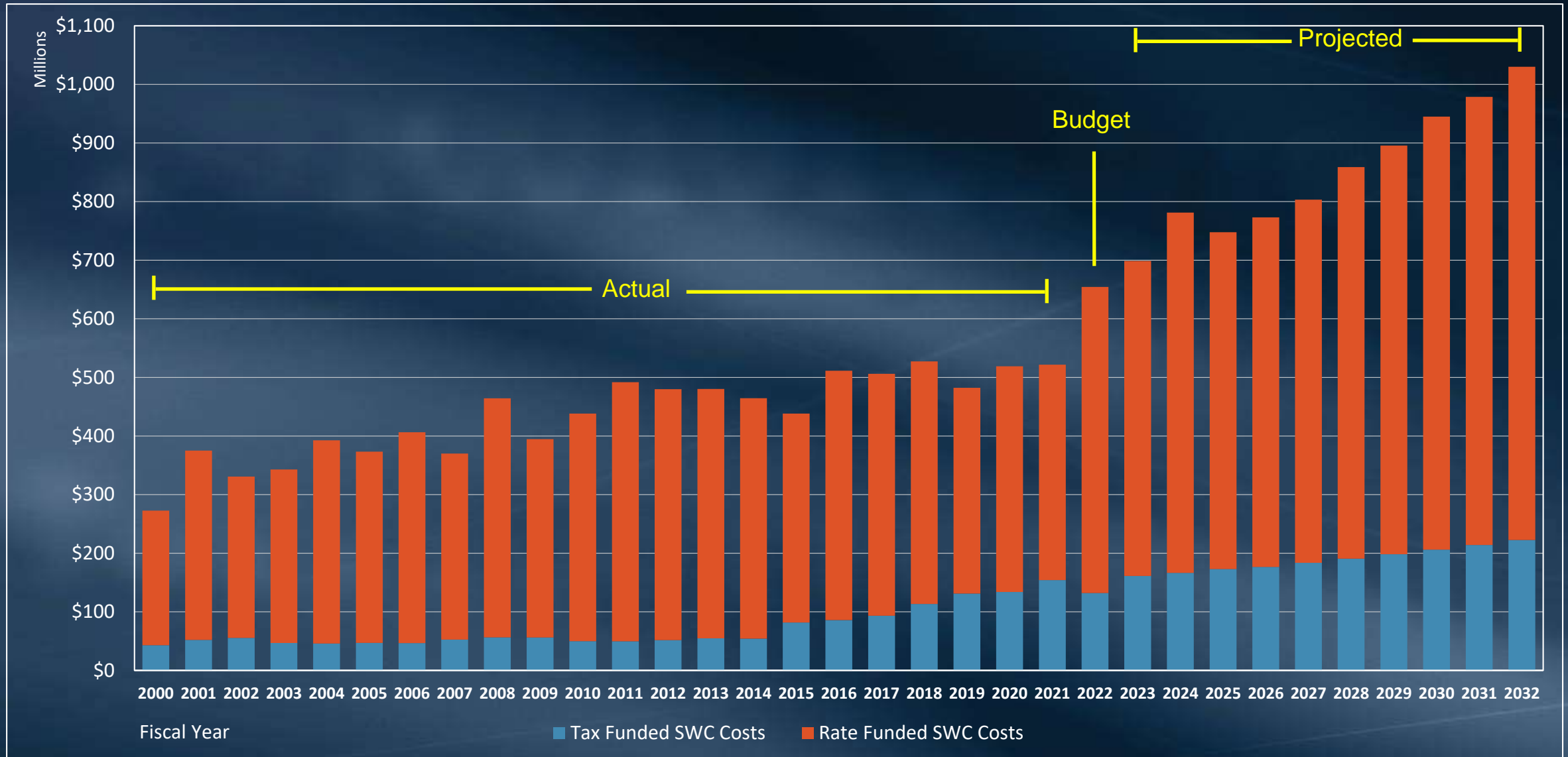


Outstanding Debt Service

DWR Burns-Porter Bonds

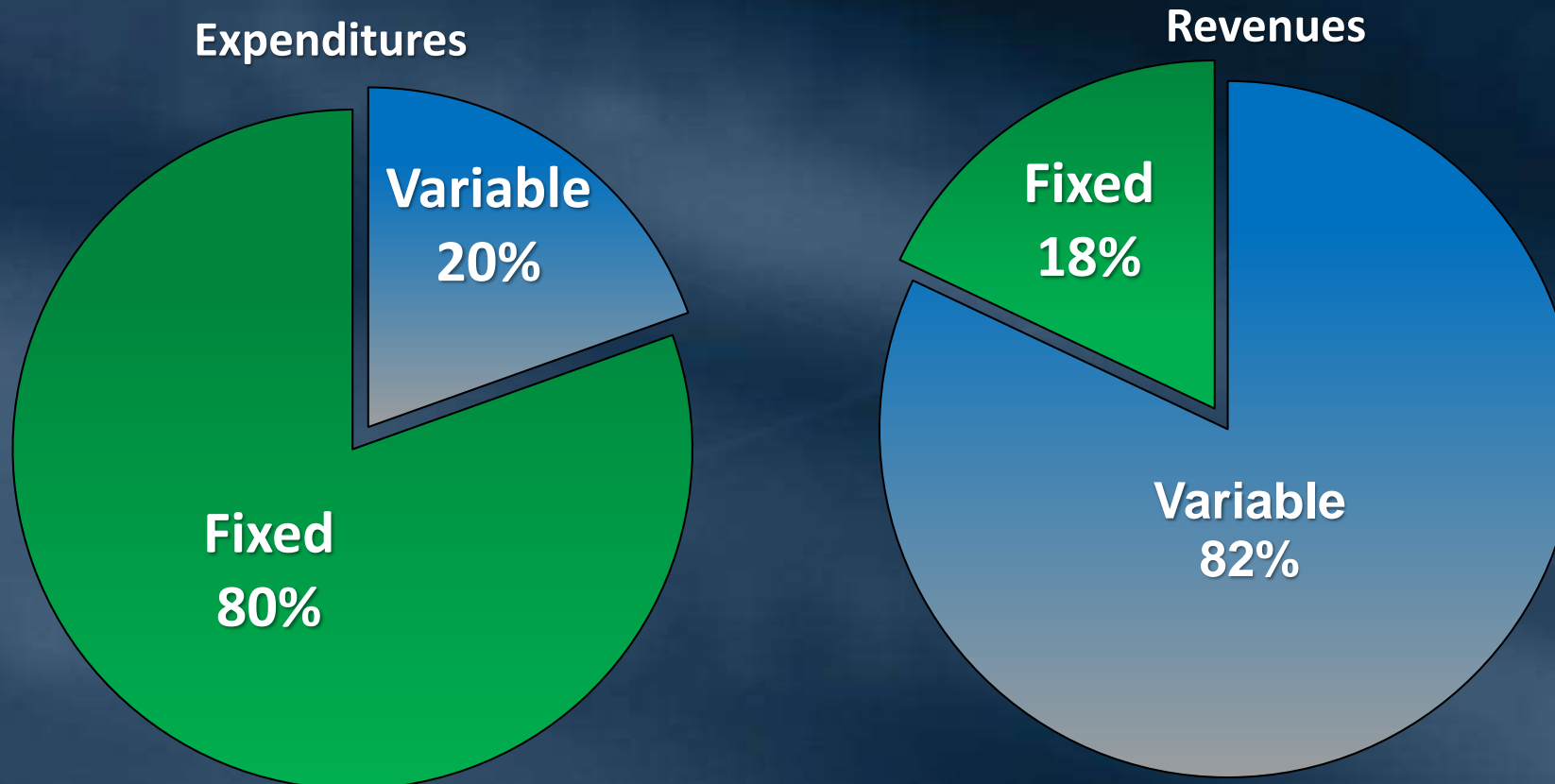


State Water Contract Costs



Fixed vs. Variable Components of Metropolitan Revenues and Expenditures

Proposed Budget FY 2022/23



Variable Expenditures include SWP Variable Power, CRA Power & Variable Treatment
Fixed Revenues include RTS Charge, Capacity Charge and Property Taxes

Credit Rating Assessment: Revenue Defensibility

- Credit ratings provide an overview of utilities' general financial health and ability to repay its debt obligations.
- Fitch Rating's U.S. Water and Sewer Rating Criteria
 - November 29, 2018 criteria included 30 percent or greater fixed revenue target
 - March 18, 2021 criteria introduce broader revenue defensibility metric
- Revenue defensibility is an "...assessment of a utility's exposure to demand volatility and the flexibility within its rate-setting framework to recover costs of service and maintain operating profitability."

Revenue Defensibility, cont'd

- “In its assessment of revenue defensibility, Fitch analyzes the historical patterns of revenue performance through economic and investment cycles, as well as growth trends over time, considering the utility’s revenue mix, customer characteristics, contractual framework, the economic underpinnings of its service area, and its capability to preserve revenue generation through rate increases or other measures.” (Page 4.)
- “Fitch may also determine the rate flexibility assessment to be higher...if characteristics are present that would tend to...lead to overall revenue stability...utilities who collect a significant amount of revenues from fixed charges, including revenues from property taxes or assessments, etc., may be assessed higher...given the nature of this income would...ensure greater revenue stability...” (Page 7.)
- “Fitch evaluates a utility’s vulnerability to sudden drops in demand and the impact on revenue defensibility...” (Page 7.)

Financial Policies and Fiscal Integrity

- The Board has adopted financial policies that provide guidance for determining its fiscal integrity.
 - Fixed-Charge Coverage Ratio of 1.20x
 - Minimum and Target Reserves
 - Revenue Bond Coverage Target of 2.00x
- A reduction in fixed charges increases dependence on variable revenue, which puts pressure on meeting the Board's financial policies during periods of higher volatility/low water transactions.

Property taxes help address Metropolitan's inherent volatility in its financial profile

- Metropolitan's inherent volatility is tied to cycles of hydrology and long-term impacts of Climate Change.
- Fixed revenues are a key factor in managing Metropolitan's financial volatility, which is tied to these underlying determinants.
- Property taxes represent approximately 50% of fixed revenues.
- As a more stable revenue stream, property taxes offset the need to adjust volumetric rates more frequently, or in a greater magnitude.
- If a determination regarding the applicability of Section 124.5 limitation is not made, an additional 9% rate increase would be required to recover costs

Metropolitan's fiscal integrity is supported by...

- Continuing an ad valorem property tax rate in excess of the 124.5 limit
- Maintaining a fixed revenue source in line with growing SWC costs
 - At its current rate of 0.0035 percent, property tax revenue would pay 22 percent of SWC obligations
 - If the Section 124.5 limit applies, property taxes would pay less than one-tenth of 1 percent of SWC obligations
- Providing a diversity of fixed revenue sources (Prop Tax, RTS/Standby Charge, Capacity Charge)
- Distributing the costs of Metropolitan's services more equitably (residences and businesses pay a modest share vs. Member Agencies) through property taxes

Support for a Four-Year Determination

- Making a four-year determination of the applicability of the MWD Act Section 124.5 is appropriate because...
 1. Provides flexibility to manage Metropolitan's finances during current drought conditions
 2. Ongoing financial and strategic planning efforts, which rely on this revenue component, won't be completed and implemented within the upcoming biennium budget period
 3. The inherent volatility found in Metropolitan's financial profile has a cyclicity beyond the biennium budget period
 4. Consistent with the scope of many financial planning timeframes

Next Steps

- The Board will hold a public hearing on March 8, 2022
 - Public comments on the applicability of Section 124.5 will be received at that time.
- At its regular Board Meeting on April 12, 2022, the Board will determine whether it is essential to fiscal integrity to continue to collect property taxes in excess of the Section 124.5 limit for FYs 2022/23 through 2025/26.
- If it makes such a finding, Section 124.5 will not apply in that timeframe.
- In August of each year, the Board may then set the property tax rate for the appropriate fiscal year. However, the Proposed Budget FYs 2022/23 and 2023/24 and CY 2023 and 2024 rates and charges assume the property tax rate is continued at 0.0035 percent.



THE METROPOLITAN WATER DISTRICT
OF SOUTHERN CALIFORNIA

RESOLUTION _____

**RESOLUTION OF THE BOARD OF DIRECTORS
OF THE METROPOLITAN WATER DISTRICT OF
SOUTHERN CALIFORNIA**

**FINDING THAT FOR FISCAL YEARS 2022/23 THROUGH 2025/26, THE AD
VALOREM PROPERTY TAX RATE LIMITATION IN SECTION 124.5 OF THE
METROPOLITAN WATER DISTRICT ACT IS NOT APPLICABLE BECAUSE IT IS
ESSENTIAL TO METROPOLITAN'S FISCAL INTEGRITY TO COLLECT AD
VALOREM PROPERTY TAXES IN EXCESS OF THAT LIMITATION**

The Board of Directors of The Metropolitan Water District of Southern California (the "Board") hereby finds that:

1. The Metropolitan Water District of Southern California ("Metropolitan"), pursuant to Section 124 of the Metropolitan Water District Act (the "Act"), is authorized to levy and collect taxes on all property within the district for the purposes of carrying on the operations and paying the obligations of the district; and
2. Pursuant to Section 307 of the Act, the Board of Directors ("Board") determines the amount of money necessary to be raised by taxation for district purposes each fiscal year and fixes rates of taxation upon the assessed valuation of property taxable by the district to be levied accordingly; and
3. Since its inception Metropolitan has levied and collected property taxes; and
4. The Board, pursuant to sections 133 and 134 of the Act, is authorized to fix the rate or rates at which water shall be sold. Such rates, so far as practicable, shall result in revenue which, together with revenue from fixed charges or assessments, will pay Metropolitan's operating expenses, capital costs, debt service and other expenses and obligations; and
5. Before 1942, all revenues to pay for operations, construction of the Colorado River Aqueduct, other facilities, and other Metropolitan obligations came from ad valorem property taxes. After deliveries of Metropolitan water began in fiscal year 1941/42, water sales were an additional source of revenues, but not until 1974 did revenues from water sales equal revenues from ad valorem taxes; and

6. On November 4, 1960, Metropolitan entered into its contract with the California Department of Water Resources (the “State Water Contract”) for water service from the State Water Project. Metropolitan’s was the first contract executed and the prototype for the 28 state water contracts that followed; its terms were validated by the California Supreme Court in *Metropolitan Water Dist. v. Marquardt* (1963) 59 Cal.2d 159; and

7. Under the State Water Contract, Metropolitan is obligated to pay allocable portions of the cost of construction and replacement of the State Water Project system, as well as ongoing operating and maintenance costs, regardless of quantities of water delivered to Metropolitan and regardless of the amounts of water Metropolitan delivers to its member agencies. Approximately 70 percent of Metropolitan’s State Water Contract obligations are fixed, or unrelated to the quantity of water delivered; and

8. Metropolitan’s authority to levy a tax or assessment to satisfy State Water Contract obligations was a condition to entering into the State Water Contract, and the California Department of Water Resources only executed state water contracts with agencies that have taxing power; and

9. The State Water Contract expressly provides that, if other available funds are not sufficient, Metropolitan must levy a tax or assessment to satisfy its State Water Contract obligations; and

10. Metropolitan’s outstanding general obligation bonds and State Water Contract obligations are indebtedness approved by the California voters before Article XIII A of the California Constitution (Proposition 13) was adopted; and

11. Metropolitan’s revenues from water transactions and deliveries vary with the quantity of water delivered and water deliveries fluctuate significantly with drought, weather conditions, availability of local supplies, economic conditions and other factors affecting regional demands. During the period from fiscal year 2011/12 through fiscal year 2020/21, Metropolitan’s annual Member Agency water transactions ranged from 1.37 million acre-feet to 2.06 million acre-feet; and

12. When fixing taxes and setting rates, the Board and Metropolitan’s member agencies evaluate the appropriate mix of property taxes and water rates and charges to promote Metropolitan’s fiscal stability and ensure its ability to satisfy the region’s long-term water supply needs while reasonably and fairly allocating the cost of providing service to its member agencies and complying with legal requirements; and

13. On May 8, 1984, the Board approved recommendations to amend the Act, set forth in Board Letter 6-2 dated April 30, 1984; and

14. Such amendments were incorporated into Assembly Bill 1445, which was approved by the Legislature and filed with the California Secretary of State on July 3, 1984, and added to the Act as Section 124.5; and

15. Section 124.5 provides that Metropolitan must limit the ad valorem property tax to collect no more than the amount required to pay for a fraction of voter-approved debt, specifically, the composite amount required to pay (1) the principal and interest on general obligation bonded indebtedness of the district and (2) that portion of the district's payment obligation under a water service contract with the state which is reasonably allocable, as determined by Metropolitan, to the payment by the state of principal and interest on bonds issued pursuant to the California Water Resources Development Bond Act as of the effective date of Section 124.5 and used to finance construction of facilities for the benefit of the district; and

16. Section 124.5 further provides that its restrictions do not apply "if the board of directors of the district, following a hearing held to consider that issue, finds that a tax in excess of these restrictions is essential to the fiscal integrity of the district, and written notice of the hearing is filed with the offices of the Speaker of the Assembly and the President pro Tempore of the Senate at least 10 days prior to that date of the hearing;" and

17. Section 124.5's rate restriction became effective in fiscal year 1990/91; and

18. In fiscal years 1990/91 through 1999/2000, the Board maintained Metropolitan's tax levy rate at .0089 percent, a rate that was below the rate then permitted under the restriction clause of Section 124.5; and

19. Metropolitan's tax levy rate has declined from .0089 percent in fiscal year 1999/2000 to .0035 percent in fiscal year 2012/13, and the Board has made the necessary finding since fiscal year 2013/14 that it is essential to fiscal integrity to collect property taxes in excess of the limits set forth in Section 124.5; and

20. On February 8, 2022, the General Manager presented to the Board a proposed biennial budget for fiscal years 2022/23 and 2023/24, proposed rates for calendar years 2023 and 2024, proposed charges for 2023, and the Ten-Year Financial Forecast that were based on the proposal that Metropolitan maintain its current ad valorem property tax rate of 0.0035 to maintain fiscal integrity; and

21. On March 7, 2022, the General Manager provided an information letter to the Board reviewing the applicability of Section 124.5 for fiscal years 2022/23 through 2025/26; and

22. On March 8, 2020, the Board held a public hearing with advance notice as required by Section 124.5, to consider the recommendation to suspend the tax restriction clause of Section 124.5 for to give interested parties the opportunity to present their views regarding the recommendation that it is essential to fiscal integrity to collect property taxes in fiscal years 2022/23 through 2025/26 in excess of the limits of Section 124.5; and

23. Metropolitan currently utilizes tax revenues solely to pay debt service on its general obligation bonds, approved by the voters in 1966 and presently outstanding in the amount of \$26,830,000 as of December 31, 2021, and a portion of its State Water Contract obligations capital costs; and

24. Metropolitan provides, sells and delivers a reliable water supply at wholesale to its member agencies throughout a broad service area, and its integrated water system is able to deliver water throughout its service area; and

25. Metropolitan's participation in the State Water Project under the State Water Contract is fundamental to Metropolitan's ability to consistently provide a reliable water supply and delivery at wholesale to its service area and, thus, satisfaction of its State Water Contract obligations is essential to Metropolitan's mission; and

26. The State Water Project facilities are over 50 years old and Metropolitan's State Water Contract obligations include increasing costs for repair and replacement of existing facilities that are needed to both maintain the storage and conveyance capacity of the State Water Project facilities and assure continued availability and delivery of supplies from the State Water Project and other sources. These costs and obligations were not foreseen by the Legislature when, in 1984, it established the Section 124.5 tax rate restriction and nothing suggests that the Legislature intended to prohibit the Board from considering such circumstances when deciding whether collecting more than the limitation in that Section is essential to Metropolitan's fiscal integrity; and

27. Metropolitan's State Water Contract obligations also include substantial construction, replacement, operation, and maintenance costs for endangered species protection and conservation measures, consistent with state and federal mandates. These obligations must be undertaken to ensure the reliability of the State Water Project, to address ecosystem needs, and to secure long-term operating permits consistent with the federal and state endangered species acts. These costs and obligations were not foreseen or considered by the Legislature when, in 1984, it established the Section 124.5 rate restriction and nothing suggests that the Legislature intended to prohibit the Board from considering such circumstances when deciding whether collecting more than the limitation in that Section is essential to Metropolitan's fiscal integrity; and

28. Consideration of, and providing for, current and anticipated State Water Contract obligations is essential to Metropolitan's fiscal stability and integrity; and

29. Availability of diverse financial resources to satisfy Metropolitan's State Water Contract obligations is essential to Metropolitan's fiscal stability and integrity; and

30. An appropriate balance of fixed costs and fixed revenue is essential to Metropolitan's long-term fiscal health; and

31. The ad valorem tax is essential to the appropriate balance of fixed costs and fixed revenue under current circumstances; and

32. Continuing an ad valorem property tax rate in excess of the limit of Section 124.5 will allow the Board flexibility to fund Metropolitan's State Water Contract obligations fully and fairly in fiscal year 2022/23 through 2025/26 and for the foreseeable future; and

33. When it enacted Section 124.5, the Legislature recognized the importance of robust fixed revenue sources. At the same time that it established the rate restriction and safety valve to make the restriction inapplicable, it authorized alternative fixed revenue sources in the form of benefit assessments and standby charges. To the extent such assessments or charges would be new assessments or charges, they would likely be governed by additional requirements not in place or contemplated when the Legislature enacted Section 124.5. In the Board's judgment, adoption of such new or additional assessments or charges is not practical and they are not practical fixed revenue sources at this time, especially because those assessments and charges would be collected from property owners already paying the ad valorem property taxes; and

34. In FY 2021/22, approximately 90 percent of Metropolitan's estimated costs are fixed, while approximately 18 percent of Metropolitan's revenues are from fixed sources, including ad valorem property taxes, readiness-to-serve and capacity charges; in FY 2022/23, approximately 80 percent of Metropolitan's estimated costs are fixed, while approximately 18 percent of Metropolitan's revenues are from fixed sources, including ad valorem property taxes, readiness-to-serve and capacity charges. Collecting an amount in excess of the Section 124.5 rate limitation will allow Metropolitan to sustain ad valorem property tax revenues at 8 percent of overall revenues in fiscal year 2022/23 and fiscal year 2023/24. If Section 124.5 limitations were applied, it is anticipated that, in fiscal years 2022/23 through 2025/26, and thereafter, ad valorem property tax revenue would drop to less than 0.1 percent overall revenue; and

35. If the Section 124.5 limit is applicable, fiscal years 2022/23 through 2025/26 fixed revenues as a percentage of total revenues will decline approximately from 18 percent in fiscal year 2021/22 to an average of 10 percent for fiscal years 2022/23 through 2025/26; and

36. Considering Metropolitan's significant fixed costs and fluctuating volumetric revenues, robust and diverse fixed revenues are essential to Metropolitan's fiscal well-being for the additional reason that they help Metropolitan maintain its creditworthiness. Positive credit ratings are central to fiscal integrity because they reduce the cost of borrowing and provide flexibility by increasing access to credit markets. Access to credit markets is especially important whenever Metropolitan faces supply or demand uncertainties. As set forth above, collecting more tax revenue in excess of the Section 124.5 limit will allow Metropolitan to retain important fixed revenues; and

37. Ad valorem taxes are an important component of Metropolitan's fiscal integrity because they help ensure that those for whom costs are incurred help pay those costs. As a wholesale water agency, Metropolitan's customers are its 26 member agencies. Each member agency pays volumetric rates based on the amount of water transactions with Metropolitan; whereas ad valorem taxes are levied directly on residents and businesses that are property owners within Metropolitan's service area. All property owners within Metropolitan's service area benefit from the water system that allows water to be delivered in Southern California. Ad valorem taxes ensure that residences and businesses pay a share of costs of the system; and

38. Maintaining the existing ad valorem tax rate advances fiscal integrity because it takes pressure off Metropolitan's volumetric water rates and readiness-to-serve and capacity

charges and assist the Board, in its discretion, in maintaining a fair and appropriate balance between fixed costs and fixed revenues and help ensure that all who benefit from Metropolitan's service pay a fair share of the cost of that service; and

39. Continuing an ad valorem property tax rate in excess of the limits of Section 124.5 and preventing the decline in fixed revenues will create a more stable water revenue structure that can better deal with fluctuations in water transactions and support drought response measures; and

40. Metropolitan's reliance on property taxes is significantly lower than most other agencies that entered into state water contracts. Other state water contractors rely on property taxes to cover up to 100 percent of their state water contract obligations. Even if all of Metropolitan's property tax revenue were fully allocated to State Water Contract obligations—and it is not, as a portion covers Metropolitan's general obligation debt service—Metropolitan would cover only an average of 24 percent for fiscal years 2022/23 through 2025/26 of its State Water Contract obligations. This percentage is significantly lower than other state water contractors; and

41. An analysis of fiscal health and stability must consider long-term circumstances, and the full spectrum of facts and circumstances, including the appropriate mix of property taxes and water rates and charges that will best allow Metropolitan to satisfy the region's long-term water supply needs; and

42. Notices of a public hearing were filed with the offices of the Speaker of the Assembly and the President pro Tempore of the Senate on February 24, 2022; and

43. The Board conducted a public hearing at its regular meeting on March 8, 2022, at which interested parties were given the opportunity to present their views regarding the recommendation that it is essential to Metropolitan's fiscal integrity to collect taxes in excess of the Section 124.5 limitation for fiscal years 2022/23 through 2025/26; and

44. The Board has carefully considered the comments and evidence and all material factors relevant to the finding, and all such materials were made available at <https://www.mwdh2o.com/who-we-are/budget-finance/property-tax-rate-for-fy-202021/>; and

45. The meeting of the Board was conducted in accordance with the Brown Act (commencing at Section 54950 of the Government Code), for which due notice was provided and at which a quorum was present and acting throughout; and

46. A four-year determination of the applicability of Section 124.5 is appropriate given (1) the flexibility required to manage Metropolitan's finances during current drought conditions, (2) the time required to complete ongoing financial and strategic planning efforts, (3) inherent volatility found in Metropolitan's financial profile, and (4) the scope of financial planning timeframes used in the financial sector for various projections and analysis;

NOW, THEREFORE, the Board of Directors of The Metropolitan Water District of Southern California, after receiving, considering, and evaluating public comments and evidence and all material factors pertaining thereto, including the financial and operating information summarized in Board Letter 9-2 and presented on March 8, 2022, and in recognition of the facts and considerations set forth in this Resolution, hereby:

1. Finds and determines that it is essential to Metropolitan's fiscal integrity to collect ad valorem property taxes in excess of the Section 124.5 limitation on ad valorem property taxes in fiscal years 2022/23 through 2025/26; and
2. Resolves and determines that pursuant to its finding, the tax rate restriction in Section 124.5 of the Act is inapplicable when setting the ad valorem property tax rate for fiscal years 2022/23 through 2025/26; and
3. Waives compliance with Section 4301(b) of Metropolitan's Administrative Code for any tax levy that utilizes this finding regarding Section 124.5 of the Act.

I HEREBY CERTIFY that the foregoing is a full, true, and correct copy of a resolution of the Board of Directors of The Metropolitan Water District of Southern California, adopted at its meeting held April 12, 2022.

Secretary of the Board of Directors
of the Metropolitan Water District
of Southern California

THE METROPOLITAN WATER DISTRICT
OF SOUTHERN CALIFORNIA

RESOLUTION _____

**RESOLUTION OF THE BOARD OF DIRECTORS
OF THE METROPOLITAN WATER DISTRICT OF
SOUTHERN CALIFORNIA**

**FINDING THAT FOR FISCAL YEARS 2022/23 AND 2023/24, THE AD VALOREM
PROPERTY TAX RATE LIMITATION IN SECTION 124.5 OF THE METROPOLITAN
WATER DISTRICT ACT IS NOT APPLICABLE BECAUSE IT IS ESSENTIAL TO
METROPOLITAN'S FISCAL INTEGRITY TO COLLECT AD VALOREM PROPERTY
TAXES IN EXCESS OF THAT LIMITATION**

The Board of Directors of The Metropolitan Water District of Southern California (the "Board") hereby finds that:

1. The Metropolitan Water District of Southern California ("Metropolitan"), pursuant to Section 124 of the Metropolitan Water District Act (the "Act"), is authorized to levy and collect taxes on all property within the district for the purposes of carrying on the operations and paying the obligations of the district; and
2. Pursuant to Section 307 of the Act, the Board of Directors ("Board") determines the amount of money necessary to be raised by taxation for district purposes each fiscal year and fixes rates of taxation upon the assessed valuation of property taxable by the district to be levied accordingly; and
3. Since its inception Metropolitan has levied and collected property taxes; and
4. The Board, pursuant to sections 133 and 134 of the Act, is authorized to fix the rate or rates at which water shall be sold. Such rates, so far as practicable, shall result in revenue which, together with revenue from fixed charges or assessments, will pay Metropolitan's operating expenses, capital costs, debt service and other expenses and obligations; and
5. Before 1942, all revenues to pay for operations, construction of the Colorado River Aqueduct, other facilities, and other Metropolitan obligations came from ad valorem property taxes. After deliveries of Metropolitan water began in fiscal year 1941/42, water sales were an additional source of revenues, but not until 1974 did revenues from water sales equal revenues from ad valorem taxes; and

6. On November 4, 1960, Metropolitan entered into its contract with the California Department of Water Resources (the “State Water Contract”) for water service from the State Water Project. Metropolitan’s was the first contract executed and the prototype for the 28 state water contracts that followed; its terms were validated by the California Supreme Court in *Metropolitan Water Dist. v. Marquardt* (1963) 59 Cal.2d 159; and

7. Under the State Water Contract, Metropolitan is obligated to pay allocable portions of the cost of construction and replacement of the State Water Project system, as well as ongoing operating and maintenance costs, regardless of quantities of water delivered to Metropolitan and regardless of the amounts of water Metropolitan delivers to its member agencies. Approximately 70 percent of Metropolitan’s State Water Contract obligations are fixed, or unrelated to the quantity of water delivered; and

8. Metropolitan’s authority to levy a tax or assessment to satisfy State Water Contract obligations was a condition to entering into the State Water Contract, and the California Department of Water Resources only executed state water contracts with agencies that have taxing power; and

9. The State Water Contract expressly provides that, if other available funds are not sufficient, Metropolitan must levy a tax or assessment to satisfy its State Water Contract obligations; and

10. Metropolitan’s outstanding general obligation bonds and State Water Contract obligations are indebtedness approved by the California voters before Article XIII A of the California Constitution (Proposition 13) was adopted; and

11. Metropolitan’s revenues from water transactions and deliveries vary with the quantity of water delivered and water deliveries fluctuate significantly with drought, weather conditions, availability of local supplies, economic conditions and other factors affecting regional demands. During the period from fiscal year 2011/12 through fiscal year 2020/21, Metropolitan’s annual Member Agency water transactions ranged from 1.37 million acre-feet to 2.06 million acre-feet; and

12. When fixing taxes and setting rates, the Board and Metropolitan’s member agencies evaluate the appropriate mix of property taxes and water rates and charges to promote Metropolitan’s fiscal stability and ensure its ability to satisfy the region’s long-term water supply needs while reasonably and fairly allocating the cost of providing service to its member agencies and complying with legal requirements; and

13. On May 8, 1984, the Board approved recommendations to amend the Act, set forth in Board Letter 6-2 dated April 30, 1984; and

14. Such amendments were incorporated into Assembly Bill 1445, which was approved by the Legislature and filed with the California Secretary of State on July 3, 1984, and added to the Act as Section 124.5; and

15. Section 124.5 provides that Metropolitan must limit the ad valorem property tax to collect no more than the amount required to pay for a fraction of voter-approved debt, specifically, the composite amount required to pay (1) the principal and interest on general obligation bonded indebtedness of the district and (2) that portion of the district's payment obligation under a water service contract with the state which is reasonably allocable, as determined by Metropolitan, to the payment by the state of principal and interest on bonds issued pursuant to the California Water Resources Development Bond Act as of the effective date of Section 124.5 and used to finance construction of facilities for the benefit of the district; and

16. Section 124.5 further provides that its restrictions do not apply "if the board of directors of the district, following a hearing held to consider that issue, finds that a tax in excess of these restrictions is essential to the fiscal integrity of the district, and written notice of the hearing is filed with the offices of the Speaker of the Assembly and the President pro Tempore of the Senate at least 10 days prior to that date of the hearing;" and

17. Section 124.5's rate restriction became effective in fiscal year 1990/91; and

18. In fiscal years 1990/91 through 1999/2000, the Board maintained Metropolitan's tax levy rate at .0089 percent, a rate that was below the rate then permitted under the restriction clause of Section 124.5; and

19. Metropolitan's tax levy rate has declined from .0089 percent in fiscal year 1999/2000 to .0035 percent in fiscal year 2012/13, and the Board has made the necessary finding since fiscal year 2013/14 that it is essential to fiscal integrity to collect property taxes in excess of the limits set forth in Section 124.5; and

20. On February 8, 2022, the General Manager presented to the Board a proposed biennial budget for fiscal years 2022/23 and 2023/24, proposed rates for calendar years 2023 and 2024, proposed charges for 2023, and the Ten-Year Financial Forecast that were based on the proposal that Metropolitan maintain its current ad valorem property tax rate of 0.0035 to maintain fiscal integrity; and

21. On March 7, 2022, the General Manager provided an information letter to the Board reviewing the applicability of Section 124.5 for fiscal years 2022/23 through 2025/26; and

22. On March 8, 2020, the Board held a public hearing with advance notice as required by Section 124.5, to consider the recommendation to suspend the tax restriction clause of Section 124.5 for to give interested parties the opportunity to present their views regarding the recommendation that it is essential to fiscal integrity to collect property taxes in fiscal years 2022/23 through 2025/26 in excess of the limits of Section 124.5; and

23. Metropolitan currently utilizes tax revenues solely to pay debt service on its general obligation bonds, approved by the voters in 1966 and presently outstanding in the amount of \$26,830,000 as of December 31, 2021, and a portion of its State Water Contract obligations capital costs; and

24. Metropolitan provides, sells and delivers a reliable water supply at wholesale to its member agencies throughout a broad service area, and its integrated water system is able to deliver water throughout its service area; and

25. Metropolitan's participation in the State Water Project under the State Water Contract is fundamental to Metropolitan's ability to consistently provide a reliable water supply and delivery at wholesale to its service area and, thus, satisfaction of its State Water Contract obligations is essential to Metropolitan's mission; and

26. The State Water Project facilities are over 50 years old and Metropolitan's State Water Contract obligations include increasing costs for repair and replacement of existing facilities that are needed to both maintain the storage and conveyance capacity of the State Water Project facilities and assure continued availability and delivery of supplies from the State Water Project and other sources. These costs and obligations were not foreseen by the Legislature when, in 1984, it established the Section 124.5 tax rate restriction and nothing suggests that the Legislature intended to prohibit the Board from considering such circumstances when deciding whether collecting more than the limitation in that Section is essential to Metropolitan's fiscal integrity; and

27. Metropolitan's State Water Contract obligations also include substantial construction, replacement, operation, and maintenance costs for endangered species protection and conservation measures, consistent with state and federal mandates. These obligations must be undertaken to ensure the reliability of the State Water Project, to address ecosystem needs, and to secure long-term operating permits consistent with the federal and state endangered species acts. These costs and obligations were not foreseen or considered by the Legislature when, in 1984, it established the Section 124.5 rate restriction and nothing suggests that the Legislature intended to prohibit the Board from considering such circumstances when deciding whether collecting more than the limitation in that Section is essential to Metropolitan's fiscal integrity; and

28. Consideration of, and providing for, current and anticipated State Water Contract obligations is essential to Metropolitan's fiscal stability and integrity; and

29. Availability of diverse financial resources to satisfy Metropolitan's State Water Contract obligations is essential to Metropolitan's fiscal stability and integrity; and

30. An appropriate balance of fixed costs and fixed revenue is essential to Metropolitan's long-term fiscal health; and

31. The ad valorem tax is essential to the appropriate balance of fixed costs and fixed revenue under current circumstances; and

32. Continuing an ad valorem property tax rate in excess of the limit of Section 124.5 will allow the Board flexibility to fund Metropolitan's State Water Contract obligations fully and fairly in fiscal year 2022/23 and 2023/24 and for the foreseeable future; and

33. When it enacted Section 124.5, the Legislature recognized the importance of robust fixed revenue sources. At the same time that it established the rate restriction and safety valve to make the restriction inapplicable, it authorized alternative fixed revenue sources in the form of benefit assessments and standby charges. To the extent such assessments or charges would be new assessments or charges, they would likely be governed by additional requirements not in place or contemplated when the Legislature enacted Section 124.5. In the Board's judgment, adoption of such new or additional assessments or charges is not practical and they are not practical fixed revenue sources at this time, especially because those assessments and charges would be collected from property owners already paying the ad valorem property taxes; and

34. In FY 2021/22, approximately 90 percent of Metropolitan's estimated costs are fixed, while approximately 18 percent of Metropolitan's revenues are from fixed sources, including ad valorem property taxes, readiness-to-serve and capacity charges; in FY 2022/23, approximately 80 percent of Metropolitan's estimated costs are fixed, while approximately 18 percent of Metropolitan's revenues are from fixed sources, including ad valorem property taxes, readiness-to-serve and capacity charges. Collecting an amount in excess of the Section 124.5 rate limitation will allow Metropolitan to sustain ad valorem property tax revenues at 8 percent of overall revenues in fiscal year 2022/23 and fiscal year 2023/24. If Section 124.5 limitations were applied, it is anticipated that, in fiscal years 2022/23 and 2023/24, and thereafter, ad valorem property tax revenue would drop to less than 0.1 percent of overall revenue; and

35. If the Section 124.5 limit is applicable, fiscal years 2022/23 and 2023/24 fixed revenues as a percentage of total revenues will decline approximately from 18 percent to 10 percent; and

36. Considering Metropolitan's significant fixed costs and fluctuating volumetric revenues, robust and diverse fixed revenues are essential to Metropolitan's fiscal well-being for the additional reason that they help Metropolitan maintain its creditworthiness. Positive credit ratings are central to fiscal integrity because they reduce the cost of borrowing and provide flexibility by increasing access to credit markets. Access to credit markets is especially important whenever Metropolitan faces supply or demand uncertainties. As set forth above, collecting more tax revenue in excess of the Section 124.5 limit will allow Metropolitan to retain important fixed revenues; and

37. Ad valorem taxes are an important component of Metropolitan's fiscal integrity because they help ensure that those for whom costs are incurred help pay those costs. As a wholesale water agency, Metropolitan's customers are its 26 member agencies. Each member agency pays volumetric rates based on the amount of water transactions with Metropolitan; whereas ad valorem taxes are levied directly on residents and businesses that are property owners within Metropolitan's service area. All property owners within Metropolitan's service area benefit from the water system that allows water to be delivered in Southern California. Ad valorem taxes ensure that residences and businesses pay a share of costs of the system; and

38. Maintaining the existing ad valorem tax rate advances fiscal integrity because it takes pressure off Metropolitan's volumetric water rates and readiness-to-serve and capacity

charges and assist the Board, in its discretion, in maintaining a fair and appropriate balance between fixed costs and fixed revenues and help ensure that all who benefit from Metropolitan's service pay a fair share of the cost of that service; and

39. Continuing an ad valorem property tax rate in excess of the limits of Section 124.5 and preventing the decline in fixed revenues will create a more stable water revenue structure that can better deal with fluctuations in water transactions and support drought response measures; and

40. Metropolitan's reliance on property taxes is significantly lower than most other agencies that entered into state water contracts. Other state water contractors rely on property taxes to cover up to 100 percent of their state water contract obligations. Even if all of Metropolitan's property tax revenue were fully allocated to State Water Contract obligations—and it is not, as a portion covers Metropolitan's general obligation debt service—Metropolitan would cover only 25 percent of its fiscal year 2022/23 and 23 percent of its fiscal year 2023/24 State Water Contract obligations. This percentage is significantly lower than other state water contractors; and

41. An analysis of fiscal health and stability must consider long-term circumstances, and the full spectrum of facts and circumstances, including the appropriate mix of property taxes and water rates and charges that will best allow Metropolitan to satisfy the region's long-term water supply needs; and

42. Notices of a public hearing were filed with the offices of the Speaker of the Assembly and the President pro Tempore of the Senate on February 24, 2022; and

43. The Board conducted a public hearing at its regular meeting on March 8, 2022, at which interested parties were given the opportunity to present their views regarding the recommendation that it is essential to Metropolitan's fiscal integrity to collect taxes in excess of the Section 124.5 limitation for fiscal years 2022/23 through 2025/26; and

44. The Board has carefully considered the comments and evidence and all material factors relevant to the finding, and all such materials were made available at <https://www.mwdh2o.com/who-we-are/budget-finance/property-tax-rate-for-fy-202021/>; and

45. The meeting of the Board was conducted in accordance with the Brown Act (commencing at Section 54950 of the Government Code), for which due notice was provided and at which a quorum was present and acting throughout;

NOW, THEREFORE, the Board of Directors of The Metropolitan Water District of Southern California, after receiving, considering, and evaluating public comments and evidence and all material factors pertaining thereto, including the financial and operating information summarized in Board Letter 9-2 and presented on March 8, 2022, and in recognition of the facts and considerations set forth in this Resolution, hereby:

1. Finds and determines that it is essential to Metropolitan's fiscal integrity to collect ad valorem property taxes in excess of the Section 124.5 limitation on ad valorem property taxes in fiscal years 2022/23 and 2023/24; and
2. Resolves and determines that pursuant to its finding, the tax rate restriction in Section 124.5 of the Act is inapplicable when setting the ad valorem property tax rate for fiscal years 2022/23 and 2023/24; and
3. Waives compliance with Section 4301(b) of Metropolitan's Administrative Code for any tax levy that utilizes this finding regarding Section 124.5 of the Act.

I HEREBY CERTIFY that the foregoing is a full, true, and correct copy of a resolution of the Board of Directors of The Metropolitan Water District of Southern California, adopted at its meeting held April 12, 2022.

Secretary of the Board of Directors
of the Metropolitan Water District
of Southern California



Finance & Insurance Committee

Section 124.5 Determination Finding

Item 7-2

April 11, 2022

Summary of Process

February 2022

- Board approved a hearing date
- Board received an informational Board Letter on the proposed budget and rates, and participated in several workshops
- Staff provided notice to the CA State Legislature of the public hearing
- Staff assembled a website that contains the key supportive documents for its finding and recommendation

March 2022

- Staff provided the Board an informational Board letter and presentation covering the substantive bases for staff's recommendation
- Board held a public hearing on this matter and the proposed budget, rates and charges

Staff and the Board have engaged in a detailed, methodical and transparent process to assess the circumstances for making a finding related to the applicability of Section 124.5

MWD Act Section 124.5

- Metropolitan Act Section 124.5, enacted in 1984, limits ad valorem property taxes to recover:
 - Metropolitan's general obligation bond debt service
 - A portion of its State Water Contract (SWC) obligations, limited to the debt service on state general obligation bonds (Burns-Porter bonds) for facilities benefitting Metropolitan
- The restrictions of Section 124.5 do not apply if the Board finds that collecting more is "essential to the fiscal integrity of the District"
- Since FY 2013/14, the Board has determined it was essential to Metropolitan's fiscal integrity to maintain the tax rate at .0035 percent

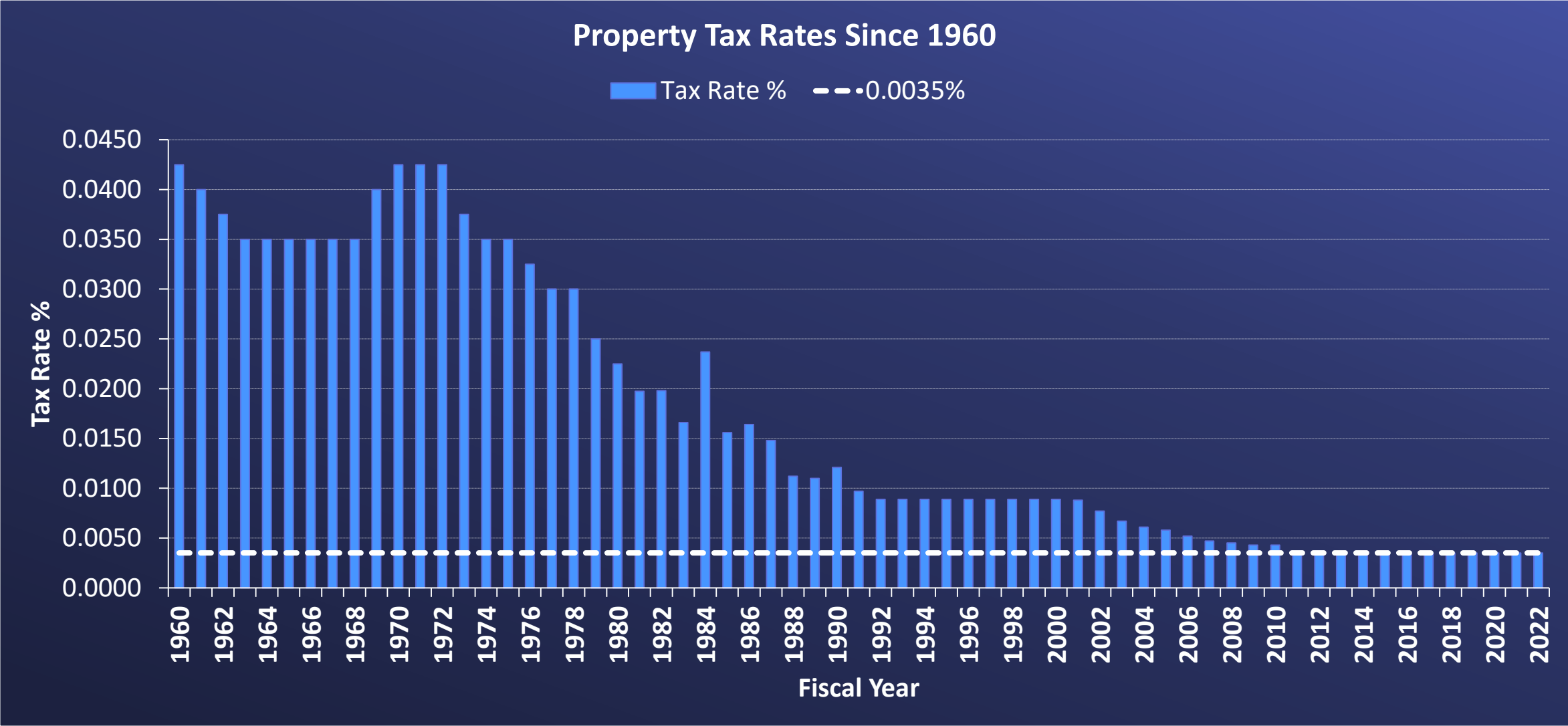
Essential to Fiscal Integrity

- Not defined in statute or elsewhere
- Applicability determination left to discretion of the Board
- No time period for the determination was established by the CA State Legislature
- Industry and Metropolitan metrics provide guidance

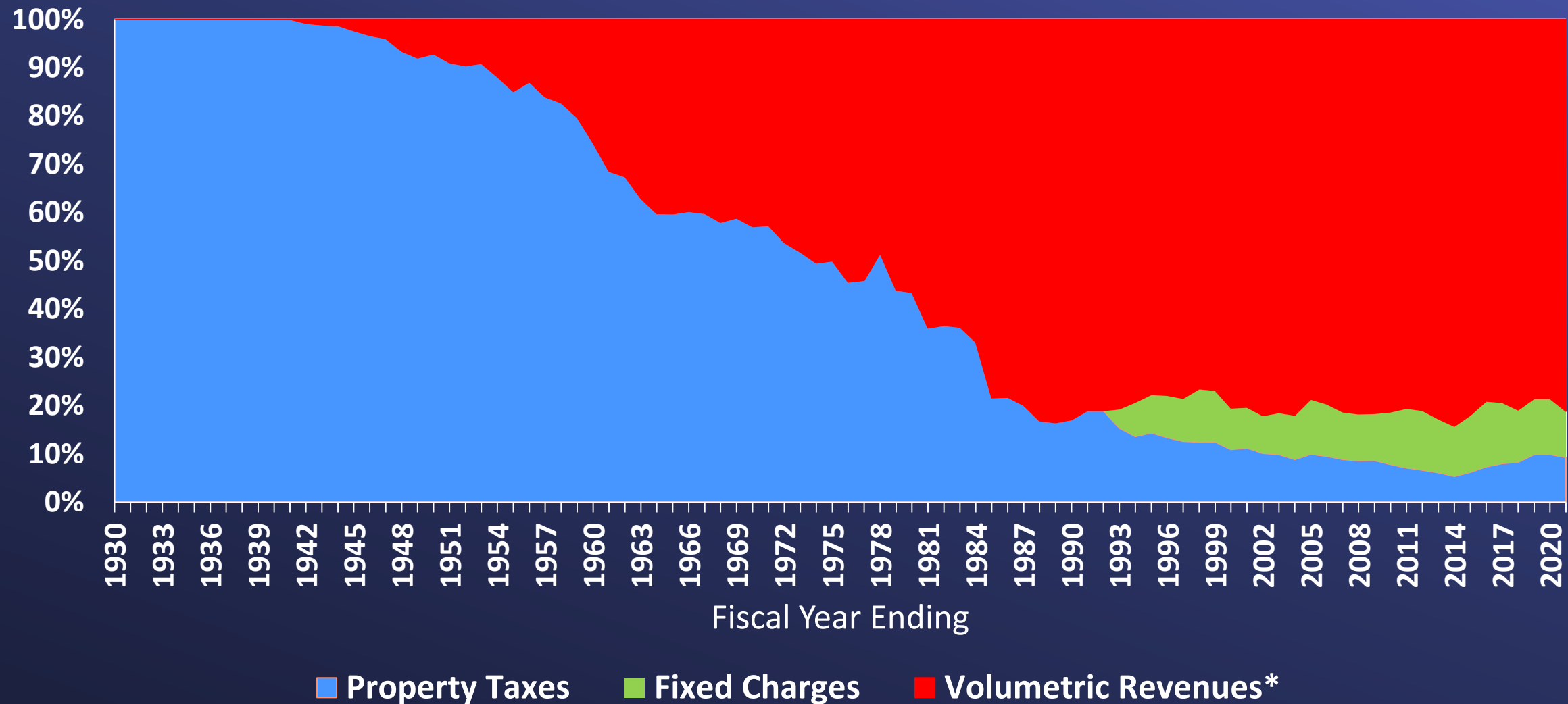
Legal Effect of 124.5 Determination

- Section 124.5 would not apply in the relevant time period
- No specific tax rate is set with this determination; no minimum or maximum tax rate established
- Tax rates are considered and set by the Board each August

Historical Property Tax Rates



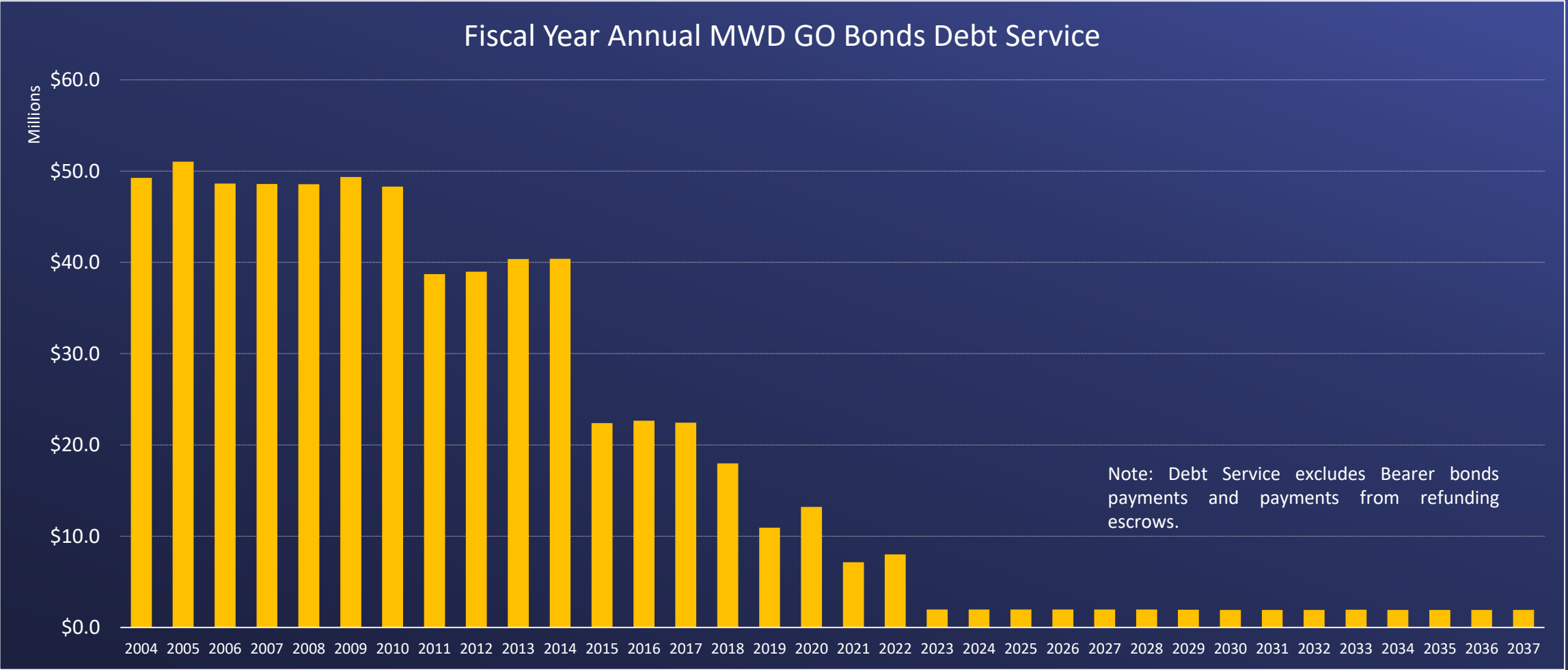
Historical Revenue Sources



* Includes water sales, exchanges and wheeling

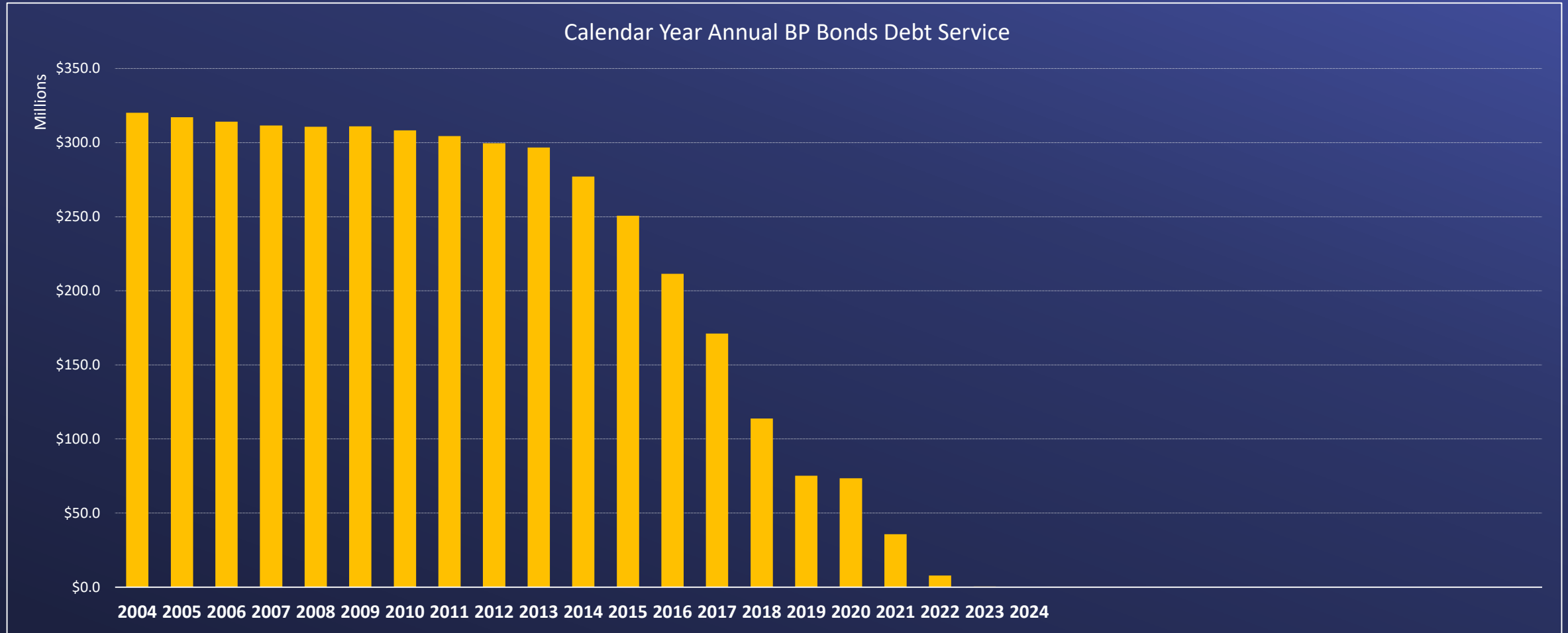
Outstanding Debt Service

MWD GO Bonds

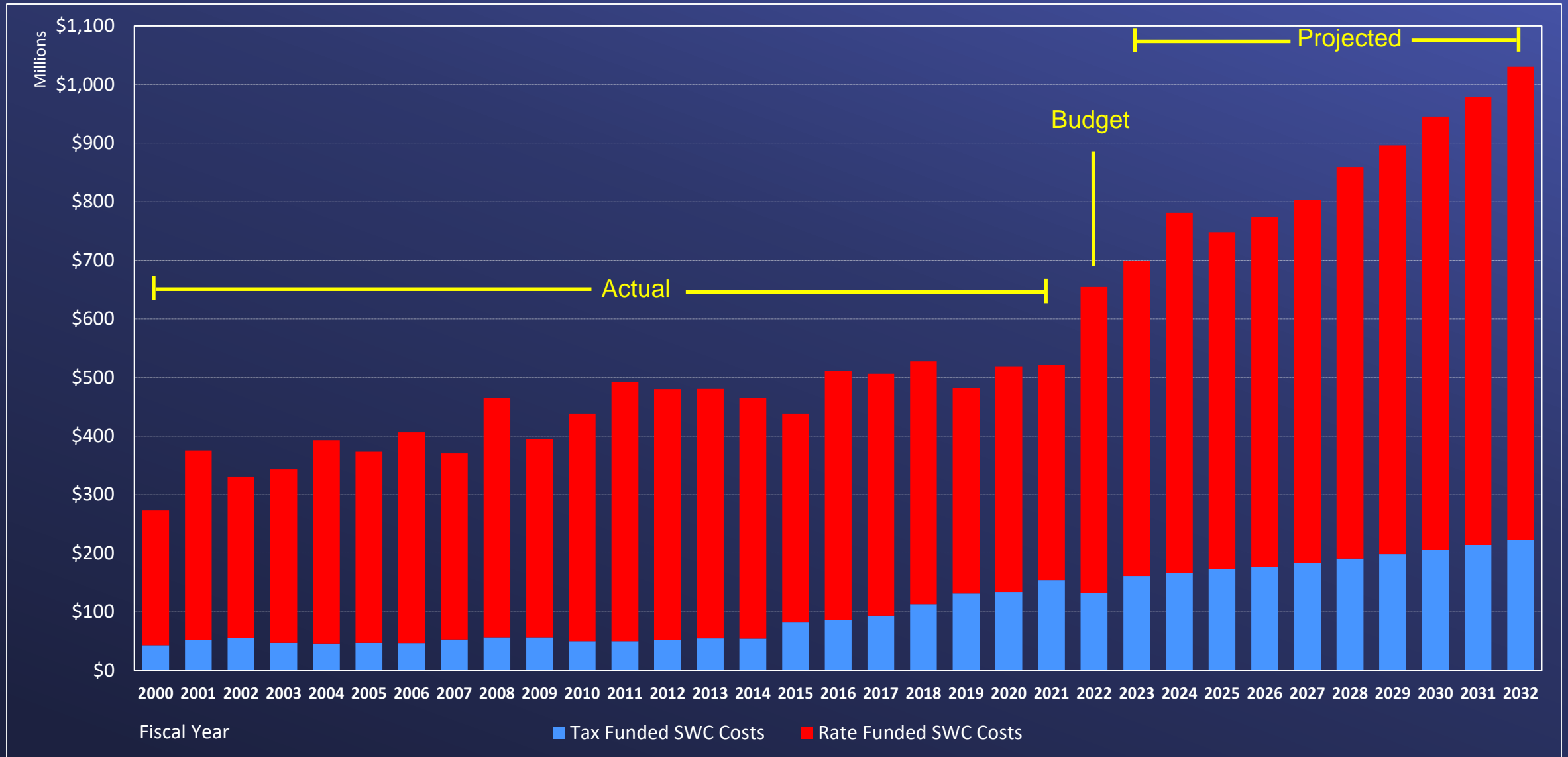


Outstanding Debt Service

DWR Burns-Porter Bonds



State Water Contract Costs



Financial Policies and Fiscal Integrity

- The Board has adopted financial policies that provide guidance for determining its fiscal integrity.
 - Fixed-Charge Coverage Ratio of 1.20x
 - Minimum and Target Reserves
 - Revenue Bond Coverage Target of 2.00x
- A reduction in fixed charges increases dependence on variable revenue, which puts pressure on meeting the Board's financial policies during periods of higher volatility/low water transactions.

Property taxes help address Metropolitan's inherent volatility in its financial profile

- Metropolitan's inherent volatility is tied to cycles of hydrology and long-term impacts of Climate Change.
- Fixed revenues are a key factor in managing Metropolitan's financial volatility, which is tied to these underlying determinants.
- Property taxes represent approximately 50% of fixed revenues.
- As a more stable revenue stream, property taxes offset the need to adjust volumetric rates more frequently, or in a greater magnitude.
- If a determination regarding the applicability of Section 124.5 limitation is not made, an additional 9% rate increase would be required to recover costs

Metropolitan's fiscal integrity is supported by...

- Continuing an ad valorem property tax rate in excess of the 124.5 limit
- Maintaining a fixed revenue source in line with growing SWC costs
 - At its current rate of 0.0035 percent, property tax revenue would pay 22 percent of SWC obligations
 - If the Section 124.5 limit applies, property taxes would pay less than one-tenth of 1 percent of SWC obligations
- Providing a diversity of fixed revenue sources (Prop Tax, RTS/Standby Charge, Capacity Charge)
- Distributing the costs of Metropolitan's services more equitably (residences and businesses pay a modest share vs. Member Agencies) through property taxes

Support for a Four-Year Determination

Making a four-year determination of the applicability of the MWD Act Section 124.5 is appropriate because...

1. Provides flexibility to manage Metropolitan's finances during current drought conditions
2. Ongoing financial and strategic planning efforts, which rely on this revenue component, won't be completed and implemented within the upcoming biennium budget period
3. The inherent volatility found in Metropolitan's financial profile has a cyclicity beyond the biennium budget period
4. Consistent with the scope of many financial planning timeframes

Options for Consideration

Staff has presented the board with three options for the determination finding related to the applicability of the Section 124.5 limitation:

- Option #1: Adopt the resolution finding that for fiscal years 2022/23 through 2025/26, the ad valorem property tax rate limitation of Metropolitan Water District Act Section 124.5 is not applicable because it is essential to Metropolitan's fiscal integrity to collect ad valorem property taxes in excess of the limitation
- Option #2: Adopt the resolution finding that for fiscal years 2022/23 and 2023/24, the ad valorem property tax rate limitation of Metropolitan Water District Act Section 124.5 is not applicable because it is essential to Metropolitan's fiscal integrity to collect ad valorem property taxes in excess of the limitation
- Option #3: Make no determination and allows the Section 124.5 limitation to apply

Recommendation

Staff recommends Option #1

Option #1: Adopt the resolution finding that for fiscal years 2022/23 through 2025/26, the ad valorem property tax rate limitation of Metropolitan Water District Act Section 124.5 is not applicable because it is essential to Metropolitan's fiscal integrity to collect ad valorem property taxes in excess of the limitation



Section 124.5 Determination Finding

Questions



**THE METROPOLITAN WATER DISTRICT
OF SOUTHERN CALIFORNIA**

RESOLUTION 9301

**RESOLUTION OF THE BOARD OF DIRECTORS
OF THE METROPOLITAN WATER DISTRICT OF
SOUTHERN CALIFORNIA**

**FINDING THAT FOR FISCAL YEARS 2022/23 THROUGH 2025/26, THE AD
VALOREM PROPERTY TAX RATE LIMITATION IN SECTION 124.5 OF THE
METROPOLITAN WATER DISTRICT ACT IS NOT APPLICABLE BECAUSE IT IS
ESSENTIAL TO METROPOLITAN'S FISCAL INTEGRITY TO COLLECT AD
VALOREM PROPERTY TAXES IN EXCESS OF THAT LIMITATION**

The Board of Directors of The Metropolitan Water District of Southern California (the "Board") hereby finds that:

1. The Metropolitan Water District of Southern California ("Metropolitan"), pursuant to Section 124 of the Metropolitan Water District Act (the "Act"), is authorized to levy and collect taxes on all property within the district for the purposes of carrying on the operations and paying the obligations of the district; and
2. Pursuant to Section 307 of the Act, the Board of Directors ("Board") determines the amount of money necessary to be raised by taxation for district purposes each fiscal year and fixes rates of taxation upon the assessed valuation of property taxable by the district to be levied accordingly; and
3. Since its inception Metropolitan has levied and collected property taxes; and
4. The Board, pursuant to sections 133 and 134 of the Act, is authorized to fix the rate or rates at which water shall be sold. Such rates, so far as practicable, shall result in revenue which, together with revenue from fixed charges or assessments, will pay Metropolitan's operating expenses, capital costs, debt service and other expenses and obligations; and
5. Before 1942, all revenues to pay for operations, construction of the Colorado River Aqueduct, other facilities, and other Metropolitan obligations came from ad valorem property taxes. After deliveries of Metropolitan water began in fiscal year 1941/42, water sales were an additional source of revenues, but not until 1974 did revenues from water sales equal revenues from ad valorem taxes; and
6. On November 4, 1960, Metropolitan entered into its contract with the California Department of Water Resources (the "State Water Contract") for water service from the State

Water Project. Metropolitan's was the first contract executed and the prototype for the 28 state water contracts that followed; its terms were validated by the California Supreme Court in *Metropolitan Water Dist. v. Marquardt* (1963) 59 Cal.2d 159; and

7. Under the State Water Contract, Metropolitan is obligated to pay allocable portions of the cost of construction and replacement of the State Water Project system, as well as ongoing operating and maintenance costs, regardless of quantities of water delivered to Metropolitan and regardless of the amounts of water Metropolitan delivers to its member agencies. Approximately 70 percent of Metropolitan's State Water Contract obligations are fixed, or unrelated to the quantity of water delivered; and

8. Metropolitan's authority to levy a tax or assessment to satisfy State Water Contract obligations was a condition to entering into the State Water Contract, and the California Department of Water Resources only executed state water contracts with agencies that have taxing power; and

9. The State Water Contract expressly provides that, if other available funds are not sufficient, Metropolitan must levy a tax or assessment to satisfy its State Water Contract obligations; and

10. Metropolitan's outstanding general obligation bonds and State Water Contract obligations are indebtedness approved by the California voters before Article XIII A of the California Constitution (Proposition 13) was adopted; and

11. Metropolitan's revenues from water transactions and deliveries vary with the quantity of water delivered and water deliveries fluctuate significantly with drought, weather conditions, availability of local supplies, economic conditions and other factors affecting regional demands. During the period from fiscal year 2011/12 through fiscal year 2020/21, Metropolitan's annual Member Agency water transactions ranged from 1.37 million acre-feet to 2.06 million acre-feet; and

12. When fixing taxes and setting rates, the Board and Metropolitan's member agencies evaluate the appropriate mix of property taxes and water rates and charges to promote Metropolitan's fiscal stability and ensure its ability to satisfy the region's long-term water supply needs while reasonably and fairly allocating the cost of providing service to its member agencies and complying with legal requirements; and

13. On May 8, 1984, the Board approved recommendations to amend the Act, set forth in Board Letter 6-2 dated April 30, 1984; and

14. Such amendments were incorporated into Assembly Bill 1445, which was approved by the Legislature and filed with the California Secretary of State on July 3, 1984, and added to the Act as Section 124.5; and

15. Section 124.5 provides that Metropolitan must limit the ad valorem property tax to collect no more than the amount required to pay for a fraction of voter-approved debt, specifically, the composite amount required to pay (1) the principal and interest on general obligation bonded indebtedness of the district and (2) that portion of the district's payment obligation under a water service contract with the state which is reasonably allocable, as determined by Metropolitan, to the payment by the state of principal and interest on bonds issued pursuant to the California Water Resources Development Bond Act as of the effective date of Section 124.5 and used to finance construction of facilities for the benefit of the district; and

16. Section 124.5 further provides that its restrictions do not apply "if the board of directors of the district, following a hearing held to consider that issue, finds that a tax in excess of these restrictions is essential to the fiscal integrity of the district, and written notice of the hearing is filed with the offices of the Speaker of the Assembly and the President pro Tempore of the Senate at least 10 days prior to that date of the hearing;" and

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25. Metropolitan's participation in the State Water Project under the State Water Contract is fundamental to Metropolitan's ability to consistently provide a reliable water supply and delivery at wholesale to its service area and, thus, satisfaction of its State Water Contract obligations is essential to Metropolitan's mission; and

26. The State Water Project facilities are over 50 years old and Metropolitan's State Water Contract obligations include increasing costs for repair and replacement of existing facilities that are needed to both maintain the storage and conveyance capacity of the State Water Project facilities and assure continued availability and delivery of supplies from the State Water Project and other sources. These costs and obligations were not foreseen by the Legislature when, in 1984, it established the Section 124.5 tax rate restriction and nothing suggests that the Legislature intended to prohibit the Board from considering such circumstances when deciding whether collecting more than the limitation in that Section is essential to Metropolitan's fiscal integrity; and

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28. Consideration of, and providing for, current and anticipated State Water Contract obligations is essential to Metropolitan's fiscal stability and integrity; and

29. Availability of diverse financial resources to satisfy Metropolitan's State Water Contract obligations is essential to Metropolitan's fiscal stability and integrity; and

30. An appropriate balance of fixed costs and fixed revenue is essential to Metropolitan's long-term fiscal health; and

31. The ad valorem tax is essential to the appropriate balance of fixed costs and fixed revenue under current circumstances; and

32. Continuing an ad valorem property tax rate in excess of the limit of Section 124.5 will allow the Board flexibility to fund Metropolitan's State Water Contract obligations fully and fairly in fiscal year 2022/23 through 2025/26 and for the foreseeable future; and

33. When it enacted Section 124.5, the Legislature recognized the importance of robust fixed revenue sources. At the same time that it established the rate restriction and safety valve to make the restriction inapplicable, it authorized alternative fixed revenue sources in the form of benefit assessments and standby charges. To the extent such assessments or charges would be new assessments or charges, they would likely be governed by additional requirements not in place or contemplated when the Legislature enacted Section 124.5. In the Board's judgment, adoption of such new or additional assessments or charges is not practical and they are not practical fixed revenue sources at this time, especially because those assessments and charges would be collected from property owners already paying the ad valorem property taxes; and

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35. If the Section 124.5 limit is applicable, fiscal years 2022/23 through 2025/26 fixed revenues as a percentage of total revenues will decline approximately from 18 percent in fiscal year 2021/22 to an average of 10 percent for fiscal years 2022/23 through 2025/26; and

36. Considering Metropolitan's significant fixed costs and fluctuating volumetric revenues, robust and diverse fixed revenues are essential to Metropolitan's fiscal well-being for the additional reason that they help Metropolitan maintain its creditworthiness. Positive credit ratings are central to fiscal integrity because they reduce the cost of borrowing and provide flexibility by increasing access to credit markets. Access to credit markets is especially important whenever Metropolitan faces supply or demand uncertainties. As set forth above, collecting more tax revenue in excess of the Section 124.5 limit will allow Metropolitan to retain important fixed revenues; and

37. Ad valorem taxes are an important component of Metropolitan's fiscal integrity because they help ensure that those for whom costs are incurred help pay those costs. As a wholesale water agency, Metropolitan's customers are its 26 member agencies. Each member agency pays volumetric rates based on the amount of water transactions with Metropolitan; whereas ad valorem taxes are levied directly on residents and businesses that are property owners within Metropolitan's service area. All property owners within Metropolitan's service area benefit from the water system that allows water to be delivered in Southern California. Ad valorem taxes ensure that residences and businesses pay a share of costs of the system; and

38. Maintaining the existing ad valorem tax rate advances fiscal integrity because it takes pressure off Metropolitan's volumetric water rates and readiness-to-serve and capacity charges and assist the Board, in its discretion, in maintaining a fair and appropriate balance

between fixed costs and fixed revenues and help ensure that all who benefit from Metropolitan's service pay a fair share of the cost of that service; and

39. Continuing an ad valorem property tax rate in excess of the limits of Section 124.5 and preventing the decline in fixed revenues will create a more stable water revenue structure that can better deal with fluctuations in water transactions and support drought response measures; and

40. Metropolitan's reliance on property taxes is significantly lower than most other agencies that entered into state water contracts. Other state water contractors rely on property taxes to cover up to 100 percent of their state water contract obligations. Even if all of Metropolitan's property tax revenue were fully allocated to State Water Contract obligations—and it is not, as a portion covers Metropolitan's general obligation debt service—Metropolitan would cover only an average of 24 percent for fiscal years 2022/23 through 2025/26 of its State Water Contract obligations. This percentage is significantly lower than other state water contractors; and

41. An analysis of fiscal health and stability must consider long-term circumstances, and the full spectrum of facts and circumstances, including the appropriate mix of property taxes and water rates and charges that will best allow Metropolitan to satisfy the region's long-term water supply needs; and

42. Notices of a public hearing were filed with the offices of the Speaker of the Assembly and the President pro Tempore of the Senate on February 24, 2022; and

43. The Board conducted a public hearing at its regular meeting on March 8, 2022, at which interested parties were given the opportunity to present their views regarding the recommendation that it is essential to Metropolitan's fiscal integrity to collect taxes in excess of the Section 124.5 limitation for fiscal years 2022/23 through 2025/26; and

44. The Board has carefully considered the comments and evidence and all material factors relevant to the finding, and all such materials were made available at <https://www.mwdh2o.com/who-we-are/budget-finance/property-tax-rate-for-fy-202021/>; and

45. The meeting of the Board was conducted in accordance with the Brown Act (commencing at Section 54950 of the Government Code), for which due notice was provided and at which a quorum was present and acting throughout; and

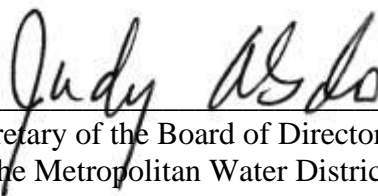
46. A four-year determination of the applicability of Section 124.5 is appropriate given (1) the flexibility required to manage Metropolitan's finances during current drought conditions, (2) the time required to complete ongoing financial and strategic planning efforts, (3) inherent volatility found in Metropolitan's financial profile, and (4) the scope of financial planning timeframes used in the financial sector for various projections and analysis;

NOW, THEREFORE, the Board of Directors of The Metropolitan Water District of Southern California, after receiving, considering, and evaluating public comments and evidence

and all material factors pertaining thereto, including the financial and operating information summarized in Board Letter 9-2 and presented on March 8, 2022, and in recognition of the facts and considerations set forth in this Resolution, hereby:

1. Finds and determines that it is essential to Metropolitan's fiscal integrity to collect ad valorem property taxes in excess of the Section 124.5 limitation on ad valorem property taxes in fiscal years 2022/23 through 2025/26; and
2. Resolves and determines that pursuant to its finding, the tax rate restriction in Section 124.5 of the Act is inapplicable when setting the ad valorem property tax rate for fiscal years 2022/23 through 2025/26; and
3. Waives compliance with Section 4301(b) of Metropolitan's Administrative Code for any tax levy that utilizes this finding regarding Section 124.5 of the Act.

I HEREBY CERTIFY that the foregoing is a full, true, and correct copy of a resolution of the Board of Directors of The Metropolitan Water District of Southern California, adopted at its meeting held April 12, 2022.

A handwritten signature in dark ink, appearing to read "Judy AS Lo", is written over a horizontal line.

Secretary of the Board of Directors
of the Metropolitan Water District
of Southern California



● **Board of Directors**
Finance and Insurance Committee

4/12/2022 Board Meeting

Revised 7-3

Subject

Approve the proposed biennial budget for fiscal years 2022/23 and 2023/24, which includes the Capital Investment Plan and revenue requirements for fiscal years 2022/23 and 2023/24 and the ten-year forecast; adopt resolutions fixing and adopting the water rates and charges for calendar years 2023 and 2024; the General Manager has determined that the proposed actions are exempt or otherwise not subject to CEQA

Executive Summary

This letter presents information on and recommendations for the Proposed Biennial Budget and revenue requirements for fiscal years (FY) 2022/23 and FY 2023/24, water rates and charges for the calendar year (CY) 2023 and CY 2024, the Ten-Year Financial Forecast (Ten-Year Forecast), and the Cost of Service Reports (COS) supporting the rates and charges options outlined below. The Proposed Biennial Budget covers a transitional period of strategic long-term planning at Metropolitan, while at the same time needing to address near-term challenges, such as high inflation and a deepening drought emergency due to low State Water Project (SWP) supplies.

Before the General Manager presented the initial budget and rates proposal in February, staff had already worked to reduce what would have been double-digit increases to a proposal of 8 percent rate increases per year. On February 7, 2022, at Budget Workshop #1, staff presented the Proposed Biennial Budget, which has since been updated, to the Finance and Insurance (F&I) Committee, including the proposed increases to the rates and charges for CYs 2023 and 2024, the COS Report, Capital Investment Plan (CIP), and Ten-Year Forecast. The revenue requirements for FYs 2022/23 and 2023/24, which are derived from the Proposed Biennial Budget, lead to overall rate increases of 8 percent in each of CYs 2022/23 and 2023/24.

Since Budget Workshop #1, the F&I Committee held three additional workshops that focused on the development of the CIP, staff responses to board questions, updates to the Proposed Biennial Budget, and the applicability of Metropolitan Water District Act Section 124.5. The Board also held a public hearing on March 8, 2022, for the public to provide comments on the proposed budget, rates, and charges. Additionally, the Board received information on various alternative budget and rate scenarios and requested that staff bring forward for consideration a rate option that is closer to the prior long-term rate projection of 5 percent. The outcome of this lengthy and transparent budget process is the presentation of three options, summarized below and detailed throughout this letter.

Key Driver for Rate Increases

The proposed rate increases are primarily driven by: (1) the catch-up for the loss of the Water Stewardship Rate (WSR) revenue; (2) a decrease in projected water transactions; (3) and projected increases for State Water Project (SWP) and Colorado River Aqueduct (CRA) power costs and fixed State Water Contract (SWC) costs; and higher departmental Operations and Maintenance (O&M) costs driven by high inflation and increasing Delta Conveyance Planning expenditures.

Option 1 is the updated Proposed Biennial Budget, which recommends overall rate increases of 8 percent in CY 2023 and 8 percent in CY 2024. Highlights of this option include the following:

- Implements measures to limit annual increases in Departmental O&M expenditures to approximately 3 percent per year, while adding 20 regular full-time employees (FTE) positions to support board initiatives of Sustainability, Resilience & Innovation, Diversity, Equity & Inclusion, and Equal Employment Opportunity, and support key operational needs. The remaining staffing needs are unfunded. The Departmental O&M budget also includes \$20M for planning activities related to the Regional Recycled Water Program (RRWP) and incorporates negotiated labor increases, allowable merit adjustments, and increased benefit costs.
- Recommends appropriating \$600 million (M) to CIP for FYs 2022/23 and 2023/24. Maintains PAYGO funding at \$135M per year to limit rate impacts at the expense of decreasing revenue bond coverage and of not meeting MWD's revenue bond coverage target of 2.0 times.
- Funds \$99M in contributions for the Delta Conveyance Project (DCP) planning activities. These contributions will be funded from a combination of rates and the California WaterFix refund of \$34.5M received in 2019.
- Continues to support demand management programs, including a proposed increase in funding for the Conservation Program to \$86M over the biennium, \$36M of which is anticipated to be bond-financed. Staff, however, requests authority to bond finance the entire Conservation Program to provide flexibility in case of revenue shortfalls.
- Bond finance the AVEK High Desert Program to reduce short-term rate impacts.
- Allows Metropolitan to meet the fixed charge minimum coverage target of 1.2 times over the biennial period but will not allow Metropolitan to achieve its revenue bond target of 2.0 times during the biennium or the ten-year forecast period.
- Draws \$55.2 million from reserves over the biennium.
- Long-term overall rate increases are projected at 5 percent per year and include the full-scale RRWP but not the DCP. This projection is subject to changes based on many factors, including the implementation of the 2020 IRP and updated water transactions.

Other Actions to Mitigate Rate Impacts

In bringing forward Option 1, staff carefully reviewed all means available that would allow Metropolitan to fulfill its mission to the highest degree while also limiting overall rate increases to the member agencies, recognizing that they too are contending with drought, system investment needs, and affordability concerns. Metropolitan has and will continue to be persistent in its search for new revenue sources, which potentially include state and federal grant opportunities, beneficial water exchanges, and partnerships that leverage investments in Metropolitan's system. Staff continues to work with the Governor's office and the Legislature to advocate for funding for Metropolitan's emergency drought projects and the RRWP. Additionally, Metropolitan is exploring low-interest loans through the State Revolving Funds and researching federal project financing options. Metropolitan's existing assets, such as real estate, may also pose opportunities to serve their strategic function for Metropolitan while at the same time generating revenue. Finally, the General Manager has initiated an organizational assessment to evaluate opportunities to improve operations and become more efficient in the delivery of Metropolitan's services. Altogether, Metropolitan is taking action on all fronts to mitigate rate impacts on its member agencies but, at the same, is proposing a budget (Option 1) that prudently manages the overall financial position of Metropolitan.

Option 2 reduces the overall rate increases to 6.5 percent in each of CYs 2023 and 2024. The following changes to the Proposed Biennial Budget (Option 1) are necessary to achieve these rates reductions:

- Increase the budgeted departmental vacancy rate for FTE positions from 2 percent to 5 percent to reflect current conditions. The higher vacancy rate is assumed to persist through FY 2031/32. This reduces the Departmental O&M budget by \$24M over the biennium. **However, there is a risk that some savings might not materialize as savings from unfilled positions are often spent on overtime or temporary labor. Also, the savings might not be maintained if the vacancy rate decreases.**
- Update the Local Resource Projects (LRP) projection to reflect the expectation that no new agreements will be added during the biennial budget period.

- Under this option, the long-term rate outlook shows rates increasing by 6 percent in FY 2024/25, 5.5 percent from FY 2025/26 through FY 2028/29, and 5 percent thereafter.
- Revenue bond coverage decreases to 1.4 times in FY 2023/24.
- Additional risks as compared to Option 1: savings might not materialize or be maintained, and increased risk of large reserves draws that necessitate unplanned rate increases or higher future rates.

Option 3 reduces overall rate increases to 5.5 percent in each of CYs 2023 and 2024. This is achieved by making the following changes from Option 2:

- Assume Metropolitan receives \$10M in grant funding per year to offset O&M expenditures through FY 2031/32.
- Reduce the Departmental O&M budget by another \$10M over the biennial budget period. **These cuts have substantial impacts on operations, research and planning, and staff development, as explained in this letter.**
- Long-term rate increases would increase to 6 percent beginning in FY 2024/25 before dropping down to 5 percent in FY 2029/30.
- Additional risks as compared to Option 2: grants might not be obtained, and increased risk of large reserves draws that necessitate unplanned rate increases or higher future rates.

Attached to this board letter are documents corresponding to each budget option presented above, as well as resolutions reflecting the calculations for Option 1. Metropolitan will publish a final Budget, Cost of Service Report, Engineer's Report, and appropriate resolutions to reflect the final option adopted by the Board. Notice of the proposed budget, rates, charges, review of the applicability of the ad valorem property tax limitation, and the public workshops and hearings were provided to the member agencies, the Board, and the public in advance of the budget, rates, and charges process. All documents provided to the Board in connection with the actions proposed in this board letter have been posted online, along with other supporting and background material and any comments received by Metropolitan.

Description

OVERVIEW

The Proposed Biennial Budget covers a transitional period of strategic planning at Metropolitan. Over the next two fiscal years, Metropolitan will be completing the 2020 Integrated Resources Plan, continuing a rate refinement process, undertaking a long-term financial plan, and addressing Metropolitan's role as it approaches 100 years. The findings and recommendations that come out of these strategic planning initiatives will be considered by the Board and, if adopted, incorporated into future biennial budgets. In addition to the upcoming key strategic planning period, the biennium also starts in a time of emergency drought, when the world appears to be coming out of a pandemic that caused detrimental health and economic impacts, and great inflation and product shortages. Therefore, the options presented in this letter strike a balance between addressing the challenges of this transitional period and attempting to do so with the least amount of financial impact on Metropolitan's member agencies.

Funding Strategic Priorities

The proposed budget options align with the General Manager's proposed Business Plan for FYs 2022/23 and 2023/24, which sets out Metropolitan's strategic priorities. The five strategic priorities will guide the General Manager's Business Plan to drive new initiatives toward organizational improvements and overall resilience:

- *Empower the workforce and promote diversity, equity, and inclusion.*
- *Sustain Metropolitan's Mission with a Strengthened Business Model.*
- *Adapt to Changing Climate and Water Resources.*
- *Protect Public Health, Regional Economy, and Metropolitan Assets.*
- *Partner with Stakeholders and the Communities We Serve.*

Key Budget Assumptions

Underlying all three of the proposed budget options are the following key assumptions:

- **Water transactions projection:** Water transactions include water sales, exchanges, and wheeling, which can be greatly impacted by hydrologic conditions. Metropolitan's Water Resource Management Group projected water transactions to be 1.59 million acre-feet (MAF) for FY 2022/23 and 1.54 MAF for FY 2023/24 and to remain between 1.5 and 1.6 MAF over the next ten years.
- **State Water Project and Colorado River:** For FYs 2022/23 and 2023/24, Metropolitan's SWP supplies are projected to be 0.41 MAF and 0.82 MAF, respectively. These projections are based on a 15 percent SWP allocation for CY 2022 and 40 percent for CY 2023 and account for the utilization of Metropolitan's SWP supply programs. After CY 2023, the SWP allocation is set at the median forecast of 50 percent. For FYs 2022/23 and 2023/24, Colorado River diversions are projected to be 1.007 MAF and 0.923 MAF, respectively, and account for the utilization of Metropolitan's Colorado River supply programs.
- **Capital Investment Plan:** CIP expenditures are budgeted at \$300M in each of the biennial budget years. The capital expenditures for the full RRWP are not included in the biennium but are included in the Ten-Year Forecast starting in FY 2024/25. Detailed information about the CIP can be found in the CIP Appendix, **Attachment 1**.
- **Ad valorem tax rate:** The Proposed Biennial Budget assumes that the Board maintains the ad valorem tax rate at the current level of 0.0035 percent of assessed value, as the Board has done since FY 2013/14. This is projected to generate ad valorem tax revenues of \$163.1M in FY 2022/23 and \$168.3M in FY 2023/24.

Key Drivers for Rate Increases

The proposed rate increases are primarily driven by: (1) the catch-up for the loss of the Water Stewardship Rate (WSR) revenue; (2) a decrease in projected water transactions; (3) projected increases for State Water Project (SWP) and Colorado River Aqueduct (CRA) power costs and fixed State Water Contract (SWC) costs; and, (4) higher departmental O&M costs driven by high inflation and increasing DCP planning expenditures.

Water demands are projected to decrease by 60 thousand acre-feet over the proposed biennial budget period, from 1.60 MAF to 1.54 MAF, and are expected to continue to decline to 1.51 MAF by FY 2025/26. The lower water demand projection is the reason why our current rate projections are higher than was previously forecasted.

Financial Reporting Change

The Proposed Biennial Budget has been prepared on a cash basis instead of a modified-accrual basis. Financial reports will continue to be prepared on a full-accrual basis of accounting in accordance with promulgated rules of the Governmental Accounting Standards Board and Generally Accepted Accounting Principles. The staff has reviewed the impacts of budgeting and reporting on a modified-accrual basis over the last nine years and has determined that the benefits expected to be achieved did not manifest as thought. Reporting against the cash-based budget provides the most transparent reporting of available unrestricted reserves. Additionally, rather than saving a significant amount of staff time, the modified-accrual basis of accounting increased the amount of time required to maintain modified-accrual data and report against this basis of budgeting. Therefore, the staff proposes a change from a modified-accrual basis method of accounting to a cash-basis method. If approved by the Board pursuant to Section 5106 of the Administrative Code, the adopted budget will reflect this change.

Table 1 below summarizes the proposed revenue requirement and expenditure totals for the Proposed Biennial Budget (Option 1), as well as for Options 2 and 3.

Table 1: Expenditures and Revenue Requirements for Proposed Budget Options

in millions of dollars

Options/Fiscal Year	Option 1		Option 2		Option 3	
	FY 2022/23	FY 2023/24	FY 2022/23	FY 2023/24	FY 2022/23	FY 2023/24
State Water Contract Power	\$ 211.6	\$ 258.6	\$ 211.6	\$ 258.6	\$ 211.6	\$ 258.6
Colorado River Aqueduct Power	105.9	85.6	105.9	85.6	105.9	85.6
Departmental O&M	608.9	616.7	597.3	604.5	589.1	602.3
State Water Contract OMP&R & Capital	440.1	468.2	440.1	468.2	440.1	468.2
Supply Programs (cash funded portion)	66.7	64.1	66.7	64.1	66.7	64.1
Delta Conveyance Planning (net of CWF refund)	30.0	34.5	30.0	34.5	30.0	34.5
Demand Management (cash funded portion)	50.8	54.9	50.8	49.1	50.8	49.1
PAYGO	135.0	135.0	135.0	135.0	135.0	135.0
Debt Service	288.0	301.0	288.0	301.0	288.0	301.0
Sub-Total Expenditures	\$ 1,937.0	\$ 2,018.6	\$ 1,925.3	\$ 2,000.6	\$ 1,917.2	\$ 1,998.4
Increase/(Decrease) in Required Reserves	11.0	7.9	6.1	6.9	5.5	7.1
Property Taxes Revenues	(163.1)	(168.3)	(163.1)	(168.3)	(163.1)	(168.3)
Other Revenues	(72.0)	(57.4)	(72.0)	(57.4)	(82.1)	(67.5)
Total Revenue Requirement	\$ 1,712.9	\$ 1,800.7	\$ 1,696.3	\$ 1,781.8	\$ 1,677.6	\$ 1,769.7

OPTION 1 – PROPOSED BIENNIAL BUDGET**Rates and Charges**

Overall rate increases of 8 percent effective each year, on January 1, 2023, and January 1, 2024, are appropriate to cover the costs in the Proposed Biennial Budget for FYs 2022/23 and 2023/24, meet financial policy guidelines with the exception of revenue bond coverage, and maintain steady rates for the future according to current assumptions. Before the Proposed Biennial Budget was presented in February, the General Manager had already taken steps to reduce the rate impact over the biennial budget period by focusing on actions to lower cash expenditures, including bond financing certain supply and conservation programs, limiting departmental O&M requests for new positions and discretionary budget increases, holding steady the level of PAYGO funding, and applying the CA WaterFix refund to DCP planning costs. Highlights of this option include the following:

- Implements measures to limit annual increases in Departmental O&M expenditures to approximately 3 percent per year, while adding 20 regular FTE positions to support board initiatives of Sustainability, Resilience & Innovation SRI, Diversity, Equity & Inclusion DE&I, and Equal Employment Opportunity EEO, and support key operational needs. The Departmental O&M budget also includes \$20M for planning activities related to the RRWP and incorporates negotiated labor increases, allowable merit adjustments, and increased benefit costs.
- Recommends appropriating \$600M to CIP for FYs 2022/23 and 2023/24. Maintains PAYGO funding at \$135M per year to limit rate impacts at the expense of decreasing revenue bond coverage and of not meeting MWD's revenue bond coverage target of 2.0 times.
- Funds \$99M in contributions for the DCP planning activities. These contributions will be funded from a combination of rates and the California WaterFix refund of \$34.5M received in 2019.
- Continues to support demand management programs, including a proposed increase in funding for the Conservation Program to \$43M annually, \$36M of which is anticipated to be bond-financed over the biennium. Staff requests authority to bond finance the entire Conservation Program to provide flexibility in case of revenue shortfalls.
- Bond finance the AVEK High Desert Program to reduce short-term rate impacts.
- Allows Metropolitan to meet the fixed charge minimum coverage target of 1.2 times over the biennial period but will not allow Metropolitan to achieve its revenue bond target of 2.0 times during the biennium or the ten-year forecast period.
- Draws \$55.2 million from reserves over the biennium.

- Long-term overall rate increases are projected at 5 percent per year and include the full-scale RRWP but not the DCP. This projection is subject to changes based on many factors including the implementation of the 2020 IRP and updated water transactions.

The specific elements of the proposed rate increase effective January 1, 2023, and January 1, 2024, are shown below in Table 2.

Table 2: Option 1 – Proposed Rates and Charges

Rates & Charges Effective January 1st	Adopted 2022	Proposed 2023	% Increase (Decrease)	Proposed 2024	% Increase (Decrease)
Tier 1 Supply Rate (\$/AF)	\$243	\$329	35%	\$355	8%
Tier 2 Supply Rate (\$/AF)	\$285	\$532	87%	\$540	2%
System Access Rate (\$/AF)	\$389	\$381	-2%	\$412	8%
System Power Rate (\$/AF)	\$167	\$169	1%	\$190	12%
Treatment Surcharge (\$/AF)	\$344	\$367	7%	\$373	2%
Full Service Untreated Volumetric Cost (\$/AF)					
Tier 1	\$799	\$879	10%	\$957	9%
Tier 2	\$841	\$1,082	29%	\$1,142	6%
Full Service Treated Volumetric Cost (\$/AF)					
Tier 1	\$1,143	\$1,246	9%	\$1,330	7%
Tier 2	\$1,185	\$1,449	22%	\$1,515	5%
Readiness-to-Serve Charge (\$M)	\$140	\$157	12%	\$175	11%
Capacity Charge (\$/cfs)	\$12,200	\$10,800	-11%	\$11,800	9%
Overall Rate Increase			8%		8%

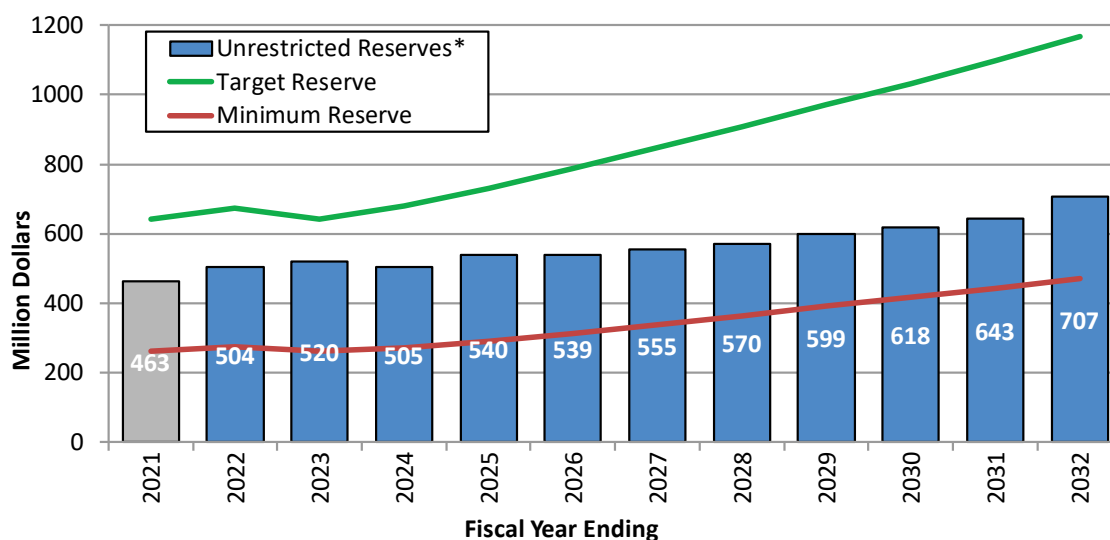
Capacity and RTS Charges by member agencies are reflected on pages 108 and 110, respectively, of the FYs 2022/23 and FY 2023/24 Cost of Service Report for Proposed Water Rates and Charges – Option 1 (**Attachment 2**).

The analysis in the COS Report supports the proposed rates and charges. The proposed CYs 2023 and 2024 water rates and charges are based on Metropolitan's current methodology for developing rates and charges to produce the necessary revenue required to cover costs. The proposed rates and charges also exclude a separate rate or charge to recover demand management costs, as a result of Metropolitan's Board action on November 23, 2021, which directed staff to recover 100 percent of demand management costs from Metropolitan's supply rate elements in the future rate and charge proposals. Accordingly, all demand management costs (regardless of funding source, such as bond financing or current revenues) are functionalized as supply and collected on the Tier 1 and Tier 2 supply rates. However, because there are no projected Tier 2 transactions in the biennium, the demand management costs are recovered entirely by the Tier 1 supply rate.

10-Year Financial Forecast

The Proposed Biennial Budget sets the foundation for consistent, reasonable rate increases over the ten-year planning period. Overall rate increases from FY 2022/23 through FY 2031/32 are projected to start at 8 percent each year for the next biennium and lower to 5 percent thereafter. The complete Ten-Year Forecast is presented in **Attachment 1** and includes the implementation of the full RRWP but does not include the costs for the DCP.

The long-term rate projections for all options presented in this report are highly influenced by the addition of the full-scale RRWP, which is assumed to begin construction in FY 2024/25 and affect the 2025 to 2032 rates and charges. The allocation of the RRWP costs to the rates and charges is based on preliminary information and might substantially change as a result of an upcoming COS study for the RRWP. In addition, the 10-year rate forecasts do not include the DCP which would substantially increase the rate projections.

Figure 1: Option 1 – Projected Rate Increases, Reserves and Financial Indicators, Ten-Year Forecast

	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
Overall Rate Inc.	3.0%	4.0%	8.0%	8.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.1%	5.0%
Water Transactions, MAF**	1.52	1.60	1.59	1.54	1.54	1.51	1.53	1.53	1.54	1.55	1.55	1.57
Rev. Bond Cvg	2.0	1.6	1.5	1.5	1.8	1.7	1.8	1.7	1.7	1.7	1.8	1.7
Fixed Chg Cvg	2.0	1.6	1.5	1.5	1.8	1.7	1.8	1.7	1.7	1.7	1.7	1.6
PAYGO, \$M	110	135	135	135	175	175	175	175	200	200	200	200

* includes Revenue Remainder and Water Rate Stabilization Fund

** includes water sales, exchanges, and wheeling

Bond Coverage Ratio

Revenue bond debt service coverage is one primary indicator of credit quality and is calculated by dividing net operating revenues by debt service. Metropolitan's debt management policy is to maintain an annual revenue bond coverage ratio of at least 2.0 times. Over the Ten-Year Forecast, Metropolitan's revenue bond coverage ratio is not expected to be achieved. In addition, Metropolitan also measures the total coverage of all fixed obligations after payment of operating expenditures. Metropolitan's fixed charge coverage ratio target is 1.2 times. The Ten-Year Forecast projects that Metropolitan's fixed charge coverage ratio is at least 1.5 times over the ten-year period, which helps maintain favorable credit ratings and access to the capital markets with low borrowing costs.

OPTION 2

Rates and Charges

This option reduces the overall rate increases to 6.5 percent in each of CYs 2023 and 2024. The following changes to the Proposed Biennial Budget (Option 1) are necessary to achieve these rate reductions:

- Increase the departmental budget vacancy rate for FTE positions from 2 percent to 5 percent to reflect current conditions. The higher vacancy rate is assumed to persist through FY 2031/32. This reduces the Departmental O&M budget by \$24M over the biennium. However, there is a risk that some savings might not materialize as savings from unfilled positions are often spent on overtime or temporary labor. Also, the savings might not be maintained if the vacancy rate decreases.
- Update the Local Resource Projects (LRP) projection to reflect the expectation that no new agreements will be added during the biennial budget period.
- Under this option, the long-term rate outlook shows rates increasing by 6 percent in FY 2024/25, 5.5 percent from FY 2025/26 through FY 2028/29, and 5 percent thereafter.

- Revenue bond coverage decreases to 1.4 times in FY 2023/24.
- Additional risks as compared to Option 1: savings might not materialize or be maintained, and increased risk of large reserves draws that necessitate unplanned rate increases or higher future rates.

The specific elements of the proposed rate increase effective January 1, 2023, and January 1, 2024, are shown below in Table 3.

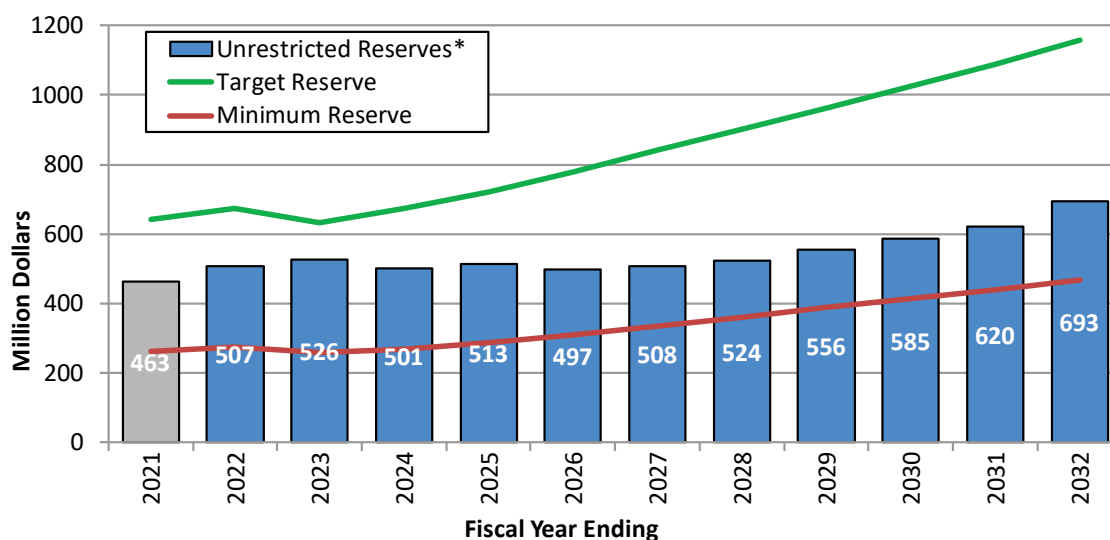
Table 3: Option 2 – Proposed Rates and Charges

Rates & Charges Effective January 1st	Adopted 2022	Proposed 2023	% Increase (Decrease)	Proposed 2024	% Increase (Decrease)
Tier 1 Supply Rate (\$/AF)	\$243	\$325	34%	\$341	5%
Tier 2 Supply Rate (\$/AF)	\$285	\$531	86%	\$532	0%
System Access Rate (\$/AF)	\$389	\$375	-4%	\$401	7%
System Power Rate (\$/AF)	\$167	\$167	0%	\$187	12%
Treatment Surcharge (\$/AF)	\$344	\$360	5%	\$363	1%
Full Service Untreated Volumetric Cost (\$/AF)					
Tier 1	\$799	\$867	9%	\$929	7%
Tier 2	\$841	\$1,073	28%	\$1,120	4%
Full Service Treated Volumetric Cost (\$/AF)					
Tier 1	\$1,143	\$1,227	7%	\$1,292	5%
Tier 2	\$1,185	\$1,433	21%	\$1,483	3%
Readiness-to-Serve Charge (\$M)	\$140	\$156	11%	\$172	10%
Capacity Charge (\$/cfs)	\$12,200	\$10,700	-12%	\$11,500	7%
Overall Rate Increase			6.5%		6.5%

Capacity and RTS Charges by member agencies are reflected on pages 108 and 110, respectively, of the FYs 2022/23 and FY 2023/24 Cost of Service Report for Proposed Water Rates and Charges – Option 2 (**Attachment 3**).

10-Year Financial Forecast

Under this option, the long-term rate outlook shows rates increasing by 6 percent in FY 2024/25, 5.5 percent from FY 2025/26 through FY 2028/29, and 5 percent thereafter. Additionally, the forecasted minimum bond coverage ratio steps down from 1.5 times to 1.4 times.

Figure 2: Option 2 – Projected Rate Increases, Reserves and Financial Indicators, Ten-Year Forecast

Overall Rate Inc.	3.0%	4.0%	6.5%	6.5%	6.0%	5.5%	5.5%	5.5%	5.5%	5.0%	5.0%	5.0%
Water Transactions, MAF**		1.60	1.59	1.54	1.54	1.51	1.53	1.53	1.54	1.55	1.55	1.57
Rev. Bond Cvg	2.0	1.6	1.5	1.4	1.7	1.6	1.7	1.7	1.7	1.8	1.8	1.8
Fixed Chg Cvg	2.0	1.6	1.5	1.4	1.7	1.6	1.7	1.7	1.7	1.7	1.7	1.6
PAYGO, \$M	-	135	135	135	175	175	175	175	200	200	200	200

* includes Revenue Remainder and Water Rate Stabilization Fund

** includes water sales, exchanges, and wheeling

OPTION 3

Rates and Charges

This option achieves an overall rate increase of 5.5 percent in both of CYs 2023 and 2024. This is accomplished by making the following changes to Option 2:

- Assumes Metropolitan receives \$10M in grant funding per year to offset O&M expenditures through FY 2031/32.
- Reduce the Departmental O&M budget by another \$10M over the biennial budget period. These cuts have a substantial impact on Metropolitan's operations and research and planning programs, as detailed in Table 4 below.
- Long-term rate increases would increase to 6 percent beginning in FY 2024/25 before dropping down to 5 percent in FY 2029/30.
- Additional risks as compared to Option 2: grants might not be obtained, and increased risk of large reserves draws that necessitate unplanned rate increases or higher future rates.

Table 4: Summary of Key O&M Budget Cuts and Impacts**Research and Planning Impacts**

- Cancel Feather River Watershed Climate Modeling effort (including co-funding to sponsors) and cut spatial analysis work (remote sensing data analysis, machine learning, analytics on agricultural and urban areas) back by half; this would reduce the ability to understand climate change impacts and monitor the effectiveness of water efficiency actions.
- Cut Delta-related studies and projects including collaborative science work on salmon recovery, the relative risk of fish entrainment modeling, and delta smelt and NGO participation in Collaborative Science and Adaptive Management Program; limit work on other pilot studies and modeling as well as cutting several inspection trips and the level of engineering and agricultural coordination support for the Delta Islands.
- Cut cost-sharing agreements with other agencies and academic institutions on scientific studies, resulting in missed collaborative opportunities on Metropolitan's science objectives.

Operations Impacts

- Limit the scope of the Seismic Resilience Strategy including the number of seismic assessments of Metropolitan infrastructure; additionally, postpone a variety of scheduled system vulnerability and reliability studies that would identify corrective action to maintain the system's reliability.
- Extend shutdowns (e.g., the 7-day shutdown could extend to 14 days or more) or defer or cancel some shutdowns to reduce overtime. Extending shutdowns could result in a significant impact on member agencies as many agencies do not have sufficient local supplies to withstand an extended shutdown period.
- Cut WSO materials and supplies: (1) pipe/valves and tools (10 percent), which increases the risk to system reliability and potential for emergency repairs; (2) laboratory supplies (6 percent) with a commensurate reduction in water quality tests that may impact the ability to do extended research into emerging water quality issues and trends.
- Cut WSO field travel to support work in remote areas in response to potential deferment of select shutdowns.
- Cut director inspection trips from 65 to 40, with more local/one-day and shared trips between two or more directors, and far fewer trips to Hoover Dam and the State Water Project/Delta; cut state and legislative inspection trips from one every year to one every two years.
- Cut travel, training, and conferences, resulting in reduced staff development and professional and technical opportunities.
- Cuts in IT outside services and materials and supplies which will result in slower response time to unplanned outages, possible increase in system downtime, and limited ability to respond to ad hoc requests and system enhancements.
- Cut IT training which will greatly decrease innovation and ability to support new technology.
- Cancel IT project implementations related to procurement, contracting, HR systems improvement, and other projects which may impact district productivity and vendor experience.

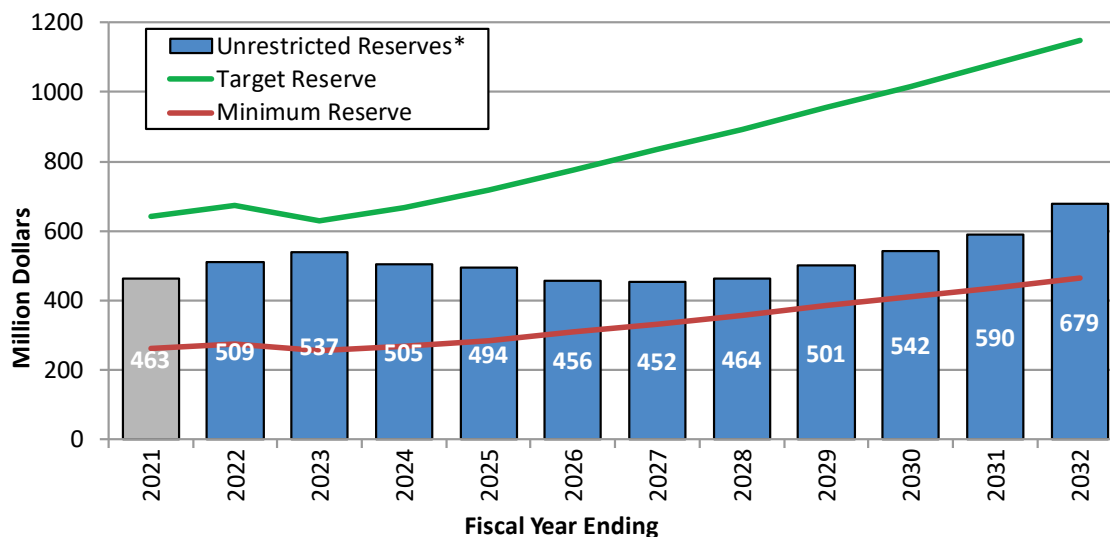
Table 5: Option 3 – Proposed Rates and Charges

Rates & Charges Effective January 1st	Adopted 2022	Proposed 2023	% Increase (Decrease)	Proposed 2024	% Increase (Decrease)
Tier 1 Supply Rate (\$/AF)	\$243	\$323	33%	\$335	4%
Tier 2 Supply Rate (\$/AF)	\$285	\$531	86%	\$532	0%
System Access Rate (\$/AF)	\$389	\$370	-5%	\$393	6%
System Power Rate (\$/AF)	\$167	\$166	-1%	\$183	10%
Treatment Surcharge (\$/AF)	\$344	\$356	3%	\$357	0%
Full Service Untreated Volumetric Cost (\$/AF)					
Tier 1	\$799	\$859	8%	\$911	6%
Tier 2	\$841	\$1,067	27%	\$1,108	4%
Full Service Treated Volumetric Cost (\$/AF)					
Tier 1	\$1,143	\$1,215	6%	\$1,268	4%
Tier 2	\$1,185	\$1,423	20%	\$1,465	3%
Readiness-to-Serve Charge (\$M)	\$140	\$155	11%	\$169	9%
Capacity Charge (\$/cfs)	\$12,200	\$10,600	-13%	\$11,400	8%
Overall Rate Increase			5.5%		5.5%

Capacity and RTS Charges by member agencies are reflected on pages 108 and 110, respectively, of the FYs 2022/23 and FY 2023/24 Cost of Service Report for Proposed Water Rates and Charges – Option 3 (**Attachment 4**).

10-Year Financial Forecast

This option targets overall rate increases of 5.5 percent in both CYs 2023 and 2024. Overall rate increases from FY 2022/23 through FY 2031/32 are projected to start at 5.5 percent each year for the biennium and increase to 6 percent through FY 2028/29, then decrease to 5 percent thereafter. As in Option 2, the bond coverage ratio reaches a minimum of 1.4 times in FY 2023/24.

Figure 3: Option 3 – Projected Rate Increases, Reserves and Financial Indicators, Ten-Year Forecast

Overall Rate Inc.	3.0%	4.0%	5.5%	5.5%	6.0%	6.0%	6.0%	6.0%	6.0%	5.0%	5.0%	5.0%
Water Transactions, MAF**	1.52	1.60	1.59	1.54	1.54	1.51	1.53	1.53	1.54	1.55	1.55	1.57
Rev. Bond Cvg	2.0	1.6	1.5	1.4	1.7	1.6	1.7	1.7	1.7	1.8	1.8	1.8
Fixed Chg Cvg	2.0	1.6	1.5	1.4	1.7	1.6	1.7	1.7	1.7	1.7	1.7	1.7
PAYGO, \$M	110	135	135	135	175	175	175	175	200	200	200	200

* includes Revenue Remainder and Water Rate Stabilization Fund

** includes water sales, exchanges, and wheeling

COST OF SERVICE ANALYSIS

The proposed water rates and charges to support the estimated revenue requirements were developed using the COS methodology previously approved by the Board and implemented since the Board adopted the current rate structure in October 2001 and implemented it in January 2003. More recently, the Board modified the manner of allocating demand management costs by directing staff in November 2021 to recover all demand management costs through the supply rate elements. Metropolitan, a wholesaler, provides full-service water service (treated or untreated) to its member agencies. Metropolitan has one class of customers: its member agencies. The level of rate unbundling in Metropolitan's rate structure provides transparency to show that rates and charges recover only those functions involved in the applicable service and that no cross-subsidy of functions exists. Metropolitan's COS process and resulting unbundled rate structure ensure that its wholesale customers pay for only those services they elect to receive. COS reports have been prepared for each rate option and are found as **Attachments 2, 3, and 4** to this letter.

PUBLIC PROCESS

The following table gives an account of the public process carried out regarding the Proposed Biennial Budget and proposed water rates and charges for CYs 2023 and 2024. In addition to the Board process, staff presented information to Metropolitan's member agencies at monthly Member Agency Managers Meetings.

February 7, 2022	F&I Committee, Workshop #1
February 11, 2022	Notice of public hearing regarding proposed rates and charges transmitted to member agencies
February 22, 2022	F&I Committee, Workshop #2
February 24, 2022	Notice of public hearing regarding Section 124.5 transmitted to Legislature
March 7, 2022	F&I Committee, Workshop #3
March 8, 2022	A public hearing on proposed water rates and charges and applicability of the tax rate limit pursuant to Section 124.5 of the MWD Act
March 22, 2022	F&I Committee, Workshop #4
April 11, 2022	F&I Committee, Recommended Biennial Budget, Calendar Year rates and charges, and applicability of Section 124.5 tax rate limit
April 12, 2022	Board action regarding Biennial Budget, Calendar Year rates and charges, and applicability of Section 124.5 tax rate limit

Following this process, and having received and evaluated all comments, this board letter proposes that the Board approve the Proposed Biennial Budget, including the CIP, and rates and charges, presented as Option 1, and provides two alternative options.

Policy

Metropolitan Water District Act Section 61: Ordinances, Resolutions, and Orders

Metropolitan Water District Act Section 124.5: Ad Valorem Tax Limitation

Metropolitan Water District Act Section 130: General Powers to Provide Water Services

Metropolitan Water District Act Section 133: Fixing of Water Rates

Metropolitan Water District Act Section 134: Adequacy of Water Rates; Uniformity of Rates

Metropolitan Water District Act Section 134.5: Water Standby or Availability of Service Charge

Metropolitan Water District Administrative Code Section 4304: Apportionment of Revenues and Setting of Water Rates

Metropolitan Water District Administrative Code Section 11104: Delegation of Responsibilities

Metropolitan Water District Administrative Code Section 5106: Accounting System

Metropolitan Water District Administrative Code Section 5107: Biennial Budget Process

Metropolitan Water District Administrative Code Section 5109: Capital Financing

Metropolitan Water District Administrative Code Section 5200(b): Funds Established

By Minute Item 51828, dated December 10, 2019, the Board directed staff to: (1) incorporate the 2019/20 fiscal-year-end balance of the Water Stewardship Fund to fund all demand management costs in the proposed FYs 2020/21 and 2021/22 Biennial Budget; and (2) to not incorporate the Water Stewardship Rate or any other rate or charge to recover demand management costs, with the proposed rate and charges for CYs 2021 and 2022.

By Minute Item 52603, dated November 23, 2021, the Board directed staff to incorporate the 100 percent Supply Alternative as the demand management cost recovery method used in the proposals for rates and charges.

California Environmental Quality Act (CEQA)

CEQA determination for Options 1, 2, and 3:

The proposed actions are not defined as a project under CEQA (Public Resources Code Section 21065, State CEQA Guidelines Section 15378) because the proposed actions will not cause either a direct physical change in the environment or a reasonably foreseeable indirect physical change in the environment and involves continuing administrative activities, such as general policy and procedure making (Section 15378(b)(2) of the State CEQA Guidelines). In addition, the proposed actions are not defined as a project because they involve the creation of government funding mechanisms or other government fiscal activities which do not involve any commitment to any specific project which may result in a potentially significant physical impact on the environment (Section 15378(b)(4) of the State CEQA Guidelines). Finally, if it can be seen with certainty that there is no possibility that the proposed actions in question may have a significant effect on the environment, the proposed actions are not subject to CEQA (Section 15061(b)(3) of the State CEQA Guidelines).

Board Options

Option #1

- a. Approve the FY 2022/23 and FY 2023/24 Proposed Biennial Budget with overall rate increases of 8 percent in ~~FY-CY~~ 2023 and 8 percent in ~~FY-CY~~ 2024, which includes:
 - (i) Appropriation of \$3,131.0M for Metropolitan O&M and operating equipment, power costs on the Colorado River Aqueduct, SWC operations, maintenance, power and replacement costs and SWC capital charges, demand management programs including the local resources and Conservation Credits Program, and costs associated with supply programs, for FYs 2022/23 and 2023/24;
 - (ii) A continuing appropriation of \$589.0M for FY 2022/23 and FY 2023/24 for debt service on Metropolitan general obligation and revenue bonds;
 - (iii) Bond financing \$84.4M for the AVEK High Desert Program over the biennium, and
 - (iv) Bond financing \$36.0M of the budgeted Conservation Program over the biennium;
- b. Authorize the use of \$270M in operating revenues to fund the Capital Investment Plan for FYs 2022/23 and 2023/24;
- c. Determine that the revenue requirements to be paid from rates and charges are \$1,712.9M in FY 2022/23 and \$1,800.7M in FY 2023/24;
- d. Approve the Ten-Year Financial Forecast, as shown in the Proposed Biennial Budget FY 2022/23 and FY 2023/24;
- e. Approve water rates effective January 1, 2023, and January 1, 2024, as shown in Table 2 above;
- f. Adopt the Resolution Fixing and Adopting Water Rates To Be Effective January 1, 2023, and 2024, in the form of **Attachment 5**;
- g. Adopt the Resolution Fixing and Adopting A Readiness-To-Serve Charge Effective January 1, 2023, in the form of **Attachment 6**;
- h. Adopt the Resolution Fixing and Adopting A Capacity Charge Effective January 1, 2023, in the form of **Attachment 7**; and
- i. Authorize a change in the method of installing, keeping, and rendering all accounts from a modified-accrual basis method of accounting to a cash-basis method of accounting for the purpose of budgeting.

Business Analysis: Option 1 provides adequate funding for O&M needs, targets a minimum bond coverage ratio of 1.5 times, maintains funding for all demand management programs, and ensures that Metropolitan has sufficient resources to meet upcoming challenges and execute on the General Manager's strategic priorities. Under this option, the Ten-Year Financial Forecast anticipates a 5 percent overall rate increase beginning in ~~FY 2024/25-CY 2025~~ and remaining at that level through ~~FY 2031/32-CY 2032~~.

Option #2

- a. Approve the FY 2022/23 and FY 2023/24 Proposed Biennial Budget with overall rate increases of 6.5 percent in ~~FY-CY~~ 2023 and 6.5 percent in ~~FY-CY~~ 2024, which includes:
 - (i) Appropriation of \$3,101.4M for Metropolitan O&M and operating equipment, power costs on the Colorado River Aqueduct, SWC operations, maintenance, power and replacement costs and SWC capital charges, demand management programs including the local resources and Conservation Credits Program, and costs associated with supply programs, for FYs 2022/23 and 2023/24;
 - (ii) A continuing appropriation of \$589.0M for FY 2022/23 and FY 2023/24 for debt service on Metropolitan general obligation and revenue bonds;
 - (iii) Bond financing \$84.4M for the AVEK High Desert Program over the biennium, and
 - (iv) Bond financing \$36.0M of the budgeted Conservation Program over the biennium;
- b. Authorize the use of \$270M in operating revenues to fund the Capital Investment Plan for FYs 2022/23 and 2023/24;
- c. Determine that the revenue requirements to be paid from rates and charges are \$1,696.3M in FY 2022/23 and \$1,781.8M in FY 2023/24;
- d. Approve the Ten-Year Financial Forecast, as shown in the Proposed Biennial Budget FY 2022/23 and FY 2023/24;
- e. Approve water rates effective January 1, 2023, and January 1, 2024, as shown in Table 3 above;
- f. Adopt the Resolution Fixing and Adopting Water Rates To Be Effective January 1, 2023, and 2024, in the form of **Attachment 5**, as will be updated to reflect the calculations and resulting rates pursuant to Option 2;
- g. Adopt the Resolution Fixing and Adopting A Readiness-To-Serve Charge Effective January 1, 2023, in the form of **Attachment 6**, as will be updated to reflect the calculations and resulting RTS Charge pursuant to Option 2;
- h. Adopt the Resolution Fixing and Adopting A Capacity Charge Effective January 1, 2023, in the form of **Attachment 7**, as will be updated to reflect the calculations and resulting Capacity Charge pursuant to Option 2; and
- i. Authorize a change in the method of installing, keeping, and rendering all accounts from a modified-accrual basis method of accounting to a cash-basis method of accounting for the purpose of budgeting.

Business Analysis: Option 2 lowers the recommended overall rate increases from 8 percent to 6.5 percent in each of ~~CYs 2023 and 2024~~ ~~CYs 2022/23 and 2023/24~~, which is made possible by increasing the assumed FTE vacancy rate and placing a moratorium on new LRP agreements in the biennium. The bond coverage decreases to 1.4 times in FY 2023/24 and, additionally, the 10-Year Financial Forecast anticipates a rate increase of 6 percent in ~~CY 2025, FY 2024/25~~, 5.5 percent from ~~CY 2026, FY 2025/26~~ through ~~CY 2029, FY 2028/29~~ and 5 percent thereafter.

Option #3

- a. Approve the FY 2022/23 and FY 2023/24 Proposed Biennial Budget with overall rate increases of 5.5 percent in ~~FY 2022/23~~ ~~CY 2023~~ and 5.5 percent in ~~CY 2024~~ ~~FY 2023/24~~, which includes:
 - (i) Appropriation of \$3,091.1M for Metropolitan O&M and operating equipment, power costs on the Colorado River Aqueduct, SWC operations, maintenance, power and replacement costs and SWC capital charges, demand management programs including the local resources and Conservation Credits Program, and costs associated with supply programs, for FYs 2022/23 and 2023/24;
 - (ii) A continuing appropriation of \$589.0M for FY 2022/23 and FY 2023/24 for debt service on Metropolitan general obligation and revenue bonds;
 - (iii) Bond financing \$84.4M for the AVEK High Desert Program over the biennium, and
 - (iv) Bond financing \$36.0M of the budgeted Conservation Program over the biennium;
- b. Authorize the use of \$270M in operating revenues to fund the Capital Investment Plan for FYs 2022/23 and 2023/24;
- c. Determine that the revenue requirements to be paid from rates and charges are \$1,677.6M in

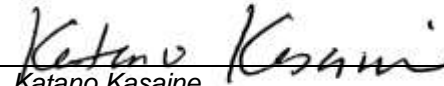
FY 2022/23 and \$1,769.7M in FY 2023/24;

- d. Approve the Ten-Year Financial Forecast, as shown in the Proposed Biennial Budget FY 2022/23 and FY 2023/24;
- e. Approve water rates effective January 1, 2023, and January 1, 2024, as shown in Table 5 above;
- f. Adopt the Resolution Fixing and Adopting Water Rates To Be Effective January 1, 2023, and 2024, in the form of **Attachment 5**, as will be updated to reflect the calculations and resulting rates pursuant to Option 3;
- g. Adopt the Resolution Fixing and Adopting A Readiness-To-Serve Charge Effective January 1, 2023, in the form of **Attachment 6**, as will be updated to reflect the calculations and resulting RTS Charge pursuant to Option 3;
- h. Adopt the Resolution Fixing and Adopting A Capacity Charge Effective January 1, 2023, in the form of **Attachment 7**, as will be updated to reflect the calculations and resulting Capacity Charge pursuant to Option 3; and
- i. Authorize a change in the method of installing, keeping, and rendering all accounts from a modified-accrual basis method of accounting to a cash-basis method of accounting for the purpose of budgeting.

Business Analysis: Option 3 lowers the recommended overall rate increases from 8 percent to 5.5 percent in each of CYs ~~2023-2022/23~~ and ~~20242023/24~~, primarily made possible through cutting departmental O&M budgets in addition to increasing the assumed FTE vacancy rate, placing a moratorium on new LRP agreements in the biennium, and assuming \$10M in annual grant funding. The bond coverage decreases to 1.4 times in FY 2023/24 and, additionally, the 10-Year Financial Forecast anticipates a 6 percent overall rate increase beginning in CY ~~2025FY 2024/25~~ and remaining at that level through CY 2029 ~~FY 2028/29~~ before decreasing to 5 percent.

Staff Recommendation

Option #1



Katano Kasaine
Chief Financial Officer/
Assistant General Manager

4/8/2022

Date



Adel Hagekhalil
General Manager

4/8/2022

Date

Attachment 1 – Proposed Biennial Budget FY 2022/23 and FY 2023/24 and the associated Ten-Year Financial Forecast

Attachment 2 – Metropolitan Water District of Southern California, Fiscal Years 2022/23 and FY 2023/24 Cost of Service Report for Proposed Water Rates and Charges – Option 1

Attachment 3 – Metropolitan Water District of Southern California, Fiscal Years 2022/23 and FY 2023/24 Cost of Service Report for Proposed Water Rates and Charges – Option 2

Attachment 4 – Metropolitan Water District of Southern California, Fiscal Years 2022/23 and FY 2023/24 Cost of Service Report for Proposed Water Rates and Charges – Option 3

Attachment 5 – Resolution Fixing and Adopting Water Rates to be Effective January 1, 2023, and January 1, 2024 – Option 1

Attachment 6 – Resolution Fixing and Adopting a Readiness-To-Serve Charge Effective January 1, 2023 – Option 1

Attachment 7 – Resolution Fixing and Adopting a Capacity Charge Effective January 1, 2023 – Option 1

Ref# cfo12683361



● **Board of Directors**
Finance and Insurance Committee

4/12/2022 Board Meeting

Revised 7-3

Subject

Approve the proposed biennial budget for fiscal years 2022/23 and 2023/24, which includes the Capital Investment Plan and revenue requirements for fiscal years 2022/23 and 2023/24 and the ten-year forecast; adopt resolutions fixing and adopting the water rates and charges for calendar years 2023 and 2024; the General Manager has determined that the proposed actions are exempt or otherwise not subject to CEQA

Executive Summary

This letter presents information on and recommendations for the Proposed Biennial Budget and revenue requirements for fiscal years (FY) 2022/23 and FY 2023/24, water rates and charges for the calendar year (CY) 2023 and CY 2024, the Ten-Year Financial Forecast (Ten-Year Forecast), and the Cost of Service Reports (COS) supporting the rates and charges options outlined below. The Proposed Biennial Budget covers a transitional period of strategic long-term planning at Metropolitan, while at the same time needing to address near-term challenges, such as high inflation and a deepening drought emergency due to low State Water Project (SWP) supplies.

Before the General Manager presented the initial budget and rates proposal in February, staff had already worked to reduce what would have been double-digit increases to a proposal of 8 percent rate increases per year. On February 7, 2022, at Budget Workshop #1, staff presented the Proposed Biennial Budget, which has since been updated, to the Finance and Insurance (F&I) Committee, including the proposed increases to the rates and charges for CYs 2023 and 2024, the COS Report, Capital Investment Plan (CIP), and Ten-Year Forecast. The revenue requirements for FYs 2022/23 and 2023/24, which are derived from the Proposed Biennial Budget, lead to overall rate increases of 8 percent in each of CYs 2022/23 and 2023/24.

Since Budget Workshop #1, the F&I Committee held three additional workshops that focused on the development of the CIP, staff responses to board questions, updates to the Proposed Biennial Budget, and the applicability of Metropolitan Water District Act Section 124.5. The Board also held a public hearing on March 8, 2022, for the public to provide comments on the proposed budget, rates, and charges. Additionally, the Board received information on various alternative budget and rate scenarios and requested that staff bring forward for consideration a rate option that is closer to the prior long-term rate projection of 5 percent. The outcome of this lengthy and transparent budget process is the presentation of three options, summarized below and detailed throughout this letter.

Key Driver for Rate Increases

The proposed rate increases are primarily driven by: (1) the catch-up for the loss of the Water Stewardship Rate (WSR) revenue; (2) a decrease in projected water transactions; (3) and projected increases for State Water Project (SWP) and Colorado River Aqueduct (CRA) power costs and fixed State Water Contract (SWC) costs; and higher departmental Operations and Maintenance (O&M) costs driven by high inflation and increasing Delta Conveyance Planning expenditures.

Option 1 is the updated Proposed Biennial Budget, which recommends overall rate increases of 8 percent in CY 2023 and 8 percent in CY 2024. Highlights of this option include the following:

- Implements measures to limit annual increases in Departmental O&M expenditures to approximately 3 percent per year, while adding 20 regular full-time employees (FTE) positions to support board initiatives of Sustainability, Resilience & Innovation, Diversity, Equity & Inclusion, and Equal Employment Opportunity, and support key operational needs. The remaining staffing needs are unfunded. The Departmental O&M budget also includes \$20M for planning activities related to the Regional Recycled Water Program (RRWP) and incorporates negotiated labor increases, allowable merit adjustments, and increased benefit costs.
- Recommends appropriating \$600 million (M) to CIP for FYs 2022/23 and 2023/24. Maintains PAYGO funding at \$135M per year to limit rate impacts at the expense of decreasing revenue bond coverage and of not meeting MWD's revenue bond coverage target of 2.0 times.
- Funds \$99M in contributions for the Delta Conveyance Project (DCP) planning activities. These contributions will be funded from a combination of rates and the California WaterFix refund of \$34.5M received in 2019.
- Continues to support demand management programs, including a proposed increase in funding for the Conservation Program to \$86M over the biennium, \$36M of which is anticipated to be bond-financed. Staff, however, requests authority to bond finance the entire Conservation Program to provide flexibility in case of revenue shortfalls.
- Bond finance the AVEK High Desert Program to reduce short-term rate impacts.
- Allows Metropolitan to meet the fixed charge minimum coverage target of 1.2 times over the biennial period but will not allow Metropolitan to achieve its revenue bond target of 2.0 times during the biennium or the ten-year forecast period.
- Draws \$55.2 million from reserves over the biennium.
- Long-term overall rate increases are projected at 5 percent per year and include the full-scale RRWP but not the DCP. This projection is subject to changes based on many factors, including the implementation of the 2020 IRP and updated water transactions.

Other Actions to Mitigate Rate Impacts

In bringing forward Option 1, staff carefully reviewed all means available that would allow Metropolitan to fulfill its mission to the highest degree while also limiting overall rate increases to the member agencies, recognizing that they too are contending with drought, system investment needs, and affordability concerns. Metropolitan has and will continue to be persistent in its search for new revenue sources, which potentially include state and federal grant opportunities, beneficial water exchanges, and partnerships that leverage investments in Metropolitan's system. Staff continues to work with the Governor's office and the Legislature to advocate for funding for Metropolitan's emergency drought projects and the RRWP. Additionally, Metropolitan is exploring low-interest loans through the State Revolving Funds and researching federal project financing options. Metropolitan's existing assets, such as real estate, may also pose opportunities to serve their strategic function for Metropolitan while at the same time generating revenue. Finally, the General Manager has initiated an organizational assessment to evaluate opportunities to improve operations and become more efficient in the delivery of Metropolitan's services. Altogether, Metropolitan is taking action on all fronts to mitigate rate impacts on its member agencies but, at the same, is proposing a budget (Option 1) that prudently manages the overall financial position of Metropolitan.

Option 2 reduces the overall rate increases to 6.5 percent in each of CYs 2023 and 2024. The following changes to the Proposed Biennial Budget (Option 1) are necessary to achieve these rates reductions:

- Increase the budgeted departmental vacancy rate for FTE positions from 2 percent to 5 percent to reflect current conditions. The higher vacancy rate is assumed to persist through FY 2031/32. This reduces the Departmental O&M budget by \$24M over the biennium. **However, there is a risk that some savings might not materialize as savings from unfilled positions are often spent on overtime or temporary labor. Also, the savings might not be maintained if the vacancy rate decreases.**
- Update the Local Resource Projects (LRP) projection to reflect the expectation that no new agreements will be added during the biennial budget period.

- Under this option, the long-term rate outlook shows rates increasing by 6 percent in FY 2024/25, 5.5 percent from FY 2025/26 through FY 2028/29, and 5 percent thereafter.
- Revenue bond coverage decreases to 1.4 times in FY 2023/24.
- Additional risks as compared to Option 1: savings might not materialize or be maintained, and increased risk of large reserves draws that necessitate unplanned rate increases or higher future rates.

Option 3 reduces overall rate increases to 5.5 percent in each of CYs 2023 and 2024. This is achieved by making the following changes from Option 2:

- Assume Metropolitan receives \$10M in grant funding per year to offset O&M expenditures through FY 2031/32.
- Reduce the Departmental O&M budget by another \$10M over the biennial budget period. **These cuts have substantial impacts on operations, research and planning, and staff development, as explained in this letter.**
- Long-term rate increases would increase to 6 percent beginning in FY 2024/25 before dropping down to 5 percent in FY 2029/30.
- Additional risks as compared to Option 2: grants might not be obtained, and increased risk of large reserves draws that necessitate unplanned rate increases or higher future rates.

Attached to this board letter are documents corresponding to each budget option presented above, as well as resolutions reflecting the calculations for Option 1. Metropolitan will publish a final Budget, Cost of Service Report, Engineer's Report, and appropriate resolutions to reflect the final option adopted by the Board. Notice of the proposed budget, rates, charges, review of the applicability of the ad valorem property tax limitation, and the public workshops and hearings were provided to the member agencies, the Board, and the public in advance of the budget, rates, and charges process. All documents provided to the Board in connection with the actions proposed in this board letter have been posted online, along with other supporting and background material and any comments received by Metropolitan.

Description

OVERVIEW

The Proposed Biennial Budget covers a transitional period of strategic planning at Metropolitan. Over the next two fiscal years, Metropolitan will be completing the 2020 Integrated Resources Plan, continuing a rate refinement process, undertaking a long-term financial plan, and addressing Metropolitan's role as it approaches 100 years. The findings and recommendations that come out of these strategic planning initiatives will be considered by the Board and, if adopted, incorporated into future biennial budgets. In addition to the upcoming key strategic planning period, the biennium also starts in a time of emergency drought, when the world appears to be coming out of a pandemic that caused detrimental health and economic impacts, and great inflation and product shortages. Therefore, the options presented in this letter strike a balance between addressing the challenges of this transitional period and attempting to do so with the least amount of financial impact on Metropolitan's member agencies.

Funding Strategic Priorities

The proposed budget options align with the General Manager's proposed Business Plan for FYs 2022/23 and 2023/24, which sets out Metropolitan's strategic priorities. The five strategic priorities will guide the General Manager's Business Plan to drive new initiatives toward organizational improvements and overall resilience:

- *Empower the workforce and promote diversity, equity, and inclusion.*
- *Sustain Metropolitan's Mission with a Strengthened Business Model.*
- *Adapt to Changing Climate and Water Resources.*
- *Protect Public Health, Regional Economy, and Metropolitan Assets.*
- *Partner with Stakeholders and the Communities We Serve.*

Key Budget Assumptions

Underlying all three of the proposed budget options are the following key assumptions:

- **Water transactions projection:** Water transactions include water sales, exchanges, and wheeling, which can be greatly impacted by hydrologic conditions. Metropolitan's Water Resource Management Group projected water transactions to be 1.59 million acre-feet (MAF) for FY 2022/23 and 1.54 MAF for FY 2023/24 and to remain between 1.5 and 1.6 MAF over the next ten years.
- **State Water Project and Colorado River:** For FYs 2022/23 and 2023/24, Metropolitan's SWP supplies are projected to be 0.41 MAF and 0.82 MAF, respectively. These projections are based on a 15 percent SWP allocation for CY 2022 and 40 percent for CY 2023 and account for the utilization of Metropolitan's SWP supply programs. After CY 2023, the SWP allocation is set at the median forecast of 50 percent. For FYs 2022/23 and 2023/24, Colorado River diversions are projected to be 1.007 MAF and 0.923 MAF, respectively, and account for the utilization of Metropolitan's Colorado River supply programs.
- **Capital Investment Plan:** CIP expenditures are budgeted at \$300M in each of the biennial budget years. The capital expenditures for the full RRWP are not included in the biennium but are included in the Ten-Year Forecast starting in FY 2024/25. Detailed information about the CIP can be found in the CIP Appendix, **Attachment 1**.
- **Ad valorem tax rate:** The Proposed Biennial Budget assumes that the Board maintains the ad valorem tax rate at the current level of 0.0035 percent of assessed value, as the Board has done since FY 2013/14. This is projected to generate ad valorem tax revenues of \$163.1M in FY 2022/23 and \$168.3M in FY 2023/24.

Key Drivers for Rate Increases

The proposed rate increases are primarily driven by: (1) the catch-up for the loss of the Water Stewardship Rate (WSR) revenue; (2) a decrease in projected water transactions; (3) projected increases for State Water Project (SWP) and Colorado River Aqueduct (CRA) power costs and fixed State Water Contract (SWC) costs; and, (4) higher departmental O&M costs driven by high inflation and increasing DCP planning expenditures.

Water demands are projected to decrease by 60 thousand acre-feet over the proposed biennial budget period, from 1.60 MAF to 1.54 MAF, and are expected to continue to decline to 1.51 MAF by FY 2025/26. The lower water demand projection is the reason why our current rate projections are higher than was previously forecasted.

Financial Reporting Change

The Proposed Biennial Budget has been prepared on a cash basis instead of a modified-accrual basis. Financial reports will continue to be prepared on a full-accrual basis of accounting in accordance with promulgated rules of the Governmental Accounting Standards Board and Generally Accepted Accounting Principles. The staff has reviewed the impacts of budgeting and reporting on a modified-accrual basis over the last nine years and has determined that the benefits expected to be achieved did not manifest as thought. Reporting against the cash-based budget provides the most transparent reporting of available unrestricted reserves. Additionally, rather than saving a significant amount of staff time, the modified-accrual basis of accounting increased the amount of time required to maintain modified-accrual data and report against this basis of budgeting. Therefore, the staff proposes a change from a modified-accrual basis method of accounting to a cash-basis method. If approved by the Board pursuant to Section 5106 of the Administrative Code, the adopted budget will reflect this change.

Table 1 below summarizes the proposed revenue requirement and expenditure totals for the Proposed Biennial Budget (Option 1), as well as for Options 2 and 3.

Table 1: Expenditures and Revenue Requirements for Proposed Budget Options

in millions of dollars

Options/Fiscal Year	Option 1		Option 2		Option 3	
	FY 2022/23	FY 2023/24	FY 2022/23	FY 2023/24	FY 2022/23	FY 2023/24
State Water Contract Power	\$ 211.6	\$ 258.6	\$ 211.6	\$ 258.6	\$ 211.6	\$ 258.6
Colorado River Aqueduct Power	105.9	85.6	105.9	85.6	105.9	85.6
Departmental O&M	608.9	616.7	597.3	604.5	589.1	602.3
State Water Contract OMP&R & Capital	440.1	468.2	440.1	468.2	440.1	468.2
Supply Programs (cash funded portion)	66.7	64.1	66.7	64.1	66.7	64.1
Delta Conveyance Planning (net of CWF refund)	30.0	34.5	30.0	34.5	30.0	34.5
Demand Management (cash funded portion)	50.8	54.9	50.8	49.1	50.8	49.1
PAYGO	135.0	135.0	135.0	135.0	135.0	135.0
Debt Service	288.0	301.0	288.0	301.0	288.0	301.0
Sub-Total Expenditures	\$ 1,937.0	\$ 2,018.6	\$ 1,925.3	\$ 2,000.6	\$ 1,917.2	\$ 1,998.4
Increase/(Decrease) in Required Reserves	11.0	7.9	6.1	6.9	5.5	7.1
Property Taxes Revenues	(163.1)	(168.3)	(163.1)	(168.3)	(163.1)	(168.3)
Other Revenues	(72.0)	(57.4)	(72.0)	(57.4)	(82.1)	(67.5)
Total Revenue Requirement	\$ 1,712.9	\$ 1,800.7	\$ 1,696.3	\$ 1,781.8	\$ 1,677.6	\$ 1,769.7

OPTION 1 – PROPOSED BIENNIAL BUDGET**Rates and Charges**

Overall rate increases of 8 percent effective each year, on January 1, 2023, and January 1, 2024, are appropriate to cover the costs in the Proposed Biennial Budget for FYs 2022/23 and 2023/24, meet financial policy guidelines with the exception of revenue bond coverage, and maintain steady rates for the future according to current assumptions. Before the Proposed Biennial Budget was presented in February, the General Manager had already taken steps to reduce the rate impact over the biennial budget period by focusing on actions to lower cash expenditures, including bond financing certain supply and conservation programs, limiting departmental O&M requests for new positions and discretionary budget increases, holding steady the level of PAYGO funding, and applying the CA WaterFix refund to DCP planning costs. Highlights of this option include the following:

- Implements measures to limit annual increases in Departmental O&M expenditures to approximately 3 percent per year, while adding 20 regular FTE positions to support board initiatives of Sustainability, Resilience & Innovation SRI, Diversity, Equity & Inclusion DE&I, and Equal Employment Opportunity EEO, and support key operational needs. The Departmental O&M budget also includes \$20M for planning activities related to the RRWP and incorporates negotiated labor increases, allowable merit adjustments, and increased benefit costs.
- Recommends appropriating \$600M to CIP for FYs 2022/23 and 2023/24. Maintains PAYGO funding at \$135M per year to limit rate impacts at the expense of decreasing revenue bond coverage and of not meeting MWD's revenue bond coverage target of 2.0 times.
- Funds \$99M in contributions for the DCP planning activities. These contributions will be funded from a combination of rates and the California WaterFix refund of \$34.5M received in 2019.
- Continues to support demand management programs, including a proposed increase in funding for the Conservation Program to \$43M annually, \$36M of which is anticipated to be bond-financed over the biennium. Staff requests authority to bond finance the entire Conservation Program to provide flexibility in case of revenue shortfalls.
- Bond finance the AVEK High Desert Program to reduce short-term rate impacts.
- Allows Metropolitan to meet the fixed charge minimum coverage target of 1.2 times over the biennial period but will not allow Metropolitan to achieve its revenue bond target of 2.0 times during the biennium or the ten-year forecast period.
- Draws \$55.2 million from reserves over the biennium.

- Long-term overall rate increases are projected at 5 percent per year and include the full-scale RRWP but not the DCP. This projection is subject to changes based on many factors including the implementation of the 2020 IRP and updated water transactions.

The specific elements of the proposed rate increase effective January 1, 2023, and January 1, 2024, are shown below in Table 2.

Table 2: Option 1 – Proposed Rates and Charges

Rates & Charges Effective January 1st	Adopted 2022	Proposed 2023	% Increase (Decrease)	Proposed 2024	% Increase (Decrease)
Tier 1 Supply Rate (\$/AF)	\$243	\$329	35%	\$355	8%
Tier 2 Supply Rate (\$/AF)	\$285	\$532	87%	\$540	2%
System Access Rate (\$/AF)	\$389	\$381	-2%	\$412	8%
System Power Rate (\$/AF)	\$167	\$169	1%	\$190	12%
Treatment Surcharge (\$/AF)	\$344	\$367	7%	\$373	2%
Full Service Untreated Volumetric Cost (\$/AF)					
Tier 1	\$799	\$879	10%	\$957	9%
Tier 2	\$841	\$1,082	29%	\$1,142	6%
Full Service Treated Volumetric Cost (\$/AF)					
Tier 1	\$1,143	\$1,246	9%	\$1,330	7%
Tier 2	\$1,185	\$1,449	22%	\$1,515	5%
Readiness-to-Serve Charge (\$M)	\$140	\$157	12%	\$175	11%
Capacity Charge (\$/cfs)	\$12,200	\$10,800	-11%	\$11,800	9%
Overall Rate Increase			8%		8%

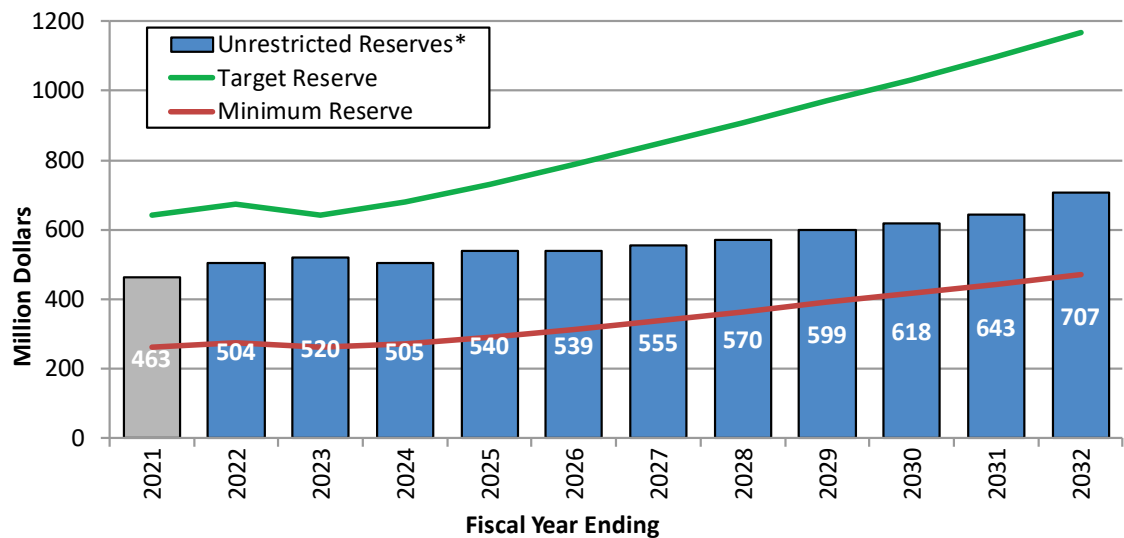
Capacity and RTS Charges by member agencies are reflected on pages 108 and 110, respectively, of the FYs 2022/23 and FY 2023/24 Cost of Service Report for Proposed Water Rates and Charges – Option 1 (**Attachment 2**).

The analysis in the COS Report supports the proposed rates and charges. The proposed CYs 2023 and 2024 water rates and charges are based on Metropolitan's current methodology for developing rates and charges to produce the necessary revenue required to cover costs. The proposed rates and charges also exclude a separate rate or charge to recover demand management costs, as a result of Metropolitan's Board action on November 23, 2021, which directed staff to recover 100 percent of demand management costs from Metropolitan's supply rate elements in the future rate and charge proposals. Accordingly, all demand management costs (regardless of funding source, such as bond financing or current revenues) are functionalized as supply and collected on the Tier 1 and Tier 2 supply rates. However, because there are no projected Tier 2 transactions in the biennium, the demand management costs are recovered entirely by the Tier 1 supply rate.

10-Year Financial Forecast

The Proposed Biennial Budget sets the foundation for consistent, reasonable rate increases over the ten-year planning period. Overall rate increases from FY 2022/23 through FY 2031/32 are projected to start at 8 percent each year for the next biennium and lower to 5 percent thereafter. The complete Ten-Year Forecast is presented in **Attachment 1** and includes the implementation of the full RRWP but does not include the costs for the DCP.

The long-term rate projections for all options presented in this report are highly influenced by the addition of the full-scale RRWP, which is assumed to begin construction in FY 2024/25 and affect the 2025 to 2032 rates and charges. The allocation of the RRWP costs to the rates and charges is based on preliminary information and might substantially change as a result of an upcoming COS study for the RRWP. In addition, the 10-year rate forecasts do not include the DCP which would substantially increase the rate projections.

Figure 1: Option 1 – Projected Rate Increases, Reserves and Financial Indicators, Ten-Year Forecast

	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
Overall Rate Inc.	3.0%	4.0%	8.0%	8.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.1%	5.0%
Water Transactions, MAF**	1.52	1.60	1.59	1.54	1.54	1.51	1.53	1.53	1.54	1.55	1.55	1.57
Rev. Bond Cvg	2.0	1.6	1.5	1.5	1.8	1.7	1.8	1.7	1.7	1.7	1.8	1.7
Fixed Chg Cvg	2.0	1.6	1.5	1.5	1.8	1.7	1.8	1.7	1.7	1.7	1.7	1.6
PAYGO, \$M	110	135	135	135	175	175	175	175	200	200	200	200

* includes Revenue Remainder and Water Rate Stabilization Fund

** includes water sales, exchanges, and wheeling

Bond Coverage Ratio

Revenue bond debt service coverage is one primary indicator of credit quality and is calculated by dividing net operating revenues by debt service. Metropolitan's debt management policy is to maintain an annual revenue bond coverage ratio of at least 2.0 times. Over the Ten-Year Forecast, Metropolitan's revenue bond coverage ratio is not expected to be achieved. In addition, Metropolitan also measures the total coverage of all fixed obligations after payment of operating expenditures. Metropolitan's fixed charge coverage ratio target is 1.2 times. The Ten-Year Forecast projects that Metropolitan's fixed charge coverage ratio is at least 1.5 times over the ten-year period, which helps maintain favorable credit ratings and access to the capital markets with low borrowing costs.

OPTION 2

Rates and Charges

This option reduces the overall rate increases to 6.5 percent in each of CYs 2023 and 2024. The following changes to the Proposed Biennial Budget (Option 1) are necessary to achieve these rate reductions:

- Increase the departmental budget vacancy rate for FTE positions from 2 percent to 5 percent to reflect current conditions. The higher vacancy rate is assumed to persist through FY 2031/32. This reduces the Departmental O&M budget by \$24M over the biennium. However, there is a risk that some savings might not materialize as savings from unfilled positions are often spent on overtime or temporary labor. Also, the savings might not be maintained if the vacancy rate decreases.
- Update the Local Resource Projects (LRP) projection to reflect the expectation that no new agreements will be added during the biennial budget period.
- Under this option, the long-term rate outlook shows rates increasing by 6 percent in FY 2024/25, 5.5 percent from FY 2025/26 through FY 2028/29, and 5 percent thereafter.

- Revenue bond coverage decreases to 1.4 times in FY 2023/24.
- Additional risks as compared to Option 1: savings might not materialize or be maintained, and increased risk of large reserves draws that necessitate unplanned rate increases or higher future rates.

The specific elements of the proposed rate increase effective January 1, 2023, and January 1, 2024, are shown below in Table 3.

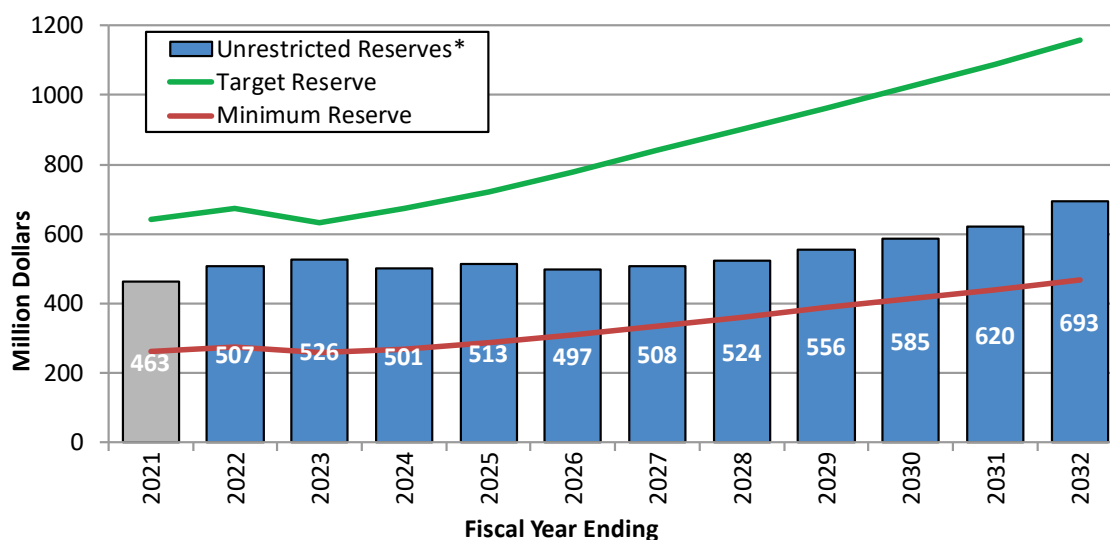
Table 3: Option 2 – Proposed Rates and Charges

Rates & Charges Effective January 1st	Adopted 2022	Proposed 2023	% Increase (Decrease)	Proposed 2024	% Increase (Decrease)
Tier 1 Supply Rate (\$/AF)	\$243	\$325	34%	\$341	5%
Tier 2 Supply Rate (\$/AF)	\$285	\$531	86%	\$532	0%
System Access Rate (\$/AF)	\$389	\$375	-4%	\$401	7%
System Power Rate (\$/AF)	\$167	\$167	0%	\$187	12%
Treatment Surcharge (\$/AF)	\$344	\$360	5%	\$363	1%
Full Service Untreated Volumetric Cost (\$/AF)					
Tier 1	\$799	\$867	9%	\$929	7%
Tier 2	\$841	\$1,073	28%	\$1,120	4%
Full Service Treated Volumetric Cost (\$/AF)					
Tier 1	\$1,143	\$1,227	7%	\$1,292	5%
Tier 2	\$1,185	\$1,433	21%	\$1,483	3%
Readiness-to-Serve Charge (\$M)	\$140	\$156	11%	\$172	10%
Capacity Charge (\$/cfs)	\$12,200	\$10,700	-12%	\$11,500	7%
Overall Rate Increase			6.5%		6.5%

Capacity and RTS Charges by member agencies are reflected on pages 108 and 110, respectively, of the FYs 2022/23 and FY 2023/24 Cost of Service Report for Proposed Water Rates and Charges – Option 2 (**Attachment 3**).

10-Year Financial Forecast

Under this option, the long-term rate outlook shows rates increasing by 6 percent in FY 2024/25, 5.5 percent from FY 2025/26 through FY 2028/29, and 5 percent thereafter. Additionally, the forecasted minimum bond coverage ratio steps down from 1.5 times to 1.4 times.

Figure 2: Option 2 – Projected Rate Increases, Reserves and Financial Indicators, Ten-Year Forecast

Overall Rate Inc.	3.0%	4.0%	6.5%	6.5%	6.0%	5.5%	5.5%	5.5%	5.5%	5.0%	5.0%	5.0%
Water Transactions, MAF**		1.60	1.59	1.54	1.54	1.51	1.53	1.53	1.54	1.55	1.55	1.57
Rev. Bond Cvg	2.0	1.6	1.5	1.4	1.7	1.6	1.7	1.7	1.7	1.8	1.8	1.8
Fixed Chg Cvg	2.0	1.6	1.5	1.4	1.7	1.6	1.7	1.7	1.7	1.7	1.7	1.6
PAYGO, \$M	-	135	135	135	175	175	175	175	200	200	200	200

* includes Revenue Remainder and Water Rate Stabilization Fund

** includes water sales, exchanges, and wheeling

OPTION 3

Rates and Charges

This option achieves an overall rate increase of 5.5 percent in both of CYs 2023 and 2024. This is accomplished by making the following changes to Option 2:

- Assumes Metropolitan receives \$10M in grant funding per year to offset O&M expenditures through FY 2031/32.
- Reduce the Departmental O&M budget by another \$10M over the biennial budget period. These cuts have a substantial impact on Metropolitan's operations and research and planning programs, as detailed in Table 4 below.
- Long-term rate increases would increase to 6 percent beginning in FY 2024/25 before dropping down to 5 percent in FY 2029/30.
- Additional risks as compared to Option 2: grants might not be obtained, and increased risk of large reserves draws that necessitate unplanned rate increases or higher future rates.

Table 4: Summary of Key O&M Budget Cuts and Impacts**Research and Planning Impacts**

- Cancel Feather River Watershed Climate Modeling effort (including co-funding to sponsors) and cut spatial analysis work (remote sensing data analysis, machine learning, analytics on agricultural and urban areas) back by half; this would reduce the ability to understand climate change impacts and monitor the effectiveness of water efficiency actions.
- Cut Delta-related studies and projects including collaborative science work on salmon recovery, the relative risk of fish entrainment modeling, and delta smelt and NGO participation in Collaborative Science and Adaptive Management Program; limit work on other pilot studies and modeling as well as cutting several inspection trips and the level of engineering and agricultural coordination support for the Delta Islands.
- Cut cost-sharing agreements with other agencies and academic institutions on scientific studies, resulting in missed collaborative opportunities on Metropolitan's science objectives.

Operations Impacts

- Limit the scope of the Seismic Resilience Strategy including the number of seismic assessments of Metropolitan infrastructure; additionally, postpone a variety of scheduled system vulnerability and reliability studies that would identify corrective action to maintain the system's reliability.
- Extend shutdowns (e.g., the 7-day shutdown could extend to 14 days or more) or defer or cancel some shutdowns to reduce overtime. Extending shutdowns could result in a significant impact on member agencies as many agencies do not have sufficient local supplies to withstand an extended shutdown period.
- Cut WSO materials and supplies: (1) pipe/valves and tools (10 percent), which increases the risk to system reliability and potential for emergency repairs; (2) laboratory supplies (6 percent) with a commensurate reduction in water quality tests that may impact the ability to do extended research into emerging water quality issues and trends.
- Cut WSO field travel to support work in remote areas in response to potential deferment of select shutdowns.
- Cut director inspection trips from 65 to 40, with more local/one-day and shared trips between two or more directors, and far fewer trips to Hoover Dam and the State Water Project/Delta; cut state and legislative inspection trips from one every year to one every two years.
- Cut travel, training, and conferences, resulting in reduced staff development and professional and technical opportunities.
- Cuts in IT outside services and materials and supplies which will result in slower response time to unplanned outages, possible increase in system downtime, and limited ability to respond to ad hoc requests and system enhancements.
- Cut IT training which will greatly decrease innovation and ability to support new technology.
- Cancel IT project implementations related to procurement, contracting, HR systems improvement, and other projects which may impact district productivity and vendor experience.

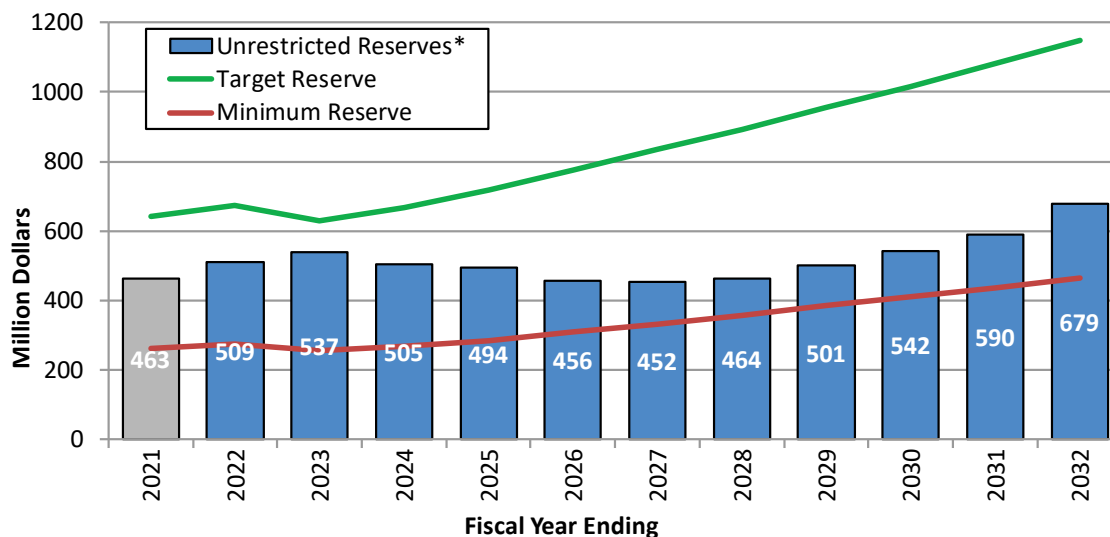
Table 5: Option 3 – Proposed Rates and Charges

Rates & Charges Effective January 1st	Adopted 2022	Proposed 2023	% Increase (Decrease)	Proposed 2024	% Increase (Decrease)
Tier 1 Supply Rate (\$/AF)	\$243	\$323	33%	\$335	4%
Tier 2 Supply Rate (\$/AF)	\$285	\$531	86%	\$532	0%
System Access Rate (\$/AF)	\$389	\$370	-5%	\$393	6%
System Power Rate (\$/AF)	\$167	\$166	-1%	\$183	10%
Treatment Surcharge (\$/AF)	\$344	\$356	3%	\$357	0%
Full Service Untreated Volumetric Cost (\$/AF)					
Tier 1	\$799	\$859	8%	\$911	6%
Tier 2	\$841	\$1,067	27%	\$1,108	4%
Full Service Treated Volumetric Cost (\$/AF)					
Tier 1	\$1,143	\$1,215	6%	\$1,268	4%
Tier 2	\$1,185	\$1,423	20%	\$1,465	3%
Readiness-to-Serve Charge (\$M)	\$140	\$155	11%	\$169	9%
Capacity Charge (\$/cfs)	\$12,200	\$10,600	-13%	\$11,400	8%
Overall Rate Increase			5.5%		5.5%

Capacity and RTS Charges by member agencies are reflected on pages 108 and 110, respectively, of the FYs 2022/23 and FY 2023/24 Cost of Service Report for Proposed Water Rates and Charges – Option 3 (**Attachment 4**).

10-Year Financial Forecast

This option targets overall rate increases of 5.5 percent in both CYs 2023 and 2024. Overall rate increases from FY 2022/23 through FY 2031/32 are projected to start at 5.5 percent each year for the biennium and increase to 6 percent through FY 2028/29, then decrease to 5 percent thereafter. As in Option 2, the bond coverage ratio reaches a minimum of 1.4 times in FY 2023/24.

Figure 3: Option 3 – Projected Rate Increases, Reserves and Financial Indicators, Ten-Year Forecast

Overall Rate Inc.	3.0%	4.0%	5.5%	5.5%	6.0%	6.0%	6.0%	6.0%	6.0%	5.0%	5.0%	5.0%
Water Transactions, MAF**	1.52	1.60	1.59	1.54	1.54	1.51	1.53	1.53	1.54	1.55	1.55	1.57
Rev. Bond Cvg	2.0	1.6	1.5	1.4	1.7	1.6	1.7	1.7	1.7	1.8	1.8	1.8
Fixed Chg Cvg	2.0	1.6	1.5	1.4	1.7	1.6	1.7	1.7	1.7	1.7	1.7	1.7
PAYGO, \$M	110	135	135	135	175	175	175	175	200	200	200	200

* includes Revenue Remainder and Water Rate Stabilization Fund

** includes water sales, exchanges, and wheeling

COST OF SERVICE ANALYSIS

The proposed water rates and charges to support the estimated revenue requirements were developed using the COS methodology previously approved by the Board and implemented since the Board adopted the current rate structure in October 2001 and implemented it in January 2003. More recently, the Board modified the manner of allocating demand management costs by directing staff in November 2021 to recover all demand management costs through the supply rate elements. Metropolitan, a wholesaler, provides full-service water service (treated or untreated) to its member agencies. Metropolitan has one class of customers: its member agencies. The level of rate unbundling in Metropolitan's rate structure provides transparency to show that rates and charges recover only those functions involved in the applicable service and that no cross-subsidy of functions exists. Metropolitan's COS process and resulting unbundled rate structure ensure that its wholesale customers pay for only those services they elect to receive. COS reports have been prepared for each rate option and are found as **Attachments 2, 3, and 4** to this letter.

PUBLIC PROCESS

The following table gives an account of the public process carried out regarding the Proposed Biennial Budget and proposed water rates and charges for CYs 2023 and 2024. In addition to the Board process, staff presented information to Metropolitan's member agencies at monthly Member Agency Managers Meetings.

February 7, 2022	F&I Committee, Workshop #1
February 11, 2022	Notice of public hearing regarding proposed rates and charges transmitted to member agencies
February 22, 2022	F&I Committee, Workshop #2
February 24, 2022	Notice of public hearing regarding Section 124.5 transmitted to Legislature
March 7, 2022	F&I Committee, Workshop #3
March 8, 2022	A public hearing on proposed water rates and charges and applicability of the tax rate limit pursuant to Section 124.5 of the MWD Act
March 22, 2022	F&I Committee, Workshop #4
April 11, 2022	F&I Committee, Recommended Biennial Budget, Calendar Year rates and charges, and applicability of Section 124.5 tax rate limit
April 12, 2022	Board action regarding Biennial Budget, Calendar Year rates and charges, and applicability of Section 124.5 tax rate limit

Following this process, and having received and evaluated all comments, this board letter proposes that the Board approve the Proposed Biennial Budget, including the CIP, and rates and charges, presented as Option 1, and provides two alternative options.

Policy

Metropolitan Water District Act Section 61: Ordinances, Resolutions, and Orders

Metropolitan Water District Act Section 124.5: Ad Valorem Tax Limitation

Metropolitan Water District Act Section 130: General Powers to Provide Water Services

Metropolitan Water District Act Section 133: Fixing of Water Rates

Metropolitan Water District Act Section 134: Adequacy of Water Rates; Uniformity of Rates

Metropolitan Water District Act Section 134.5: Water Standby or Availability of Service Charge

Metropolitan Water District Administrative Code Section 4304: Apportionment of Revenues and Setting of Water Rates

Metropolitan Water District Administrative Code Section 11104: Delegation of Responsibilities

Metropolitan Water District Administrative Code Section 5106: Accounting System

Metropolitan Water District Administrative Code Section 5107: Biennial Budget Process

Metropolitan Water District Administrative Code Section 5109: Capital Financing

Metropolitan Water District Administrative Code Section 5200(b): Funds Established

By Minute Item 51828, dated December 10, 2019, the Board directed staff to: (1) incorporate the 2019/20 fiscal-year-end balance of the Water Stewardship Fund to fund all demand management costs in the proposed FYs 2020/21 and 2021/22 Biennial Budget; and (2) to not incorporate the Water Stewardship Rate or any other rate or charge to recover demand management costs, with the proposed rate and charges for CYs 2021 and 2022.

By Minute Item 52603, dated November 23, 2021, the Board directed staff to incorporate the 100 percent Supply Alternative as the demand management cost recovery method used in the proposals for rates and charges.

California Environmental Quality Act (CEQA)

CEQA determination for Options 1, 2, and 3:

The proposed actions are not defined as a project under CEQA (Public Resources Code Section 21065, State CEQA Guidelines Section 15378) because the proposed actions will not cause either a direct physical change in the environment or a reasonably foreseeable indirect physical change in the environment and involves continuing administrative activities, such as general policy and procedure making (Section 15378(b)(2) of the State CEQA Guidelines). In addition, the proposed actions are not defined as a project because they involve the creation of government funding mechanisms or other government fiscal activities which do not involve any commitment to any specific project which may result in a potentially significant physical impact on the environment (Section 15378(b)(4) of the State CEQA Guidelines). Finally, if it can be seen with certainty that there is no possibility that the proposed actions in question may have a significant effect on the environment, the proposed actions are not subject to CEQA (Section 15061(b)(3) of the State CEQA Guidelines).

Board Options

Option #1

- a. Approve the FY 2022/23 and FY 2023/24 Proposed Biennial Budget with overall rate increases of 8 percent in ~~FY-CY~~ 2023 and 8 percent in ~~FY-CY~~ 2024, which includes:
 - (i) Appropriation of \$3,131.0M for Metropolitan O&M and operating equipment, power costs on the Colorado River Aqueduct, SWC operations, maintenance, power and replacement costs and SWC capital charges, demand management programs including the local resources and Conservation Credits Program, and costs associated with supply programs, for FYs 2022/23 and 2023/24;
 - (ii) A continuing appropriation of \$589.0M for FY 2022/23 and FY 2023/24 for debt service on Metropolitan general obligation and revenue bonds;
 - (iii) Bond financing \$84.4M for the AVEK High Desert Program over the biennium, and
 - (iv) Bond financing \$36.0M of the budgeted Conservation Program over the biennium;
- b. Authorize the use of \$270M in operating revenues to fund the Capital Investment Plan for FYs 2022/23 and 2023/24;
- c. Determine that the revenue requirements to be paid from rates and charges are \$1,712.9M in FY 2022/23 and \$1,800.7M in FY 2023/24;
- d. Approve the Ten-Year Financial Forecast, as shown in the Proposed Biennial Budget FY 2022/23 and FY 2023/24;
- e. Approve water rates effective January 1, 2023, and January 1, 2024, as shown in Table 2 above;
- f. Adopt the Resolution Fixing and Adopting Water Rates To Be Effective January 1, 2023, and 2024, in the form of **Attachment 5**;
- g. Adopt the Resolution Fixing and Adopting A Readiness-To-Serve Charge Effective January 1, 2023, in the form of **Attachment 6**;
- h. Adopt the Resolution Fixing and Adopting A Capacity Charge Effective January 1, 2023, in the form of **Attachment 7**; and
- i. Authorize a change in the method of installing, keeping, and rendering all accounts from a modified-accrual basis method of accounting to a cash-basis method of accounting for the purpose of budgeting.

Business Analysis: Option 1 provides adequate funding for O&M needs, targets a minimum bond coverage ratio of 1.5 times, maintains funding for all demand management programs, and ensures that Metropolitan has sufficient resources to meet upcoming challenges and execute on the General Manager's strategic priorities. Under this option, the Ten-Year Financial Forecast anticipates a 5 percent overall rate increase beginning in ~~FY 2024/25-CY 2025~~ and remaining at that level through ~~FY 2031/32-CY 2032~~.

Option #2

- a. Approve the FY 2022/23 and FY 2023/24 Proposed Biennial Budget with overall rate increases of 6.5 percent in ~~FY-CY~~ 2023 and 6.5 percent in ~~FY-CY~~ 2024, which includes:
 - (i) Appropriation of \$3,101.4M for Metropolitan O&M and operating equipment, power costs on the Colorado River Aqueduct, SWC operations, maintenance, power and replacement costs and SWC capital charges, demand management programs including the local resources and Conservation Credits Program, and costs associated with supply programs, for FYs 2022/23 and 2023/24;
 - (ii) A continuing appropriation of \$589.0M for FY 2022/23 and FY 2023/24 for debt service on Metropolitan general obligation and revenue bonds;
 - (iii) Bond financing \$84.4M for the AVEK High Desert Program over the biennium, and
 - (iv) Bond financing \$36.0M of the budgeted Conservation Program over the biennium;
- b. Authorize the use of \$270M in operating revenues to fund the Capital Investment Plan for FYs 2022/23 and 2023/24;
- c. Determine that the revenue requirements to be paid from rates and charges are \$1,696.3M in FY 2022/23 and \$1,781.8M in FY 2023/24;
- d. Approve the Ten-Year Financial Forecast, as shown in the Proposed Biennial Budget FY 2022/23 and FY 2023/24;
- e. Approve water rates effective January 1, 2023, and January 1, 2024, as shown in Table 3 above;
- f. Adopt the Resolution Fixing and Adopting Water Rates To Be Effective January 1, 2023, and 2024, in the form of **Attachment 5**, as will be updated to reflect the calculations and resulting rates pursuant to Option 2;
- g. Adopt the Resolution Fixing and Adopting A Readiness-To-Serve Charge Effective January 1, 2023, in the form of **Attachment 6**, as will be updated to reflect the calculations and resulting RTS Charge pursuant to Option 2;
- h. Adopt the Resolution Fixing and Adopting A Capacity Charge Effective January 1, 2023, in the form of **Attachment 7**, as will be updated to reflect the calculations and resulting Capacity Charge pursuant to Option 2; and
- i. Authorize a change in the method of installing, keeping, and rendering all accounts from a modified-accrual basis method of accounting to a cash-basis method of accounting for the purpose of budgeting.

Business Analysis: Option 2 lowers the recommended overall rate increases from 8 percent to 6.5 percent in each of ~~CYs 2023 and 2024~~ ~~CYs 2022/23 and 2023/24~~, which is made possible by increasing the assumed FTE vacancy rate and placing a moratorium on new LRP agreements in the biennium. The bond coverage decreases to 1.4 times in FY 2023/24 and, additionally, the 10-Year Financial Forecast anticipates a rate increase of 6 percent in ~~CY 2025, FY 2024/25~~, 5.5 percent from ~~CY 2026, FY 2025/26~~ through ~~CY 2029, FY 2028/29~~ and 5 percent thereafter.

Option #3

- a. Approve the FY 2022/23 and FY 2023/24 Proposed Biennial Budget with overall rate increases of 5.5 percent in ~~FY 2022/23~~ ~~CY 2023~~ and 5.5 percent in ~~CY 2024~~ ~~FY 2023/24~~, which includes:
 - (i) Appropriation of \$3,091.1M for Metropolitan O&M and operating equipment, power costs on the Colorado River Aqueduct, SWC operations, maintenance, power and replacement costs and SWC capital charges, demand management programs including the local resources and Conservation Credits Program, and costs associated with supply programs, for FYs 2022/23 and 2023/24;
 - (ii) A continuing appropriation of \$589.0M for FY 2022/23 and FY 2023/24 for debt service on Metropolitan general obligation and revenue bonds;
 - (iii) Bond financing \$84.4M for the AVEK High Desert Program over the biennium, and
 - (iv) Bond financing \$36.0M of the budgeted Conservation Program over the biennium;
- b. Authorize the use of \$270M in operating revenues to fund the Capital Investment Plan for FYs 2022/23 and 2023/24;
- c. Determine that the revenue requirements to be paid from rates and charges are \$1,677.6M in

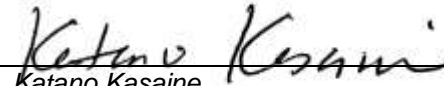
FY 2022/23 and \$1,769.7M in FY 2023/24;

- d. Approve the Ten-Year Financial Forecast, as shown in the Proposed Biennial Budget FY 2022/23 and FY 2023/24;
- e. Approve water rates effective January 1, 2023, and January 1, 2024, as shown in Table 5 above;
- f. Adopt the Resolution Fixing and Adopting Water Rates To Be Effective January 1, 2023, and 2024, in the form of **Attachment 5**, as will be updated to reflect the calculations and resulting rates pursuant to Option 3;
- g. Adopt the Resolution Fixing and Adopting A Readiness-To-Serve Charge Effective January 1, 2023, in the form of **Attachment 6**, as will be updated to reflect the calculations and resulting RTS Charge pursuant to Option 3;
- h. Adopt the Resolution Fixing and Adopting A Capacity Charge Effective January 1, 2023, in the form of **Attachment 7**, as will be updated to reflect the calculations and resulting Capacity Charge pursuant to Option 3; and
- i. Authorize a change in the method of installing, keeping, and rendering all accounts from a modified-accrual basis method of accounting to a cash-basis method of accounting for the purpose of budgeting.

Business Analysis: Option 3 lowers the recommended overall rate increases from 8 percent to 5.5 percent in each of CYs ~~2023-2022/23~~ and ~~2024-2023/24~~, primarily made possible through cutting departmental O&M budgets in addition to increasing the assumed FTE vacancy rate, placing a moratorium on new LRP agreements in the biennium, and assuming \$10M in annual grant funding. The bond coverage decreases to 1.4 times in FY 2023/24 and, additionally, the 10-Year Financial Forecast anticipates a 6 percent overall rate increase beginning in CY ~~2025-FY 2024/25~~ and remaining at that level through CY 2029 ~~FY 2028/29~~ before decreasing to 5 percent.

Staff Recommendation

Option #1



Katano Kasaine
Chief Financial Officer/
Assistant General Manager

4/8/2022

Date



Adel Hagekhalil
General Manager

4/8/2022

Date

Attachment 1 – Proposed Biennial Budget FY 2022/23 and FY 2023/24 and the associated Ten-Year Financial Forecast

Attachment 2 – Metropolitan Water District of Southern California, Fiscal Years 2022/23 and FY 2023/24 Cost of Service Report for Proposed Water Rates and Charges – Option 1

Attachment 3 – Metropolitan Water District of Southern California, Fiscal Years 2022/23 and FY 2023/24 Cost of Service Report for Proposed Water Rates and Charges – Option 2

Attachment 4 – Metropolitan Water District of Southern California, Fiscal Years 2022/23 and FY 2023/24 Cost of Service Report for Proposed Water Rates and Charges – Option 3

Attachment 5 – Resolution Fixing and Adopting Water Rates to be Effective January 1, 2023, and January 1, 2024 – Option 1

Attachment 6 – Resolution Fixing and Adopting a Readiness-To-Serve Charge Effective January 1, 2023 – Option 1

Attachment 7 – Resolution Fixing and Adopting a Capacity Charge Effective January 1, 2023 – Option 1

Ref# cfo12683361



Proposed Biennial Budget

Fiscal Years
2022/23 – 2023/24

THE METROPOLITAN WATER DISTRICT
of SOUTHERN CALIFORNIA

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DISTRICT OVERVIEW

District Profile

The Metropolitan Water District of Southern California (Metropolitan) is a metropolitan water district created in 1928 under authority of the Metropolitan Water District Act (California Statutes 1927, Chapter 429, as reenacted in 1969 as Chapter 209, as amended (the Act)). Metropolitan has 26 member public agencies and its primary purpose is to provide its members with a reliable wholesale water supply service for domestic and municipal uses. To do so, Metropolitan imports water from the Colorado River and Northern California. Metropolitan also helps its member agencies develop increased water conservation, recycling, storage and other local resource programs.

Metropolitan is authorized to develop, store, and distribute water for domestic and municipal purposes and other beneficial uses if excess water is available, and may provide, generate, and deliver electric power within or outside the state for the purpose of developing, storing, and distributing water. All powers, privileges and duties vested in or imposed upon Metropolitan are exercised and performed by and through its Board of Directors. Metropolitan is governed by a 38-member Board of Directors representing the 26 member agencies. Metropolitan directors are selected by their respective member agencies and some of those directors also serve on the governing body of their member agency. Board and committee meetings are open to the public and are broadcast on the Internet through Metropolitan's website, www.mwdh2o.com. Although the Board and its committees have met virtually since the start of the COVID-19 pandemic, Metropolitan has made participation, observation, viewing, and listening options available to the public meetings. A schedule of Board and committee meetings, as well as current and archived Board materials, is available at the same website.

Metropolitan was established to obtain an allotment of Colorado River water and to construct and operate the 242-mile Colorado River Aqueduct (CRA), which runs from an intake at Lake Havasu on the California-Arizona border, to an endpoint at Metropolitan's Lake Mathews reservoir in Riverside County. Metropolitan owns and operates an extensive portfolio of capital facilities including the CRA, 16 hydroelectric facilities, nine reservoirs, 830 miles of large-scale pipes, and five water treatment plants.

In 1960, Metropolitan, followed by other public agencies, signed a long-term contract with the state Department of Water Resources (DWR) to participate in the State Water Project (SWP). The SWP is the largest state-built, user-financed water supply and transportation project in the country. Its facilities were constructed with several general types of financing, the repayment of which is made by the 29 agencies and districts that participate in the SWP through long-term contracts (the State Water Contractors). The State Water Contractors also pay for the operations, maintenance, power, and replacement (OMP&R) costs of the SWP, as the State Water Contracts are the basis for all SWP construction and ongoing operations and DWR manages and operates the SWP. As the largest of the now 29 contractors, Metropolitan is entitled to slightly less than half of all SWP supplies. Water supplies from the SWP are conveyed to Metropolitan via the SWP's 444-mile California Aqueduct, which was made possible pursuant to Metropolitan's State Water Contract. The SWP serves urban and agricultural agencies from the San Francisco Bay area to Southern California.

To secure additional supplies, Metropolitan also has groundwater banking partnerships and water transfer arrangements within and outside of its service area. Metropolitan also provides financial incentives to its member agencies for local investments in water management projects and programs. An increasing percentage of Southern California's water supply comes from these local resources, including conservation, water recycling and recovered groundwater.

To pay for its costs, the Act authorizes Metropolitan to: levy property taxes within its service area; establish water rates; collect charges for water standby and service availability; incur general obligation bonded

indebtedness and issue revenue bonds, notes and short-term revenue certificates; execute contracts; and exercise the power of eminent domain for the purpose of acquiring property. In addition, Metropolitan's Board is authorized to establish terms and conditions under which additional areas may be annexed to Metropolitan's service area.

Mission

The mission of Metropolitan is to provide its 5,200-square-mile service area with adequate and reliable supplies of high-quality water to meet present and future needs in an environmentally and economically responsible way.

Core Values

Metropolitan's core values include the following:

- Integrity
- Stewardship
- Diversity
- Open Communication
- Leadership
- Teamwork

Metropolitan Service Area

Metropolitan's service area comprises approximately 5,200 square miles and includes portions of the six counties of Los Angeles, Orange, Riverside, San Bernardino, San Diego and Ventura. When Metropolitan began delivering water in 1941, its service area consisted of approximately 625 square miles. Its service area has increased by 4,500 square miles since that time. The expansion was primarily the result of annexation of the service areas of additional member agencies. Historically, Metropolitan has provided between 40 and 60 percent of the water used annually within its service area.

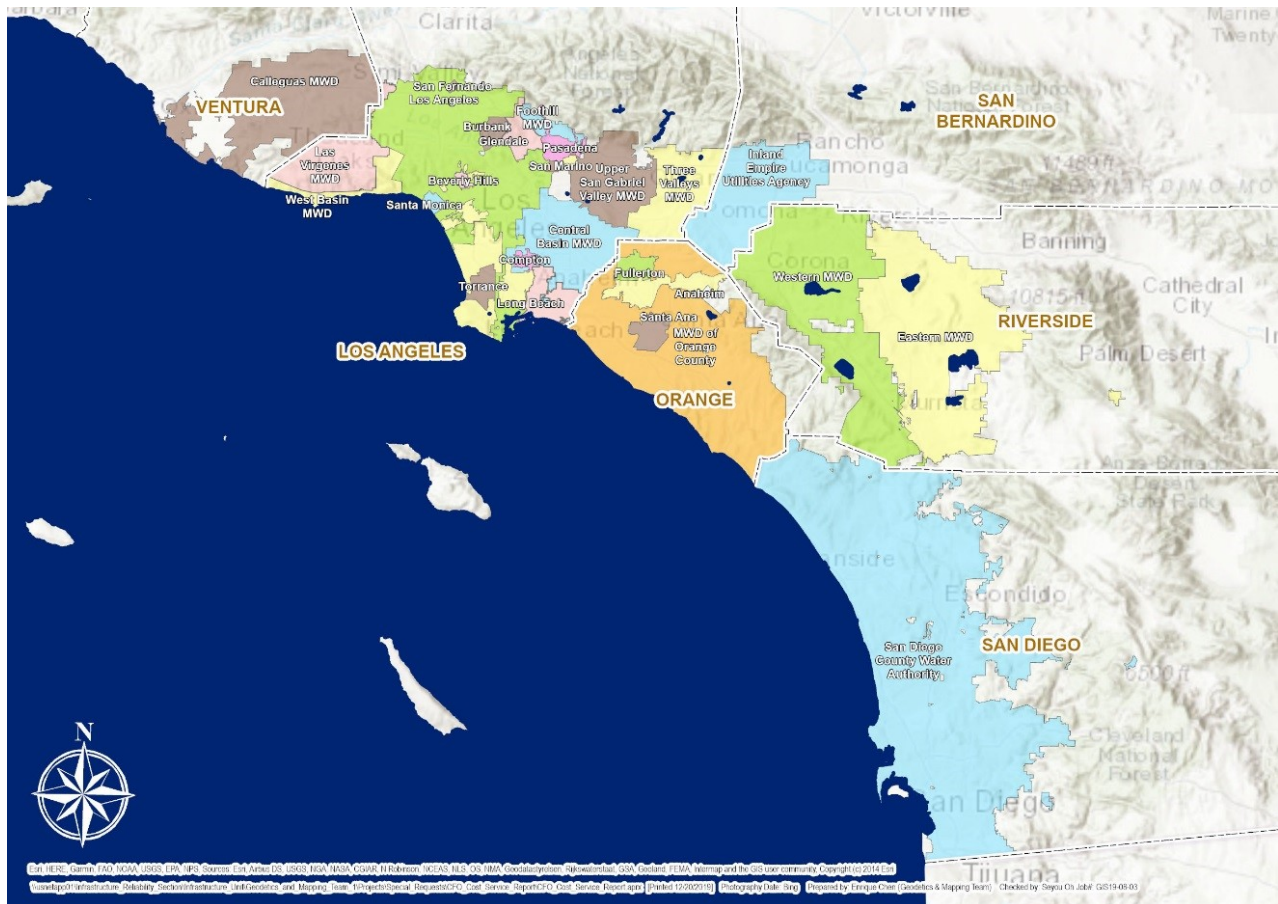
The area served by Metropolitan represents the most densely populated and heavily industrialized portions of Southern California. Metropolitan estimates that approximately 19 million people lived in Metropolitan's service area in 2020, based on official estimates from the California Department of Finance and on population distribution estimates from the Southern California Association of Governments (SCAG) and the San Diego Association of Governments (SANDAG). Recent population projections prepared by SCAG in 2020 and by SANDAG in 2019, which will be used as base data for Metropolitan's 2020 Integrated Water Resources Plan, show expected population growth of approximately 17 percent in Metropolitan's service area between 2010 and 2035, which is slightly lower than the approximately 18 percent population growth rate projected by SCAG in 2012 and SANDAG in 2013 (which projections were used as base data for Metropolitan's prior 2015 Integrated Water Resources Plan update).

The economy of Metropolitan's service area is exceptionally diverse. In 2019, the economy of the Six County Area was larger than all but twelve nations of the world. The Six County Area economy ranked between South Korea (\$1.642 trillion) and Spain (\$1.394 trillion), with an estimated gross domestic product ("GDP") of \$1.596 trillion. The Six County Area's gross domestic product in 2019 was larger than all U.S. states except California, Texas and New York.

The climate in Metropolitan's service area ranges from moderate temperatures throughout the year in the coastal areas to hot and dry summers in the inland areas. Annual rainfall in an average year has historically been approximately 13 to 15 inches along the coastal area, up to 20 inches in foothill areas and less than 10 inches inland.

Service Area Map

The map below shows the area served by Metropolitan. It includes parts of six of the ten counties that comprise Southern California (Six County Area) consisting of Los Angeles, Orange, Riverside, San Bernardino, San Diego, and Ventura counties. Although these counties comprise Metropolitan's service area, Metropolitan's territory does not encompass all of the area within each of the six counties.



Summary of Recent Trends and Outlook for the Six County Area Economy

There are a number of events in recent months that support the outlook for faster growth in the national and Six County Area economy. Congress approved a \$1.9 trillion COVID-related spending plan and these funds have begun to be distributed to residents, businesses and local governments. Three coronavirus vaccines have been approved and as of mid-April 2021 an average of over 3 million doses are being given to residents daily according to the Center for Disease Control and Prevention (CDC).

On the basis of these events, forecasts of national economic growth are being revised upwards. The U.C.L.A. Anderson School economic forecast released in March 2021 has GDP growing by 6.3% in 2021 and 4.6% in 2022. The same forecast sees increased job growth and reduced unemployment rates in California for 2021, 2022 and 2023. Job growth in the state is forecast to outpace national growth rates while the state's unemployment rate,

while declining, is forecast to remain above the national rate. The forecast has 4.1% and 3.1% for job growth in California in 2021 and 2022 compared to 3.6% and 2.9% for the nation.

Job growth in the Six County Area after February 2020 was restrained by reopening restrictions that were stricter than throughout the nation and by large job losses in tourism and motion picture production sectors that have a high concentration in the Six County Area. These major causes of slow job growth are related to the coronavirus pandemic and are temporary and will be eliminated over time once the pandemic is under control.

Through March 2021, the Six County Area had recovered 37.3% of the jobs lost between February and April of 2020. This is below the 43.2% recovery for the state the 62.4% job recovery in the nation. The Six County Area economy made substantial recovery gains in February and March 2021 as coronavirus cases, deaths and hospitalizations improved in the region, the number of vaccinations accelerated and activity restrictions were lifted. The Six County Area added 144,100 jobs between January and March 2021. The April and May 2021 data should also show large job gains as many businesses, tourist attractions, such as Disneyland, and sports venues have recently reopened to limited capacity or have announced reopening dates in April and May.

The Six County Area slightly outpaced the nation in nonfarm wage and salary job growth from the beginning of 2013 through the end of 2019. By December 2019 job levels were 934,600 or 10.7% above the pre-recession peak level in July 2007. Job growth for the entire Six County Area in 2019 was 127,600 jobs or a gain of 1.3% compared to a 1.4% increase in jobs for the state and nation for the comparable period. In 2019, unemployment rates ranged from a low of 2.9% in Orange County to a high of 4.4% in Los Angeles County. Unemployment rates declined from 2018 levels in all Six County Area counties.

Over the longer term, international trade has been a leading growth sector in the Six County Area. Container volume rose 79% between 2000 and 2019 despite a 3.3% decline in 2019 as a result of tariff increases. Trade gains support job growth in warehousing, wholesale trade and trucking particularly in the Riverside-San Bernardino county area. In 2019, the Six County Area accounted for \$10.3 billion in new venture capital funding (a record high level) behind the New York metro and ahead of New England. Air passenger travel at the major airports in the Six County Area reached record levels in 2019 up 2.0% over 2018 to 135.5 million trips led by gains at Burbank, Ontario and San Diego airports.

Population growth averaged 115,400 between 2010 and 2020 according to the California Department of Finance (DOF) estimates, and growth slowed in the past five years and declined by 12,500 in 2020. The Six County Area had 22.2 million residents in 2020, approximately 56% of the State's population. Income, taxable sales and assessed valuation in the Six County Area have increased since 2013 along with record levels in foreign trade and film permits. At the end of 2019, gains in income, taxable sales and assessed valuation outpaced the growth in consumer price indices in the Six County Area all of which helped local government revenue growth.

Long-term job growth is driven by the Six County Area's economic base—those sectors that sell most of their goods and services in national and world markets outside of the Six County Area. Recent projections by CCSCE, SCAG and SANDAG report that the Six County Area will see job growth that slightly exceeds the national average during the next 10 to 30 years, led by gains in Professional and Business Services, Wholesale Trade, Information and the tourism component of Leisure and Hospitality.

For more demographic and economic information for Metropolitan's service area or the Six County Area, please refer to the Service Area Economy section, which includes information on:

- Job growth trends
- Construction activity
- Housing trends
- Assessed valuation

- International Trade
- Income & Wages
- Population
- Economic structure and long term prospects

Strategic Plan Summary

The General Manager submits to the Board of Directors a business plan containing the General Manager's key priorities for the coming year for review and approval.

Five strategic priorities support Metropolitan's mission for fiscal years 2022/23 and 2023/24:

Strategic Priority #1: Empower the Workforce and Promote Diversity, Equity and Inclusion

Strategic Priority #2: Sustain Metropolitan's Mission with a Strengthened Business Model

Strategic Priority #3: Adapt to Changing Climate and Water Resources

Strategic Priority #4: Protect Public Health, Regional Economy, and Metropolitan's Assets

Strategic Priority #5: Partner with Stakeholders and the Communities We Serve

For more detail on the GM's strategic priorities, please refer to the General Manager's Transmittal Letter.

The General Counsel, General Auditor and Ethics Officer also submit to the Board of Directors a business plan containing their department's key priorities for the coming year for review and approval.

The groups within the General Manager department submit their business plans to the General Manager annually for review and approval. These business plans include a group mission statement and Objectives and Actions to support the relevant General Manager's strategic priorities.

Performance Indicators

Metropolitan has developed a series of key performance indicators (KPIs) that are used to measure and evaluate mission-critical processes as well as support internal decision making. These KPIs include financial, water quality, human resource, legislative, operational, outreach, etc. measures that are closely aligned with Metropolitan's business plans, key priorities and objectives.

Please see the Operating Expenditures section for Metropolitan's performance measures including fiscal year results and targets.

Organization Structure

Member Agencies

The following table lists the 26 member agencies of Metropolitan which include 11 municipal water districts, 14 cities and one county water authority.

Municipal Water Districts	Cities	County Water Authority
Calleguas	Anaheim	San Diego
Central Basin	Beverly Hills	
Eastern	Burbank	
Foothill	Compton	
Inland Empire Utilities Agency	Fullerton	
Upper San Gabriel Valley	Glendale	
Western of Riverside County	Long Beach	
Las Virgenes	Los Angeles	
Orange County	Pasadena	
Three Valleys	San Fernando	
West Basin	San Marino	
	Santa Ana	
	Santa Monica	
	Torrance	

Board of Directors

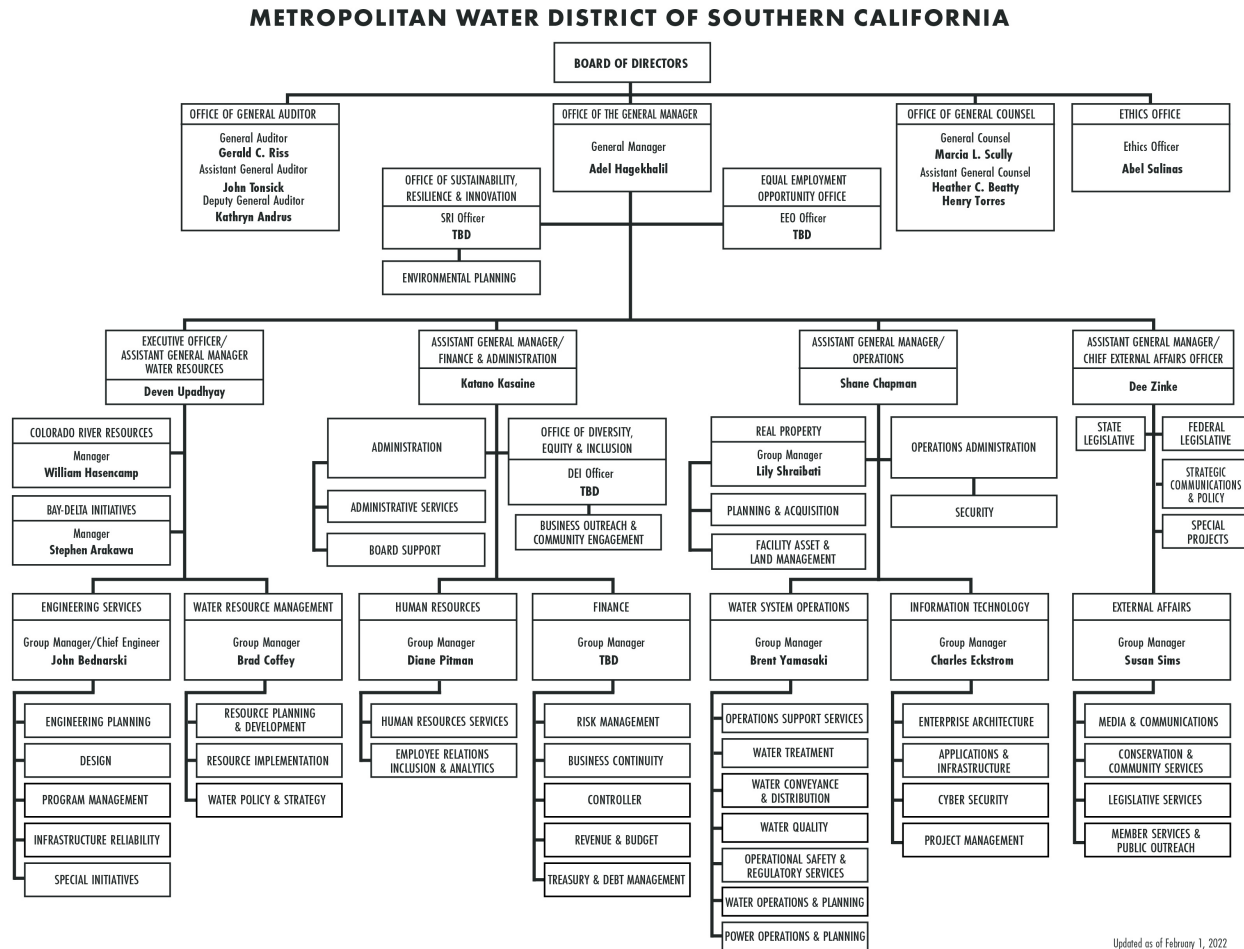
Metropolitan is governed by the customers that use its system and service, its member public agencies, through a 38-member Board of Directors. Each member public agency is entitled to have at least one representative on the Board, plus an additional representative for each full five percent of the total assessed valuation of property in Metropolitan's service area that is within the member public agency. Accordingly, the Board may, from time to time, have more than 38 directors. There are also limits on reductions in the number of directors. Changes in relative assessed valuation do not terminate any director's term and as a result of California Assembly Bill 1220 (Garcia) enacted in 2019, "A member public agency shall not have fewer than the number of representatives the member public agency had as of January 1, 2019."

The Board includes business, professional and civic leaders. Directors serve on the Board without compensation from Metropolitan. Voting is based on assessed valuation, with each member agency being entitled to cast one vote for each \$10 million or major fractional part of \$10 million of assessed valuation of property within the member agency, as shown by the assessment records of the county in which the member agency is located. The Board administers its policies through the Metropolitan Water District Administrative Code (the Administrative Code), which the Board adopted in 1977. The Board periodically amends the Administrative Code to reflect new policies or changes in existing policies that occur from time to time.

Metropolitan's day-to-day management is under the direction of its General Manager, who serves at the pleasure of the Board, as do Metropolitan's General Counsel, General Auditor, and Ethics Officer.

Organization Chart

A larger version is provided on the inside back cover of the Biennial Budget document.



Metropolitan Senior Management

Adel Hagekhalil	General Manager
Marcia Scully	General Counsel
Gerald Riss	General Auditor
Abel Salinas	Ethics Officer
Katano Kasaine	Assistant General Manager, Finance and Administration
Deven Upadhyay	Executive Officer/Assistant General Manager, Water Resources
Shane Chapman	Assistant General Manager, Operations
Dee Zinke	Assistant General Manager/Chief External Affairs Officer

Workforce

Metropolitan's budget is for 1,927 regular full-time employees. Most Metropolitan employees are represented by the American Federation of State, County and Municipal Employees (AFSCME), Local 1902; the Management and Professional Employees Association (MAPA), Local 1001; the Supervisors Association; and the Association of Confidential Employees (ACE). The four bargaining units represent approximately 99 percent of Metropolitan's employees. The remaining one percent is unrepresented.

Offices

Metropolitan's headquarters are located at 700 N. Alameda St., Los Angeles, California 90012. Metropolitan has legislative offices in Sacramento and Washington D.C.



Financial Organization

Fund Structure and Descriptions (from Metropolitan's Administrative Code)

To provide for accountability of public moneys in accordance with applicable federal and state law and regulations and Board policies, the following active or prospectively active funds have been established in the Treasury of the District:

- **General Fund** (Fund No. 1001, established 1929).
 - Moneys not specifically allocated or appropriated may be placed in this fund and used for general purposes of the District.
 - Expenditures for reimbursable work and water conservation capital and indirect costs under the contract with Imperial Irrigation District are paid from this fund.
- **Replacement and Refurbishment Fund** (Fund No. 5001, established 1988).
 - Used to finance certain capital program expenditures from current revenues in accordance with Section 5109, subject to the conditions contained in Section 5202(b).
- **State Contract Fund** (Fund No. 5701, established 1960).
 - Used for the payment of capital charges under the State Water Contract, including the capital charges for off-aqueduct power facilities, subject to the conditions contained in Section 5201(d).
- **Special Tax Fund** (Fund No. 5702, established 1951).
 - Annexation fees (cash payments and special tax collections) are deposited in this fund and transferred to the State Contract Fund to pay a portion of State Water Contract capital charges.
- **Water Revenue Fund** (Fund No. 1002, established 1975).
 - Receipts from water sales are deposited in this fund and are transferred to various other funds in accordance with revenue bond covenants and Board resolutions to pay in order of priority:
 1. Operation and maintenance expenditures;
 2. The interest on and bond obligation of Water Revenue Bonds and Parity Obligations issued pursuant to Master Resolution 8329 (the Master Resolution or Senior Debt Resolution) adopted by the Board on July 9, 1991 and any Supplemental Resolutions thereto, and any other obligations on a parity with the Water Revenue Bonds;
 3. All other payments required for compliance with the Master Resolution, and any Supplemental Resolutions;
 4. The interest on and bond obligation of Subordinate Water Revenue Bonds and Parity Obligations issued pursuant to Master Subordinate Resolution 9199 (the Master Subordinate Resolution) adopted by the Board on March 8, 2016 and any supplemental Resolutions thereto, and any other obligations on a parity with the Subordinate Water Revenue Bonds;
 5. All other payments required for compliance with the Master Resolution, and any Supplemental Resolutions;

6. Principal of and interest on Commercial Paper Notes and other amounts due a provider of a liquidity facility;
 7. Deposits into the Water Standby Charge Fund in accordance with resolutions imposing such charges; and
 8. Any other obligations which are charges, liens, or encumbrances upon or payable from net operating revenues.
- Moneys remaining at the end of each month, after the foregoing transfers, are transferred to the Revenue Remainder Fund.
 - **Operation and Maintenance Fund** (Fund No. 1003, established 1975).
 - Used to pay all operation and maintenance expenditures, including State Water Contract operation, maintenance, power and replacement charges, subject to the conditions contained in Section 5201(f).
 - **Revenue Remainder Fund** (Fund No. 1004, established 1975).
 - Used to maintain working capital and may be used for any lawful purpose by the District, subject to the conditions contained in Section 5202.
 - **Water Rate Stabilization Fund** (Fund No. 5501, established 1987).
 - Used to reduce future water revenue requirements or, as directed by the Board, for other lawful purposes, in accordance with Section 5202.
 - **Water Treatment Surcharge Stabilization Fund** (Fund No. 5502, established 1988).
 - Used to mitigate required increases in the surcharge for water treatment or, as directed by the Board, for other lawful purposes, in accordance with Section 5202.
 - **Revolving Construction Fund** (Fund No. 5003, established 1988).
 - Capital expenditures made from this fund are to be reimbursed from proceeds of security sales to the extent such expenditures are authorized uses of debt proceeds under the Act, subject to the conditions and restrictions contained in Section 5201(g).
 - **Iron Mountain Landfill Postclosure Maintenance/Corrective Action Trust Fund** (Fund No. 6005, established 1990).
 - Used as a trust fund to maintain moneys sufficient to cover the costs of postclosure maintenance and/or corrective action of the District's solid waste landfill facility at Iron Mountain, in accordance with regulations of the California Integrated Waste Management Board, and subject to the conditions contained in Section 5201(m).
 - **Water Standby Charge Fund** (Fund No. 1005, established 1992).
 - Used to separately hold revenues attributable to water standby charges; amounts deposited in this fund are used exclusively for the purpose for which the water standby charge was authorized.
 - **Water Transfer Fund** (Fund No. 1007, established 1995).

- Used for moneys set aside for the purchase of water through transfers or similar arrangements, and for the costs of filling the Eastside Reservoir Project.
- **Self-Insured Retention Fund** (Fund No. 1008, established 1999).
 - Used to separately hold amounts set aside for emergency repairs and claims against the District as provided in Section 5201(o).
- **Lake Matthews Multi Species Reserve Trust Fund** (Fund 6101, established 1997.)
 - Used as set forth in agreement between Metropolitan and the Riverside County Habitat Conservation Agency for the Multi Species Reserve.
- **Other Funds to be established for bond issues, notes or other obligations of the District**
 - There shall be established in the Treasury of the District such funds and accounts as are required pursuant to bond covenants, tax and non-arbitrage certificates, bond counsel letters of instruction and related documents, to provide for accountability of District funds and compliance with applicable federal and state law and regulations. Such funds and accounts shall be established for each issue of bonds, notes or other obligations of the District as required in the respective bond or note resolution and closing documents.
- **Water Stewardship Fund** (Fund No. 1009 established 2005).
 - Used to collect revenue from the Water Stewardship Rate and to pay costs associated with water recycling, seawater desalination, conservation, brackish water desalination, or other demand management programs. These funds can also be used to fund administrative costs associated with these programs. Funds may be used as directed by the Board, for other lawful purposes, in accordance with Section 5201(p) and Section 5202(d).

Financial Reporting

Metropolitan prepares its financial reports in conformity with generally accepted accounting principles (GAAP). The Office of the Chief Financial Officer prepares, at the conclusion of each fiscal year, the Annual Comprehensive Financial Report in compliance with principles and standards for financial reporting set forth by the Governmental Accounting Standards Board (GASB).

Budgetary and Accounting Basis

The budget is prepared and monitored on a cash basis. Cash basis accounting recognizes revenues when received and expenses when paid. Under accrual accounting, revenues are recorded when earned and expenses are recorded at the time liabilities are incurred, regardless of the timing of related cash flows. However, while Metropolitan's budget is on a cash basis it operates as a utility enterprise and prepares its basic financial statements using accrual accounting.

Financial Planning

In conjunction with the development of the Biennial Budget, Metropolitan prepares a ten-year forecast (Ten-Year Financial Forecast). The Ten-Year Financial Forecast supports long range resource, capital investment and operational planning. It includes a forecast of future costs and the revenues necessary to support operations and investments in infrastructure and resources that are derived from the most recent Integrated Resources Plan and other planning processes.

To support Metropolitan's Biennial Budget, Ten-Year Financial Forecast, and financial planning, revenue requirements are evaluated to determine the level of rate adjustments required for the upcoming budget year. To the extent possible, increases in rates are adjusted to avoid large fluctuations.

Budget Process

The budget process provides an opportunity to align shorter-term Objectives and Actions in the department and group level business plans to Metropolitan's longer-term Mission, Values, and Strategic Priorities and the needs of our member agencies. Each even numbered year, under the direction of the General Manager, a Biennial Budget is prepared for Metropolitan operations covering the following two fiscal years. The Board does have the opportunity to amend the budget as it sees fit to changing fiscal and climatic conditions.

The budget is presented to the Board for consideration and adoption in April in order to align it with the adoption of water rates also approved in April. This permits the incorporation of approved O&M budget expenditures into the Revenue Requirements process, which facilitates the setting of water rates. The Board and member agencies conduct extensive reviews of and provide significant input to the budget over three months from January to April. This year's budget review process included board workshops on February 7, February 22, and March 7, a public hearing on March 8, and several other presentations and caucuses with member agencies, with final approval occurring at the April 12 Board meeting.

The O&M budget is presented in an organizational format and is described in terms of its scope of work, personnel requirements, and allocation by expense category. The budget serves to identify the resource requirements for the actions and tasks each group will engage in to support the General Manager's Business Plan. The overall emphasis, consistent with Metropolitan's mission, has been on providing high quality and reliable water supplies at a fair and competitive price and in an environmental and economically responsible way.

Balanced Budget

Metropolitan considers the budget to be balanced when the sources of funds equals the uses of funds. That is, budgeted operating revenues, and on occasion the use of water rate stabilization funds, are equal to or greater than budgeted operating expenditures including debt service, and ending fund balances meet minimum policy levels. Rates and charges are set to ensure that revenues are sufficient to recover the total cash needs in a given fiscal year.

Budget Calendar

Due Date	Activity
June - November	Identification of major maintenance and capital projects and CIP Evaluation Team review of new and continuing projects.
August – November	Budget instructions issued to all groups. Personnel complements are developed including full-time, part-time, temporary, and overtime estimates. Group managers bring proposed budget presentations to senior management.
November	CIP Evaluation Team completes review of project proposals for the CIP. O&M budgets, CIP estimates, and operating equipment budgets are developed. Senior management reviews and makes final recommendations on group budgets.
December	Group budgets are revised as necessary. Proposed budget is finalized and materials and presentations are developed for presentation to the Board of Directors.
January – April	Proposed budget is presented to the Board of Directors and member agency managers. Proposed group and department budgets are presented to the relevant Board committees. Proposed annual budget workshops are conducted with the full Board and budget estimates are revised as necessary.
April	Finance and Insurance Committee recommends action on the Biennial Budget. Board of Directors takes action on adoption of the Biennial Budget.

Starting in the summer prior to budget adoption, each group identifies any needed major maintenance and new capital projects as well as develop the associated cost estimates. In August, the budget guidelines and a calendar of budget process deadlines are issued to group, assistant group, and section managers by Budget and Financial Planning staff outlining major budget priorities consistent with the General Manager's Business Plan, staffing and operational objectives.

The development phase begins with overall program formulation and identification of individual projects, staffing, and equipment needs. Personnel budgets, including requests for temporary and part-time help, are then prepared and professional services requirements are identified. All requests for personnel, equipment purchases, and projects must be submitted with formal justifications, which address a standard set of questions developed by Budget and Financial Planning staff. Each organization is required to identify the extent to which its proposed budget supports the General Manager's strategic priorities as outlined in the Business Plan. This information is later used to update the Business Plan in the late spring in an iterative process.

The procedures for preparation of each element of the budget are outlined below.

Labor and Professional Services Budget

The labor budget consists of regular full-time payroll, overtime, premium pay, and part-time and temporary employees. The professional services budget consists of planned payments to outside consultants for specialized skills. Personnel components reflect the staffing of on-going work with regular employees rather than temporary employees or consultants. In addition, each group provides detailed information on consultant, overtime, and temporary employee usage. Senior management examines this information for the level and types of resources being committed toward the stated business plan and strategic priorities. Through this process, senior management makes appropriate recommendations for the allocation of labor resources.

Adjustments to the proposed budget are made following the review by senior management and the General Manager.

Equipment Budgets

Operating equipment is any equipment, machine, vehicle, tool, or other item that is portable, costs more than \$5,000, and has an anticipated useful life of at least five years. Expensed equipment is similar to operating equipment except that it costs less than \$5,000. All operating equipment is tracked while the tracking of expensed equipment is required for only certain classes of equipment (e.g., workstation/laptop computers, communications equipment, etc.).

The justification for equipment requests includes a description of the item, where it will be used, what it will be used for, and whether or not the item is new or a replacement. If the item is a replacement, the frequency of downtime and cost of repair of the old item versus purchasing a new one must be provided. If the item is required equipment for expanded functions or additional personnel, this must also be explained. A cost/benefit analysis is performed for equipment costing more than \$40,000.

Depending on the nature of the equipment, the requests may be evaluated by several groups. For example, each group manager and the fleet equipment coordinator review vehicle requests.

Finance Department Responsibilities

Treasury and Debt Management

- Recommend procedures for revenue collection, payment of approved demands, reporting and other actions associated with the prudent management of Metropolitan's financial resources.
- Provide for the issuance of debt to fund the capital investment plan.

Controller and Accounting Operations

- Prepare monthly expenditure and revenue reports.
- Prepare periodic reports on the status of expenditures, revenues, investments and actions taken to ensure the financial stability of Metropolitan.
- Prepare and present information on financial trends to facilitate evaluation of Metropolitan's financial position and identify conditions requiring management attention.

Budget and Financial Planning

- Support the development of the Strategic Plan that includes projections of short range and long range financial needs, and recommend methods for meeting those needs.
- Support the development of annual water rates and charges, Metropolitan's biennial operating and capital investment plan and ten year forecast.
- Prepare Metropolitan's proposed biennial operating budget and budget documents.
- Prepare budget performance reports on a monthly, quarterly, semi-annual and annual basis.
- Develop procedures and controls to monitor and assure compliance with the budget.
- Assist departments throughout the year with their budgets and financial issues.
- Prepare financial projections, schedules of rates and charges, tax rate proposals and other financial materials.

Other Department Responsibilities

Engineering

- Prepare Metropolitan's capital investment plan and CIP budget document.

General Manager Responsibilities

- Review and present to the Board of Directors long range plans, budgets and revisions, schedules of rates and charges, payments of financial demands and other financial transactions, as necessary.
- Prepare annual business plan containing General Manager's key priorities for the coming year.
- Implement emergency financial procedures within approved limits, when necessary.

Budgetary Controls

Budget requests are evaluated at several management levels. Managers and staff review budget requests during each phase of the budget process. Each request for a new project, additional personnel, or piece of operating equipment is scrutinized by each group and further reviewed by Budget and Financial Planning staff during the budget process.

All budget submittals are reviewed collectively by the group and section managers. Only those items that are deemed appropriate to support the initiatives of the General Manager's Business Plan are included in the budget recommendation.

Once the budget is completed, the expenditures for each group are monitored on a monthly basis to ensure that the groups do not exceed the authorized operating budget for the fiscal year or biennial period, unless approved by the General Manager.

Budget Adjustments

The budget may be amended in the mid-cycle biennial review or when overall expenditures are anticipated to significantly exceed estimates. A report outlining the reasons for increasing the budget appropriation is prepared and submitted to the Board of Directors for consideration. The Board of Directors must approve any increases in the overall budget appropriations.

Capital Investment Plan (CIP)

The Capital Investment Plan (CIP) communicates the capital priorities of Metropolitan for the next two fiscal years. Within the Ten Year Financial Forecast, the CIP projects have been carefully reviewed, scored and ranked to support system reliability, water quality, and safety while meeting all regulatory requirements.

Structure

The highest level of the CIP structure is Program. Programs are comprised of one or more Project Groups.

There are 13 capital programs which include:

- Colorado River Aqueduct Reliability
- Cost Efficiency & Productivity
- Dams & Reservoirs Improvements
- Distribution System Reliability
- District Housing & Property Improvements
- Minor Capital Projects
- Prestressed Concrete Cylinder Pipe Rehabilitation
- Regional Recycled Water
- Right-of-Way & Infrastructure Protection
- System Flexibility/Supply Reliability
- System Reliability
- Treatment Plant Reliability
- Water Quality

Definitions of the 13 capital programs can be found in the Capital Investment Plan Section of this budget book.

Preparation

The Capital Investment Plan (CIP) is prepared as part of Metropolitan's biennial budget process. This plan provides information on all capital programs and projects that have been proposed, evaluated and included in the budget forecast to begin or continue during and after the two budget years. Scope, accomplishments, objectives, and financial projections are provided for each capital program. Every project with work planned for the two budget years and beyond is listed under the individual program summaries.

When the need for a project is recognized, a CIP proposal is prepared which provides information regarding scope, justification, alternatives, schedule, impacts of rescheduling work for a later time, impact on operation and maintenance costs, and estimate of total project cost. All projects are reviewed and prioritized on a biennial basis by the CIP Evaluation Committee working closely with project sponsors and management.

Capital projects include new facilities, betterments, and replacements that cost at least \$50,000 and have an anticipated useful life of at least five years. In the case of information technology computer software capital projects, the cost must exceed \$250,000 and the resulting asset must have an anticipated useful life of at least three years.

The projects that comprise the proposed CIP have been identified from many Metropolitan studies of projected water needs as well as ongoing monitoring and inspections, condition assessments, and focused vulnerability studies. Staff continues to study operational demands on aging facilities and has made recommendations for capital projects that will maintain infrastructure reliability and ensure compliance with all applicable water quality regulations, and building, fire, and safety codes. Staff has also studied business and operations processes and proposed projects that will improve efficiency and provide future cost savings. Additionally, several projects have been identified and prioritized to provide flexibility in system operations to address uncertain supply conditions from the Colorado River and the State Water Project.

Capital projects can be further differentiated into two general categories: major capital and minor capital projects. Major capital projects cost at least \$400,000 and are described in the CIP under their respective Programs. Projects described in the CIP are funded and authorized to proceed under the General Manager's authority unless Board approval is otherwise required in accordance with Metropolitan's Administrative Code. Minor capital projects cost between \$50,000 and \$400,000 and are not individually described in the CIP. Minor capital projects are identified throughout each fiscal year and are funded and implemented under the General Manager's authority.

Additional information on project budgeting can be found in the Capital Investment Plan Section of this budget book.

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BIENNIAL BUDGET SUMMARY

APPROPRIATIONS

The FY 2022/23 appropriation of \$2,158.4 million is comprised of \$1,514.0 million or 70.1% percent for operations expense, \$288.0 million or 13.3% percent for debt service expense, and \$356.4 million or 16.5% percent for the Capital Investment Plan expenses (CIP). The FY 2023/24 appropriation of \$2,247.5 million is comprised of \$1,582.5 million or 70.4% percent for operations expense, \$301.0 million or 13.4% percent for debt service expense, and \$364.0 million or 16.2% percent for the CIP expenses. The table below provides a comparison of FY 2022/23 and FY 2023/24 and illustrates the total appropriations for the operating, debt service and CIP expenses.

FY 2022/23 and FY 2023/24 Operating and Capital Appropriations, \$ millions

Proposed Budget	FY 2022/23	FY 2023/24	Total Biennium
Operating Budget	\$1,514.0	\$1,582.5	\$3,096.5
Debt Service	288.0	301.0	589.0
Capital Investments*	356.4	364.0	720.4
Grand Total	\$2,158.4	\$2,247.5	\$4,405.9

*Capital Investments includes Capital Investment Plan plus debt financed Supply Programs and Conservation

The Biennial Budget for FY 2022/23 and FY 2023/24 provides funding for Metropolitan's strategic priorities while meeting most financial policy guidelines, with overall rate increases of 8.0 percent in CY 2023 and 8.0 percent in CY 2024 of the Biennial Budget. The overall rate increases of 8.0 percent and 8.0 percent are higher than previously forecasted due to higher projected costs, catch-up for the loss of the Water Stewardship Rate (WSR) and lower projected water transactions for the biennial budget period.

The budget is prepared and monitored on a cash basis. Cash basis accounting recognizes revenues when received and expenses when paid. Under accrual accounting, revenues are recorded when earned and expenses are recorded at the time liabilities are incurred, regardless of the timing of related cash flows. However, while Metropolitan's budget is on a cash basis it operates as a utility enterprise and prepares its basic financial statements using accrual accounting.

FUND SUMMARY

The following tables show fund balance, and projected revenues and expenditures for Metropolitan for each fiscal year of the Biennial Budget.

FY 2022/23 Fund Summary, \$ millions

Fiscal Year Ending June 30th, 2023

(\$ in Millions)	All Funds	Operating Funds	Debt Service and Construction Funds	Reserve Funds (1)	Other Funds (2)
Beginning of Year Balance	1,294.9	526.5	197.7	504.5	66.3
USES OF FUNDS					
Expenditures					
State Water Contract	681.7	681.7	—	—	—
Supply Programs (cash funded portion)	66.7	66.7	—	—	—
Colorado River Power	105.9	105.9	—	—	—
Debt Service	288.0	2.8	285.2	—	—
Demand Management (cash funded portion)	50.8	50.8	—	—	—
Departmental O&M	562.1	562.1	—	—	—
Treatment Chemicals, Sludge & Power	32.5	32.5	—	—	—
Other O&M	14.4	14.4	—	—	—
Sub-total Expenses	1,802.0	1,516.8	285.2	—	—
Capital Investments (4)	356.4	30.0	326.4	—	—
Fund Deposits					
R&R and General Fund	135.0	30.0	105.0	—	—
Revenue Bond Construction	81.7	—	81.7	—	—
Treatment Surcharge Stabilization Fund	—	—	—	—	—
Interest for Construction & Trust Funds	0.2	—	0.2	—	—
Increase in Required Reserves	11.0	18.1	8.3	(15.4)	—
Increase in Rate Stabilization Fund	30.5	—	—	30.5	—
Sub-total Fund Deposits	258.3	48.1	195.1	15.1	—
TOTAL USES OF FUNDS	2,416.7	1,594.9	806.7	15.1	—
SOURCES OF FUNDS					
Revenues					
Taxes	163.1	161.1	2.0	—	—
Interest Income	6.6	2.7	1.2	2.6	0.2
Power Sales	16.7	16.7	—	—	—
Fixed Charges (RTS & Capacity Charge)	187.5	187.5	—	—	—
Water Revenue (3)	1,496.9	1,496.9	—	—	—
Miscellaneous Revenue	48.9	48.9	—	—	—
Bond Proceeds	303.1	—	303.1	—	—
Sub-total Revenues	2,222.7	1,913.8	306.2	2.6	0.2
Fund Withdrawals					
R&R and General Fund	135.0	30.0	105.0	—	—
Water Stewardship Fund	56.1	—	—	—	56.1
Treatment Surcharge Stabilization Fund	2.9	—	—	—	2.9
Sub-total Fund Withdrawals	194.0	30.0	105.0	—	59.0
TOTAL SOURCES OF FUNDS	2,416.7	1,943.8	411.2	2.6	59.2
Inter-Fund Transfers	—	(348.9)	395.6	12.5	(59.2)
End of Year Balance	1,359.2	544.6	287.8	519.6	7.3

Totals may not foot due to rounding.

(1) includes Water Rate Stabilization Fund and Revenue Remainder Fund.

(2) includes Water Stewardship, Water Treatment Stabilization and Trust Funds.

(3) includes water sales and exchange

(4) includes Capital Investment Plan plus debt financed Supply and Conservation Programs. However, the proposed budget is seeking authorization to issue bonds for up to the full \$43 million per year for the Conservation Program. If this occurs, the total capital investment for FYs 2022/23 and 2023/24 would be \$381.4 million and \$389.0 million, respectively.

FY 2023/24 Fund Summary, \$ millions

Fiscal Year Ending June 30th, 2024

(\$ in Millions)	All Funds	Operating Funds	Debt Service and Construction Funds	Reserve Funds (1)	Other Funds (2)
Beginning of Year Balance	1,359.2	544.6	287.8	519.6	7.3
USES OF FUNDS					
Expenditures					
State Water Contract	761.2	761.2	—	—	—
Supply Programs (cash funded portion)	64.1	64.1	—	—	—
Colorado River Power	85.6	85.6	—	—	—
Debt Service	301.0	2.7	298.3	—	—
Demand Management (cash funded portion)	54.9	54.9	—	—	—
Departmental O&M	568.0	568.0	—	—	—
Treatment Chemicals, Sludge & Power	34.9	34.9	—	—	—
Other O&M	13.8	13.8	—	—	—
Sub-total Expenses	1,883.6	1,585.2	298.3	—	—
Capital Investments (4)	364.0	30.0	334.0	—	—
Fund Deposits					
R&R and General Fund	135.0	30.0	105.0	—	—
Treatment Surcharge Stabilization Fund	7.7	—	—	—	7.7
Interest for Construction & Trust Funds	0.3	—	0.2	—	—
Increase in Required Reserves	7.9	(4.0)	(0.3)	12.2	—
Sub-total Fund Deposits	150.8	26.0	104.9	12.2	7.7
TOTAL USES OF FUNDS	2,398.4	1,641.2	737.3	12.2	7.7
SOURCES OF FUNDS					
Revenues					
Taxes	168.3	166.3	2.0	—	—
Interest Income	9.8	4.1	1.8	3.8	0.1
Power Sales	14.2	14.2	—	—	—
Fixed Charges (RTS & Capacity Charge)	202.5	202.5	—	—	—
Water Revenue (3)	1,579.6	1,579.6	—	—	—
Miscellaneous Revenue	33.6	33.6	—	—	—
Bond Proceeds	159.2	—	159.2	—	—
Sub-total Revenues	2,167.2	2,000.3	162.9	3.8	0.1
Fund Withdrawals					
R&R and General Fund	135.0	30.0	105.0	—	—
Bond Funds for Construction	69.8	—	69.8	—	—
Water Stewardship Fund	—	—	—	—	—
Decrease in Required Reserves	—	—	—	—	—
Decrease in Rate Stabilization Fund	26.4	—	—	26.4	—
Sub-total Fund Withdrawals	231.2	30.0	174.8	26.4	—
TOTAL SOURCES OF FUNDS	2,398.4	2,030.3	337.7	30.3	0.1
Inter-Fund Transfers	—	(389.1)	399.5	(18.1)	7.6
End of Year Balance	1,278.8	540.6	217.9	505.4	14.9

Totals may not foot due to rounding.

(1) includes Water Rate Stabilization Fund and Revenue Remainder Fund.

(2) includes Water Stewardship, Water Treatment Stabilization and Trust Funds.

(3) includes water sales and exchange

(4) includes Capital Investment Plan plus debt financed Supply and Conservation Programs. However, the proposed budget is seeking authorization to issue bonds for up to the full \$43 million per year for the Conservation Program. If this occurs, the total capital investment for FYs 2022/23 and 2023/24 would be \$381.4 million and \$389.0 million, respectively.

SOURCES OF FUNDS

Total Sources of FY 2022/23 and FY 2023/24 Funds, \$ millions

	2021/22 Budget	2022/23 Proposed	2023/24 Proposed	2021/22 Budget Compared to 2022/23 Proposed	2022/23 Proposed Compared to 2023/24 Proposed
SOURCES OF FUNDS					
Revenues					
Taxes	140.1	163.1	168.3	23.0	5.2
Interest Income	19.3	6.6	9.8	(12.7)	3.2
Power Sales	21.9	16.7	14.2	(5.2)	(2.4)
Fixed Charges (RTS & Capacity Charge)	175.5	187.5	202.5	12.0	15.0
Water Revenues (1)	1,475.9	1,496.9	1,579.6	21.0	82.7
Miscellaneous Revenue	20.5	48.9	33.6	28.5	(15.3)
Bond Proceeds and Reimbursements	89.4	303.1	159.2	213.7	(143.9)
Sub-total Revenues	1,942.5	2,222.7	2,167.2	280.2	(55.5)
Fund Withdrawals					
R&R and General Fund	135.0	135.0	135.0	—	—
Bond Funds for Construction	0.6	—	69.8	(0.6)	69.8
Water Stewardship Fund	75.5	56.1	—	(19.4)	(56.1)
Treatment Surcharge Stabilization Fund	—	2.9	—	2.9	(2.9)
Decrease in Required Reserves	—	—	—	—	—
Decrease in Water Rate Stabilization Fund	—	—	26.4	—	26.4
Sub-total Fund Withdrawals	211.1	194.0	231.2	(17.1)	37.2
TOTAL SOURCES OF FUNDS	2,153.6	2,416.7	2,398.4	263.1	(18.3)

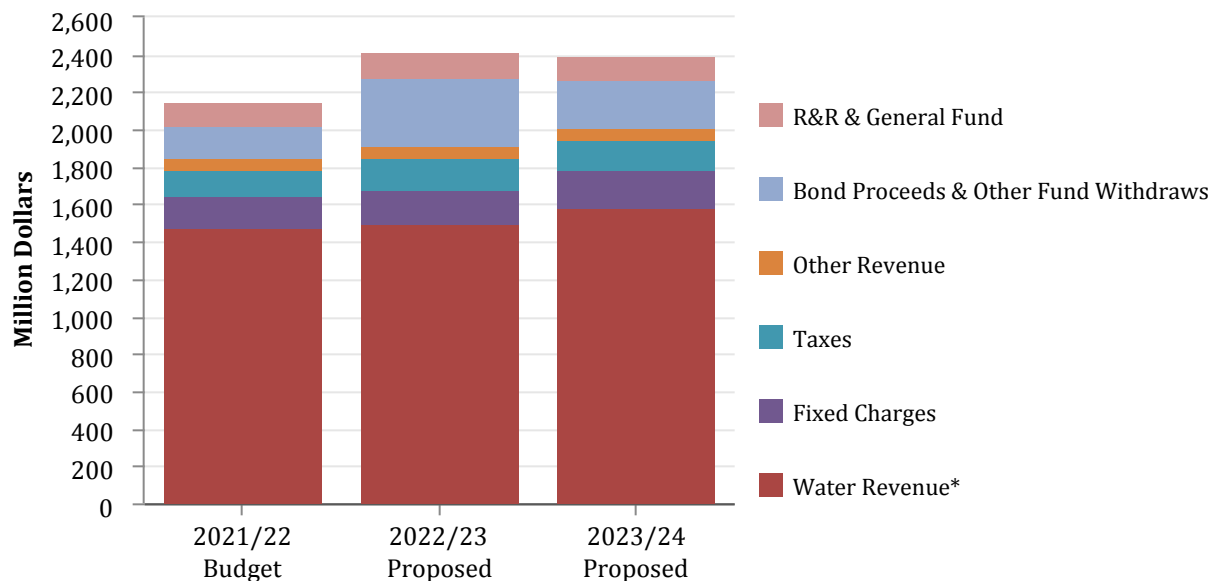
Totals may not foot due to rounding.

(1) includes water sales and exchange

OPERATING REVENUE

Estimated revenues from water rates, fixed charges (Readiness-To-Serve Charge and Capacity Charge), taxes and annexation fees, and other miscellaneous income (interest income, power recovery, etc.) are projected to be \$1.92 billion for FY 2022/23 and \$2.01 billion for FY 2023/24. For FY 2022/23, this is \$66.5 million more than the FY 2021/22 budget, and for FY 2023/24, this is \$88.3 million more than FY 2022/23. The increase in revenues for FY 2022/23 is due to higher water rates and charges in calendar year 2023. For FY 2023/24, the revenue is higher due to higher water rates and charges in calendar year 2023 and calendar year 2024. In addition, the forecast assumes the ad valorem tax rate is maintained at 0.0035 percent of assessed valuations. A description of each revenue source is included in the Glossary of Terms.

Sources of Funds FY 2022/23 and FY 2023/24, \$ millions

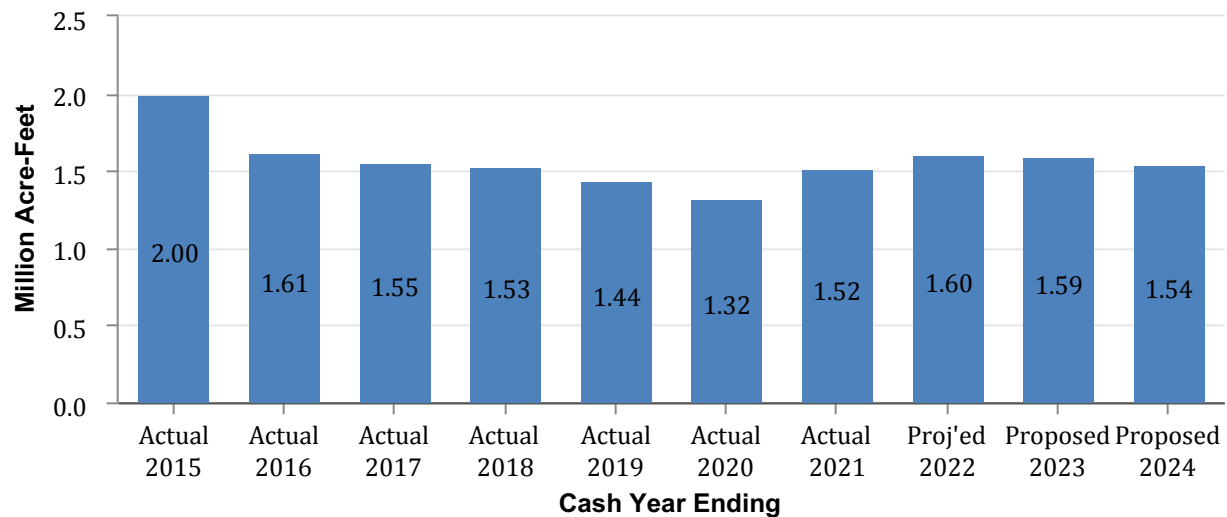


* includes water sales and exchanges

Water Revenues

Revenues from water transactions are budgeted at \$1,496.9 million in FY 2022/23 and \$1,579.6 million in FY 2023/24. Water rates and charges are to increase by 8.0 percent overall, effective January 1, 2023 and 8.0 percent overall, effective January 1, 2024. Water transactions are estimated to be 1.59 million acre-feet (MAF) in Cash Year 2022/23 and 1.54 MAF in Cash Year 2023/24. By the end of the biennium, water transactions are estimated to decrease by 60 thousand acre-feet (TAF) from the FY 2021/22 budget of 1.6 MAF. Water transactions are forecasted to be lower than the FY 2021/22 budget as expectations are that demands will trend lower due to consumer response to the previous droughts, continued conservation initiatives, and local supply development.

Water Transactions Trend, MAF



The Cash Year 2022/23 water transactions include 1.31 MAF of full-service sales, of which 770 TAF (or 48 percent) are treated water sales, 541 TAF of untreated water sales, and 279 TAF of exchange water to the San Diego County Water Authority (SDCWA) pursuant to the 2003 Amended and Restated Exchange Agreement (exchange water). The Cash Year 2023/24 water transactions include 1.26 MAF of full-service sales, of which 780 TAF (or 51 percent) are treated water sales, 482 TAF of untreated water sales, and 278 TAF of exchange water. No wheeling transactions are projected in the biennium period. The figure above shows the trend of occur period member agency water transactions.

Property Taxes and Annexation Fees

Revenues from property taxes, which will be used to pay voter-approved debt service on general obligation bonds and a portion of the SWC expenditures, are estimated to be \$163.1 million in FY 2022/23 and \$168.3 million in FY 2023/24.

The ad valorem tax rate is assumed to remain at the current level of 0.0035 percent of assessed value in both fiscal years; assessed valuations are projected to increase by 4.0 percent each fiscal year.

Fixed Charges

Fixed charges include the Capacity Charge and Readiness-to-Serve Charge. In FY 2022/23, these charges are estimated to generate \$39.0 million and \$148.5 million, respectively. In FY 2023/24, these charges are estimated to generate \$36.5 million and 166.0 million, respectively. In total this represents a \$12.0 million increase from the FY 2021/22 to FY 2022/23 budget, and a \$15.0 million increase from the FY 2022/23 to the FY 2023/24 budget.

All Other Revenue

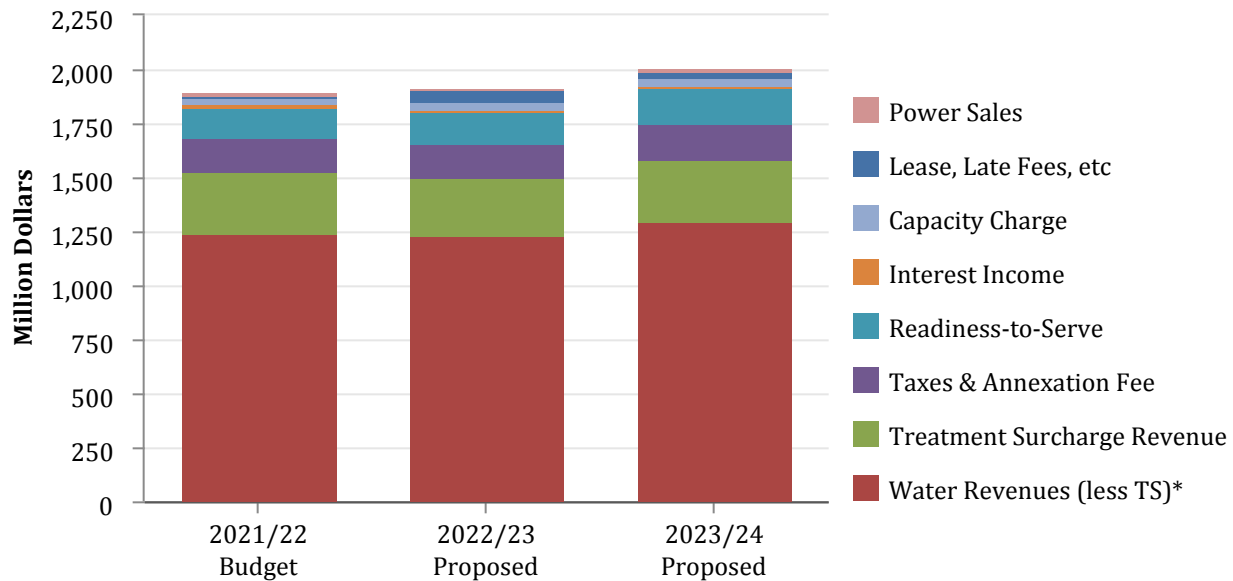
Revenues from hydroelectric and CRA power sales are estimated to be \$16.7 million for FY 2022/23 and \$14.2 million for FY 2023/24. FY 2022/23 is lower than the FY 2021/22 budgeted amount of \$19.1 million due to increased deliveries through the CRA.

Miscellaneous revenues, which include items such as interest income, lease revenues, and water transactions with non-member agencies, are estimated to total \$55.5 million for FY 2022/23 and \$43.4 million for FY 2023/24, higher than the FY 2021/22 budgeted amounts of \$29.6 million, mainly due to increased water

transactions with non-member agencies and the addition of agency contributions to the Regional Recycled Water Program (RRWP).

A summary of operating revenues is shown in the graph below.

Operating Revenues, \$ millions



* includes water sales and exchanges

CAPITAL FUNDING

The FY 2022/23 and FY 2023/24 Capital Investment Plan (CIP) will be funded with bond proceeds and current operating revenues (PAYGO). It is anticipated that Metropolitan will issue new revenue bonds of \$330 million over the biennium to fund a portion of the CIP. The remaining CIP expenditures will be funded with revenue funded capital of \$135 million in FY 2022/23 and \$135 million in FY 2023/24.

In FY 2022/23 and FY 2023/24 the Supply Programs include capital expenditures related to the development of the AVEK High Desert Water Bank program. These expenditures will be recorded as participation rights and are proposed to be funded by debt. Remaining project costs total \$97.9 million and would be covered by a single debt issuance during the biennium.

In FY 2022/23 and FY 2023/24 the Conservation Program is proposed to be funded at \$25 million in each budget year; however, the program is budgeted at \$43 million in each budget year. It is proposed that expenditures in excess of \$25 million will be funded by debt. A single debt issuance of \$36 million is proposed during the biennium to cover additional conservation expenditures.

Please refer to the section on debt financing for additional details on debt funding of capital projects.

Capital Funding Source Descriptions

New Bond Issues

Metropolitan has the ability to issue long-term bonds to fund its capital programs. The proceeds of the bond sales can be used to pay for capital expenses over several years. The repayment of the bonds is generally over 30 years and is paid from water revenues.

Revenue Funded Capital

Annual capital expenses that are not paid from debt funding, grants, or loans must be paid from revenues, either from current year revenues or from the R&R fund, if funds exist.

USES OF FUNDS

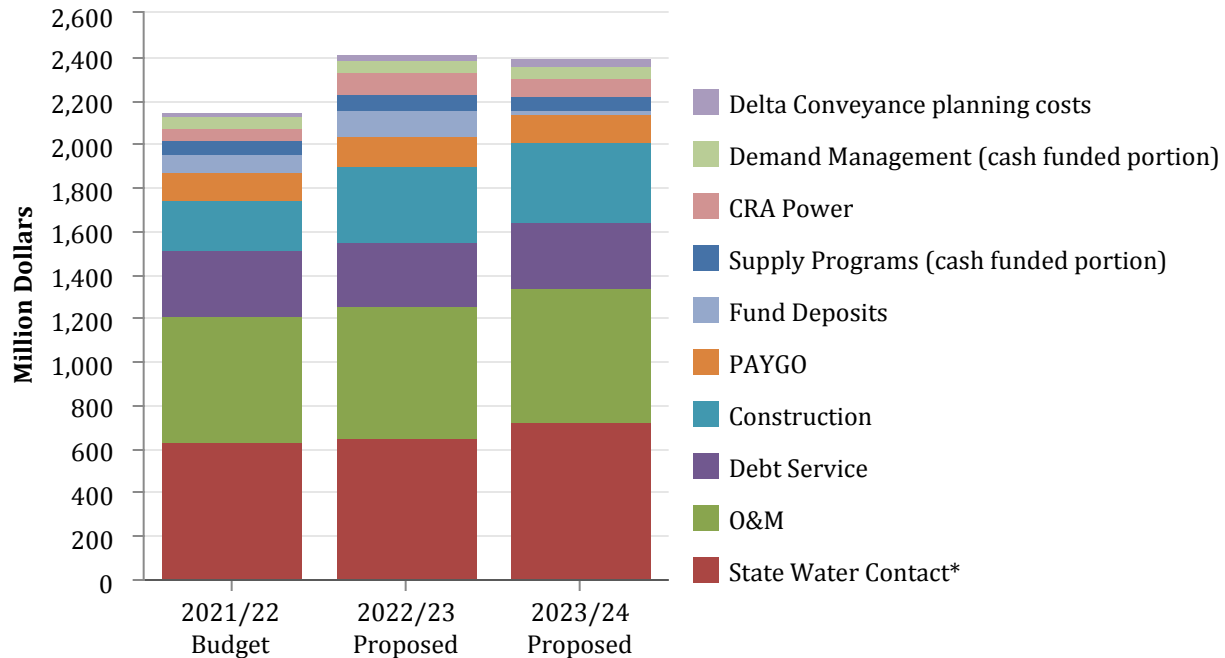
Total uses of funds are \$2.4 billion for FY 2022/23 and \$2.4 billion for FY 2023/24. The table and graph below show the breakdown of expenditures and other obligations that make up the Uses of Funds.

Total Uses of FY 2022/23 and FY 2023/24 Funds, \$ millions

	2021/22 Budget	2022/23 Proposed	2023/24 Proposed	2021/22 Budget Compared to 2022/23 Proposed	2022/23 Proposed Compared to 2023/24 Proposed
USES OF FUNDS					
Expenditures					
State Water Contract*	629.4	651.7	726.7	22.3	75.0
Supply Programs (cash funded portion)	61.2	66.7	64.1	5.5	(2.6)
Delta Conveyance planning costs	25.0	30.0	34.5	5.0	4.5
Colorado River Power	57.6	105.9	85.6	48.3	(20.2)
Debt Service	307.0	288.0	301.0	(19.0)	13.0
Demand Management (cash funded portion)	52.5	50.8	54.9	(1.7)	4.1
Departmental O&M	530.9	562.1	568.0	31.2	5.9
Treatment Chemicals, Sludge & Power	34.8	32.5	34.9	(2.4)	2.4
Other O&M	14.2	14.4	13.8	0.2	(0.6)
Sub-total Expenditures	1,712.5	1,802.0	1,883.6	89.5	81.6
Capital Investments	225.0	356.4	364.0	131.4	7.6
Fund Deposits					
R&R and General Fund	135.0	135.0	135.0	—	—
Revenue Bond Construction	—	81.7	—	81.7	(81.7)
Treatment Surcharge Stabilization Fund	2.0	—	7.7	(2.0)	7.7
Interest for Construction & Trust Funds	1.2	0.2	0.3	(1.0)	0.1
Increase in Required Reserves	60.8	11.0	7.9	(49.8)	(3.1)
Increase in Water Rate Stabilization Fund	17.2	30.5	—	13.3	(30.5)
Sub-total Fund Deposits	216.1	258.3	150.8	42.2	(107.5)
TOTAL USES OF FUNDS	2,153.6	2,416.7	2,398.4	263.1	(18.3)

Totals may not foot due to rounding.

Total Uses of FY 2022/23 and FY 2023/24 Funds, \$ millions



Colorado River Aqueduct Power

CRA power costs are projected to be \$105.9 million in FY 2022/23 and \$85.6 million in FY 2023/24 based on diversions of approximately 1,007 TAF in FY 2022/23 and 923 TAF in FY 2023/24. FY 2022/23 is \$48.3 million higher than the FY 2021/22 budget due to higher diversions at Intake and increased power costs. FY 2023/24 is \$20.2 million lower than FY 2022/23 due to reduced CRA diversions.

Please refer to the section on the CRA for additional details on this expense.

State Water Project

State Water Contract (SWC) expenditures, not including the Delta conveyance planned contribution described below, are budgeted at \$651.7 million for FY 2022/23 and \$726.7 million in FY 2023/24. This is based on Metropolitan's deliveries to MWD's service area of 461 TAF in FY 2022/23 and 777 TAF in FY 2023/24. SWP power costs are expected to be \$211.6 million for FY 2022/23 and \$258.6 million for FY 2023/24. Power costs are higher than FY 2021/22 budget due to increased power costs.

The forecasted amount for SWP expenditures reflects incorporation of rate management credits into the forecast. Rate management credits result from a provision of the State Water Contract that provides for the reduction of capital charges based on differences between the Department of Water Resources' collections from the SWP contractors and the actual amounts paid for capital-related charges.

The total State Water Contract expenditure budget of \$681.7 for FY 2022/23 and \$761.2 for FY 2023/24 includes Metropolitan's planned contribution of \$34.5 million in FY 2022/23 and \$64.5 million in FY 2023/24 partially offset by a \$34.5 million California Water Fix refund over the biennium for Delta conveyance project planning activities.

Please refer to the section on the SWP for additional details on this expense.

Regional Recycled Water Program Planning Costs

The FY 2022/23 and FY 2023/24 budget includes funding for planning costs for the potential Regional Recycled Water Program at \$12.9 million in FY 2022/23 and \$7.4 million in FY 2023/24 for preparation of a programmatic environmental impact report. This is the next step before the Board will be fully informed and ready to make a decision on whether to proceed with further investments in this potential project. The departments have budgeted for the RRWP planning costs as a major O&M project with their budgets. The FY 2021/22 budget of \$15 million was restated to show the planning costs in the departmental O&M budget.

Demand Management Costs

Demand management includes conservation programs, programs to incentivize the development of local water resources, Future Supply Actions Program, and the Stormwater Pilot Program. Metropolitan provides financial incentives to its member agencies for the development of local projects such as water recycling and groundwater recovery projects through the Local Resource Program (LRP). Metropolitan also provides financial incentives for the development of conservation programs. Demand Management paid from current year revenues is budgeted at \$50.8 million for FY 2022/23 and \$54.9 million in FY 2023/24. An additional \$18 million in each year is budgeted for conservation to be funded by debt.

Please refer to the section on Demand Management for additional details on this expenditure.

Supply Programs

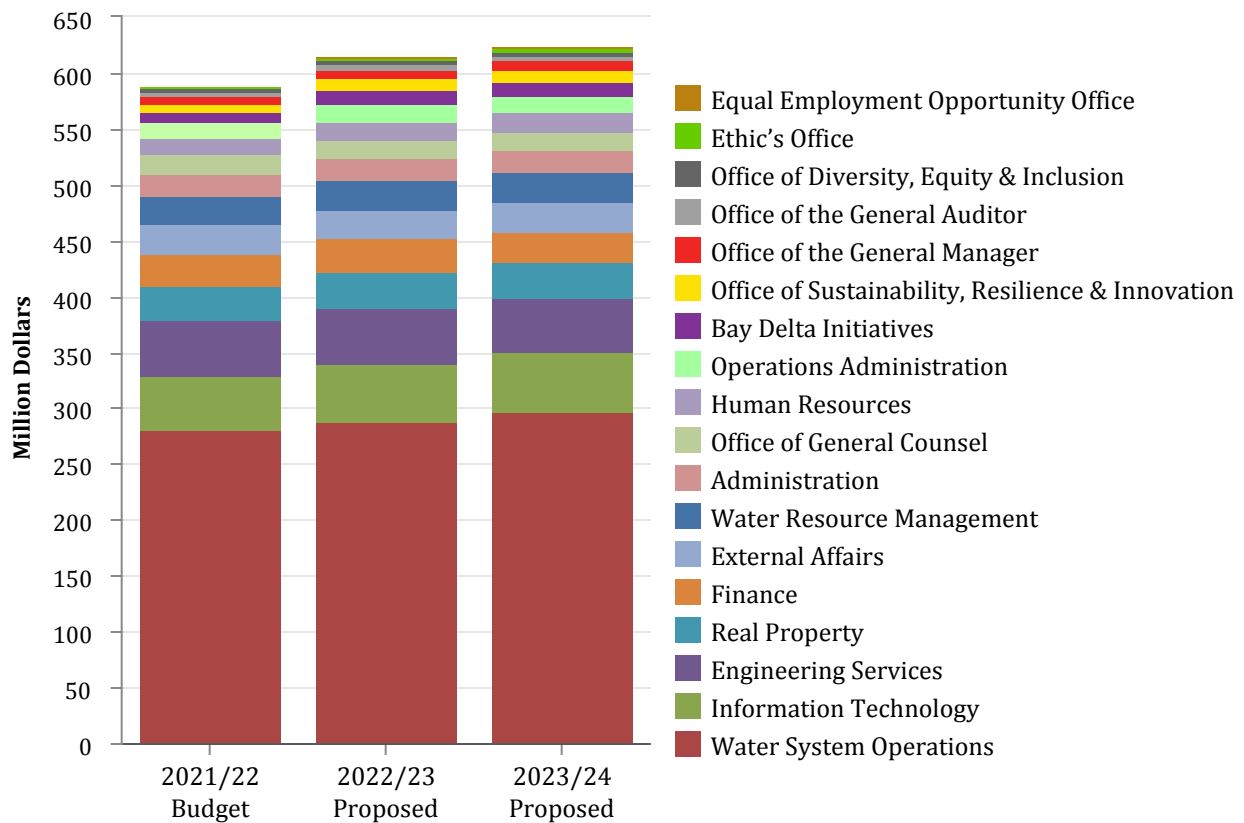
Metropolitan's two principal sources of supply draw from two different watersheds. This has allowed Metropolitan to draw more heavily on one source in the event the other is experiencing a drought. To further ensure regional supply reliability, Metropolitan has developed a portfolio of additional supply programs on both watersheds. Total expenditures from current year revenues are budgeted at \$66.7 million for FY 2022/23 and \$64.1 million in FY 2023/24. Additional spending on Participation Rights for the AVEK High Desert Water Bank Program of \$38M in FY 2022/23 and \$46M in FY 2023/24 are proposed to be funded by debt.

Please refer to the section on the Supply Programs for additional details on this expenditure.

OPERATIONS AND MAINTENANCE

The FY 2022/23 O&M budget, including operating equipment purchases, is \$608.9 million. This is \$29.1 million, or 5.0 percent, higher than the FY 2021/22 budget of \$579.9 million. The FY 2023/24 O&M budget is \$616.7 million, an increase of \$7.7 million, or 1.3 percent, over the FY 2022/23 budget.

Departmental Budget by Organization (without operating equipment, succession planning labor pool and overhead credit), \$ millions



Operations and Maintenance Budget by Organization, \$ thousands

Departmental Units	2021/22 Budget	2022/23 Proposed	2023/24 Proposed	2021/22 Budget vs. 2022/23 Proposed	% Change	2022/23 Proposed vs. 2023/24 Proposed	% Change
Office of the General Manager	6,269.5	8,139.4	8,371.4	1,869.9	29.8%	232.0	2.9%
Water System Operations w/o Variable Treatment	245,803.4	256,532.3	261,878.5	10,728.9	4.4%	5,346.2	2.1%
Information Technology	49,640.0	50,973.6	53,640.8	1,333.6	2.7%	2,667.2	5.2%
Engineering Services	49,345.2	50,817.7	49,358.6	1,472.5	3.0%	(1,459.1)	(2.9%)
Real Property	31,114.0	31,649.4	31,692.4	535.3	1.7%	43.0	0.1%
Finance	28,488.3	30,007.0	26,629.8	1,518.6	5.3%	(3,377.1)	(11.3%)
External Affairs	26,207.4	26,277.5	26,712.1	70.1	0.3%	434.6	1.7%
Water Resource Management	25,346.2	25,908.8	26,582.0	562.6	2.2%	673.2	2.6%
Administration	19,219.2	19,923.0	20,822.2	703.8	3.7%	899.2	4.5%
Human Resources	15,031.1	16,230.8	16,499.5	1,199.8	8.0%	268.7	1.7%
Operations Administration	13,552.7	15,414.6	15,609.0	1,861.9	13.7%	194.5	1.3%
Bay Delta Initiatives	9,709.4	12,499.4	12,867.9	2,790.0	28.7%	368.5	2.9%
Office of Sustainability, Resilience & Innovation	7,096.8	10,318.8	9,682.8	3,222.0	45.4%	(636.0)	(6.2%)
Office of Diversity, Equity & Inclusion	2,502.1	3,870.1	3,999.3	1,368.0	54.7%	129.2	3.3%
Equal Employment Opportunity Office	—	2,048.6	2,146.3	2,048.6	—%	97.7	4.8%
Subtotal - General Manager's Department	529,325.3	560,610.9	566,492.6	31,285.6	5.9%	5,881.7	1.0%
Office of General Counsel	17,752.3	16,416.7	16,289.3	(1,335.6)	(7.5%)	(127.5)	(0.8%)
Office of General Auditor	4,750.2	4,768.4	4,910.5	18.2	0.4%	142.1	3.0%
Ethics Office	1,679.9	2,184.2	2,234.8	504.3	30.0%	50.5	2.3%
Undistributed RRWP Planning Costs*	4,035.0	—	—	(4,035.0)	—%	—	—%
Overhead Credit from Construction	(24,203.5)	(21,891.4)	(21,958.2)	2,312.1	(9.6%)	(66.8)	0.3%
Succession Planning Labor Pool	4,539.8	5,000.0	5,000.0	460.2	10.1%	—	—%
Total Department Budget	537,878.9	567,088.8	572,968.9	29,209.9	5.4%	5,880.2	1.0%
Operating Equipment	7,153.4	9,394.9	8,836.8	2,241.5	31.3%	(558.1)	(5.9%)
Variable Treatment	34,818.7	32,464.3	34,883.3	(2,354.4)	(6.8%)	2,419.0	7.5%
GRAND TOTAL	579,851.1	608,948.0	616,689.0	29,096.9	5.0%	7,741.0	1.3%

*FY 2021/22 Departmental O&M budget restated to include RRWP Planning Costs budget of \$15M; remaining \$10,965M budget reflected in individual groups budgets above

Totals may not foot due to rounding

The table above depicts the distribution of the departmental O&M by organization without the overhead credit, succession planning labor pool and operating equipment. Including treatment costs, the Water System Operations (WSO) group accounts for 47 percent of the total departmental budget for FY 2022/23 and FY 2023/24. Information Technology is the second largest departmental expenditure area, accounting for 8 percent of the total departmental budget for FY 2022/23 and FY 2023/24. A summary of the O&M budget by organization is shown in the table above. The table below summarizes the O&M budget by expenditure type. A more detailed discussion of significant factors impacting the O&M budget follows.

FY 2022/23 and FY 2023/24 Operations & Maintenance Annual Budget by Expenditure Type, \$ thousands

	2021/22 Budget	2022/23 Proposed	2023/24 Proposed	2021/22 Budget vs. 2022/23 Proposed	2022/23 Proposed vs. 2023/24 Proposed
Salaries & Benefits	377,018.1	394,435.3	410,294.1	17,417.2	15,858.9
Chemicals, Sludge and Power	34,818.7	32,464.3	34,883.3	(2,354.4)	2,419.0
Outside Services	68,726.6	72,252.9	66,024.7	3,526.3	(6,228.2)
Materials & Supplies	33,073.7	36,388.9	36,804.0	3,315.2	415.1
Other	59,060.6	64,011.7	59,846.0	4,951.0	(4,165.7)
Operating Equipment	7,153.4	9,394.9	8,836.8	2,241.5	(558.1)
Grand Total	579,851.2	608,948.0	616,689.0	29,096.8	7,741.0

Totals may not foot due to rounding

FY 2022/23 O&M Budget Highlights

The FY 2022/23 O&M budget includes \$608.9 million for labor and benefits, water treatment chemicals, power, and solids handling, materials and supplies, professional services, and operating equipment purchases. This is \$29.1 million, or 5.0 percent, higher than the FY 2021/22 budget of \$579.9 million. This increase is primarily due to proposed negotiated labor increases, enhanced security, land management and maintenance efforts, inflationary pressures on fuels and materials, and increased utilities demand and costs.

Salaries and Benefits: Labor costs, not including those charged to construction are \$394.4 million. This is \$17.4 million, or 4.6 percent, higher than the FY 2021/22 budget of \$377.0 million. Key increases include proposed negotiated labor increases of \$15.6 million, or 90.0 percent of the increase; new positions of \$4.0 million, or 23.0 percent of the increase and overhead credit from construction of \$2.3 million or 13 percent of the increase. These increases were offset by a decrease in benefits of (\$4.3) million, or (25.0) percent of the increase. Retirement, medical and other benefits are increasing offset by a lowered actuarial estimate for Other Post Employment (OPEB) benefits. Overhead credit from construction estimate was also revised downwards.

The FY 2022/23 budget includes 1,927 regular full time positions which are increasing by 20 net positions from the FY 2021/22 budget and 47 district temporary full-time equivalents (FTEs) which are increasing by 10 net positions for a total of 1,974 authorized positions.

The 20 new regular full time positions are being added to support board initiatives of Diversity, Equity & Inclusion (DEI), Equal Employment Opportunity (EEO), Sustainability, Innovation & Resilience (SRI) as well as other critical district needs in land management and property maintenance, media and communication, security (including cybersecurity), and accounting, treasury and contracting. The ten district temporary positions are being added to accommodate enhanced security, business process and business systems support as well as ongoing succession planning and education efforts.

The budget recognizes the importance of sound succession planning and continued training and development of the workforce with a \$5 million succession planning labor pool included in each FY 2022/23 and FY 2023/24 budget for advance recruitment and internship programs. An additional \$2 million each year is included in WSO's budget to fund the apprenticeship program.

Outside Services: Outside Services are anticipated to increase by \$3.5 million primarily as a result of enhanced security, land management, and maintenance efforts; The development and implementation of Metropolitan's Security Strategic Management Plan requires additional labor and non-labor resources in order to meet vulnerability assessment recommendations. In addition, the budget includes large maintenance and repair projects at Metropolitan's USHQ Facility, DVL Visitor Center and property structures in the Bay Delta and Palo Verde Valley. Some of these projects at USHQ and DVL were deferred by Board action in the last biennial budget.

Materials & Supplies: Materials & Supplies is increasing by \$3.3 million primarily as a result of land management and maintenance efforts as well as software licensing and support. Costs of fuel, building, construction and other materials are rising significantly due to inflationary pressures. Metropolitan has adopted a Cloud First strategy for business applications. As systems are moved to the cloud, software license costs that were previously captured as capital are now expensed as O&M per accounting requirements. In the long term, moving and hosting business applications in the cloud will prove to be more cost effective, and provide for greater operational flexibility and resiliency.

Other O&M and Operating Equipment: Chemicals, solids, and power reflect the cost of the water treatment process and are anticipated to decrease by \$2.4 million in FY 2022/23, driven by a reduction in power and chemical costs. Power costs are decreasing due to changes in power costs and water flows. Chemical costs are decreasing as a result of a change in water blends - a shift to more CRA water which requires less chemicals to treat than SWP water.

The FY 2022/23 budget reflects an increase in utilities not related to variable treatment of \$3.4 million as a result of increasing costs associated with electricity and hazardous waste disposal. Hazardous waste abatement costs are increasing as a result of the Weymouth Basin Remediation and CRA rehabilitation. Electricity costs are increasing due to the planned continuous operation at the Greg Avenue pump station to manage available supplies and help mitigate drought conditions.

Insurance premiums and third party claims are also increasing by \$1.1 million. Insurance premiums are increasing as a result of the expected overall pool exposure to catastrophic losses such as wild fire risk liability, US economic and political uncertainties, global instability and new and increased exposures due in part to climate change. 3rd party liability claims are increasing based on projected losses from the actuarial report.

Operating equipment is higher by \$2.2 million primarily due to the replacement of critical aging vehicles and equipment that is at the end of its useful life and inflationary pressures in pricing. The purchase of vehicles was deferred by Board action in the last biennial budget.

Regional Recycled Water Program Planning Costs: The budget for the RRWP Planning Costs is \$12.9 million and is reflected in Departmental O&M as a major O&M Project. \$9.6 million of the total is for professional services and \$3.2 million is for salaries and benefits. A total of 11 regular full-time positions have been allocated to the project. The FY 2021/22 budget of \$15 million included \$11.8 million for professional services and \$3.2 million for salaries and benefits.

FY 2023/24 O&M Budget Highlights

The FY 2023/24 O&M budget is \$616.7 million, an increase of \$7.7 million, or 1.3 percent, compared to the FY 2022/23 budget. This increase is primarily due to proposed negotiated labor increases offset by a reduction in outside services related to the RRWP Planning project and a decrease in anticipated 3rd party insurance claims.

Salaries and Benefits: The FY 2023/24 O&M labor budget is about \$15.9 million or 4.0 percent higher than the FY 2022/23 budget. Proposed negotiated labor increases represent \$15.7 million, or 98.9 percent of the increase. Benefits are continuing to decline by \$0.5 million or 3.3 percent as a result of reduced OPEB costs. The remaining \$0.6 million increase, or 3.8 percent, is primarily attributable to a slight increase in overtime, as well as premium and temporary labor.

FY 2023/24 regular full time positions are flat with the FY 2022/23 budget but district temporary positions are increasing by 2 net positions. As a result FY 2023/24 total authorized positions are increasing from 1,974 to 1,976.

Outside Services: Outside Services are anticipated to decrease by \$6.2 million of which \$5.5M is due to the decrease in the level of support for the environmental planning phase of the RRWP Planning project. Other

reductions in legal and labor union negotiations costs were somewhat offset by increases in property maintenance and security costs.

Materials & Supplies: Materials & Supplies is increasing by \$0.4 million. Increases in software licensing and support of \$0.8 million is being offset by a reduction in water treatment chemicals of \$0.4 million used for Quagga mussel control. There is an expectation in FY 2023/24 that SWP flows would increase and the need for chemicals to treat CRA water would decrease.

Other O&M and Operating Equipment: The cost of chemicals, power, and sludge disposal incurred in the water treatment process is anticipated to increase by \$2.4 million in FY 2023/24 due primarily to increased water demands and inflationary pressures on chemical costs.

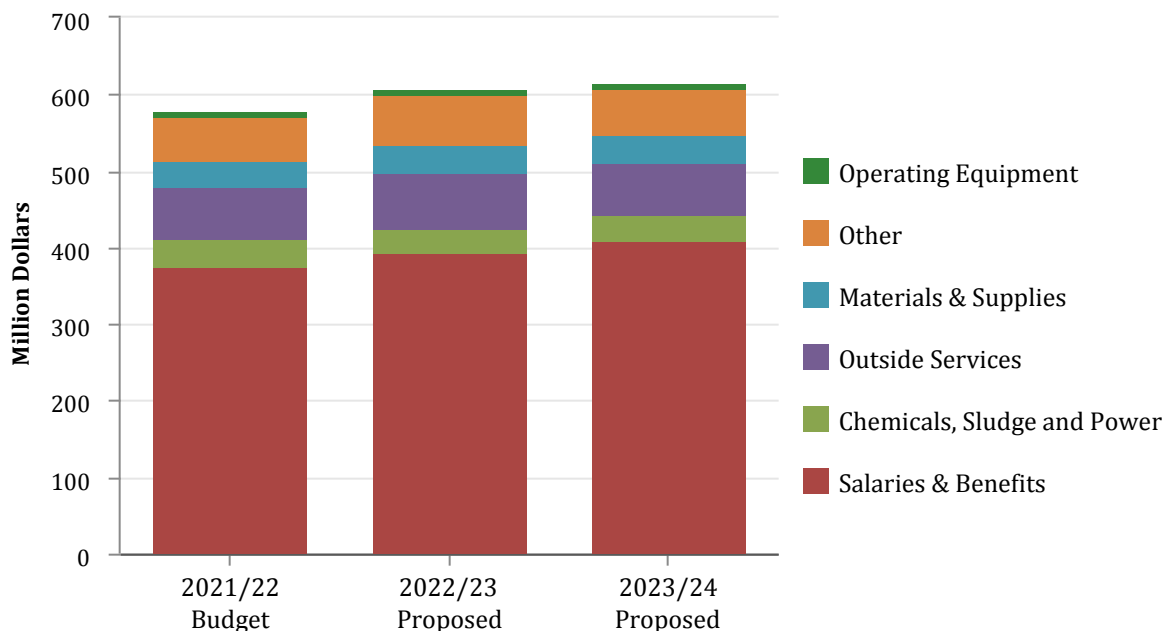
Third-party insurance claims are anticipated to decrease by \$4.0 million as a result of the actuarial study.

The FY 2023/24 budget reflects a decrease in utilities not related to variable treatment of \$1.1 million due to pumping at the Greg Avenue facility anticipated for only half of the year.

Operating equipment is lower by \$0.6 million from FY 2022/23 due primarily to a reduction in lab equipment and construction and maintenance needs.

Regional Recycled Water Program Planning Costs: The budget for the RRWP Planning Costs is \$7.4 million and is reflected in Departmental O&M as a major O&M Project. \$4.2 million of the total is for professional services and \$3.2 million for salaries and benefits. A total of 11 regular full-time positions have been allocated to the project.

Departmental Budget by Expenditure Type, \$ millions



The figure above summarizes the total departmental O&M budget by expenditure type, of which about 65 percent is for salaries and benefits in both FY 2022/23 and FY 2023/24.

STAFFING PLAN

FY 2022/23 and FY 2023/24 total authorized positions which include district temporary positions, are 1,974 and 1,976 positions, respectively. Total regular full time positions are increasing by 20 over the biennium to support board initiatives of Diversity, Equity & Inclusion (DEI), Equal Employment Opportunity (EEO), Sustainability, Innovation & Resilience (SRI) as well other critical district needs in land management and property maintenance, media and communication, security including cybersecurity, and accounting, treasury and contracting. Twelve district temporary positions will also be added over the biennium to accommodate enhanced security, business process and business systems support as well as ongoing succession planning and education efforts.

Over the biennium, positions dedicated to O&M work are expected to increase by 35 regular full time positions and by 12 district temporary positions to support increased recruitment, enhanced security, land management and maintenance efforts, enhanced business process and business systems support, and ongoing succession planning efforts. The number of regular full time positions allocated to the RRWP Planning Costs budget over the biennium has remained constant at 11 from the FY 2021/22 budget.

The personnel complement is shown in the following tables.

Regular and Temporary Positions

	2020/21 Budget	2021/22 Budget	2022/23 Proposed	2023/24 Proposed	2021/22 Budget vs. 2022/23 Proposed	2022/23 Proposed vs. 2023/24 Proposed
Regular Full Time Positions	1,907	1,907	1,927	1,927	20	—
District Temporary Positions	43	37	47	49	10	2
Total	1,950	1,944	1,974	1,976	30	2

Totals may not foot due to rounding.

O&M and Capital Staffing Levels

	2021/22 Budget	2022/23 Proposed	2023/24 Proposed
O&M Positions			
Regular Full Time Positions	1,623	1,658	1,658
District Temporary Positions	35	46	48
Total O&M	1,658	1,704	1,706
Capital Positions			
Regular Full Time Positions	284	269	269
District Temporary Positions	2	1	1
Total Capital	286	270	270
GRAND TOTAL	1,944	1,974	1,976

Totals may not foot due to rounding.

CAPITAL INVESTMENT PLAN

Estimated expenditures for the Capital Investment Plan (CIP) which includes Minor Capital Projects are \$600 million for FY 2022/23 and FY 2023/24. They are funded by current operating revenues (PAYGO) and revenue bond proceeds. The FY 2022/23 CIP expenditures are \$75 million higher than the FY 2021/22 budget, while the FY 2023/24 is unchanged from the FY 2022/23 budget. The largest areas of expenditures in the Biennial Budget are infrastructure refurbishment and replacement and infrastructure upgrades.

The CIP is discussed in more detail in the CIP supplemental volume.

Cash Funded Capital

The CIP is anticipated to be funded 45 percent by current operating revenues (PAYGO) in FY 2022/23 and in FY 2023/24, the CIP is anticipated to be funded 45 percent by PAYGO. The PAYGO funding for FY 2022/23 is budgeted at \$135 million and in FY 2023/24, the PAYGO funding is budgeted at \$135 million.

Debt Funded Capital

The CIP is anticipated to be funded 55 percent by revenue bond proceeds in FY 2022/23 and in FY 2023/24, the CIP is anticipated to be funded 55 percent by revenue bond proceeds. New debt issues of \$330 million are planned over the biennium to fund the CIP. Given construction funds expected to be available at the beginning of the biennial budget period and planned PAYGO amounts, these bond issues should provide sufficient funds to meet CIP expenditures over the two years.

Debt Service

For FY 2022/23 and FY 2023/24, Metropolitan plans to issue new revenue bond debt as described above. Debt service payments in FY 2022/23 are budgeted at \$288.0 million and \$301.0 million in FY 2023/24.

Please refer to the section on Capital Financing for additional details on this expense.

FUND BALANCES AND RESERVES

Metropolitan operates as a single enterprise fund for financial statements and budgeting purposes. Through its Administrative Code, Metropolitan identifies a number of accounts, which are referred to as funds, to separately track uses of monies for specific purposes as summarized in the table below.

The FY 2022/23 budget forecasts a \$15.1 million increase in reserves by June 30, 2023 and includes the Water Rate Stabilization Fund (WRSF) and the Revenue Remainder Fund. In addition, the Treatment Surcharge Stabilization Fund (TSSF) and the Water Stewardship Fund (WSF) are projected to decrease by \$59.0 million.

The FY 2023/24 budget forecasts a \$14.2 million decrease in reserves by June 30, 2024 and includes the WRSF and the Revenue Remainder Fund. In addition, the TSSF is projected to increase by \$7.7million.

Fund balances are budgeted to be \$1.36 billion at June 30, 2023. Of that total, \$839.7 million is restricted by bond covenants, contracts, or board policy, and \$519.6 million is unrestricted. Fund balances are budgeted to be \$1.28 billion at June 30, 2024. Of that total, \$773.6 million is restricted by bond covenants, contracts, or board policy, and \$505.4 million is unrestricted.

On June 30, 2023, the minimum and target levels for the reserve funds are estimated to be \$260.6 million and \$640.3 million, respectively. Based on projected revenues and expenditures, it is estimated that the balance in the WRSF and Revenue Remainder Fund will total about \$519.6 million, about \$259.0 million over the minimum level.

On June 30, 2024, the minimum and target levels for the reserve funds are estimated to be \$272.8 million and \$680.8 million, respectively. Based on projected revenues and expenditures, it is estimated that the balance in the WRSF and Revenue Remainder Fund will total about \$505.4 million, about \$232.6 million over the minimum level.

Projected Fund Balances, \$ millions

	Restricted	Designated	Unrestricted	Total
2022/23 Proposed				
Operating Funds	489.6	—	—	489.6
Debt Service Funds	200.4	—	—	200.4
Construction Funds	84.6	2.7	—	87.4
Reserve Funds (1)	—	—	519.6	519.6
Rate Stabilization Funds (2)	—	6.4	—	6.4
Trust and Other Funds	55.9	—	—	55.9
Total June 30, 2023	830.5	9.1	519.6	1,359.2
2023/24 Proposed				
Operating Funds	485.6	—	—	485.6
Debt Service Funds	200.1	—	—	200.1
Construction Funds	15.1	2.7	—	17.8
Reserve Funds (1)	—	—	505.4	505.4
Rate Stabilization Funds (2)	—	14.0	—	14.0
Trust and Other Funds	55.9	—	—	55.9
Total June 30, 2024	756.7	16.8	505.4	1,278.8

Totals may not foot due to rounding.

(1) includes Water Rate Stabilization Fund and Revenue Remainder Fund.

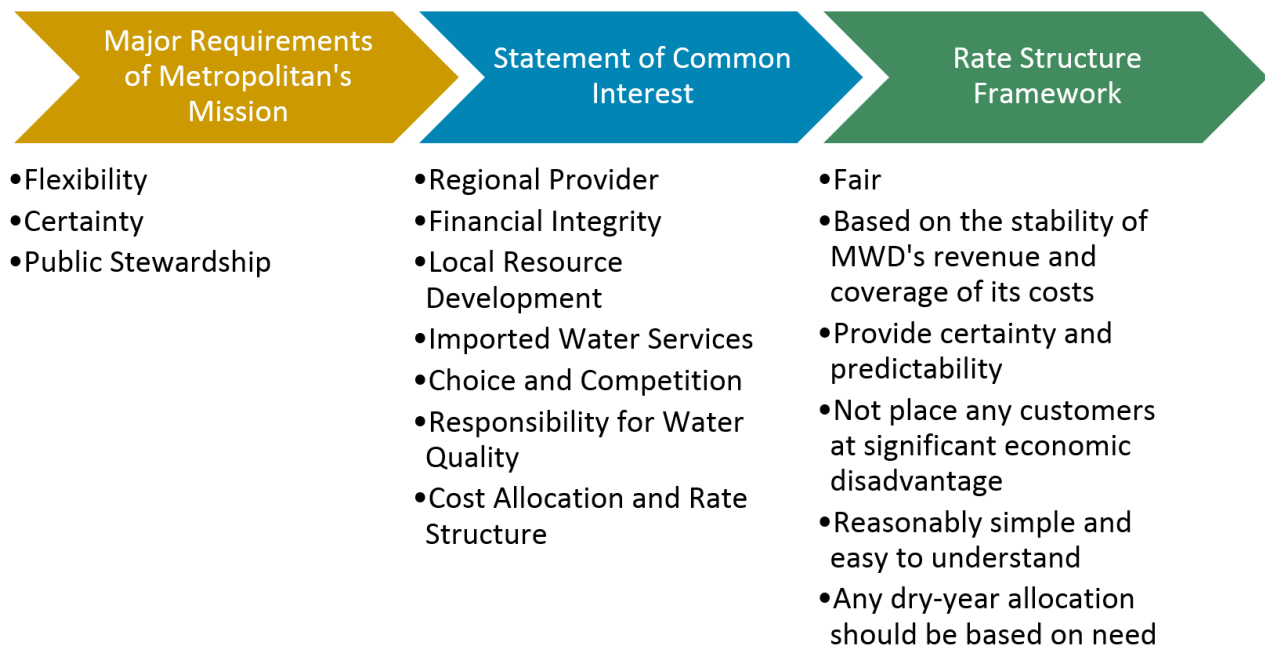
(2) includes Water Stewardship Fund and Treatment Surcharge Stabilization Fund

RATE STRUCTURE OVERVIEW

Framework

The Rate Structure Framework evolved through a comprehensive strategic planning process initiated in 1998. As depicted in the following figure, the first step of the process was to identify the “Major Requirements of Metropolitan’s Mission,” which was reflected in the Strategic Plan Policy Principles. The Statement of Common Interests formed the basis of Metropolitan’s strategic plan to address these mission requirements. One of the most important common interests was “Cost Allocation and Rate Structure.” In determining the most appropriate Cost of Service (COS) and rate structure, a set of pricing objectives, or guiding rate principles, was developed. These guiding rate principles defined Metropolitan’s Rate Structure Framework by which various COS and rate-setting methodologies could be evaluated.

Development of the Rate Structure Framework



The strategic planning process which established the foundation of the Rate Structure Framework is discussed below.

Major Requirements of Metropolitan's Mission

As one of the first steps in the strategic planning process in 1998, the Board developed a list of three mission requirements in its Metropolitan vision statement - flexibility, certainty, and public stewardship, which it described as:

- **Flexibility.** Metropolitan is aware of the legislative and economic pressures which make flexibility in providing water services for a changing demand and in a competitive water market paramount. Fair compensation for wheeling through Metropolitan's conveyance systems is an essential element of Southern California's developing market.
- **Certainty.** The certainty that Metropolitan's water supply is reliable and that the COS is appropriate is of utmost importance to member agencies and their retailers who are endeavoring to provide not only water, but value to the residents in their service area.
- **Public Stewardship.** As public stewards of much of Southern California's water supply, Metropolitan and its member agencies are responsible for making certain that the water is provided in a cost-effective and environmentally sound manner.

Statement of Common Interests

From the strategic planning mission requirements, the Board developed a list of seven areas of common interest that formed the major focus elements of the Metropolitan strategic plan, described as:

- **Regional provider.** This area includes the concerns of protecting regional infrastructure and providing service during drought periods. Regional water must be provided to meet the needs of the member agencies, and water supplies must be equitably allocated during drought periods based on the Water Surplus and Drought Management Plan principles.
- **Financial integrity.** It is a common interest of the members for Metropolitan to assure the financial integrity of the agency in all aspects of its operations.
- **Local resource development.** Metropolitan supports local resources development by working in partnership with its member agencies and by providing member agencies with financial incentives for water conservation and for local projects.
- **Imported water service.** Metropolitan is responsible for providing imported water to meet the committed needs of its member agencies.
- **Choice and competition.** After Metropolitan provides imported water for the member agencies' committed demands, a member agency can choose the most cost-effective additional water supplies for its customers. These choices include either Metropolitan, local resource development, market transfers, or some combination of these secondary options. Metropolitan and its member agencies can decide how to provide these additional supplies collaboratively while balancing local, imported, and market opportunities with affordability.
- **Responsibility for water quality.** Metropolitan must advocate for source water quality and implement in-basin water quality for the imported water it supplies. This is necessary to guarantee compliance with primary drinking water standards and to meet the water quality requirements for water recycling and ground water replenishment.

- **Cost allocation and rate structure.** The framework for a revised rate structure will be established to address allocation of costs, financial commitment, unbundling of services, and fair compensation for services including wheeling, peaking, growth, and others.

Rate Structure Framework

A major element of common interest was “*Cost Allocation and Rate Structure.*” In addressing this element a set of pricing objectives, or guiding rate principles, had to be developed to evaluate alternative COS and rate setting approaches, or methodologies. As a result, the Board adopted a set of rate principles which was defined as the *Rate Structure Framework*. The Rate Structure Framework provided the principles for the Strategic Planning Steering Committee to develop a preferred rate structure. The Rate Structure Framework includes the following principles:

- The rate structure should be *fair*;
- It should be based on the *stability* of Metropolitan’s revenue and coverage of its costs;
- It should provide certainty and predictability;
- It should not place any customers at *significant economic disadvantage*;
- It should be reasonably *simple and easy to understand*; and
- Any dry-year allocation should be *based on need*.

The 2001 COS and rate structure was adopted by the Board to address the Rate Structure Framework. That COS process and rate structure remain today, with the exception of recent modifications by the Board. First, in August 2020, the Board repealed the pre-set wheeling rate for short-term wheeling service to member agencies. As a result, charges for short-term wheeling to member agencies is now subject to contractual negotiations on a case-by-case basis, as has been the case with long-term wheeling arrangements for member agencies, all wheeling for third parties, and all exchange transactions. In December 2019, the Board directed staff (1) to incorporate the 2019/20 fiscal-year-end balance of the Water Stewardship Fund to fund all demand management costs in the proposed FYs 2020/21 and 2021/22 Biennial Budget; and (2) to not incorporate the Water Stewardship Rate, or any other rate or charge to recover demand management costs, with the proposed rate and charges for CYs 2021 and 2022. In November 2021, the Board directed staff to allocate all demand management costs to Metropolitan’s supply rate elements, and no Water Stewardship Rate or other demand management recovery charge is included in the rate structure after 2022.

RATE STRUCTURE DESIGN

The elements of the rate structure, and the rates and charges for calendar year 2022, 2023, and 2024 are summarized in Table 14.

Table 14. Rate Elements

Rate Design Elements	Functional Costs Recovered	Type of Charge	2022	2023	2024
Tier 1 Supply Rate	Supply, Drought Storage	Volumetric (\$/af)	\$243	\$329	\$355
Tier 2 Supply Rate	Reflects cost of transfers from north of the Delta	Volumetric (\$/af)	\$285	\$532	\$540
System Access Rate	Conveyance/Distribution (Average Capacity), portion of Regulatory/Emergency Storage	Volumetric (\$/af)	\$389	\$381	\$412
System Power Rate	Power on CRA and SWP	Volumetric (\$/af)	\$167	\$169	\$190
Treatment Surcharge	Treatment	Volumetric (\$/af)	\$344	\$367	\$373
Capacity Charge	Peak Distribution Capacity, portion of Regulatory Storage	Fixed (\$/cfs)	\$12,200	\$10,800	\$11,800
Readiness-to-Serve Charge	Available Conv. & Dist. Capacity, Emergency Storage	Fixed (\$M)	\$140	\$157	\$175

*Rates and Charges effective January 1st

Supply Rates

Purpose

The rate structure recovers supply costs through a two-tiered price structure. The amount of water a member agency may purchase at the lower Tier 1 Supply Rate, which is water within a member agency's Tier 1 maximum, is established by either a purchase order agreement or calculated as 60% of its Revised Base Firm Demand.

Tier 1 Supply Rate

The Tier 1 Supply Rate is a volumetric rate charged on Metropolitan's water sales that are within a member agency's Tier 1 maximum. The Tier 1 Supply Rate supports a regional integrated approach through the uniform, postage stamp rate. The Tier 1 Supply Rate is calculated as the amount of the total revenue requirement functionalized as supply divided by the estimated amount of Tier 1 water sales. Per Board direction in December 2021, all demand management costs (regardless of funding source, such as bond financing or current revenues) are functionalized as supply and collected on the Tier 1 and Tier 2 supply rates. However, because there are no projected Tier 2 transactions in the biennium, the demand management costs are recovered entirely by the Tier 1 supply rate.

Tier 2 Supply Rate

The Tier 2 Supply Rate is a volumetric rate that reflects the costs of Tier 1 and Metropolitan's cost of purchasing water transfers north of the Delta. The Tier 2 Supply Rate is charged on Metropolitan water sales that exceed a

member agency's Tier 1 maximum. The higher costs reflected in the Tier 2 Supply Rate encourages the member agencies and their customers to maintain existing local supplies and develop cost-effective local supply resources and conservation. Per Board direction in December 2021, all demand management costs (regardless of funding source, such as bond financing or current revenues) are functionalized as supply and collected on the Tier 1 and Tier 2 supply rates. However, because there are no projected Tier 2 transactions in the biennium, the demand management costs are recovered entirely by the Tier 1 supply rate.

Implementation

Because the Tier 1 maximum is set at a total member agency level and not at a meter level, all system water delivered will be billed at the Tier 1 Supply Rate. Any water delivered that exceeds the Tier 1 maximum will be billed an additional amount equivalent to the difference between the Tier 2 and Tier 1 Supply Rates.

For member agencies without purchase orders and member agencies with purchase orders that accrue a cumulative Tier 2 obligation at the end of year five of the purchase order, the Tier 2 Supply Rate will be applied in the month where the Tier 1 maximum is surpassed on all applicable deliveries. Otherwise, any obligation to pay the Tier 2 Supply Rate will be calculated over the ten-year period, consistent with the calculation of any purchase order commitment obligation.

Benefits

The use of the two-tiered structure for Supply Rates provides several benefits including (1) efficient resource management, and (2) clear price signals to accommodate a water transfer market.

System Access Rate (SAR)

Purpose

The SAR recovers the costs of Conveyance, Distribution, and Storage that is used on an average annual basis through a uniform, volumetric rate. All member agencies pay the SAR for the conveyance and distribution capacity associated with deliveries of full-service water.

Implementation

The SAR is charged for each acre-foot of water transported by Metropolitan to its member agencies and delivered as a full-service water transaction.

Benefits

The SAR benefits include: (1) support of a regional approach; (2) accommodates a water transfer market that does not unfairly advantage one user over another; (3) provides a clear linkage between costs and benefits; and (4) establishes a simple approach to recovering the costs of conveyance and distribution functions.

System Power Rate (SPR)

Purpose

The SPR recovers the costs of energy required to pump water to Southern California through the SWP and CRA. The cost of power is recovered through a uniform, volumetric rate.

Implementation

The SPR is applied to all deliveries of Metropolitan water to member agencies.

Benefits

The primary benefit of the SPR is that it clearly identifies Metropolitan's average cost of power.

Treatment Surcharge

Purpose

The Treatment Surcharge recovers all of the costs of providing treatment capacity and operations through a uniform, volumetric rate per acre-foot of treated water transactions.

Implementation

The Treatment Surcharge is charged to all treated water transactions.

Benefits

There are several benefits provided by the treatment surcharge, including that (1) only treated water users pay for the costs of treatment, and (2) by averaging the costs of providing treated water service over the entire system the regional economies of scale are preserved.

Capacity Charge

Purpose

The Capacity Charge recovers the costs incurred to provide peak capacity within the Distribution System. The Capacity Charge also provides a price signal to encourage agencies to reduce peak demands on the Distribution System and to shift demands that occur during the May 1 through September 30 period into the October 1 through April 30 period, resulting in more efficient utilization of Metropolitan's existing infrastructure and deferring capacity expansion costs.

Implementation

Each member agency will pay the Capacity Charge per cubic feet per second (cfs) based on a three-year trailing peak (maximum) day demand, measured in cfs. Each member agency's peak day is likely to occur on different days; therefore this measure approximates peak week demands on Metropolitan.

Benefits

The Capacity Charge provides several benefits including (1) increasing the overall efficiency of water use, (2) improving the fair allocation of costs among member agencies based upon the demand imposed by each agency, and (3) providing a source of fixed revenue.

Readiness-To-Serve Charge (RTS)

Purpose

The RTS recovers the cost of the portion of system that is available to provide emergency service and available capacity during outages and hydrologic variability.

Implementation

The RTS is a fixed charge that is allocated among the member agencies based on a ten-fiscal-year rolling average of firm demands. Water transfers and exchanges are included for purposes of calculating the ten-year rolling average. The SDCWA Exchange Water transactions are excluded from the calculation of the ten-year rolling

average per the terms of the Amended and Restated Agreement between the Metropolitan Water District of Southern California and the San Diego County Water Authority for the Exchange of Water. The Standby Charge is collected at the request of some member agencies that have elected to use the charge as a direct offset to the member agency's RTS obligation.

Benefits

The RTS provides two major benefits, which includes (1) a better matching of costs and benefits, and (2) a SAR that recovers only those costs associated with providing average annual service.

Purchase Order Option

The current rate structure allows member agencies to choose to purchase water from Metropolitan by means of a Purchase Order. Purchase Orders are voluntary agreements that determine the amount of water that a member agency can purchase at the Tier 1 Supply Rate. They allow member agencies to purchase a greater amount of water at the lower Tier 1 Supply Rate than would otherwise be authorized by the Administrative Code. In exchange for the higher Tier 1 Maximum, the member agency commits to purchase a specific amount of water (based on past purchase levels) over the term of the agreement. Such agreements allow member agencies to manage costs and provide Metropolitan with a measure of secure revenue.

In November 2014, the Metropolitan Board approved new Purchase Orders effective January 1, 2015 through December 31, 2024 (the "Purchase Order Term"). Twenty-one of the twenty-six member agencies have Purchase Orders, which commit the member agencies to purchase a minimum amount of supply from Metropolitan (the "Purchase Order Commitment"). The original Purchase Order Commitments were reduced by 10 percent due to the Water Supply Allocation Plan implementation in FY 2015/16.

The key terms of the Purchase Orders include:

- A ten-year term, effective January 1, 2015 through December 31, 2024;
- A higher Tier 1 limit based on the Base Period Demand, determined by the member agency's choice between (1) the Revised Base Firm Demand, which is the highest fiscal year purchases during the 13-year period of fiscal year 1989/90 through fiscal year 2001/02, or (2) the highest year purchases in the most recent 12-year period of fiscal year 2002/03 through 2013/14. The demand base is unique for each member agency, reflecting the use of Metropolitan's system water over time;
- An overall purchase commitment by the member agency equal to the Demand Base period chosen multiplied by ten to reflect the ten-year Purchase Order term. Those agencies choosing the more recent 12-year period may have a higher Tier 1 Maximum and commitment. The commitment is also unique for each member agency.
- The opportunity to reset the Base Period Demand using a five-year rolling average;
- Any obligation to pay the Tier 2 Supply Rate will be calculated over the ten-year period, consistent with the calculation of any Purchase Order commitment obligation; and
- An appeals process for agencies with unmet purchase commitments that will allow each acre-foot of unmet commitment to be reduced by the amount of production from a local resource project that commences operation on or after January 1, 2014.

Member agencies that do not have Purchase Orders in effect are subject to Tier 2 Supply Rates for amounts exceeding 60 percent of their base amount (equal to the member agency's highest fiscal year demand between 1989-90 and 2001-02) annually.

UNDERSTANDING THE LAYOUT OF THE DEPARTMENTAL BUDGET

DEPARTMENTAL/GROUP BUDGET

The Departmental Section provides detailed information about the Operations and Maintenance (O&M) budget of each group and department and consists of the following:

Mission

Describes, at a high level, the scope of the organization's functions.

Programs

Describes the organizations roles and responsibilities by program or section and provides a summary organizational chart.

Goals & Objectives

Summarizes the goals & objectives each organization proposes to accomplish in the upcoming fiscal years.

O&M Financial Summary

Provides a summary of the organization's O&M budgets. For FY 2022/23 and FY 2023/24, O&M expenditures are identified by expense categories such as salaries and benefits, professional services, and "other" expenditures and incorporate the group objectives.

Expense Category

Category	Description
<i>Salaries and Benefits</i>	Labor costs and fringe benefits for Metropolitan's regular, district temporary, and agency temporary employees. Total salaries and benefits, direct charges to capital, and O&M salaries are shown.
<i>Professional Services</i>	All costs associated with work performed by outside contractors and consultants.
<i>Operating Equipment</i>	Costs associated with the purchase of capitalized portable equipment, including automobiles, trucks, servers, and other applicable portable equipment.
<i>Other</i>	Cost of purchasing chemicals, materials and supplies, reprographics, travel, telephone, and other necessary items for effective operation of Metropolitan. A breakdown has been provided to itemize those expense categories that are five percent or more of the "other" category.

O&M Budget by Section

Provides a summary of the organization's O&M budget and personnel count by section or program.

Personnel Summary

Provides a breakdown for the organization of total personnel involved in O&M and capital work.

Budget Highlights

Identifies the major factors of the budget variance over the biennium as well as any significant changes by budget year.

OFFICE OF THE GENERAL MANAGER

The Office of the General Manager manages and administers all Metropolitan activities except those functions specifically delegated by statutes and Board order to the General Counsel, General Auditor, or Ethics Officer.

PROGRAMS

The Office of the General Manager is responsible for the management and administration of Metropolitan's activities including the management of all matters pertaining to the business of the Board and research on actions and policies of the Board by staff for directors, member agencies, and the public.

The reporting structure of the Office of the General Manager is reflected below.

The Board of Directors provides policy and direction as the governing body of the Metropolitan Water District.



GOALS AND OBJECTIVES

The following strategic priorities in the General Manager's Business Plan reflect the funding emphasis in the budget and highlight items that will be the focus of Board and staff attention over the next two years.

Strategic Priority #1: Empower the Workforce and Promote Diversity, Equity and Inclusion

Establish Office of Diversity, Equity, and Inclusion

Establish Equal Employment Opportunity (EEO) office

Establish Workforce Development Strategies

- Update training curriculum to focus on future challenges
- Pilot program to expand craft training to complement the apprenticeship program
- Coordinate District-wide management forum

Update recruitment strategies and practices

Strategic Priority #2: Sustain Metropolitan's Mission with a Strengthened Business Model

Given the identified challenges before us, document a common understanding of the services needed and value provided to the region

Assess the rate structure based on the identified values and services

Manage rate pressure on Member Agencies

- Secure state and federal funding
- Explore non-rate revenues
- Assess benefits, costs and alternative approaches for major initiatives and projects

Evaluate alternative funding and participation mechanisms for local supply development

Strategic Priority #3: Adapt to Changing Climate and Water Resources

Establish Office of Sustainability, Resiliency, and Innovation

Complete IRP Implementation Plan and Revise Water Surplus and Drought Management Plan to meet short- and long-term water resource objectives

Implement Climate Action Plan to reduce and mitigate emissions and impacts from energy use and other activities

Advance source reliability of major water resources

- Regional Recycled Water Program (per Board consideration)
- Water management guidelines for Colorado River
- Delta Conveyance Project (DCP) planning and permitting
- Advance watershed science and ecosystem restoration
- Increase water use efficiency for all communities and sectors, with a particular emphasis on addressing outdoor use (irrigation and agriculture) and leaking pipes

Strategic Priority #4: Protect Public Health, Regional Economy, and Metropolitan's Assets

Invest in system resilience, with an emphasis on infrastructure reliability and system flexibility (e.g., SWP dependent areas)

Protect water quality from source to tap and prepare for emerging water quality issues

Apply innovation and technology across project lifecycles (design, construction, operations, maintenance, and replacement)

Identify and address system vulnerabilities, such as

- Emergency preparedness and response
- Physical- and cyber-security
- Seismic and other system risks

Strategic Priority #5: Partner with Stakeholders and the Communities We Serve

Strengthen collaboration with member agencies and external stakeholders on public outreach, business, education, conservation and workforce development

Build greater awareness and understanding of underserved communities and engage them in addressing challenges of water quality, infrastructure and affordability

Engage new civic leaders at the local, state and federal levels

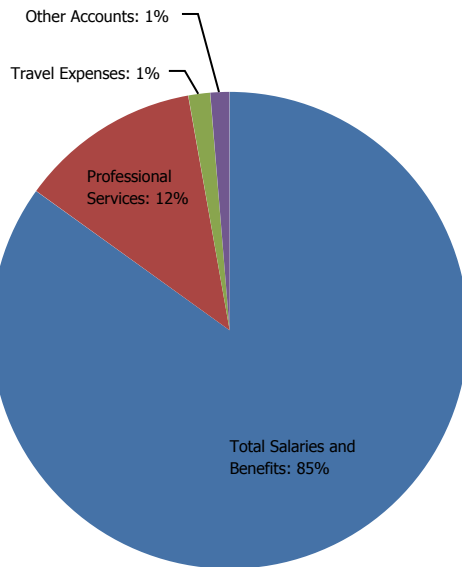
Equip staff to serve as ambassadors for Metropolitan and water reliability throughout the region and state, nationally, and industry-wide

O&M FINANCIAL SUMMARY

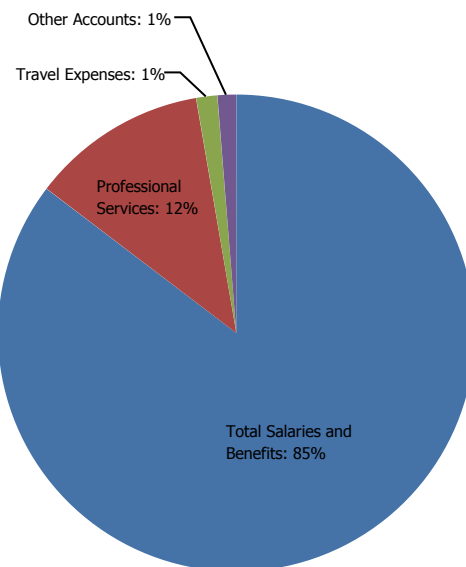
	2020/21 Actual	2021/22 Budget	2022/23 Proposed	Change from 2021/22	2023/24 Proposed	Change from 2022/23
Total Salaries and Benefits	4,840,481	5,269,432	6,913,197	1,643,765	7,145,080	231,883
<i>Direct Charges to Capital</i>	—	—	—	—	—	—
Total Salaries and Benefits	4,840,481	5,269,432	6,913,197	1,643,765	7,145,080	231,883
% Change		8.9%		31.2%		3.4%
Professional Services	197,625	800,000	1,000,000	200,000	1,000,000	—
Travel Expenses	1,306	101,200	121,000	19,800	121,100	100
Other Accounts	64,936	98,850	105,200	6,350	105,200	—
Total O&M	5,104,347	6,269,482	8,139,397	1,869,915	8,371,380	231,983
% Change		22.8%		29.8%		2.9%

Totals may not foot due to rounding.

FY 2022/23 BUDGET BY
EXPENDITURE



FY 2023/24 BUDGET BY
EXPENDITURE



PERSONNEL SUMMARY

		2020/21 Actual	2021/22 Budget	2022/23 Proposed	Change from 2021/22	2023/24 Proposed	Change from 2022/23
Regular	Total	11	13	17	4	17	—
	O&M	11	13	17	4	17	—
	Capital	—	—	—	—	—	—
Temporary	Total	1	—	1	1	1	—
	O&M	1	—	1	1	1	—
	Capital	—	—	—	—	—	—
Total Personnel	Total	12	13	18	5	18	—
	O&M	12	13	18	5	18	—
	Capital	—	—	—	—	—	—

Totals may not foot due to rounding.

BUDGET HIGHLIGHTS

The Office of the General Manager's O&M Biennial Budget is \$8.1 million in FY 2022/23 and \$8.4 million in FY 2023/24 or an increase of 29.8% and an increase of 2.9% respectively from the prior budget years. The main factors affecting these changes:

- Four positions were transferred in from other groups and one additional district temporary position was added to provide administrative support.
- Salaries and Benefits reflect proposed negotiated labor increases and merit increases for qualified employees.
- Non-labor expenses are increasing by about 23% primarily in the areas of travel and professional services to support additional staff and GM strategic priorities.

The following are the significant changes by budget year:

FY 2022/23

Personnel-related issues

Total personnel count is increasing by 5 FTEs from FY 2021/22. Regular full time positions are increasing by four with the transfer in of 2 positions from Finance, 1 position from WSO and 1 position from WRM. One district temporary position was added to provide administrative support for additional staff.

Salaries and Benefits reflect proposed negotiated labor increases and merit increases for qualified employees.

Professional Services

The budget for professional services is increasing to support GM strategic priorities.

Other

The budget for travel is increasing to support additional staff.

FY 2023/24

Personnel-related issues

Total personnel count remains flat with the FY 2022/23 budget.

Salaries and Benefits reflect proposed negotiated labor increases and merit increases for qualified employees.

Professional Services

The budget for professional services remains flat with the FY 2022/23 budget.

Other

The budget for travel and other O&M remains flat with the FY 2022/23 budget.

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OFFICE OF SUSTAINABILITY, RESILIENCE & INNOVATION

The Office of Sustainability, Resilience & Innovation promotes the successful integration of sustainability, resiliency, and innovation initiatives into all District wide efforts across all departments and with external agencies.

PROGRAMS

Metropolitan's Office of Sustainability, Resilience and Innovation (SRI) was established in 2021. Initial efforts include planning and preparation for the future through innovative and sustainable solutions in collaboration with key stakeholders. Programs will address environmental and infrastructure issues and address the District's approach to environmental responsibility and minimize environmental impact of its activities and operations.

The Office of SRI reviews Metropolitan's planned activities, operational functions, and capital investments to make sure they work toward meeting the goals of reducing Metropolitan's carbon footprint and complies with the Board-adopted climate action plan.

Environmental Planning (EPS) provides expertise for environmentally responsible decision-making and compliance with environmental laws and regulations. EPS ensures Metropolitan activities comply with the California Environmental Quality Act (CEQA); obtains permits or approvals from federal and state environmental regulatory agencies for Metropolitan activities; and participates in management of Metropolitan reserves and coordination with other non-Metropolitan reserve planning efforts.



GOALS AND OBJECTIVES

In FY 2022/23 and FY 2023/24, the Office of Sustainability, Resilience & Innovation will focus on the following key issues and initiatives:

Development of a comprehensive resiliency and sustainability plan and goals for Metropolitan. These plans will define the baseline of current operations and include clear goals, deliverables and metrics that address reductions in greenhouse gas emissions.

The Office of SRI will monitor SRI work across the region and work to build collaborative relationships within Metropolitan and with external environmental advocacy organizations.

The Environmental Planning section will focus on the following key issues and initiatives:

Support Proposed Delta Improvements

Provide environmental and technical services to support long-term Delta solutions to improve water supply reliability and water quality, and protect and enhance Delta ecosystem and associated species.

Provide technical and regulatory support for Metropolitan's Delta Island holdings.

Support Development of Water Supplies and Management of Water Reserves

Provide planning, California Environmental Quality Act/National Environmental Policy Act (CEQA/NEPA), and regulatory support for development of new water supplies, including continued planning support for the proposed Regional Recycled Water Program.

Prepare CEQA/NEPA and environmental permitting documentation for supplemental water supplies and water conservation measures, including support of Local Resources Programs with member agencies.

Provide strategic environmental compliance input and services to obtain supplemental supplies of water through transfers, banking and innovative crop and land management practices.

Climate Action Planning

Convene Climate Working Group responsible for implementation of Metropolitan's Climate Action Plan that mitigates the significant effects of greenhouse gas (GHG) emissions from Metropolitan projects.

Develop and implement web-based GHG monitoring and reporting tools and establish a monitoring schedule.

Continue collaboration with internal Metropolitan groups to implement GHG reduction strategies and verify reductions realized.

Provide annual Board updates on progress towards meeting CAP goals.

Continue to identify and evaluate new GHG reduction strategies for future updates to ensure Metropolitan is meeting its GHG reduction goal.

Regulatory Compliance

Provide timely and professional planning services and CEQA and regulatory support for all capital and O&M projects in an environmentally responsible manner.

Coordinate biennial inspections and prepare annual reports for Metropolitan's operations in compliance with the provisions of the Surface Mining and Reclamation Act (SMARA). Initiate reclamation of five SMARA sites identified for closure.

Provide environmental monitoring support for Desert O&M activities to support refurbishment or replacement of aging infrastructure and urgent repairs resulting from changing climatic conditions.

Support continued monitoring of populations and habitat of the unarmored threespine stickleback fish in compliance with Metropolitan-sponsored legislation (AB 2488) and long-term Endangered Species Act permits for the inspection and maintenance of the Foothill Feeder.

Represent Metropolitan interests and support preparation of environmental documentation for implementation of new operating guidelines on the Lower Colorado River.

Provide federal and state legislative review and identify bills and regulations that should be supported or opposed based on Metropolitan's legislative priorities and policy principles.

Reserve Management

Manage Metropolitan's four large-scale multi-species reserves and participate in several other regional conservation and multi-species reserve programs. Management of these reserves is required to satisfy regulatory requirements for the continued delivery of imported water and the construction and operation of major O&M and capital projects.

Serve as Metropolitan's representative on the Southwestern Riverside County Multi-Species Reserve Management Committee, administer a reserve management agreement with Riverside County Parks (Parks), and actively manage reserve lands to ensure compliance with state and federal permits and multi-agency cooperative management agreements, including the Memorandum of Intent between Metropolitan, Parks, and other members of the Diamond Valley Lake Ad Hoc Committee.

Facilitate collaboration among Metropolitan, Parks, and the Southwestern Riverside County Multi-Species Reserve Management Committee towards implementation of the Trails Plan and construction of multi-use connecting trails between Diamond Valley Lake and Lake Skinner and between the Reserve and the County's Regional Trail System.

Serve as Metropolitan's representative on the Reserve Management Committee for the Lake Mathews Multiple Species Reserve, administer a reserve management agreement with Riverside County Habitat Conservation Agency, and actively manage Lake Mathews reserve lands to ensure compliance with state and federal permits.

Represent Metropolitan on the Orange County Natural Communities Coalition as voting members of the respective governance committees.

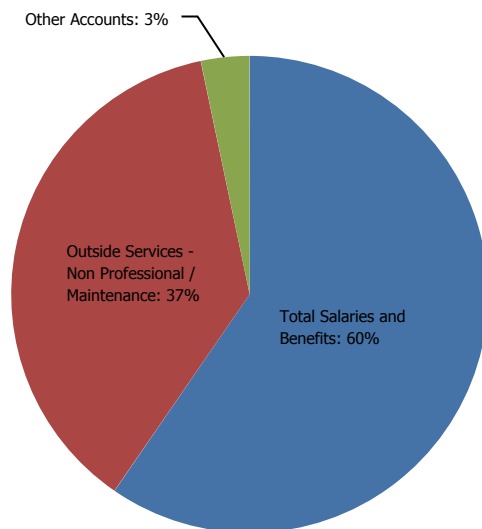
Work collaboratively with Real Property, Engineering Services, and reserve management to facilitate field coordination among stakeholders on issues within the reserves and surrounding areas.

O&M FINANCIAL SUMMARY

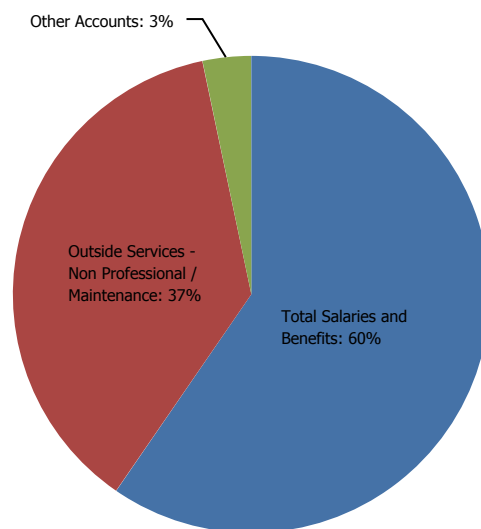
	2020/21 Actual	2021/22 Budget	2022/23 Proposed	Change from 2021/22	2023/24 Proposed	Change from 2022/23
Total Salaries and Benefits	4,087,982	5,596,732	6,842,981	1,246,248	7,158,829	315,849
<i>Direct Charges to Capital</i>	<i>(580,185)</i>	<i>(1,255,572)</i>	<i>(692,774)</i>	<i>562,797</i>	<i>(740,603)</i>	<i>(47,829)</i>
Total Salaries and Benefits	3,507,797	4,341,161	6,150,206	1,809,046	6,418,226	268,020
% Change		23.8%		41.7%		4.4%
Professional Services	1,098,670	2,472,200	3,830,000	1,357,800	2,930,000	(900,000)
Other Accounts	61,568	283,412	338,574	55,162	334,574	(4,000)
Total O&M	4,668,035	7,096,773	10,318,780	3,222,008	9,682,800	(635,980)
% Change		52.0%		45.4%		(6.2%)
Operating Equipment	—	—	99,193	99,193	—	(99,193)
Total O&M and Operating Equipment	4,668,035	7,096,773	10,417,973	3,321,200	9,682,800	(735,173)
% Change		52.0%		46.8%		(7.1%)

Totals may not foot due to rounding.

FY 2022/23 BUDGET BY
EXPENDITURE

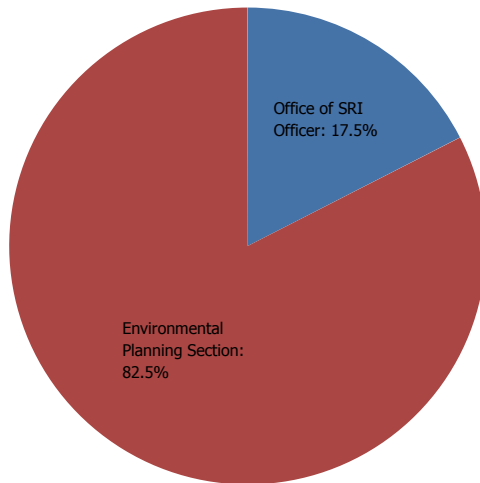


FY 2023/24 BUDGET BY
EXPENDITURE

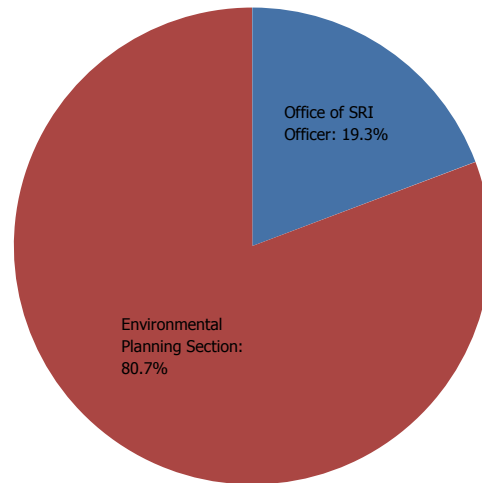


O&M BUDGET BY SECTION

FY 2022/23 BUDGET BY SECTION



FY 2023/24 BUDGET BY SECTION



	2021/22 Budget	2022/23 Proposed	Change from 2021/22	2023/24 Proposed	Change from 2022/23	Personnel Budget		
						21/22	22/23	23/24
Office of SRI Officer	—	1,804,600	1,804,600	1,866,200	61,700	—	5	5
Environmental Planning Section	7,096,800	8,514,200	1,417,400	7,816,600	(697,600)	15	17	17
Total O&M	7,096,800	10,318,800	3,222,000	9,682,800	(636,000)	15	22	22

Totals may not foot due to rounding.

PERSONNEL SUMMARY

		2020/21 Actual	2021/22 Budget	2022/23 Proposed	Change from 2021/22	2023/24 Proposed	Change from 2022/23
Regular	Total	16	20	25	5	25	—
	O&M	14	15	22	7	22	—
	Capital	2	5	3	(2)	3	—
Temporary	Total	—	—	—	—	—	—
	O&M	—	—	—	—	—	—
	Capital	—	—	—	—	—	—
Total Personnel	Total	16	20	25	5	25	—
	O&M	14	15	22	7	22	—
	Capital	2	5	3	(2)	3	—

Totals may not foot due to rounding.

BUDGET HIGHLIGHTS

The Office of Sustainability, Resilience & Innovation's Biennial Budget is \$10.4 million in FY 2022/23 and \$9.7 million in FY 2023/24 or an increase of 46.8% and a decrease of 7.1% respectively from the prior budget years. The increase is due primarily to the following:

- New Office of SRI Officer includes 2 staff transferred over from External Affairs and 3 new positions requested and professional services to support Office's key issues and initiatives.
- Environmental Planning costs are increasing for more stringent and specialized environmental regulatory oversight services for O&M projects throughout Metropolitan's service area.
- Professional services budget for Environmental Planning is increasing due to anticipated environmental consultant support for large programs requiring complex environmental documentation, including the proposed Regional Recycled Water Program and implementation of new operating guidelines on the Lower Colorado River.

FY 2022/23

Personnel-Related Issues

Total personnel count is increasing by 5 regular full-time positions from the FY 2021/22 budget to support the formation of the Office of the Sustainability, Resilience and Innovation Officer. Regular full-time positions for the Environmental Planning section remain flat with FY 2021/22.

Salaries and benefits reflect proposed negotiated labor increases and merit increases for qualified employees.

Professional Services

Professional services includes budget for New Office of SRI Officer and Environmental Planning consultant support for large programs requiring complex environmental documentation, including the proposed Regional Recycled Water Program and implementation of new operating guidelines on the Lower Colorado River.

Other

Environmental Planning memberships & subscriptions are increasing due to a new CCEEB Climate Change Project annual membership. CCEEB's Climate Change Project is heavily involved in shaping Governor Newsom's policy objectives for electrification and the California Air Resources Board's (CARB's) upcoming 2022 Assembly Bill (AB) 32 Scoping Plan Update. Other accounts increasing include travel, training and conferences as well as materials & supplies to support the new Office of the SRI Officer.

FY 2023/24

Personnel-Related Issues

Total personnel count remains flat with the FY 2022/23 budget.

Salaries and benefits reflect proposed negotiated labor increases and merit increases for qualified employees.

Professional Services

Professional services are decreasing due to a decrease in environmental documentation work required for the proposed Regional Recycled Water Program.

Operating Equipment FY 2022/23 & FY 2023/24

Two vehicles are being requested in FY 2022/23. One of the vehicles is a replacement vehicle that will be used by Environmental Planning section staff at Union Station to travel to proposed project field locations/project sites to conduct environmental surveys, construction & environmental monitoring, site visits, and field coordination, and attend meetings with WSO and other Metropolitan personnel. The second vehicles will be used by Environmental Planning section to conduct environmental surveys, environmental/construction monitoring, site visits, and field coordination and attend field meetings at work locations/project sites along the Colorado River Aqueduct, at Desert pump plant facilities, and along associate electrical transmission lines in the Desert.

EQUAL EMPLOYMENT OPPORTUNITY OFFICE

The Equal Employment Opportunity Office is responsible for ensuring a work environment free from discrimination for all Metropolitan employees and job applicants.

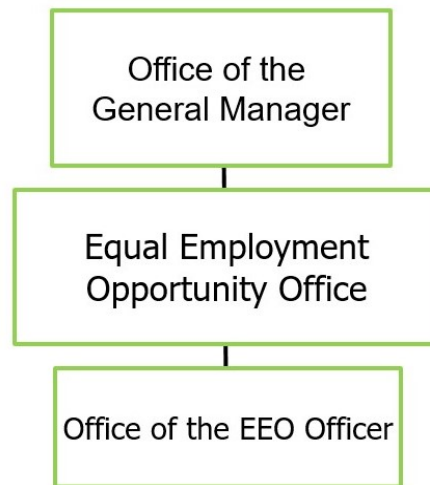
PROGRAMS

Metropolitan's Equal Employment Opportunity (EEO) Office was established by the Board in 2021. The EEO Office investigates all EEO complaints and oversees the complaint resolution process to ensure investigations are conducted in a timely, impartial, and independent fashion.

The EEO Officer also directs staff responsible for Affirmative Action, Non-Discrimination and OFCCP

regulatory compliance. The EEO Office develops mitigation policies designed to satisfy complaints and eliminate the possibility of future violations.

The newly established EEO Office should be noted for transparency, impartiality and accountability. The office should be operated independently and free from influence or interference and noted for investigating complaints thoroughly.



GOALS AND OBJECTIVES

In FY 2022/23 the Equal Employment Opportunity Office will focus on the key priorities listed below. Goals will be reviewed and refined for FY 2023/24.

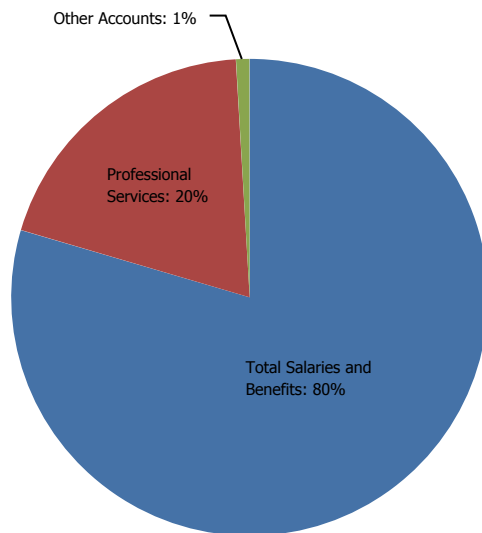
1. Develop a strategic plan and an organizational plan for the newly created EEO Office that is presented to and approved by the Board.
2. Immediately establish the EEO Office in accordance with the approved strategic and organization plan.
3. Oversee the elimination of the backlog of EEO cases and establish new standards for adjudication reducing cycle time.
4. Within the first 6-12 months receive approval and publish new EEO policies and practices to ensure a discrimination free work environment; include a training plan for all employees of Metropolitan.

O&M FINANCIAL SUMMARY

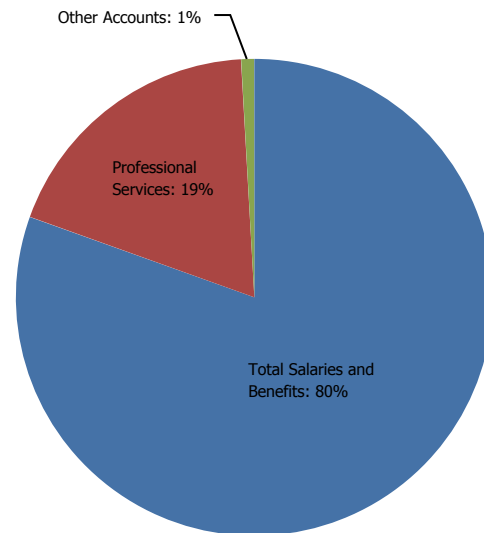
	2020/21 Actual	2021/22 Budget	2022/23 Proposed	Change from 2021/22	2023/24 Proposed	Change from 2022/23
Total Salaries and Benefits	—	—	1,629,751	1,629,751	1,727,442	97,691
<i>Direct Charges to Capital</i>	—	—	—	—	—	—
Total Salaries and Benefits	—	—	1,629,751	1,629,751	1,727,442	97,691
% Change		0.0%		100.0%		6.0%
Professional Services	—	—	400,000	400,000	400,000	—
Other Accounts	—	—	18,820	18,820	18,820	—
Total O&M	—	—	2,048,571	2,048,571	2,146,262	97,691
% Change		0.0%		100.0%		4.8%

Totals may not foot due to rounding.

FY 2022/23 BUDGET BY
EXPENDITURE



FY 2023/24 BUDGET BY
EXPENDITURE



PERSONNEL SUMMARY

		2020/21 Actual	2021/22 Budget	2022/23 Proposed	Change from 2021/22	2023/24 Proposed	Change from 2022/23
Regular	Total	0	0	6	6	6	—
	O&M	0	0	6	6	6	—
	Capital	—	—	—	—	—	—
Temporary	Total	—	—	—	—	—	—
	O&M	—	—	—	—	—	—
	Capital	—	—	—	—	—	—
Total Personnel	Total	0	0	6	6	6	—
	O&M	0	0	6	6	6	—
	Capital	—	—	—	—	—	—

Totals may not foot due to rounding.

BUDGET HIGHLIGHTS

The Equal Employment Opportunity Office's Biennial Budget is \$2.0 million in FY 2022/23 and \$2.1 million in FY 2023/24 or an increase of 100.0% and an increase of 4.8% respectively from the prior budget years. The increase is due primarily to the following:

- New EEO Office includes 3 staff transferred over from Office of the General Manager and HR and 3 new positions requested.
- Professional services to support Office's key issues and initiatives.

FY 2022/23

Personnel-Related Issues

Total personnel count is increasing by 6 regular full-time positions from the FY 2021/22 budget to support the formation of the EEO Office.

Salaries and benefits reflect proposed negotiated labor increases and merit increases for qualified employees.

Professional Services

Professional services support Office's key issues and initiatives.

Other

Other accounts includes materials & supplies, travel and other expenses necessary to support the EEO Office.

FY 2023/24

Personnel-Related Issues

Total personnel count remains flat with the FY 2022/23 budget.

Salaries and benefits reflect proposed negotiated labor increases and merit increases for qualified employees.

Professional Services

Professional services remain flat with the FY 2023/24 budget.

Other

Other accounts remains flat with the FY 2022/23 budget.

ENGINEERING SERVICES

Engineering Services provides innovative solutions that exceed our partners' expectations as the public-sector's leader for water engineering.

PROGRAMS

Engineering Services performs project management, design, construction management, infrastructure condition assessments, and facility planning; manages Metropolitan's Capital Investment Plan (CIP); and provides on-going operations and maintenance support to other stakeholders and partners within the organization.

Engineering Services accomplishes its mission through the following programs or services to our strategic partners:

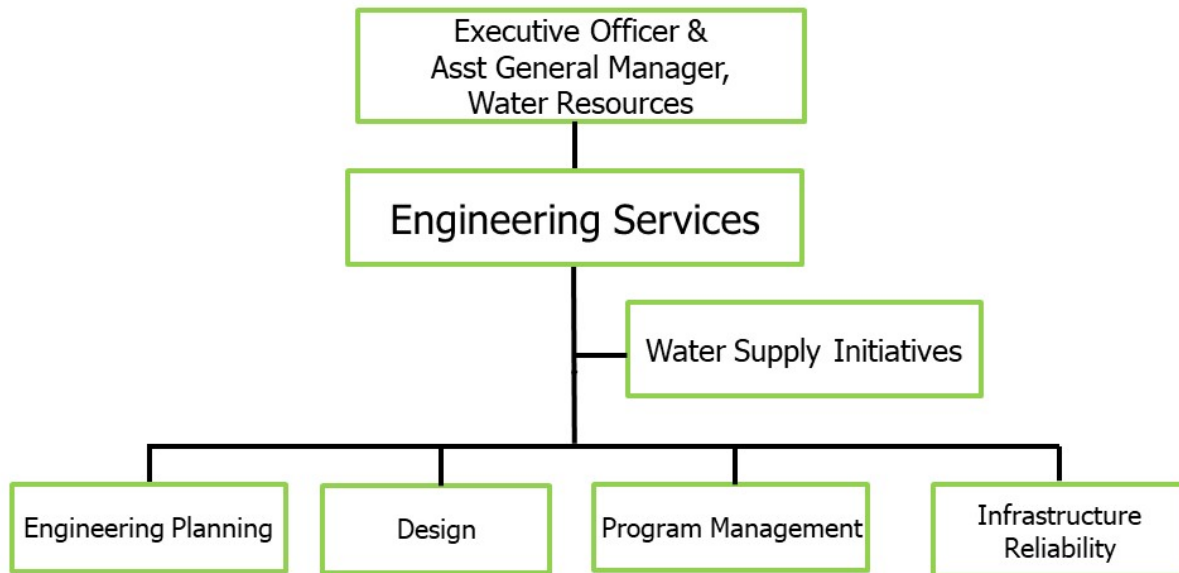
Office of the Group Manager oversees the management of the Engineering Services group by providing strategic leadership on engineering initiatives and core business efforts, to ensure the continued reliability and quality of water deliveries and the safety of Metropolitan's dams. The office also provides technical support for special initiatives including Metropolitan's Regional Recycled Water Program and the Delta conveyance.

Engineering Planning is responsible for the functions of facility planning, dam safety, hydraulic analysis, hydraulic modeling, protection of Metropolitan's substructures, construction contract administration, technical control and oversight of engineering standards, capital project support, business process management and budgeting, and management of Metropolitan's CIP.

Design is responsible for the preparation of technical assessments, conceptual and preliminary designs for new facilities and for rehabilitation of existing facilities, final design drawings and specifications for construction, and technical support during the construction, commissioning, and operation of facilities. Design provides engineering support to support Metropolitan's operations. Design is also responsible for Engineering Services' design technology and Computer Aided Design System (CAD) Electronic Drafting and Design platforms.

Program Management is responsible for the overall planning and delivery of both capital and O&M projects for treatment plants, distribution, conveyance and storage systems, and the Regional Recycled Water Program; and serves as Metropolitan's Owner's Engineer.

Infrastructure Reliability is responsible for the management of construction and procurement contracts, field inspection, soils and concrete testing, and fabrication inspection; field surveying, survey mapping, and protection of right-of-way and property rights; and infrastructure condition assessments, corrosion engineering, and materials engineering.



GOALS AND OBJECTIVES

In FY 2022/23 and FY 2023/24, Engineering Services will focus on the following key areas:

Delta Conveyance

Continue supporting the ongoing activities of the Design and Construction Authority Joint Powers Authority by providing as-needed project management and technical support for the work activities related to the Delta conveyance facilities.

Regional Recycled Water

Provide program management and leadership for development of Metropolitan's Regional Recycled Water Program during the environmental planning phase for the full-scale program in the form of program planning, technical studies, budgeting and collaboration with internal and external program participants and stakeholders.

Successfully perform engineering and technical studies to plan and manage modifications to the Advanced Purification Demonstration Plant. Continue to support opportunities to collaborate with other agencies to enhance local water supplies.

Dam Safety

Ensure the safe and reliable operation of Metropolitan's dams and reservoirs through regular dam inspections and extensive surveillance, comprehensive evaluations of existing dams and appurtenant structures using current design standards, thorough review and inspection of major repair work, and careful planning and coordination of emergency action plans with local agencies. New dam safety initiatives include upgrading instrumentation and use of technology to obtain and present instrumentation results in real-time.

Drought Resilience

Identify, develop and implement solutions to address drought's impact on Metropolitan's ability to deliver water to its member agencies. Initial focus will be on projects to increase supply reliability to portions of Metropolitan's system that exclusively receive State Water Project supplies.

Infrastructure Reliability

Manage and complete board-authorized projects within the CIP to ensure the reliable delivery of water to Metropolitan's member agencies.

Provide engineering and technical services to support the operation and maintenance of Metropolitan's water conveyance, delivery, treatment, and support facilities.

Protect public safety, minimize future costs of infrastructure maintenance and repairs, and avoid unplanned outages by monitoring Metropolitan's facilities and right-of-way, performing essential technical assessments, and implementing modern asset management methods.

CIP Management

Execute capital projects to rehabilitate aging infrastructure, enhance seismic resiliency of key Metropolitan facilities, and maintain system flexibility. High priority programs that will continue during the biennium include the Distribution System Reliability Program and CRA Rehabilitation.

Manage Metropolitan's overall CIP. Coordinate with stakeholders to prioritize project completion and develop asset-management tools. Provide regular updates on projected expenditures to finance and prepare informative quarterly reports illustrating progress on capital projects.

Partner with Water System Operations and other stakeholders to prioritize capital projects to address Metropolitan's short-term needs and long-term objectives, and optimize utilization of internal and external resources.

Continue to identify and implement improvements in project delivery.

Distribution System Reliability

Complete construction of the Orange County Feeder Relining, Etiwanda Pipeline Relining, and Casa Loma Siphon No. 1 Seismic Retrofit. Continue design for the Lake Mathews Forebay Pressure Control Structure and water reliability improvements for the Rialto Pipeline service area.

CRA Rehabilitation

Continue construction to rehabilitate pump house cranes and CRA domestic water treatment systems at all five plants. Complete design to upgrade potable water, industrial water and wastewater lines and replace transformers at each of the five CRA pumping plants. Continue design to rehabilitate the CRA main pumps.

Asset Management

Provide comprehensive engineering support to implement Metropolitan's Asset Management Strategy to effectively develop, operate, assess, upgrade, and dispose Metropolitan assets through the entire lifecycle. This effort will establish a consistent and unified framework for condition assessment and risk management, develop tools to facilitate the process, and prioritize asset acquisition, replacement, and rehabilitation to build a reliable infrastructure that is sustainable and resilient.

Hazard Mitigation Planning and Grant Funding

Develop a comprehensive Hazard Mitigation Plan to assess the overall risk of Metropolitan's infrastructure to damage caused by natural hazards (e.g., seismic, fire, flooding, climate change), and use the plan as the basis to develop mitigation projects and actions. Based on the Hazard Mitigation Plan approved by the state and federal agencies, staff will research, pursue, administer, and manage state and federal grants and loans to implement the identified mitigation projects and actions. Potential projects include Regional Recycled Water Program, drought-related improvements, seismic upgrade projects and measures to improve system flexibility.

Sustainability and Innovation

Develop strategies for, and identify opportunities to implement sustainable energy practices in CIP projects. Key focus areas include renewable energy, energy storage such as battery storage systems, energy efficiency improvements, optimization of water operations, and greenhouse gas reductions. Collaborate with Metropolitan's new Sustainability, Resiliency, and Innovation office.

Develop a sustainable infrastructure program within Engineering Services and take concrete steps to implement sustainable practices early in the planning and design phases of projects, while continuing to leverage technologies to facilitate optimal project delivery and engineering processes in addition to preserving institutional knowledge and achieving efficiencies.

System Flexibility

In response to the updated IRP, conduct a system flexibility study to evaluate the impact of outages on water delivery to member agencies and identify opportunities for system improvements and interconnections to increase resilience and improve flexibility. The study will also address impacts on the system due to seismic vulnerabilities and develop mitigation measures.

Employee Development

Develop a workforce for the future by actively maintaining and leading workforce development and succession planning activities to develop and maintain technical expertise and skills needed in the future to ensure infrastructure reliability, meet regulations, respond to emergencies, and support Metropolitan initiatives.

Empower employees to optimize procedures for routine activities and develop innovative solutions to address Metropolitan's challenges.

Actively foster open discussions to enhance workplace diversity, equity, and inclusion.

Partnership and Collaboration

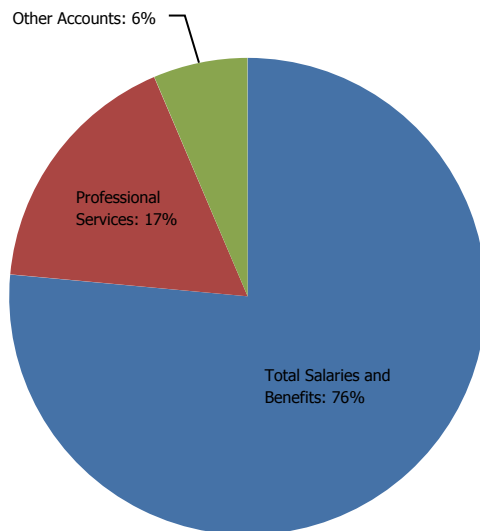
Lead ongoing communications and new initiatives to enhance partnership and collaboration between Engineering Services and WSO, to provide the best practical solutions for Metropolitan.

O&M FINANCIAL SUMMARY

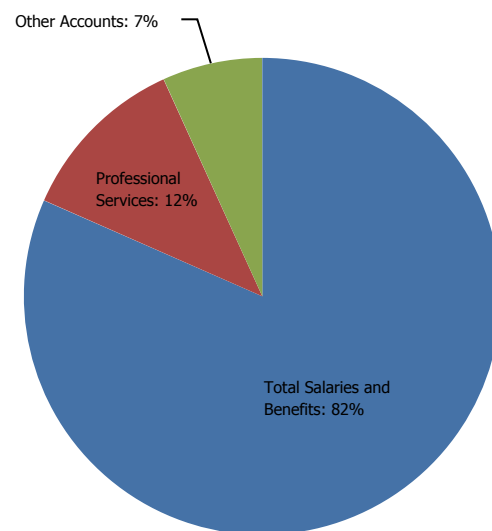
	2020/21 Actual	2021/22 Budget	2022/23 Proposed	Change from 2021/22	2023/24 Proposed	Change from 2022/23
Total Salaries and Benefits	84,880,232	91,723,905	91,574,277	(149,628)	95,026,524	3,452,246
<i>Direct Charges to Capital</i>	<i>(49,394,766)</i>	<i>(53,066,641)</i>	<i>(52,710,975)</i>	<i>355,666</i>	<i>(54,748,944)</i>	<i>(2,037,969)</i>
Total Salaries and Benefits	35,485,466	38,657,264	38,863,302	206,038	40,277,580	1,414,277
% Change		8.9%		0.5%		3.6%
Materials & Supplies	659,369	769,700	1,193,700	424,000	1,237,000	43,300
Professional Services	2,519,415	8,040,300	8,698,300	658,000	5,732,400	(2,965,900)
Taxes & Permits	508,055	957,000	957,000	—	957,000	0
Other Accounts	1,116,539	920,900	1,105,400	184,500	1,154,600	49,200
Total O&M	40,288,843	49,345,164	50,817,702	1,472,538	49,358,580	(1,459,123)
% Change		22.5%		3.0%		(2.9%)
Operating Equipment	609,403	569,800	752,436	182,636	544,112	(208,324)
Total O&M and Operating Equipment	40,898,247	49,914,964	51,570,138	1,655,174	49,902,692	(1,667,447)
% Change		22.0%		3.3%		(3.2%)

Totals may not foot due to rounding.

FY 2022/23 BUDGET BY
EXPENDITURE

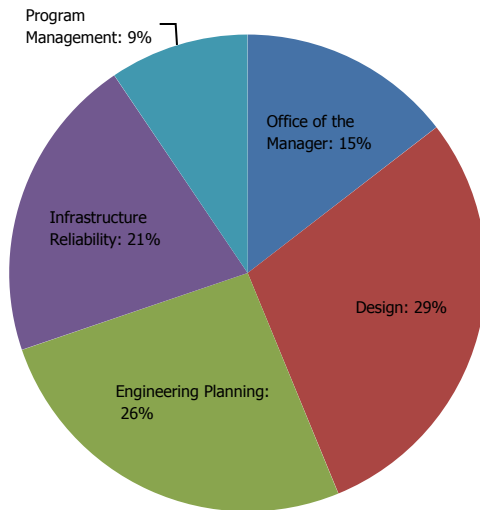


FY 2023/24 BUDGET BY
EXPENDITURE

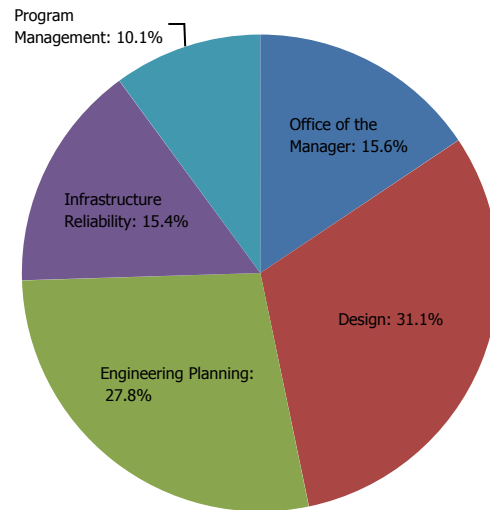


O&M BUDGET BY SECTION

FY 2022/23 BUDGET BY SECTION



FY 2023/24 BUDGET BY SECTION



	2021/22 Budget	2022/23 Proposed	Change from 2021/22	2023/24 Proposed	Change from 2022/23	Personnel Budget		
						21/22	22/23	23/24
Office of the Manager	6,590,300	7,388,900	798,600	7,707,800	318,800	20	25	25
Design	11,805,100	14,864,400	3,059,300	15,363,800	499,400	42	44	44
Engineering Planning	12,634,900	13,211,600	576,700	13,707,200	495,600	51	51	51
Infrastructure Reliability	14,535,700	10,556,400	(3,979,200)	7,612,900	(2,943,500)	12	10	10
Program Management	3,779,200	4,796,400	1,017,100	4,966,900	170,600	13	16	16
Total O&M	49,345,200	50,817,700	1,472,500	49,358,600	(1,459,100)	139	146	146

Totals may not foot due to rounding.

PERSONNEL SUMMARY

		2020/21 Actual	2021/22 Budget	2022/23 Proposed	Change from 2021/22	2023/24 Proposed	Change from 2022/23
Regular	Total	338	355	355	—	355	—
	O&M	139	139	146	7	146	—
	Capital	199	217	209	(7)	209	—
Temporary	Total	1	—	—	—	—	—
	O&M	—	—	—	—	—	—
	Capital	1	—	—	—	—	—
Total Personnel	Total	339	355	355	—	355	—
	O&M	139	139	146	7	146	—
	Capital	200	217	209	(7)	209	—

Totals may not foot due to rounding.

BUDGET HIGHLIGHTS

Engineering Services' O&M and Operating Equipment Biennial Budget is \$51.6 million in FY 2022/23 and \$49.9 million in FY 2023/24 or an increase of 3.3% and a decrease of 3.2%, respectively from the prior year budgets. These increases are primarily due to the following factors:

- Salaries and benefits reflect proposed negotiated increases, and technical support for the RRWP environmental planning phase and innovation and sustainability initiatives.
- Professional services reflects specialized technical support for the RRWP, long-term planning efforts for facility planning (e.g., seismic resilience; vulnerability, reliability and flexibility studies; hazard mitigation planning; etc.), and innovation and sustainability efforts.
- Materials and supplies reflect an increase in software licenses and maintenance fees, addition of new software, and upgrades to existing software.
- Communication expenses reflect an increase in telecommunication and general iPad costs.
- Equipment expensed reflects replacement and upgrades to field office equipment.

The following are the significant changes by budget year:

FY 2022/23

Personnel–Related Issues

Total personnel levels remain flat at 355 individuals which is consistent with the previous fiscal year. However, the O&M and capital staffing complement differs from the FY 2021/22 budget. This change is primarily due to increased support for the environmental planning phase of the RRWP and innovation and sustainability initiatives, thereby resulting in a shift of staff from capital work to O&M in FY 2022/23.

Planned capital spending for FY 2022/23 is estimated to increase by \$50 million with a district-wide capital budget estimated to be approximately \$300 million (see details in CIP Appendix). Planned spending reflects project budgets and schedules to meet Metropolitan's overall biennial budgetary goals. High priority programs that will continue during the fiscal year include the System Flexibility/Supply Reliability Program, which includes drought projects; the Prestressed Concrete Cylinder Pipe (PCCP) Rehabilitation Program; the Colorado River Aqueduct (CRA) Reliability Program; the Distribution System Reliability Program; and the Right of Way and Infrastructure Protection Program.

Salaries & Benefits

Salaries and benefits reflect proposed negotiated labor increases and merit increases for qualified employees.

Professional Services

The budget primarily reflects an increase for innovation and sustainability initiatives, and long-term facility planning efforts including seismic resilience, hazard mitigation, and system vulnerability, reliability, and flexibility support.

Materials and Supplies

The budget reflects an increase in software licenses and maintenance costs (e.g., Bentley ProjectWise), the addition of new softwares (e.g., BIM, InVizion), and upgrade to existing softwares (e.g., Bluebeam, Adobe Acrobat).

Other

Other non-labor budget reflects replacement and upgrades to field equipment (e.g., gauges, survey levels, meters and monitors), increases in telecommunication and iPad costs, and increasing costs for various county fees (e.g., survey mapping reviews, parcel and record of survey).

FY 2023/24

Personnel-related issues

Total personnel count remains flat at 355 individuals from FY 2022/23.

Planned capital spending for FY 2023/24 will remain steady with a district-wide capital budget estimated to be approximately \$300 million (see details in CIP Appendix).

Salaries & Benefits

Salaries and benefits reflect proposed negotiated labor increases and merit increases for qualified employees.

Professional Services

The budget reflects a decrease in level of support for the environmental planning phase of the RRWP.

Materials and Supplies

The budget reflects an increase in software maintenance fees.

Other

The budget reflects technical training planned for RRWP staff; conference participation by staff, especially showcasing technical papers and presentations; and anticipated increases for the Underground Service Alert.

Operating Equipment – FY 2022/23 and FY 2023/24

The operating equipment budget reflects an increase in FY 2022/23 from the prior budget year primarily due to the replacement of aging vehicles, and various equipment for corrosion engineering. In FY 2023/24, the budget reflects ongoing replacement of aging vehicles.

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WATER RESOURCE MANAGEMENT

Water Resource Management (WRM) plans, secures, and manages water resources to provide its member agencies with a reliable, cost-effective, and drought and climate-resilient water supply.

PROGRAMS

Water Resource Management manages imported water supplies; advances water-use efficiency; provides supply and demand forecasts foundational for long-term resource planning; and develops and implements timely resource programs and projects.

In addition, Water Resource Management assists member agencies in optimizing local resources to benefit the entire Metropolitan service area, and ensures Metropolitan receives a fair return on contractual investments in local and imported resources.

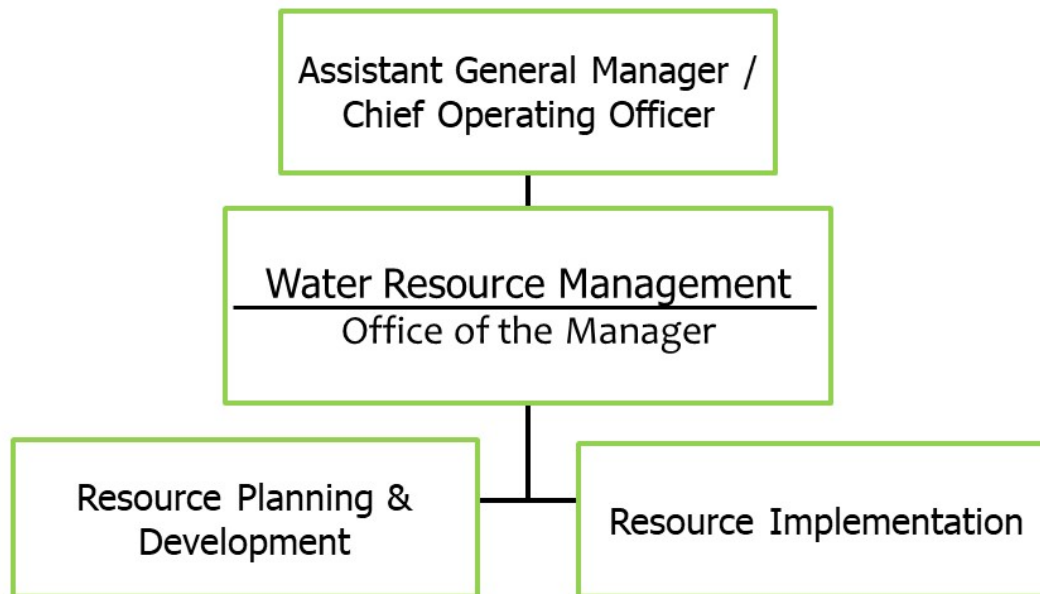
Water Resource Management accomplishes its mission through the following programs or sections:

Office of the Manager directs the group's efforts in planning, securing, and managing Metropolitan's water resources; monitors and tracks the group's business plan, financial and budgetary initiatives; and provides administrative and business process support.

Resource Planning & Development is responsible for providing technical and policy planning that will meet the needs of member agencies. Integrated water supply and demand planning reflects long-range planning efforts for local supplies and sets the foundation for Metropolitan's resource investments and programs needed to meet demands. This section supports the

development of resource programs, projects, and infrastructure to meet projected resource targets; administers regional planning processes; defines strategies for meeting service area water needs, including the Integrated Water Resources Plan (IRP), Water Surplus and Drought Management (WSDM) plan and Urban Water Management Plan (UWMP); and develops resource options, such as groundwater conjunctive use, regional recycling, stormwater and seawater desalination; as well as alternatives for short-range planning and implementation through joint action with Water System Operations.

Resource Implementation develops and administers water resource programs and contracts, and pursues application of new technologies and innovations. These activities focus on the Colorado River, State Water Project, water transfers, water recycling, groundwater recovery, and water conservation for the region. The Resource Implementation Section also monitors and responds to regulatory, legislative, and operational activities that may influence Metropolitan's water rights and benefits related to the quality, reliability and cost of water.



GOALS AND OBJECTIVES

In FY 2022/23 and FY 2023/24, WRM will focus on the following key issues:

Colorado River

Actively participate in negotiations of Colorado River system operations.

Protect Colorado River resources, Metropolitan's Colorado River rights, and optimize the use of available Colorado River water.

Participate in the Colorado River Salinity Control Forum and facilitate salinity management projects and other actions that protect and improve source water quality.

Partner with other Colorado River water delivery contractors to develop new Metropolitan supplies, including interstate and international water supply programs.

Administer Imperial Irrigation District (IID), Palo Verde Irrigation District (PVID), and proposed Bard Irrigation District agricultural conservation programs.

Work with representatives of the International Boundary and Water Commission and United States Bureau of Reclamation (USBR) to continue implementation of Minute 323 and coordinate emergency deliveries for Tijuana.

Administer contracts with Colorado River entities to make full use of Metropolitan's supplies developed from Colorado River resources. Manage intentionally created surplus supplies to ensure maximum benefit to Metropolitan.

Develop strategies and tools for managing agricultural land holdings in the Palo Verde Valley.

Groundwater Storage Program

Manage nine approved conjunctive use programs to store water for dry-year yield.

Facilitate dialogue among agencies in groundwater management, recycled water production, and stormwater and flood management to enhance groundwater basin recharge.

Legislative Review

Continue to review and provide comments and inform member agencies on proposed state and federal legislation on water resources issues related to Metropolitan's mission and WRM functions.

Regional Resources and Water Conservation

Actively participate in the development of water use objectives and water shortage assessments as part of California's Conservation as a Way of Life legislative package.

Pursue grant funding to supplement implementation of regional water conservation program initiatives.

Participate in local, state, and national activities leading to expanded use of recycled water and increased water-use efficiency.

Administer agreements that provide incentives for conservation, recycled water, recovered groundwater production, and support development of local resource development projects.

Conduct and fund research to advance local supply development and conservation program effectiveness.

Administer the Future Supply Actions Funding program to remove barriers to local supply production.

Implement stormwater pilot programs with the member agencies to evaluate Metropolitan's participation in stormwater projects.

Develop programs to improve water conservation in disadvantaged communities.

Seawater Desalination

Continue to support member agency development efforts and actively participate in CalDesal regulatory and legislative initiatives.

State Water Project

Closely coordinate with DWR to respond to current severe drought and to improve the reliability of the SWP.

Coordinate implementation of SWP contract amendments including the SWP contract extension, water management amendment and proposed Delta conveyance facility amendment. These contract amendments will ensure a long-term supply, and effective water management tools to manage the supply and reliability into the future.

Ensure accurate billings and influence sound financial decisions by DWR, including effective DWR energy management practices with regard to renewable energy, emissions reductions, transmission strategies, and energy acquisitions.

Continue to identify and resolve disputed charges related to annual SWP billings.

Protect SWP water, power, and financial positions under the Oroville Federal Energy Regulatory Commission (FERC) relicensing process as well as associated litigation and upcoming FERC relicensing and several DWR facilities in Southern California.

Coordinate and influence decisions for major facility rehabilitations and SWP capital projects to ensure cost-effective and reliable water supply, energy generation, and use.

Promote water quality monitoring and forecasting activities through the Municipal Water Quality Investigations program and raise awareness of potential water quality impacts from operational decisions.

Water Supply and System Planning

Based on the Board-adopted findings of the 2020 IRP Regional Needs Assessment, collaboratively engage with the member agencies and stakeholders to develop and complete the IRP implementation plan.

Develop Metropolitan's long-term water resources strategy to respond to the IRP Regional Needs Assessment and Severe Drought Assessment on the State Water Project.

Complete the annual reports on Metropolitan's achievements in conservation, recycling, and groundwater recharge and Annual Water Supply Assessment.

Complete the annual forecast of Metropolitan demands to support revenue requirements and budget process.

Develop a comprehensive analysis of Metropolitan's distribution system. Identify potential spatial constraints and system improvements to reliably deliver water to member agencies during peak demands, drought, and emergency conditions.

Update emergency storage objective for in-basin protection from earthquake or other outage with information from IRP needs assessment.

Continue to develop the full-scale Regional Recycled Water Program to increase water reuse and enhance opportunities for groundwater recharge within Metropolitan's service area.

Upgrade and enhance planning tools, such as computer models for demand forecasting, resource program evaluation, and distribution system.

Participate in state water/energy nexus processes and data access initiatives.

Continue to collaborate with various agencies and stakeholders in statewide and regional water resource planning efforts, such as the California Water Plan Updates and the Integrated Regional Water Management Plans.

Continue work with the Water Utility Climate Alliance to perform case studies on climate data applications to water resources planning.

Continue to administer agreements in the area of supply development including Future Supply Actions and Stormwater for Recharge Pilot.

Water Transfers, Exchanges, and Storage Programs

Continue to manage existing water transfer, exchange, and storage programs along the California Aqueduct and Colorado River Aqueduct.

Continue to evaluate the need for additional reliability by either developing new programs or modifying existing programs. Pursue additional water transfers, exchanges, and storage programs as needed.

Work with other State Water Contractors on a long-term water transfer permitting process.

Workforce Development & Succession Planning

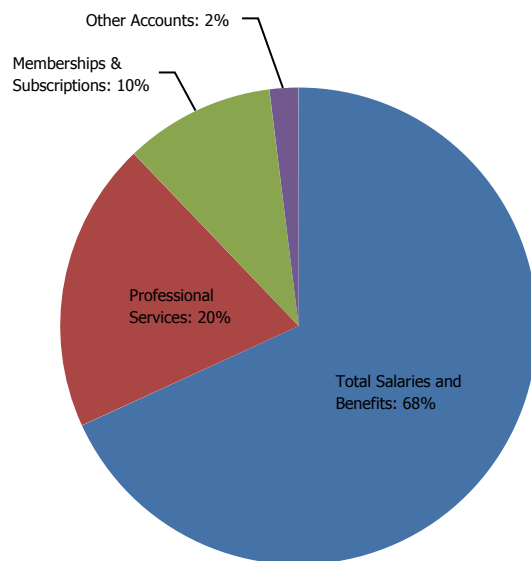
Continue to develop staff expertise in critical areas to prepare for employee retirements or departures.

O&M FINANCIAL SUMMARY

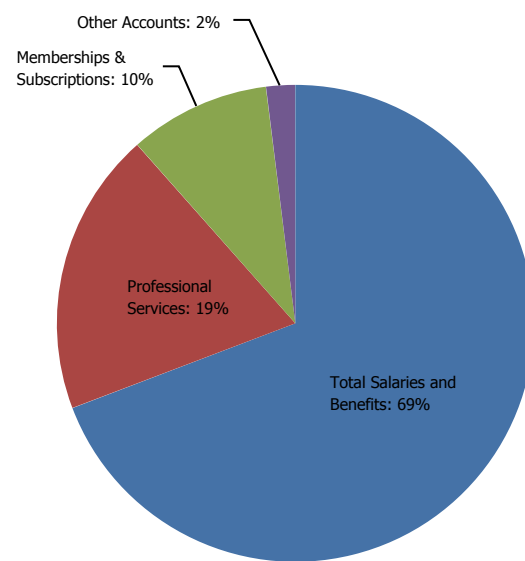
	2020/21 Actual	2021/22 Budget	2022/23 Proposed	Change from 2021/22	2023/24 Proposed	Change from 2022/23
Total Salaries and Benefits	16,718,978	17,823,670	17,660,263	(163,407)	18,401,769	741,506
<i>Direct Charges to Capital</i>	(3,122)	—	—	—	—	—
Total Salaries and Benefits	16,715,857	17,823,670	17,660,263	(163,407)	18,401,769	741,506
% Change		6.6%		(0.9%)		4.2%
Memberships & Subscriptions	4,465,373	5,069,647	5,106,239	36,592	5,116,436	10,197
Professional Services	1,663,857	2,012,500	2,632,800	620,300	2,542,600	(90,200)
Other Accounts	141,530	440,415	509,522	69,107	521,179	11,657
Total O&M	22,986,617	25,346,232	25,908,824	562,592	26,581,984	673,160
% Change		10.3%		2.2%		2.6%

Totals may not foot due to rounding.

FY 2022/23 BUDGET BY EXPENDITURE

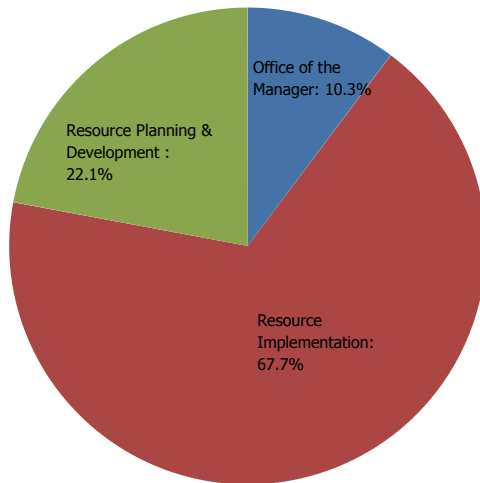


FY 2023/24 BUDGET BY EXPENDITURE

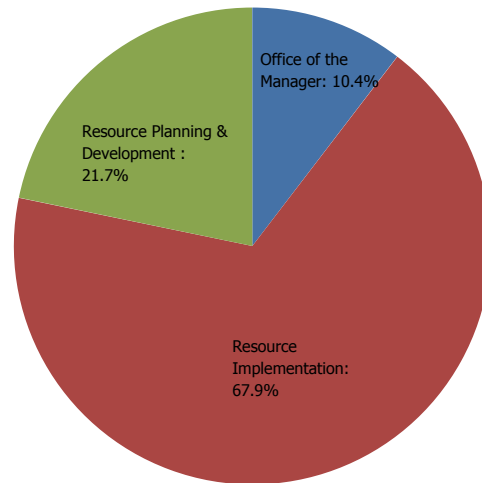


O&M BUDGET BY SECTION

FY 2022/23 BUDGET BY SECTION



FY 2023/24 BUDGET BY SECTION



	2021/22 Budget	2022/23 Proposed	Change from 2021/22	2023/24 Proposed	Change from 2022/23	Personnel Budget		
						21/22	22/23	23/24
Office of the Manager	2,818,400	2,656,700	(161,700)	2,766,600	109,900	12	11	11
Resource Implementation	17,202,600	17,538,800	336,200	18,036,400	497,600	41	43	43
Resource Planning & Development	5,325,200	5,713,300	388,100	5,779,000	65,700	18	17	17
Total O&M	25,346,200	25,908,800	562,600	26,582,000	673,200	70	71	71

Totals may not foot due to rounding.

PERSONNEL SUMMARY

		2020/21 Actual	2021/22 Budget	2022/23 Proposed	Change from 2021/22	2023/24 Proposed	Change from 2022/23
Regular	Total	63	68	68	—	68	—
	O&M	63	68	68	—	68	—
	Capital	—	—	—	—	—	—
Temporary	Total	1	2	3	1	3	—
	O&M	1	2	3	1	3	—
	Capital	—	—	—	—	—	—
Total Personnel	Total	64	70	71	1	71	—
	O&M	64	70	71	1	71	—
	Capital	—	—	—	—	—	—

Totals may not foot due to rounding.

BUDGET HIGHLIGHTS

WRM's Biennial Budget is \$25.9 million in FY 2022/23 and \$26.6 million in FY 2023/24 or an increase of 2.6% and an increase of 2.2%, respectively from the prior budget years. The main factors affecting these changes:

- The decrease in salaries and benefits in FY 2022/23 assists in the offset of the increases in Professional Services, Memberships and Subscriptions, and Sponsorships in the same year, as detailed below.
- The 0.4% total O&M budget increase in FY 2023/24 is due to salaries and benefits increases and offset by a large reduction in Professional Services due to the completion of software upgrades in FY 2022/23.

The following are the significant changes by budget year:

FY 2022/23

Personnel–Related Issues

Regular full time positions remain flat. District temporary positions are increasing by one FTE to assist with records management, document offsite recording and storage, as well as processing of invoices and process documentation.

Salaries and benefits reflect proposed negotiated labor increases and merit increases for qualified employees. These increases are offset by vacancies filled at lower level job classifications.

Professional Services

The budget reflects an increase for critical IRP Sims Software updating in support of the IRP, consulting for One Water Implementation, critical SharePoint workflow updates, as well as scheduled fee increases to current agreements.

Memberships and Subscriptions

The budget is increasing as the result of the Water Utility Climate Alliance (WUCA) membership and the membership for the California Water Data Consortium.

Other

The budget reflects an increase in sponsorships for the Board requested California Resilience Challenge, offset by an anticipated reduction in travel, training and seminars, and conferences and meetings.

FY 2023/24

Personnel–Related Issues

Personnel count remains flat.

Salaries and benefits reflect proposed negotiated labor increases and merit increases for qualified employees.

Professional Services

Budget reflects slight decrease due to IT consulting finalized in FY 2022/23.

Memberships and Subscriptions

The budget reflects an inflationary increase for WaterReuse and Six Agency dues.

Other

The budget reflects a 5% decrease in Materials and Supplies and an 18% increase in Travel expenses due to the expectation of business travel returning to pre-pandemic levels.

BAY DELTA INITIATIVES

Bay Delta Initiatives advances Delta improvements and the pursuit of the best scientific research to protect and restore fish, wildlife, and the Delta's ecosystem to ensure water supply reliability.

PROGRAMS

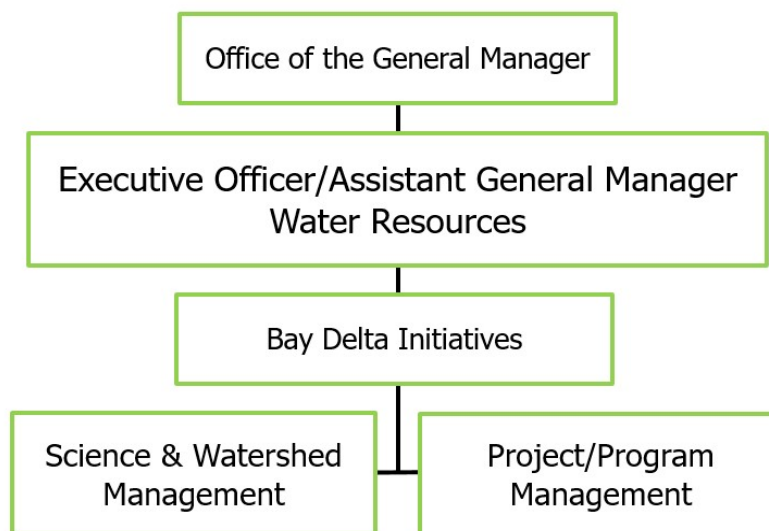
Bay Delta Initiatives (BDI) spearheads efforts toward advancement of the State's Proposed Delta Improvements, including the Delta Conveyance Project and EcoRestore and the pursuit of scientific research to protect and restore fish, wildlife, and the Delta's ecosystem while ensuring water supply reliability.

Office of the Bay Delta Initiatives Manager includes the Science and Watershed Management Section and Project/Program Management Section. BDI's Manager provides strategic leadership by ensuring the implementation of the organization's core business efforts and strategic objectives.

Science & Watershed Management Section is responsible for management of BDI's science program, support activities within Bay-Delta's watershed, continue engagement with the

planning process for the proposed Delta Conveyance Project including the Delta Conveyance Design and Construction Authority (DCA), Finance Joint Powers Authority, Department of Water Resources (DWR), and the State Water Contractors and policy/regulatory support.

Project/Program Management Section leads the implementation of strategic planning on Delta Island future land use including identifying habitat opportunities, sustainable agriculture and ecosystem health and restoration on Metropolitan's Delta Islands, participates in the planning process for the proposed Sites reservoir, manages the organization's budget and financial reporting, contract administration and general administration, and provides oversight of business plans, monthly reports, annual report, and board support.



GOALS AND OBJECTIVES

In FY 2022/23 and FY 2023/24, BDI will focus on the following key issues:

Delta Conveyance and EcoRestore

Continue review and participation with the DWR for planning and environmental documentation including the Environmental Impact Report (EIR) under the California Environmental Quality Act (CEQA) and key informational webinars, outreach and technical information provided to the public.

Support DWR planning to advance development of Biological Assessment with Fishery Agencies and provide coordination as necessary.

Collaborate with the DCA, and DWR on public outreach content and education.

Provide support on various habitat restoration projects that promote the goals of California EcoRestore.

Science Development

Advance collaborative science through research and studies addressing the protection of endangered species, management of fish and wildlife species, management of stressors, and the improvement and protection of ecosystem habitat throughout the Delta ecosystem.

Continue to participate in the Bay-Delta science community by providing input to the Collaborative Science and Adaptive Management Program, including supporting the Collaborative Adaptive Management Team.

Develop manuscripts reporting on scientific research supported by Metropolitan for publication in peer-reviewed publications; conduct presentations at workshops, symposiums and conferences to advance new scientific findings.

Provide input in the review of technical work products, workplan development, and discussion of relevant issues that may influence key Delta regulations and policies.

Collaborate on scientific research for selected pilot projects using Metropolitan's Delta Islands.

Regulatory, Planning, and Legislative Support

Provide analysis of key regulations and legislation that may influence State Water Project (SWP) supply reliability, Bay Delta water quality and environmental health.

Monitor and analyze legislations, coordinate with Legal on key topics that intersect with regulations, policies and operations.

Provide coordination between Metropolitan and SWP permitting processes including but not limited to implementation, revisions and/or new permits such as Incidental Take Permits, Biological Opinions, Temporary Urgency Change Petitions and other key water rights etc.

Provide policy and technical support for the processes related to State and Federal Endangered Species Act permitting for the State Water Project.

Sites Reservoir

Continue review and participation with the Sites Joint Powers Authority in the planning, modeling and environmental documentation development for the proposed Sites Reservoir Project.

Continue discussions with federal and state regulatory agencies regarding project impacts and benefits.

Continue discussions with federal and state project operators regarding coordinated operation agreements.

Review and comment on draft documents including: revised environmental impact report, Proposition 1 feasibility report, and biological assessment to be submitted to US Fish & Wildlife Service and National Marine Fishery Service.

Delta Islands Management

Implement the California Department of Fish and Wildlife grant for the "Analysis of Opportunities for Island-wide Improvements that includes a Mosaic of Multiple Land Uses for Subsidence Reversal, Sustainable Agricultural Practices, Carbon

Sequestration, Water Quality, and Habitat Restoration.

Work with the Reclamation Districts (RD) in implementing DWR grant-funded levee improvement projects on Bouldin and Bacon Islands, developing a regional emergency flood fight supply depot on Bouldin Island, and finalizing the 5-year Levee Improvement Plans.

Continue routine patrol of all four properties, identify and repair levee cracks, monitor active seepage areas, coordinate the removal of unoccupied structures and installation of electronic gates.

Work with Engineering in completing the bidding process and award of construction contract for completion of the final phase for the installation of additional meters for full compliance of Senate Bill 88.

Initiate preliminary design for the replacement of aging pump stations.

Manage the Delta Islands Emergency Response Team for flood/emergency situation updates.

Levee Monitoring and Freshwater Pathway

Continue scientific field investigations and surveys related to levee monitoring and instrumentation pilot project. Manage the pilot projects related to finding nutria with scent detection dogs, testing subsurface techniques and instruments for levee anomalies.

Collaborate with the Delta RD engineering firms for final draft levee monitoring and instrumentation report comments and review, present the draft to management for direction and implementation.

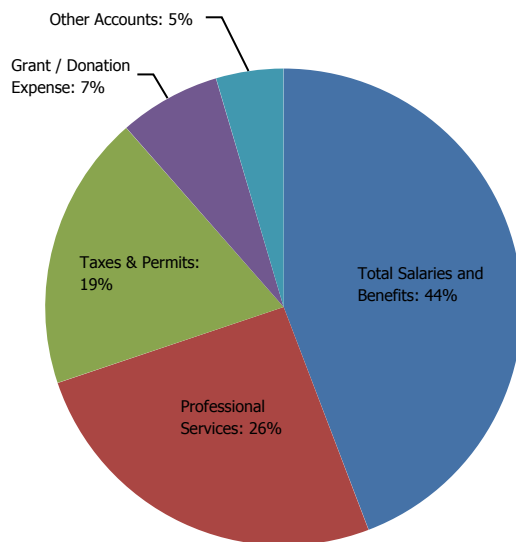
Work with local RD engineering firms to draft a revised levee standard that incorporates seismic, sea level rise and habitat elements.

O&M FINANCIAL SUMMARY

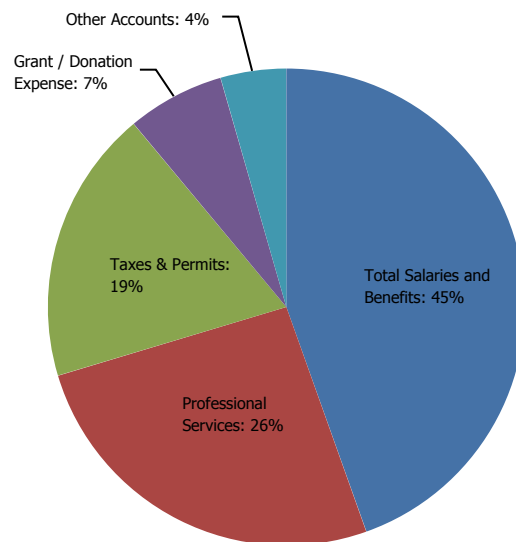
	2020/21 Actual	2021/22 Budget	2022/23 Proposed	Change from 2021/22	2023/24 Proposed	Change from 2022/23
Total Salaries and Benefits	4,973,237	5,542,239	5,587,446	45,207	5,797,614	210,169
<i>Direct Charges to Capital</i>	<i>(15,894)</i>	<i>0</i>	<i>(61,786)</i>	<i>(61,786)</i>	<i>(63,658)</i>	<i>(1,872)</i>
Total Salaries and Benefits	4,957,344	5,542,239	5,525,660	(16,579)	5,733,957	208,297
% Change		11.8%		(0.3%)		3.8%
Grant / Donation Expense	916,837	714,734	860,000	145,266	850,000	(10,000)
Professional Services	2,433,297	2,883,216	3,205,000	321,784	3,320,000	115,000
Taxes & Permits	315	—	2,336,467	2,336,467	2,391,561	55,094
Other Accounts	65,895	569,237	572,309	3,072	572,406	97
Total O&M	8,373,688	9,709,426	12,499,436	2,790,010	12,867,924	368,488
% Change		16.0%		28.7%		2.9%

Totals may not foot due to rounding.

FY 2022/23 BUDGET BY
EXPENDITURE



FY 2023/24 BUDGET BY
EXPENDITURE



PERSONNEL SUMMARY

		2020/21 Actual	2021/22 Budget	2022/23 Proposed	Change from 2021/22	2023/24 Proposed	Change from 2022/23
Regular	Total	15	17	16	(1)	16	—
	O&M	15	17	16	(1)	16	—
	Capital	—	—	—	—	—	—
Temporary	Total	—	—	2	2	2	—
	O&M	—	—	2	2	2	—
	Capital	—	—	—	—	—	—
Total Personnel	Total	15	17	18	1	18	—
	O&M	15	17	18	1	18	—
	Capital	—	—	—	—	—	—

Totals may not foot due to rounding.

BUDGET HIGHLIGHTS

The Bay Delta Initiatives' O&M Biennial Budget is \$12.5 million in FY 2022/23 and \$12.9 million in FY 2023/24 or an increase of 28.7% and an increase of 2.9% respectively from the prior budget years. The main factors affecting these changes:

- Changes to BDI staffing from prior budget years include staff promotions and transfer of a staff to the Office of the General Manager, who was not replaced. Some of the variances from promotions and position upgrades were offset by the downgrade of some positions. Budgets for FY 2022/23 and FY 2023/24 include allocations for three interns and a District Temp.
- Professional services cover allocations intended for consultants that will provide professional and technical expertise on Sacramento-San Joaquin Bay Delta (Bay-Delta) issues professional and technical expertise.
- Grant expense or cost shares for studies in collaboration with various agencies and academic institutions reflect an increase in funding to allow continuous advancement of efforts on collaborative science.
- Repairs and Maintenance (Outside Services) includes budget transfer from Real Property since BDI is mainly responsible for overseeing these activities for the Delta Islands.
- Taxes and Permits is a budget transfer from Real Property since BDI is primarily responsible for closely coordinating with the RDs and overseeing the operations of the Delta Islands. The budget covers allocations for RD Assessments for the Delta Islands. The budget for Property Taxes will remain with Real Property.

The following are the significant changes by budget year.

FY 2022/23

Personnel–related issues

Total regular personnel count was reduced by 1 FTE due to the transfer of a staff with 16 regular staff remaining. Three interns and a District Temp are added to the labor budget for this year,

Capital labor is budgeted at 20% of one regular FTE for the Delta Islands regulatory compliance project (Senate Bill 88), replacement of pump stations, and implementation of the Delta smelt and native species preservation project.

Salaries and Benefits reflect proposed negotiated labor increases and merit increases for qualified employees.

Professional Services

Professional Services budget reflect an increase due to scientific studies and pilot projects that are anticipated to ramp up with interests and partnerships with various agencies. Studies that are anticipated to be pursued may include eDNA monitoring, various Delta smelt studies, GIS/mapping data management, water supply and quality modeling, Delta smelt and native species preservation study, regenerative agriculture, floating wetlands research and others. The Professional Services budget also includes allocations for consultants involved in emergency preparedness, water reliability planning, and various other land management alternatives for the Delta Islands.

Grant Expense

The grant-related expense budget is for Metropolitan's cost share contributions under collaborative partnerships with other agencies, and academic institutions that pursue studies that are of interest to Metropolitan.

The increase in grant/donation expenses is due to new scientific studies that staff plan to pursue in collaboration with partners that also provide cost shares. Studies that are planned to be implemented include those related to Delta smelt, habitat needs for listed fish, predation on juvenile salmon, and

other studies that pursue scientific research addressing effectiveness of management actions, impacts of stressors, and development of innovative technologies.

Travel Expenses

Decrease in budget is due to the retirement of a staff that used to travel weekly between Los Angeles and Sacramento. BDI also anticipates less travel requirements for meetings that can now be effectively conducted through virtual technology.-

Repairs & Maintenance (Outside Services)

The budget for this account is transferred from Real Property since BDI is mainly responsible for overseeing the operations and maintenance of the Delta Islands. The Repairs and Maintenance shall cover costs related to various structures and infrastructures in the islands to ensure safety and proper operations of facilities.

Taxes & Permits

The budget for Taxes and Permits is transferred from Real Property since BDI is mainly responsible for RD coordination and activities. The budget is intended for RD assessments that cover the costs of levee and flood control facilities maintenance and abandoned structure removal. The assessment budget also includes additional funds for debt-service reduction payments.

Other

The budget is for funding subsidies and incentives, materials and supplies, District validated parking for Bay Delta Sacramento staff, training and conferences, lease expense for one vehicle for use by a staff for Delta Islands inspections, communication expenses, sponsorship, and membership and subscriptions mainly for open-access publication of science-related manuscripts resulting from the various science studies.

FY 2023/24

Personnel–related issues

Total personnel count remains flat from the FY 2022/23 budget.

Salaries and Benefits reflect proposed negotiated labor increases and merit increases for qualified employees.

Professional Services

The budget reflects an increase of 3.5% in funding due to some studies that are anticipated to start on the second year of the biennial budget.

Grant Expense

The budget remains flat from the FY 2022/23 budget since most of the studies to be pursued usually goes on for two to three years.

Travel Expenses

The budget remains flat from the FY 2022/23 budget since there is no anticipated change to the travel requirements.

Repairs & Maintenance

The budget remains flat from the FY 2022/23 budget since there is no anticipated change to the repairs and maintenance requirements.

Taxes & Permits

The budget for assessments include a 3% annual increase due to cost of living adjustment.

Other

The budget remains flat from the FY 2022/23 budget since there is no anticipated change to the requirements for the various accounts covered under this category.

FINANCE

Finance provides innovative, proactive, and strategic financial direction in support of the mission of Metropolitan, the Board of Directors, management, and employees.

PROGRAMS

Finance is responsible for maintaining Metropolitan's strong financial position and high credit ratings and helping to achieve equitable water rates and charges that generate sufficient revenues.

In addition, Finance assists in the efficient management of Metropolitan's financial resources, and ensures that adequate financial controls are in place to accurately record financial transactions, communicate financial results, and protect Metropolitan's assets.

Finance accomplishes its mission through the following programs or sections:

Chief Financial Officer is responsible for the overall administration of finance and accounting functions for Metropolitan including debt and investment management; financial planning and analysis including rate setting and budgeting; accounting and control including financial reporting, payroll, accounts payable, accounts receivable; and risk management and business continuity.

Budget and Financial Planning is responsible for Metropolitan's Biennial Budget, revenue requirements, and rates and charges recommendations; cost monitoring and analysis; annexation fee calculations; short and long term financial analysis; and planning and financial modeling.

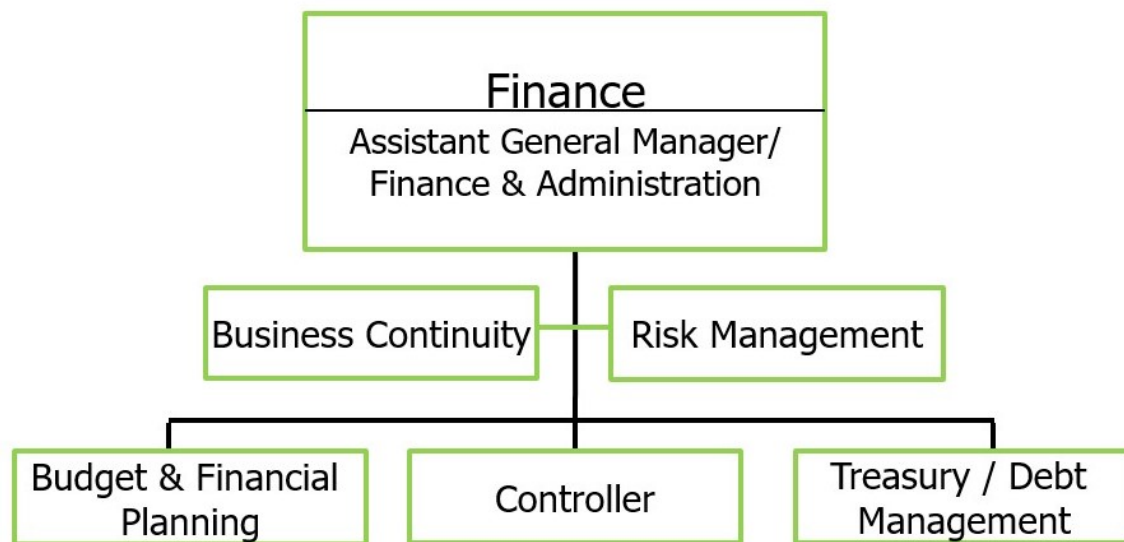
Controller is responsible for maintaining internal controls that safeguard Metropolitan's assets, as well as recording and maintaining its official accounting records via the billing, accounts payable, payroll, and financial reporting functions.

Business Continuity Management Program

ensures that Metropolitan proactively identifies potential business impacts and develops recovery strategies to continue critical operations in the event of an emergency or other business disruption. This is accomplished by conducting Business Impact Analyses and developing business continuity plans along with a life cycle of ongoing plan maintenance, testing, training and awareness. In addition, emergency communications are spearheaded using the MetAlert emergency notification system.

Risk Management reports directly to the Chief Financial Officer section, is responsible for managing all aspects of Metropolitan's casualty insurance and risk management programs to minimize exposure to loss; access risk and recommend strategies to minimize or transfer contract risk on all Metropolitan and agreements, and procure excess and specialty insurance policies to supplement the self-insured property and liability claims program.

Treasury/Debt Management is responsible for Metropolitan's investment and treasury operations including receipt, safekeeping, and disbursement of Metropolitan's funds; managing the District's liquidity cashflow needs and commercial banking activities, including receipts and payment processing, such as wires, checks, and automatic deposits; managing the District's debt obligations including preparation of security sale documents for new issues, administration of outstanding debt obligations, including compliance with all certifications and disclosure notifications; investor and bond rating agency relations; managing the District's property tax programs, including the water standby charge program and the annual ad valorem tax levy program.



GOALS AND OBJECTIVES

In FY 2022/23 and FY 2023/24, Finance will focus on the following key issues:

Cost of Service and Budget

Complete the biennial cost-of-service analysis for rates and charges. Complete and implement the Biennial Budget.

Financial Forecasts and Analysis

Provide an updated Ten-Year Financial Forecast in the Biennial Budget.

Continue to provide the Board with various analyses to manage financial performance for long-term rate stability, given the future potential implementation of the Delta conveyance and the Regional Recycled Water Program.

Analyze the funding of financial initiatives as identified.

Annexation/Tax Levy

Complete the annual annexation calculation and tax levy assessments.

Rates and Charges

Manage and effectively administer rates and charges to recover costs consistent with Board policy and objectives. Complete a comprehensive rate restructuring study.

Financial Reporting/Internal Control

Continue to record and report the financial activities of Metropolitan in a timely and transparent manner to the Board and member agencies.

Continue to ensure that internal controls are in place to provide assurance that assets are safeguarded and financial information is fairly stated.

Continue to improve communications of financial information to the Board, member agencies, management, and the financial community.

Capital Financing

Update capital financing plans and communicate Metropolitan's financial needs and capabilities to ensure cost-effective access to capital markets.

Work with Metropolitan's underwriting team, financial advisors, and swap advisors to identify financing opportunities to prudently manage the overall cost of financing Metropolitan's capital investment program.

Manage investor relations to ensure clear communications, accuracy of information, and integrity.

Continue to manage debt service to mitigate the volatility of debt service payments over time and reduce debt service costs through re-financings and the prudent use of interest rate swaps, in accordance with Metropolitan's interest rate swap policy.

Maintain relationships with the financial community and bond rating agencies to maintain Metropolitan's high credit ratings and access to various aspects of the financial markets to maximize financial flexibility.

Investment

Prudently invest Metropolitan's funds with the objective of safety of principal, liquidity, and yield.

Manage the District's portfolios to provide the necessary liquidity to fund in excess of \$3.0 billion over the biennium in expenditures for Operations and Maintenance, debt service, and construction projects.

Measure the performance of the District's portfolios and manage each to meet or exceed the benchmark consistent within established investment codes and policy.

Manage all outside portfolio managers to ensure compliance with Metropolitan's investment policy, and to monitor investment activity performance.

Risk Management

Continue to effectively manage Metropolitan's casualty insurance and risk management programs to minimize exposure to loss.

Business Continuity

Conduct regular meetings with the Business Continuity Steering Committee to ensure the Business Continuity program is aligned with Metropolitan's strategic priorities.

Continue to refine the Business Continuity Plan template and Fusion system to capture better information and produce actionable and easy to follow recovery plans.

Continue collaboration with the business users to perform annual plan updates and approvals using the Fusion software.

Conduct biannual application recovery exercises with the business users to ensure accessibility and functionality of critical applications at the back up data center in accordance with business requirements.

Conduct tabletop exercises for Metropolitan's business continuity plans to validate recovery strategies and identify areas in need of updating.

Test emergency communications using the MetAlert emergency notification system to ensure effective communications in the event that normal methods are impacted.

Workforce Development & Succession Planning

Continue to examine and consider the challenges associated with succession planning and future staffing requirements in light of the composition and age of the workforce.

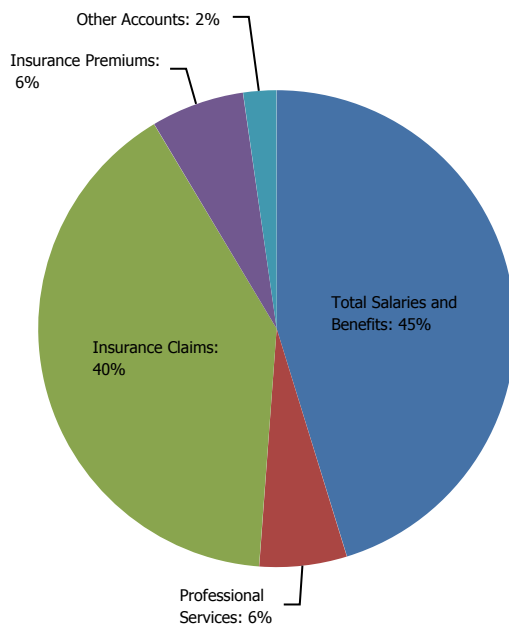
Work with each section within Finance to establish staff back-up responsibilities for various work processes.

O&M FINANCIAL SUMMARY

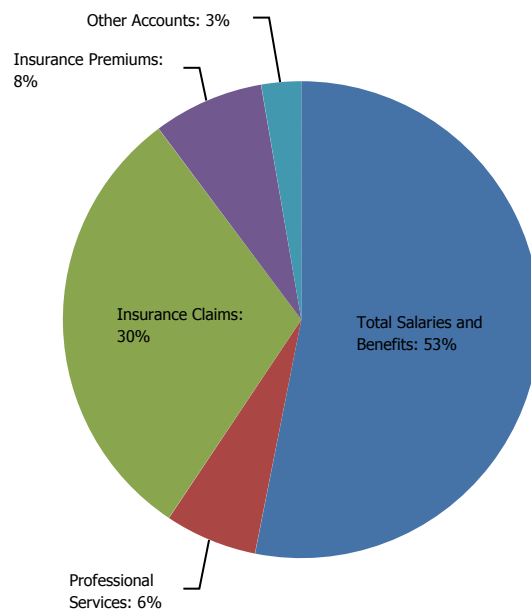
	2020/21 Actual	2021/22 Budget	2022/23 Proposed	Change from 2021/22	2023/24 Proposed	Change from 2022/23
Total Salaries and Benefits	11,292,551	13,259,705	13,762,149	502,444	14,307,907	545,758
<i>Direct Charges to Capital</i>	<i>(186,993)</i>	<i>(203,041)</i>	<i>(186,187)</i>	<i>16,853</i>	<i>(161,254)</i>	<i>24,933</i>
Total Salaries and Benefits	11,105,558	13,056,664	13,575,961	519,297	14,146,653	570,692
% Change		17.6%		4.0%		4.2%
Professional Services	1,064,239	2,061,100	1,780,900	(280,200)	1,665,600	(115,300)
Insurance Claims	(2,155,243)	11,419,990	12,075,000	655,010	8,100,000	(3,975,000)
Insurance Premiums	1,284,552	1,500,000	1,900,000	400,000	2,000,000	100,000
Other Accounts	294,144	450,576	675,102	224,526	717,574	42,472
Total O&M	11,593,250	28,488,330	30,006,963	1,518,633	26,629,827	(3,377,136)
% Change		145.7%		5.3%		(11.3%)

Totals may not foot due to rounding.

**FY 2022/23 BUDGET BY
EXPENDITURE**

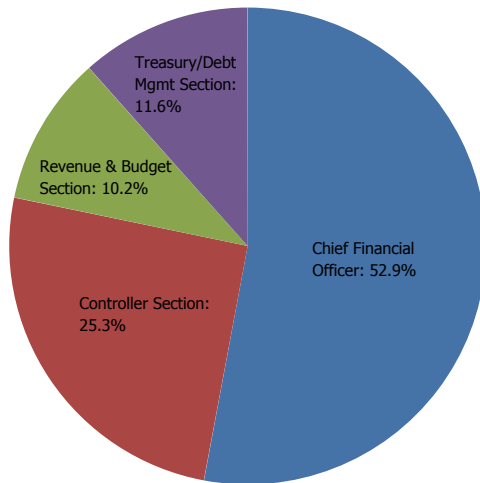


**FY 2023/24 BUDGET BY
EXPENDITURE**

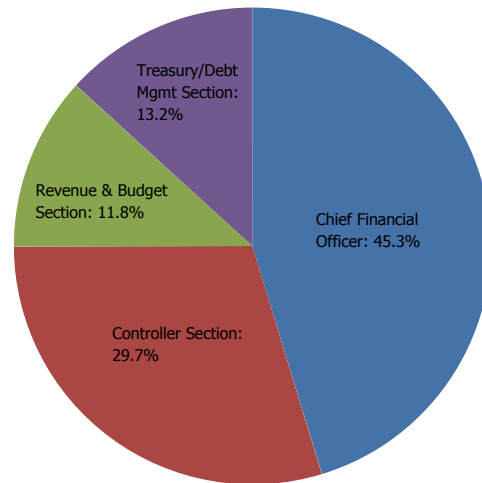


O&M BUDGET BY SECTION

FY 2022/23 BUDGET BY SECTION



FY 2023/24 BUDGET BY SECTION



	2021/22 Budget	2022/23 Proposed	Change from 2021/22	2023/24 Proposed	Change from 2022/23	Personnel Budget		
						21/22	22/23	23/24
Chief Financial Officer	15,564,200	15,888,500	324,400	12,061,200	(3,827,400)	8	5	5
Controller Section	6,682,000	7,596,200	914,200	7,902,600	306,400	31	35	35
Revenue & Budget Section	3,871,900	3,047,600	(824,200)	3,143,500	95,800	11	9	9
Treasury/Debt Mgmt Section	2,370,300	3,474,600	1,104,300	3,522,600	48,000	5	10	10
Total O&M	28,488,300	30,007,000	1,518,600	26,629,800	(3,377,100)	55	59	59

Totals may not foot due to rounding.

PERSONNEL SUMMARY

		2020/21 Actual	2021/22 Budget	2022/23 Proposed	Change from 2021/22	2023/24 Proposed	Change from 2022/23
Regular	Total	49	51	53	2	53	—
	O&M	48	51	53	2	53	—
	Capital	1	—	—	—	—	—
Temporary	Total	1	4	7	3	7	—
	O&M	1	4	6	2	6	—
	Capital	—	—	1	1	1	—
Total Personnel	Total	49	55	60	5	60	—
	O&M	49	55	59	4	59	—
	Capital	1	—	1	1	1	—

Totals may not foot due to rounding.

BUDGET HIGHLIGHTS

Finance's O&M Biennial Budget is \$30.0 million in FY 2022/23 and \$26.6 million in FY 2023/24 or an increase of 5.3% and a decrease of 11.3% respectively from the prior budget years. The change is primarily due to the following factors:

- Staffing was increased to support the Payroll process and accurate and timely reporting of compensation to CalPERS and Delta Conveyance Authority (DCA) reporting as well as Treasury operations.
- Temporary labor was increased to support increased reporting workload due to new government accounting and reporting standards as well as reporting for Delta Conveyance Authority (DCA), Delta Conveyance Finance Authority (DCFA), Six Agency Committee, Colorado River Board and other agencies; accurate payroll processing and reporting to CalPERS; and critical business systems such as water billing, payroll and budget.
- Third-party insurance claims and premiums are increasing significantly in the first year with an anticipated decrease in third party claims in the second year.
- Accounting for the realignment of some of the budget from professional services to software licensing & support the budget for professional services is decreasing by about \$15K.

The following are the significant changes by budget year.

FY 2022/23

Personnel-Related issues

Total personnel count is increasing by 5 FTEs. Regular full time positions are increasing by 2 FTEs with the transfer out of 2 positions to the Office of the General Manager, the transfer in of 1 position from Administrative Services and the addition of 3 new positions to support Accounting, Payroll and Treasury. Temporary labor is increasing by 3 FTEs to support increased reporting workload due to new government accounting and reporting standards as well as reporting for Delta Conveyance Authority (DCA), Delta Conveyance Finance Authority (DCFA), Six Agency Committee, Colorado River Board and other agencies; accurate payroll processing and reporting to CalPERS; and critical business systems such as water billing, payroll and budget.

Salaries and Benefits reflect proposed negotiated labor increases and merit increases for qualified employees.

Professional Services

Accounting for the realignment of some of the budget from professional services to software licensing & support the budget for professional

services is decreasing by about \$15K. Professional services include investment management services to support Metropolitan's \$600 million investment portfolio, and for critical audits and studies related to accounting, reporting and business systems.

Insurance Premiums

The insurance premiums budget is increasing as a result of the expected overall pool exposure to catastrophic losses such as wild fire risk liability, US economic and political uncertainties, global instability and new and increased exposures due in part to climate change.

Insurance Claims

Third-party liability claims budget is increasing based on projected losses from the actuarial report.

Other

Increase in other is primarily due to the realignment of financial, investor, credit and data analytic tools and services from professional services to Software licensing and support.

FY 2023/24

Personnel–Related issues

Total personnel count remains flat from the FY 2022/23 budget.

Salaries and Benefits reflect proposed negotiated labor increases and merit increases for qualified employees.

Professional Services

The professional services budget is decreasing primarily as the result of the completion of audit and studies related to accounting, reporting and business systems before the end of the year.

Insurance Premiums

The insurance premiums budget is increasing as a result of the expected overall pool exposure to catastrophic losses.

Insurance Claims

Third-party liability claims budget is decreasing based on projected losses from the actuarial report.

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ADMINISTRATION

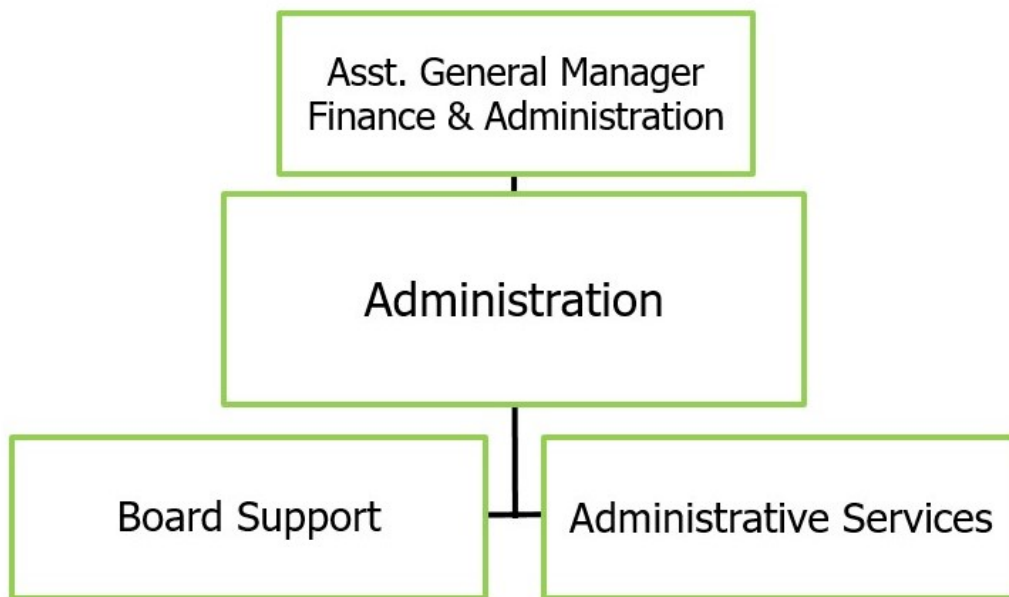
The Administration group provides outstanding value to its customers for a wide range of administrative services including contracting, inventory and Enterprise Content management in addition to providing administrative support to the Board and Office of the Chair.

PROGRAMS

The Administration group accomplishes its mission through the following programs or sections:

Administrative Services provides a range of critical services including contracting, inventory management, warehousing, reprographics, technical writing, records management, EForms management, Enterprise Content Management, and administration of Metropolitan's Rideshare Program.

Board Support provides administrative support to the Board and the Office of the Chair; coordinates Metropolitan's board document management system; and coordinates travel for the Board.



GOALS AND OBJECTIVES

In FY 2022/23 and FY 2023/2024, the Administration group will focus on the following key issues:

Innovative Solutions

Increase efficiency in procurement practices by streamlining acquisition processes. Enhance customer experience and satisfaction by upgrading warehouse online ordering system and expanding online training modules to further the customer's knowledge in key areas such as requisition processing and agreement administration.

Review administrative functions to promote higher levels of productivity, standardization, and to improve efficiency in key areas such as procurement spend analysis and records management.

Launch Information Governance / Enterprise Content Management (ECM) solution to improve existing storage, access, retrieval and control of physical and electronic records in line with fiscal, legal, and regulatory requirements.

Utilize Metropolitan's EForm Management program to improve business processes, increase productivity and enhance overall user experience by incorporating mobile technology and adopting innovative and efficient business practices.

Continue to enhance board document management through modernized technology and continued training of District staff on policies and procedures of Board matters.

Sustainability Efforts

Continue efforts to ensure Metropolitan's Rideshare Program remains beneficial for employees and compliant with South Coast Air Quality Management District's regulatory requirements.

Explore opportunities to expand the Electric Vehicle Charging program (partnership with Environmental/Engineering/WSO district-wide study).

Succession Planning and Employee Development

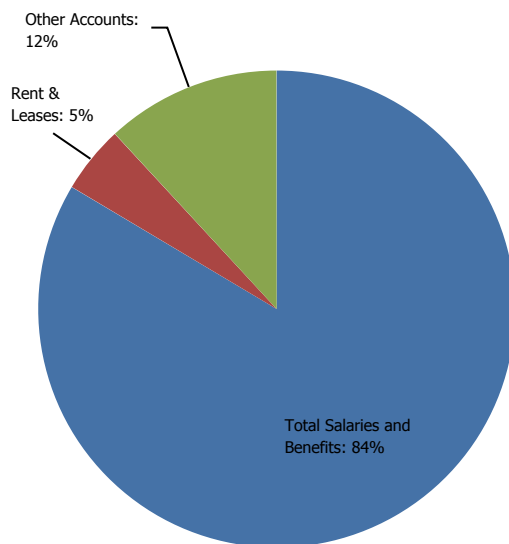
Continue to implement a section-wide cross-training program to promote organizational adaptability, institutional knowledge, experience, and expertise.

O&M FINANCIAL SUMMARY

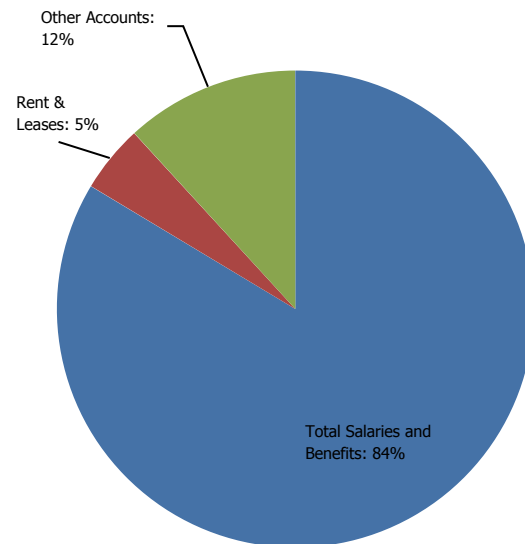
	2020/21 Actual	2021/22 Budget	2022/23 Proposed	Change from 2021/22	2023/24 Proposed	Change from 2022/23
Total Salaries and Benefits	16,077,321	16,393,818	17,390,866	997,049	18,177,362	786,496
Direct Charges to Capital	(851,373)	(757,945)	(743,094)	14,851	(765,606)	(22,512)
Total Salaries and Benefits	15,225,948	15,635,872	16,647,772	1,011,900	17,411,756	763,984
% Change		2.7%		6.5%		4.6%
Materials & Supplies	242,262	395,400	472,700	77,300	549,900	77,200
Outside Services - Non Professional / Maintenance	985,303	456,500	342,100	(114,400)	334,900	(7,200)
Professional Services	71,501	174,000	300,000	126,000	300,000	—
Rent & Leases	463,826	1,118,500	911,440	(207,060)	952,740	41,300
Subsidies & Incentives	34,364	821,400	625,600	(195,800)	625,600	0
Travel Expenses	46,426	294,891	290,720	(4,171)	307,450	16,730
Other Accounts	134,333	322,632	332,670	10,038	339,870	7,200
Total O&M	17,203,962	19,219,195	19,923,002	703,807	20,822,216	899,214
% Change		11.7%		3.7%		4.5%
Operating Equipment	87,392	34,600	218,917	184,317	43,351	(175,566)
Total O&M and Operating Equipment	17,291,353	19,253,795	20,141,919	888,123	20,865,567	723,648
% Change		11.3%		4.6%		3.6%

Totals may not foot due to rounding.

FY 2022/23 BUDGET BY EXPENDITURE

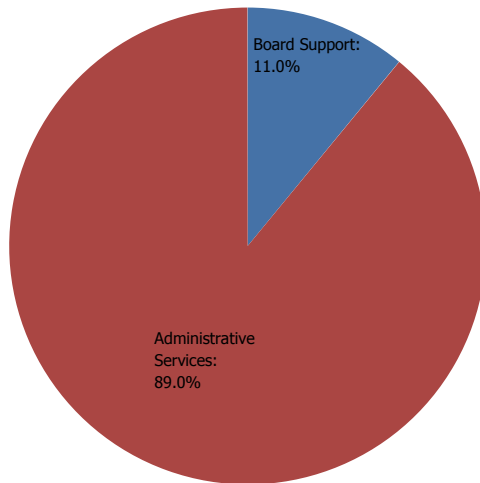


FY 2023/24 BUDGET BY EXPENDITURE

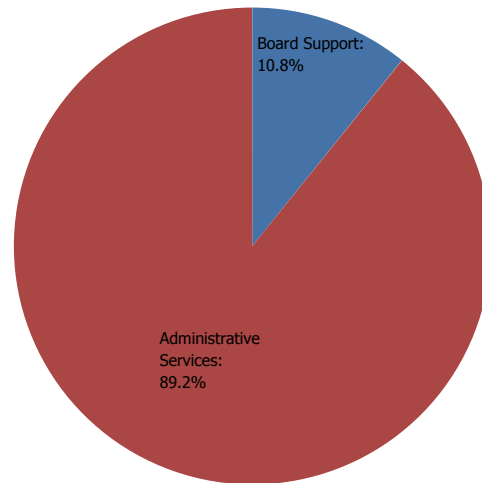


O&M BUDGET BY SECTION

FY 2022/23 BUDGET BY SECTION



FY 2023/24 BUDGET BY SECTION



	2021/22 Budget	2022/23 Proposed	Change from 2021/22	2023/24 Proposed	Change from 2022/23	Personnel Budget		
						21/22	22/23	23/24
Board Support	2,024,500	2,185,100	160,600	2,249,500	64,400	6	6	6
Administrative Services	17,194,700	17,737,900	543,200	18,572,700	834,800	73	75	76
Total O&M	19,219,200	19,923,000	703,800	20,822,200	899,200	79	81	82

Totals may not foot due to rounding.

PERSONNEL SUMMARY

		2020/21 Actual	2021/22 Budget	2022/23 Proposed	Change from 2021/22	2023/24 Proposed	Change from 2022/23
Regular	Total	79	81	80	(1)	80	—
	O&M	76	78	77	(1)	77	—
	Capital	3	3	3	—	3	—
Temporary	Total	3	1	4	3	5	1
	O&M	3	1	4	3	5	1
	Capital	—	—	—	—	—	—
Total Personnel	Total	82	82	84	2	85	1
	O&M	79	79	81	2	82	1
	Capital	3	3	3	—	3	—

Totals may not foot due to rounding.

BUDGET HIGHLIGHTS

The Administration group's O&M and Operating Equipment Biennial Budget is \$20.1 million in FY 2022/23 and \$20.9 million in FY 2023/24 or an increase of 4.6% and an increase of 3.6% respectively from the prior budget years. The changes are due primarily to the following factors:

- Increase in temporary labor to provide additional procurement resources to handle material increase in capital and information technology projects, as well as to support the E-Forms migration/upgrade effort.
- A study to determine the best way to capture procurement spend and provide analytical data.
- A consultant study to recommend a central repository to organize technical operational manuals and provide online access and searchability.
- Acquisition of a library management software system to catalog Metropolitan historical documents.

The following are the significant changes by budget year:

FY 2022/23

Personnel–Related issues

Total personnel count increased by 2 FTEs. Regular full time positions decreased by 1 FTE as a position was transferred to Finance. There was a net increase of 3 district temporary positions from the FY 2021/22 budget. The increase in temporary labor is necessary in order to provide additional procurement resources to handle material increase in capital and information technology projects, as well as to support the E-Forms migration/upgrade effort.

Salaries and Benefits reflect proposed negotiated labor increases and merit increases for qualified employees.

Professional Services

The budget increase from FY 2021/22 reflects innovative efficiency driven projects, including procurement spend analysis initiative, technical requirements necessary for a new contracts management system, development of online training modules and business process improvements for Administrative Services. The increase also includes additional support for the Chair of the Board of Directors.

Non-Professional Services

The budget decrease reflects a reduction in costs associated with off-site document storage and shredding services.

Materials and Supplies

The budget increase from FY 2021/22 for Administrative Services is driven by higher costs for the new E-Forms platform and related applications.

Subsidies and Incentives

The budget decrease from FY 2021/22 reflects the anticipated employee usage rate for Metropolitan's Rideshare program under Administrative Services.

Rents and Leases

The budget decrease from FY 2021/22 reflects the anticipated employee usage for the Vanpool program under Administrative Services.

Other

The budget reflects a decrease in travel, training and conferences for Administrative Services, offset by an increase related to Board Support activities.

FY 2023/24

Personnel–Related issues

Total personnel count reflects a net increase of 1 temporary position from FY 2022/23 for Administrative Services. The increase in temporary labor is primarily in support of procurement resources to handle material increase in capital and information technology projects, as well as to support the E-Forms migration/upgrade effort.

Salaries and Benefits reflect proposed negotiated labor increases and merit increases for qualified employees.

Materials and Supplies

The budget increase from FY 2022/23 for Administrative Services is driven by costs associated with the library management software system.

Rents and Leases

The budget increase from FY 2022/23 is due to an increase in costs for copier lease and maintenance.

Other

The budget reflects an increase in travel, training and conferences related to Administrative Services and Board Support activities.

Operating Equipment - FY 2022/23 and FY 2023/24

The operating equipment budget for Administrative Services reflects the need for the replacement of a forklift, utility cart, and truck in Metropolitan's warehouse. Additionally, an increase in service demand necessitates the purchase of specialized reprographics equipment.

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HUMAN RESOURCES

Human Resources (HR) strategically, and cost effectively, recruits, retains, motivates, rewards, and develops Metropolitan's employees.

PROGRAMS

The focus of Human Resources is to work closely with management to foster effective management; prepare to meet future workforce challenges; partner with customers on solutions; and provide excellent HR services that ensure compliance to numerous HR laws, regulations, and responsibilities.

The Human Resources Group partners with others across the organization to provide custom services and solutions that address current and future gaps in skills, knowledge, and abilities.

HR services include employee and labor relations, recruitment and selection, HR Strategic Partnering, HR Information Systems, benefits, retirement, leave administration, classification and compensation administration, medical screening, workers' compensation, training, organizational development, workforce and career development, and HR business support services.

HR accomplishes its mission through the following programs or sections:

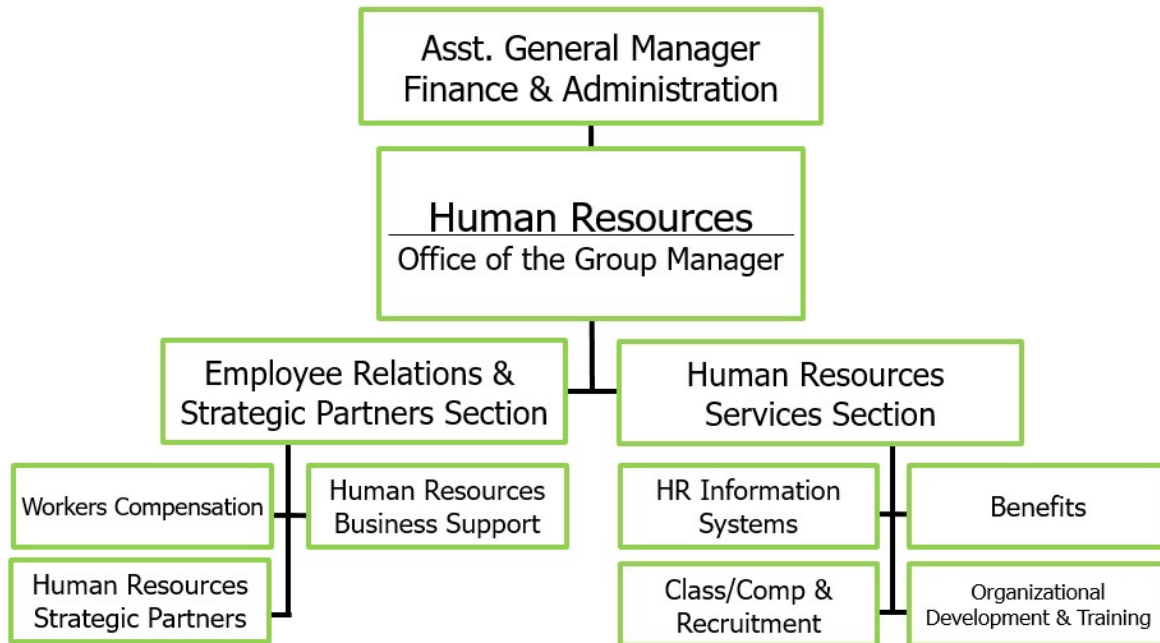
Office of Human Resource Group Manager provides strategic leadership and direction for Metropolitan's Human Resources functions. Organizations reporting directly to the Office of the Human Resource Group Manager include Employee Relations and Human Resources Services.

Employee Relations is responsible for fostering harmonious labor relations between Metropolitan and its four certified bargaining units, and plays a key role in contract negotiations. The staff also serves as a resource to managers and supervisors on such matters as grievances, disciplinary actions, and workplace conflicts. The section also provides ongoing training to managers on all facets of employer-employee relations.

HR has designated HR Strategic Partners to serve as single points of contact for managers, providing HR support in several areas, including Employee Relations, recruitment, training, succession planning, and strategic development.

Human Resources Services is responsible for the strategic design and implementation of Metropolitan's compensation, benefits, recruitment. The section leads and participates in continuous process improvement and cost optimization studies for all plans. Responsibilities include job analysis, market assessments, recruitment, active employee and retiree benefit program administration, partnering with management on new initiatives, compliance, Workers Compensation, medical screening and implementing new programs and agreements.

Finally, staff under Human Resources Information Systems administer Metropolitan's MyHR system, and serve as a critical liaison between HR and the Information Technology Group.



GOALS AND OBJECTIVES

In FY 2022/23 and FY 2023/24, HR will focus on the following key issues that support the General Manager's objective of Employee Development and additional HR priorities:

Ensure Effective People Management

Strong people management skills are essential to meeting Metropolitan's future challenges and successes. HR will ensure that the role of management is defined and that current managers have the tools and training needed to provide effective management.

A formal, multi-tiered Management and Leadership Development program will help managers better understand their roles and responsibilities as they progress through management.

Learning opportunities will be provided to employees to prepare for future management positions from the entry-level manager all the way to the executive level.

Ongoing events, workshops and forums will provide opportunities to deliver consistent expectations and tools for management, including motivating and valuing employee contributions.

Strengthen Partnerships with HR Customers

Effective people solutions require that HR partners with its customers, including management, unions, employees, retirees and others. HR must understand the customer's business needs and then build working relationships that develop effective solutions to people-related challenges. This working partnership will minimize misdirected efforts, speed decision-making, reduce rework and, ultimately, produce a better workplace at a reduced cost.

Strengthened HR/customer partnerships and communications will identify areas for improvement in HR products, services, support and messaging.

Ensure that Risk Management, Employee Relations, EEO and the Legal Department coordinate to effectively defend against litigation of liability claims and to cost-effectively resolve claims.

Prepare to Meet Challenges of Future Workforce Changes

On average, about 100 employees per year are retiring and this trend is expected to continue over the next several years. As experienced and knowledgeable employees retire, HR will continue to support and expand upon on-going succession planning efforts underway.

Efforts will include a focus on learning, development, knowledge capture, cross-training opportunities, and building pipelines for future vacancies.

HR will develop new strategies, support existing efforts and ensure Metropolitan remains competitive when compared to other organizations.

HR will support career development activity undertaken by employees to enhance knowledge, skills, and abilities for future work and promotional opportunities, including support of internship and mentoring initiatives.

Provide Excellent Human Resources Services

HR provides a wide range of services and support from pre-hire to retirement, impacting almost every aspect of the organization. To make the maximum contribution, all HR functions must serve as trusted advisors that speak with one voice, listen well and provide consistent guidance on people-related matters.

HR's organization is designed to improve customer service, provide stronger support to employees, and is aimed at developing the next generation of leaders through training, Management Academy, and recruitment.

HR will continue to simplify policies, processes, and procedures to reduce the costs of HR administration by utilizing technology, reducing redundancies and implementing new approaches to existing services.

HR will develop standard reports to enhance management access to employee data and assist with decision-making.

HR will administer a full-range of benefit services for health, leave, deferred compensation and retirement programs.

HR will continue to review the recruitment process and procedures to improve quality of hire and time-to-fill.

Ensure Compliance with Laws and Regulations

HR manages compliance to four MOUs and the Administrative Code, and addresses many sensitive and confidential personnel issues.

HR will continue to monitor a wide array of changing legal and regulatory requirements while adapting HR processes and systems to conform to these changing requirements.

HR will ensure Metropolitan meets Equal Employment Opportunity requirements and numerous Federal, State, and Local laws and regulations and Public Sector codes and rulings.

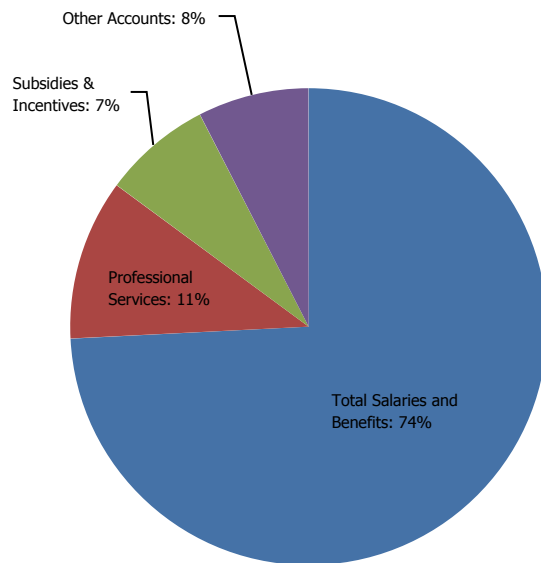
HR will maintain fiduciary responsibilities in the management of financial and retirement programs and comply with the Affordable Care Act and with all privacy and data security requirements.

O&M FINANCIAL SUMMARY

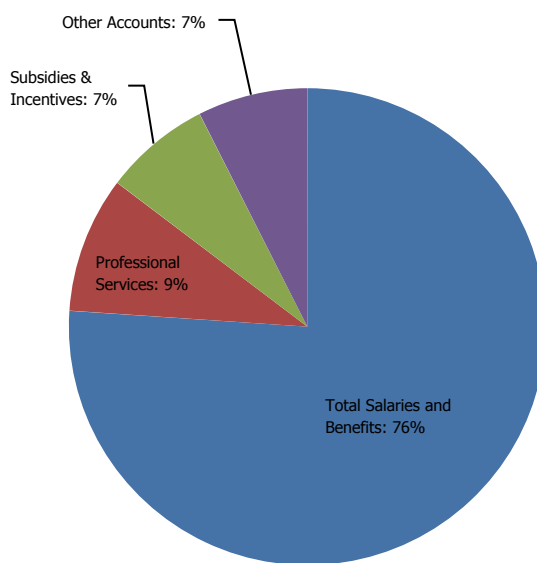
	2020/21 Actual	2021/22 Budget	2022/23 Proposed	Change from 2021/22	2023/24 Proposed	Change from 2022/23
Total Salaries and Benefits	11,615,280	11,792,170	12,043,795	251,625	12,551,381	507,586
Direct Charges to Capital	(53,146)	—	—	—	—	—
Total Salaries and Benefits	11,562,134	11,792,170	12,043,795	251,625	12,551,381	507,586
% Change		2.0%		2.1%		4.2%
Advertising	152,510	230,000	230,000	0	250,000	20,000
Outside Services - Non Professional / Maintenance	188,715	240,300	408,970	168,670	408,970	—
Professional Services	1,100,783	1,242,650	1,771,722	529,072	1,526,722	(245,000)
Subsidies & Incentives	1,116,870	974,800	1,191,600	216,800	1,191,600	—
Other Accounts	421,586	551,140	584,725	33,585	570,860	(13,865)
Total O&M	14,542,598	15,031,060	16,230,812	1,199,752	16,499,533	268,721
% Change		3.4%		8.0%		1.7%

Totals may not foot due to rounding.

FY 2022/23 BUDGET BY EXPENDITURE

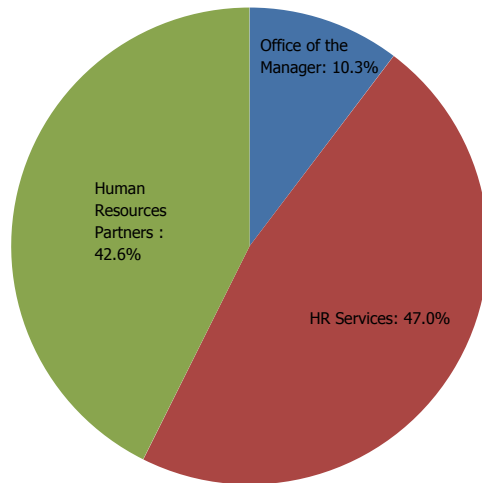


FY 2023/24 BUDGET BY EXPENDITURE

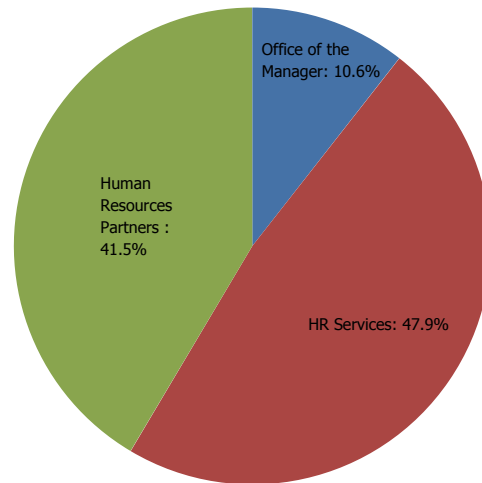


O&M BUDGET BY SECTION

FY 2022/23 BUDGET BY SECTION



FY 2023/24 BUDGET BY SECTION



	2021/22 Budget	2022/23 Proposed	Change from 2021/22	2023/24 Proposed	Change from 2022/23	Personnel Budget		
						21/22	22/23	23/24
Office of the Manager	2,256,500	1,675,500	(580,900)	1,746,100	70,600	6	4	4
HR Services	7,179,400	7,635,300	455,900	7,911,200	275,900	23	26	26
Human Resources Partners	5,595,200	6,920,000	1,324,800	6,842,300	(77,700)	15	16	16
Total O&M	15,031,100	16,230,800	1,199,800	16,499,500	268,700	44	46	46

Totals may not foot due to rounding.

PERSONNEL SUMMARY

		2020/21 Actual	2021/22 Budget	2022/23 Proposed	Change from 2021/22	2023/24 Proposed	Change from 2022/23
Regular	Total	41	44	44	—	44	—
	O&M	41	44	44	—	44	—
	Capital	0	—	—	—	—	—
Temporary	Total	7	5	2	(3)	2	—
	O&M	7	5	2	(3)	2	—
	Capital	—	—	—	—	—	—
Total Personnel	Total	47	49	46	(3)	46	—
	O&M	47	49	46	(3)	46	—
	Capital	—	—	—	—	—	—

Totals may not foot due to rounding.

BUDGET HIGHLIGHTS

HR's Biennial O&M Budget is \$16.2 million in FY 2022/23 and \$16.5 million in FY 2023/24 or an increase of 8.0% and an increase of 1.7% respectively from the prior budget years. The changes are due primarily to the following factors:

- Salaries and benefits reflect proposed negotiated labor increases from the prior budget cycle.
- Materials and supplies reflect an increase in software licensing purchases and support.
- Professional services increase in both years due to increased organizational and employee development training and training programs, and increased recruitment activities. Additionally, there is a significant increase in outside professional services for Employee Relations Section in FY 2022/23 for Labor negotiations.
- Non-Professional services increase in both years due to increased recruitment activities.
- The budget reflects an increase in the Professional Development Expenses Reimbursement Program budget to accurately reflect the five-year usage trend.

The following are the significant changes by budget year:

FY 2022/23

Personnel–Related issues

Total Regular positions remain flat with the FY 2021/22 budget. However, two (2) positions were transferred out of Human Resources group to support EEO efforts, and two (2) new positions were added to support Recruitment and Organizational Development & Training. District Temporary positions decreased from seven (7) from the FY 2021/22 budget to two (2) District Temporary positions. The two(2) District Temporary positions are to support HRIS in the implementation of Ventiv and PeopleSoft functionalities until automation can be achieved. District Temporary positions in Recruitment were no longer required.

Salaries and Benefits reflect proposed negotiated labor increases and merit increases for qualified employees.

Professional Services

The budget reflects increases as a result of bargaining unit negotiations. The budget also reflects increases in Recruitment, Organizational and Employee Training Programs, and Employee Relations services.

Non-Professional Services

The budget reflects increases as a result of increase in recruitment activities. In order for Recruitment to extend the candidate reach, Recruitment is using professional network services.

Materials & Supplies

The budget reflects an increase in software licensing (e.g., Adobe, DocuSign).

Subsidies & Incentives

The budget reflects an increase in the Professional Development Expenses Reimbursement Program budget to accurately reflect the five-year usage trend.

FY 2023/24

Personnel–Related issues

Personnel count remains flat from FY 2022/23. Salaries and Benefits reflect proposed negotiated labor increases and merit increases for qualified employees.

Professional Services

The budget is anticipated to decrease due to successful Union negotiations to renew MOUs, which expire in December 31, 2022. Professional services provided by a labor consultant will not be required in FY 2023/24.

OFFICE OF DIVERSITY, EQUITY & INCLUSION

The Office of Diversity, Equity, and Inclusion (DE&I) is responsible for the strategic oversight of DE&I including planning, developing, and implementing Metropolitan's strategies and initiatives that create an organizational culture of diversity, equity, and inclusion.

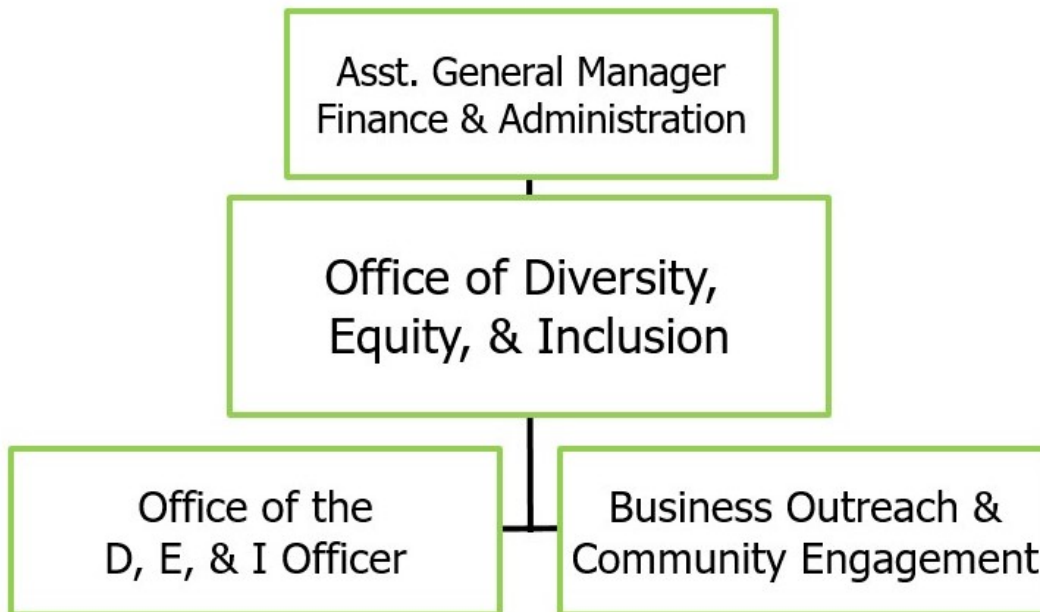
PROGRAMS

Metropolitan's Office of Diversity, Equity & Inclusion was established by the Board in 2021. The Office of DE&I champions, educates and influences the importance and value of a diverse and inclusive work environment and fosters the atmosphere and culture that attracts diverse candidates who can enhance the workplace culture.

The newly established Office of DE&I will also use a diversity, equity and inclusion lens to address disparities existing in the District's contracting and economic development operations and lead the District's approach to effectively engage underserved communities and direct community engagement programs.

Business Outreach & Community Engagement

actively encourages the participation of small, locally-owned, minority-owned, disabled veteran-owned and economically disadvantaged business enterprises, and facilitates business in the solicitation and procurement of construction contracts, professional services agreements, innovation hubs and other agencies. Business Outreach & Community Engagement enhances involvement in new technologies and positions Metropolitan as an international leader in water innovation.



GOALS AND OBJECTIVES

In FY 2022/23 and FY 2023/24, the Office of Diversity, Equity & Inclusion will focus on the following key issues and initiatives:

DE&I Commitment

Normalize conversations around DE&I. Develop, recommend, and implement education and procedures to help management and employees at all levels, in all departments and in all disciplines, embrace and facilitate the mission, goals, strategies and expected outcomes of the Office of DE&I.

Develop DE&I Strategy

In collaboration with the Board, General Manager, Executive Leadership Team and the DE&I Council, create an organization-wide DE&I plan that includes a strategic blueprint of systems, structures and programs where substantial impacts in recruitment, hiring, promotion, contracting and community engagement are realized and measured.

DE&I Training and Workforce Development

Partner with the internal departments to ensure continuous learning and quality improvement regarding DE&I KPI's, metrics, and organizational culture that align with the Metropolitan's DE&I mission and operational plans.

Collaborate with the Human Resources group and EEO Office to create and refine equity-focused leadership development curriculum and educational opportunities, and to provide career advancement pathways for people of color, women and LGBTQ+ staff, as well as focus on inclusive recruitment and retention strategies.

Business Outreach

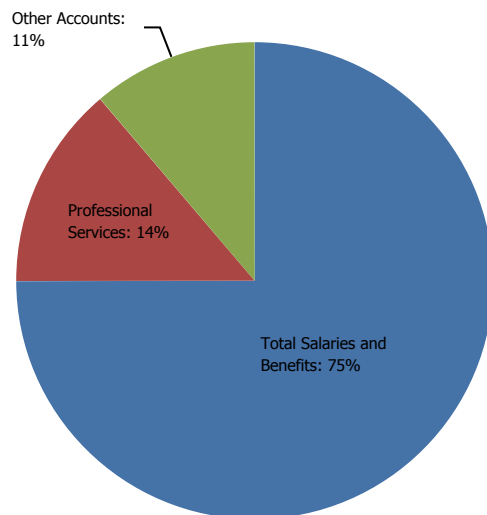
Increase opportunities to encourage small, diverse and emerging businesses to work with and secure contracts with Metropolitan through training, workshops and partnerships with organizations and other outreach to the business community. Identify and develop strategies to reduce core barriers for small and diverse business success and growth, and collaborate with Metropolitan staff to understand, advocate for, and maximize Metropolitan's business outreach policy and resources.

O&M FINANCIAL SUMMARY

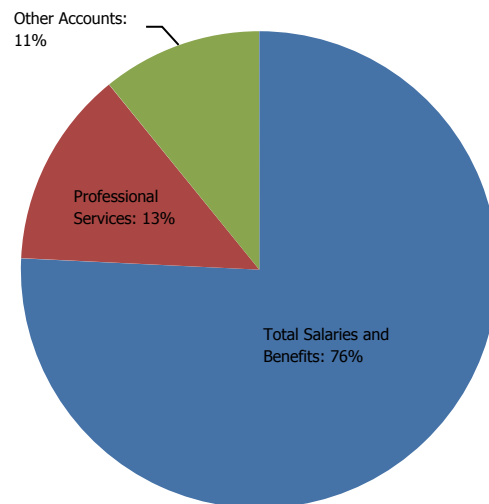
	2020/21 Actual	2021/22 Budget	2022/23 Proposed	Change from 2021/22	2023/24 Proposed	Change from 2022/23
Total Salaries and Benefits	2,012,619	2,044,290	2,901,432	857,142	3,030,572	129,139
<i>Direct Charges to Capital</i>	—	—	—	—	—	—
Total Salaries and Benefits	2,012,619	2,044,290	2,901,432	857,142	3,030,572	129,139
% Change		1.6%		41.9%		4.5%
Memberships & Subscriptions	102,619	50,000	143,443	93,443	143,503	60
Outside Services - Non Professional / Maintenance	48,225	79,600	56,650	(22,950)	56,650	—
Professional Services	143,749	100,000	535,000	435,000	535,000	—
Sponsorships	81,250	150,000	150,000	—	150,000	—
Other Accounts	10,513	78,224	83,570	5,346	83,570	—
Total O&M	2,398,974	2,502,115	3,870,095	1,367,981	3,999,295	129,199
% Change		4.3%		54.7%		3.3%

Totals may not foot due to rounding.

FY 2022/23 BUDGET BY EXPENDITURE

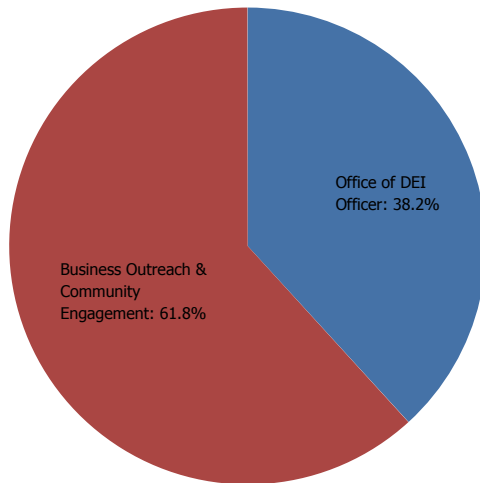


FY 2023/24 BUDGET BY EXPENDITURE

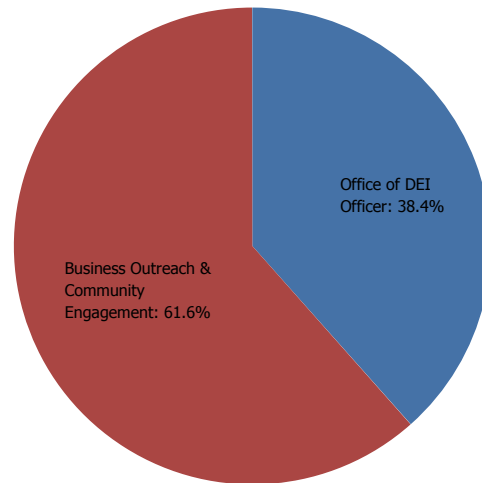


O&M BUDGET BY SECTION

FY 2022/23 BUDGET BY SECTION



FY 2023/24 BUDGET BY SECTION



	2021/22 Budget	2022/23 Proposed	Change from 2021/22	2023/24 Proposed	Change from 2022/23	Personnel Budget		
						21/22	22/23	23/24
Office of DEI Officer	—	1,479,300	1,479,300	1,537,700	58,400	—	4	4
Business Outreach & Community Engagement	2,502,100	2,390,800	(111,300)	2,461,600	70,800	7	6	6
Total O&M	2,502,100	3,870,100	1,368,000	3,999,300	129,200	7	10	10

Totals may not foot due to rounding.

PERSONNEL SUMMARY

		2020/21 Actual	2021/22 Budget	2022/23 Proposed	Change from 2021/22	2023/24 Proposed	Change from 2022/23
Regular	Total	7	7	9	2	9	—
	O&M	7	7	9	2	9	—
	Capital	—	—	—	—	—	—
Temporary	Total	—	—	1	1	1	—
	O&M	—	—	1	1	1	—
	Capital	—	—	—	—	—	—
Total Personnel	Total	7	7	10	3	10	—
	O&M	7	7	10	3	10	—
	Capital	—	—	—	—	—	—

Totals may not foot due to rounding.

BUDGET HIGHLIGHTS

The Diversity, Equity & Inclusion Office's Biennial Budget is \$3.9 million in FY 2022/23 and \$4.0 million in FY 2023/24 or an increase of 54.7% and an increase of 3.3% respectively from the prior budget years. The Salaries and Benefits increase in FY 2023/24 is due primarily to the negotiated labor increases and merit increases for qualified employees. The increase is due primarily to the following:

- New Office of DE&I Officer includes 1 staff transferred over from WSO and 2 new positions requested.
- Business Outreach section transferred from External Affairs to become Business Outreach & Community Engagement section.
- Professional services to support Office's key issues and initiatives.

FY 2022/23

Personnel-Related Issues

Total personnel count is increasing by 2 regular full-time positions from the FY 2021/22 budget to support the formation of Office of the DE&I Officer.

Salaries and benefits reflect proposed negotiated labor increases and merit increases for qualified employees.

Professional Services

Professional services support new Office's key issues and initiatives.

Memberships & Subscriptions

Memberships & Subscriptions are increasing to support the Office's key issues and initiatives.

Other

Other accounts includes training & seminars, conferences & meetings, travel and other expenses necessary to support the new Office of DE&I.

FY 2023/24

Personnel-Related Issues

Total personnel count remains flat with the FY 2022/23 budget. Salaries and benefits reflect proposed negotiated labor increases and merit increases for qualified employees.

Professional Services

Professional services remain flat with the FY 2022/23 budget.

WATER SYSTEM OPERATIONS

Water System Operations reliably treats and delivers high–quality water to Metropolitan’s member agencies in an efficient, sustainable, and environmentally responsible manner.

PROGRAMS

Water System Operations (WSO) treats and delivers water from the Colorado River and the State Water Project (SWP) through a raw water conveyance system, five treatment plants, and an extensive treated water distribution network. This flexible system provides reliable deliveries to the member agencies and moves available supplies and storage reserves to meet Metropolitan’s mission. Water quality remains paramount and all functions focus on surpassing drinking water standards in a safe and economical way.

WSO accomplishes its mission through the following programs or sections:

Office of the Group Manager provides day-to-day operational management as well as strategic and organizational leadership, directing all initiatives and core business efforts of WSO. The office also provides support functions such as budgeting and administration and coordinates and engages in regulatory and legislative activities. The Operations Projects & Asset Management unit provides oversight for the group on capital and operational project delivery, asset management, and member agency service connection requests.

Operations Support Services provides a diverse range of support to Metropolitan’s core operational reliability functions and, on a reimbursable basis, to public entities such as DWR and member agencies. The Manufacturing Services unit performs fabrication, machining, coating, valve and pump refurbishment, underwater maintenance, and crane safety and certification. Construction Services unit performs general construction, large equipment transportation, equipment installation, and emergency response. The Power & Equipment

Reliability unit provides maintenance services which include predictive, preventive, and corrective maintenance analysis for critical equipment, including all treatment plants, pumping plants, hydroelectric power plants, pressure control structures, high voltage equipment, and heating, ventilation, and air conditioning (HVAC) systems.

The Fleet Services unit acquires and maintains vehicles, construction equipment, aircraft, and emergency generators.

Water Treatment operates and maintains five water treatment plants with a combined capacity of over 2.3 billion gallons per day. The section oversees treatment processes to ensure high-quality water is reliably produced that complies with drinking water regulations. All five treatment plants are staffed and operated 24 hours a day, seven days a week to meet about half of Metropolitan’s annual deliveries. All five of the treatment plants (Jensen, Mills, Skinner, Weymouth and Diemer) have been retrofitted to use ozone as the primary disinfectant.

Water Conveyance and Distribution meets delivery requirements of member agencies by moving water into and throughout Metropolitan’s 5,200 square mile service area and performing a wide range of operations and maintenance activities to ensure system reliability. This work encompasses the Colorado River Aqueduct (CRA) system and its five pumping plants as well as the distribution system of about 830 miles of pipelines, approximately 350 service connections to member agencies, 15 hydroelectric plants, and 9 storage and regulatory reservoirs that help Metropolitan meet peak flow periods and provide dry year and

emergency supply reliability. These functions are separated into two sections: one for the desert region, and one for the eastern and western regions of the service area.

Water Quality ensures that Metropolitan provides safe and aesthetically pleasing water through the following activities: conducting chemical and biological analyses; optimizing existing treatment processes; testing new technologies to assure compliance with current and future regulations; and providing technical expertise, laboratory services, and troubleshooting of water quality issues for Metropolitan and its member agencies. Water Quality also works to preserve and improve source water quality through rigorous watershed surveys and advocate for measures to reduce the risk of point and non-point source pollution. The section is also advancing water reuse opportunities through operations and testing at the Regional Recycled Water Advanced Purification Center.

Water Operations and Planning plans and implements the movement and use of water resources. These plans incorporate infrastructure and supply limitations, hydrologic variations, agency demands, changing water quality requirements, and storage program economics. Operational scenarios that encompass a broad range of potential supplies and demands are developed and refined on a weekly basis throughout the year. This process prepares WSO for a wide variety of possible outcomes as the year develops while maintaining reliable deliveries and balancing management of water storage reserves at a reasonable cost.

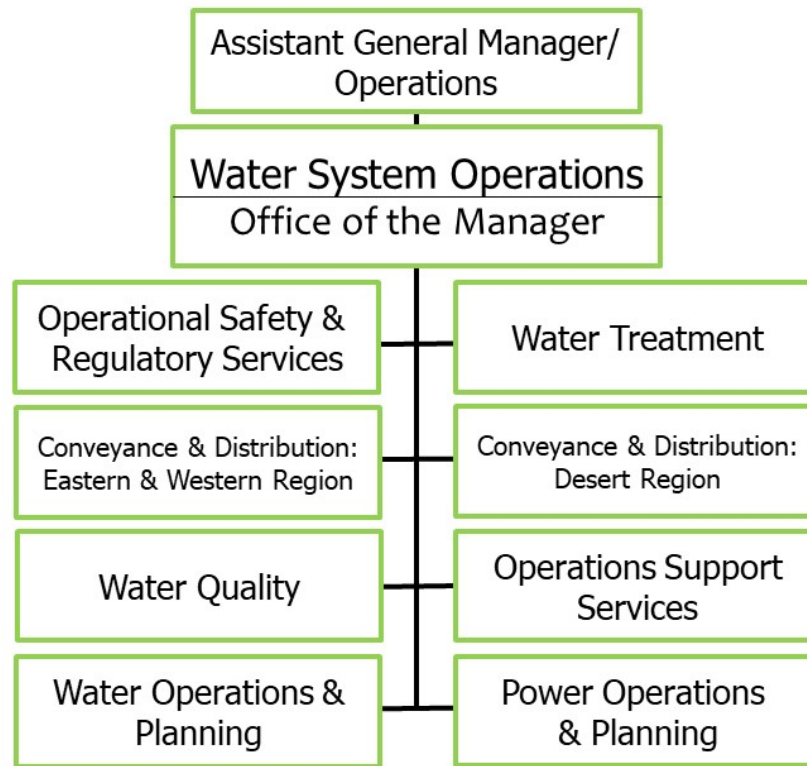
In addition, the section programs and maintains Metropolitan's automated control system, known as the Supervisory Control and Data Acquisition (SCADA) system.

Operational Safety and Regulatory Services is responsible for ensuring a safe working environment for employees through programs and training, ensuring business operations are conducted in an environmentally responsible way, and complying with all regulatory and occupational health and safety regulations and requirements. The section integrates environmental, health and safety practices into Metropolitan's operations and culture with the goal of achieving a safe workplace and eliminating regulatory incidents.

In addition, the section manages technical skills training for maintenance craft employees and sponsors an accredited apprenticeship program which is a cornerstone of WSO's proactive succession planning efforts. This is done by training industrial mechanics and electricians over a four-year period of classroom and hands on instruction.

Power Operations and Planning plans, acquires and accounts for the energy required to operate the CRA. This activity includes energy transactions with electric utilities and marketers. The section also negotiates and manages the contracts and energy accounting of renewable energy credits and greenhouse gas allowances for 15 small hydroelectric power plants and the CRA system.

In addition, the section is responsible for wholesale energy activities including evaluation of proposed energy-related regulations and legislation; analysis of state and regional transmission plans and impacts to the CRA transmission system; and reporting on compliance with regional and national electric reliability standards. Finally, the section works closely with energy staff at DWR on energy and transmission issues for the SWP.



GOALS AND OBJECTIVES

In FY 2022/23 and FY 2023/24, WSO will focus on the following key issues:

System Reliability

Manage and maintain the water system to ensure operational reliability for all reasonably expected demands. Metropolitan enters the biennium amid severe drought conditions that has led to efforts to further expand system flexibility and resilience by developing and implementing new projects and envisioning future projects, that add features to the conveyance and distribution system. These efforts will expand the movement of supplies and storage throughout the service area, with an emphasis on addressing the SWP dependent areas of the system.

Develop and distribute the Annual Operating Plan and manage water storage to provide the greatest delivery flexibility and cost effectiveness. Build on strategies such as employing operational flexibility to mitigate future drought condition impacts on water availability.

Plan, schedule, and execute the Annual Shutdown Plan to ensure reliable operation of the water delivery system, including a strategy to manage longer shutdowns to support the refurbishment of prestressed concrete cylinder pipelines.

Maintain eight-pump flow readiness on the CRA and manage storage accounts to capture all available Colorado River supplies in concert with water supplies from other sources. With member agency and regional partners, develop new water supplies to supplement the core SWP and Colorado River supplies including groundwater recovery, ocean desalination, and potable reuse.

Support the Regional Recycled Water Program by achieving regulatory acceptance for the advanced water treatment process. Conduct demonstration testing and perform optimization studies.

Support the Colorado River Aqueduct Main Pump Reliability Program, including detailed inspections of pumps, components and support systems.

Participate with the California Department of Water Resources (DWR) on value-engineering efforts to ensure cost-effective rehabilitation of SWP conveyance, pumping, and generation facilities.

Fully utilize the manufacturing shops in La Verne to maintain Metropolitan's infrastructure reliability and support projects for DWR and the member agencies.

Partner with Engineering Services and Information Technology groups to implement a comprehensive Asset Management Plan that will maximize the value of infrastructure assets and enhance reliability.

Partner with other groups to implement the Energy Sustainability Plan that will define strategies to increase operational flexibility, and reduce energy costs and greenhouse gas emissions.

Partner with other groups to implement the Energy Sustainability Plan that will define strategies to increase operational flexibility, and reduce energy costs and greenhouse gas emissions.

Continue the multi-year upgrade of the SCADA system to maintain and improve the ability to remotely operate the conveyance, distribution, and treatment systems.

Conduct emergency response exercises involving internal operational groups, member agencies, and other emergency response agencies.

Workforce Development & Succession Planning

Partner with Human Resources for an annual Leadership Academy program to improve internal recruitment pool for entry-level supervisors. Develop and implement targeted training courses for new field managers.

Recruit and begin training a new apprentice class for the mechanical and electrical trades. Support additional workforce development opportunities for the water sector.

Provide continuing education classes for licensed water treatment and distribution operators that are tailored to Metropolitan's procedures and facilities.

Water Quality, Environmental Protection, and Safety

Meet or surpass all drinking water standards and ensure delivery of aesthetically pleasing water.

Engage in the regulatory process to ensure full consideration of technical and economic feasibility for drinking water and environmental regulations. Implement increased laboratory functions to comply with new, stringent laboratory accreditation standards. Monitor for constituents of emerging concern, including PFAS and microplastics.

Engage watershed stakeholders and regulators to ensure effective control of source water contaminants such as uranium, perchlorate, hexavalent chromium, nutrients, and cyanotoxins.

Provide safety and regulatory services to ensure safe work practices and adhere to environmental and workplace health and safety regulations. Partner with the National Safety Council to identify and implement areas for improvement of the health and safety program, building upon prior efforts to continuously improve. Apply necessary workplace safety practices amid the continuing COVID-19 pandemic.

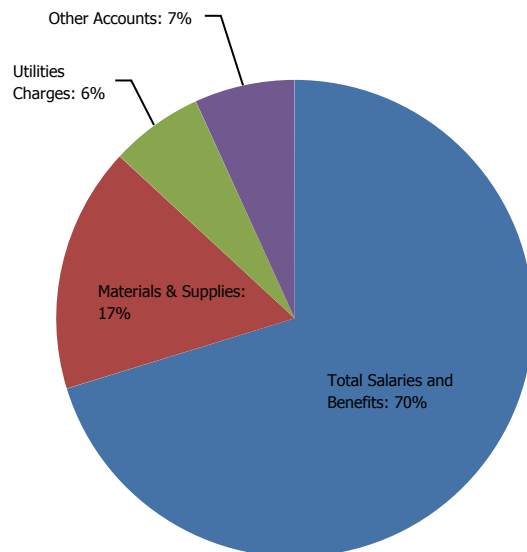
Continue effective management and monitoring of quagga mussels throughout Metropolitan's water system. Partner with DWR for monitoring quagga mussels in the west and east branches of the State Water Project and prepare quagga mussel control plans.

O&M FINANCIAL SUMMARY

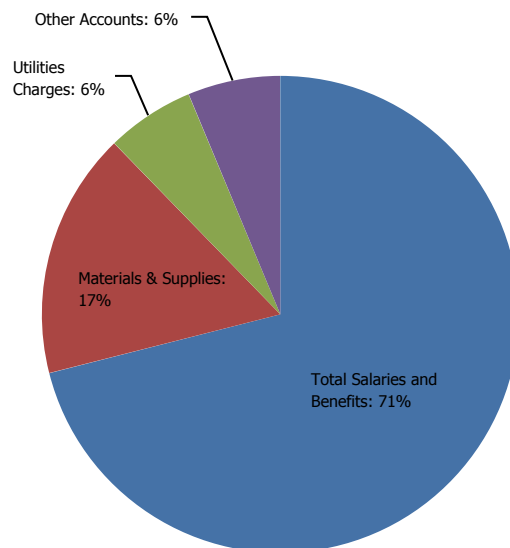
	2020/21 Actual	2021/22 Budget	2022/23 Proposed	Change from 2021/22	2023/24 Proposed	Change from 2022/23
Total Salaries and Benefits	191,615,334	209,058,267	212,267,843	3,209,577	220,454,060	8,186,216
Direct Charges to Capital	(10,114,740)	(8,951,284)	(9,246,454)	(295,171)	(9,619,320)	(372,865)
Total Salaries and Benefits	181,500,594	200,106,983	203,021,389	2,914,406	210,834,740	7,813,351
% Change		10.3%		1.5%		3.8%
Materials & Supplies	39,463,050	46,279,592	48,095,815	1,816,223	49,535,958	1,440,143
Outside Services - Non Professional / Maintenance	7,560,867	7,187,613	7,713,509	525,896	7,761,452	47,943
Utilities Charges	12,653,308	16,364,471	18,197,576	1,833,105	17,766,850	(430,726)
Other Accounts	9,267,514	10,683,464	11,968,304	1,284,840	10,862,777	(1,105,527)
Total O&M	250,445,333	280,622,123	288,996,593	8,374,470	296,761,777	7,765,184
% Change		12.0%		3.0%		2.7%
Operating Equipment	4,778,164	6,000,000	7,356,062	1,356,062	8,000,571	644,509
Total O&M and Operating Equipment	255,223,497	286,622,123	296,352,655	9,730,532	304,762,348	8,409,693
% Change		12.3%		3.4%		2.8%

Totals may not foot due to rounding.

FY 2022/23 BUDGET BY EXPENDITURE

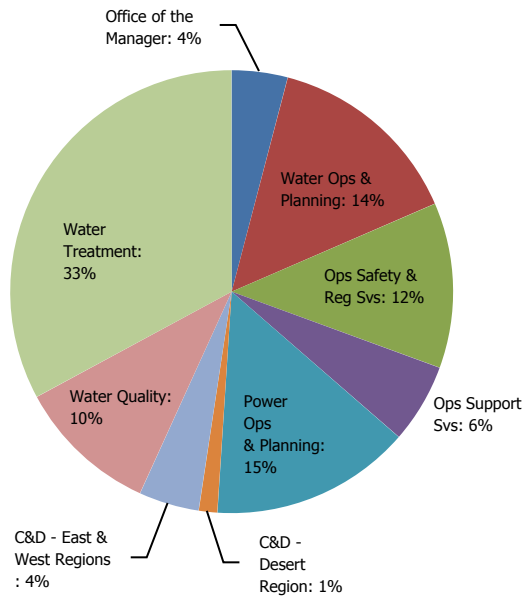


FY 2023/24 BUDGET BY EXPENDITURE

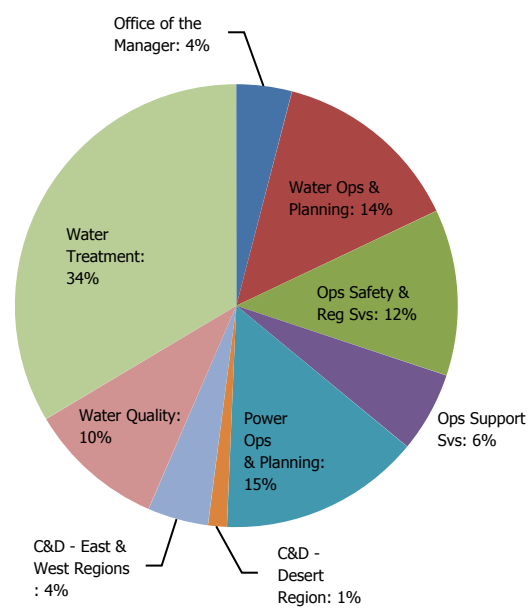


O&M BUDGET BY SECTION

FY 2022/23 BUDGET BY SECTION



FY 2023/24 BUDGET BY SECTION



	2021/22 Budget	2022/23 Proposed	Change from 2021/22	2023/24 Proposed	Change from 2022/23	Personnel Budget		
						21/22	22/23	23/24
Office of the Manager	9,793,300	11,801,900	2,008,600	12,043,100	241,300	21	22	22
C&D Section - Eastern & Western Regions	38,859,100	41,688,900	2,829,900	41,284,000	(404,900)	133	131	131
C&D Section - Desert Region	32,961,300	34,916,900	1,955,600	36,007,500	1,090,600	134	133	134
Operational Safety and Regulatory Services	16,414,100	16,776,000	362,000	17,437,100	661,100	51	50	50
Operations Support Services	39,408,200	42,332,200	2,924,000	43,664,100	1,331,900	150	154	154
Power Operations and Planning	3,800,400	3,891,300	90,800	4,056,700	165,400	12	11	11
Water Operations and Planning	12,716,200	12,747,800	31,600	13,155,900	408,100	40	38	38
Water Quality	29,428,000	29,858,100	430,100	29,593,600	(264,600)	102	102	102
Water Treatment	97,241,600	94,983,500	(2,258,100)	99,519,800	4,536,300	267	267	267
Total O&M	280,622,100	288,996,600	8,374,500	296,761,800	7,765,200	910	909	910

Totals may not foot due to rounding.

PERSONNEL SUMMARY

		2020/21 Actual	2021/22 Budget	2022/23 Proposed	Change from 2021/22	2023/24 Proposed	Change from 2022/23
Regular	Total	884	940	939	(1)	939	—
	O&M	845	894	893	(1)	893	—
	Capital	39	46	46	0	46	—
Temporary	Total	20	16	16	0	17	1
	O&M	19	16	16	0	17	1
	Capital	1	—	—	—	—	—
Total Personnel	Total	904	956	955	(1)	956	1
	O&M	865	910	909	(1)	910	1
	Capital	39	46	46	0	46	—

Totals may not foot due to rounding

BUDGET HIGHLIGHTS

WSO's O&M and Operating Equipment Biennial Budget is \$296.4 million in FY 2022/23 and \$304.8 million in FY 2023/24 or an increase of 3.4% and an increase of 2.8%, respectively from the prior year budgets. The main factors affecting these changes:

- Significant increases in chemical commodity prices, raised the expected chemical costs for water treatment.
- An increase in vendor pricing in all areas due to increasing fuel and labor costs.
- An increase in hazardous waste abatement costs expensed to O&M as a result of capital projects for Weymouth Basin Remediation and CRA rehabilitation.
- An increase in professional consulting services to support the next phase of testing at the Advanced Purification Center and the Environmental Planning phase of the Regional Recycled Water Program.
- An increase in Electricity costs due to planned continuous operation at the Greg Avenue pump station in FY 2022/23 to manage available supplies and help mitigate drought conditions.
- These increases are offset in part by a reduction in Agency and District Temp labor, Memberships & Subscriptions, and Travel expenses by taking advantage of greater availability for virtual training and conferences.

The following are the significant changes by budget year.

FY 2022/23

Personnel–Related issues

The number of regular positions reduced by one from the FY 2021/22 budget to support other district initiatives. This is in contrast to the need for additional staff in WSO to accomplish several key initiatives, such as the Regional Recycled Water Program, increased safety and regulatory compliance programs, system and drought

resiliency programs, and numerous reliability projects and programs in the Desert, among others.

Agency Temp labor needs are anticipated to decrease due to the filling of vacant regular positions. There was a reduction of District Temp student interns across WSO to meet budgetary

goals, which will lead to some desert and water treatment facility tasks, such as weed abatement and general maintenance to be deferred or require existing full time employees to complete at the expense of other O&M duties.

Organizational changes were made to better support business objectives, including addressing aging infrastructure and major rehabilitation programs, increased regulatory and compliance requirements, new strategic initiatives as well as workforce development efforts.

Refinements to the organizational structure were implemented to better serve changing operational needs and address gaps in high priority areas. These refinements focused on implementing asset management processes, addressing the need for improved power planning and NERC compliance, advancing CRA reliability and rehabilitation efforts, and meeting growing needs in the area of environmental health and safety.

Organizational refinements in the Water Quality Section help to prepare for new regulations addressing laboratory standards, and to advance potable reuse initiatives through operations and testing at the Regional Recycled Water Advanced Purification Center.

Salaries and Benefits reflect proposed negotiated labor increases and merit increases for qualified employees.

Materials and Supplies

The budget reflects inflationary pressure anticipated on chemicals and other materials and supplies.

Professional Services

The budget reflects an increase in consultant services required to support demonstration testing and technical studies for the environmental planning phase for the Regional Recycled Water Program as well as strategic development of the Asset Management Program.

Non-Professional Services

The budget reflects inflationary increases in labor and fuel costs for services provided in this category such as janitorial, pest control, and inspection services.

In addition, costs for compliance-related contract services increased for environmental and safety equipment, as well as energy regulatory compliance activities for power operations.

Utilities Charges

The budget reflects an increase in waste disposal costs from facility R&R projects and an increase in expected electrical rates. Due to drought conditions, pumping at the Greg Avenue facility is anticipated for the majority of the year increasing electricity costs.

Other

A switch to high capacity circuits resulted in a reduction in Communications Expenses by reducing the amount and types of communications lines needed for both data and phone traffic.

FY 2023/24

Personnel–Related issues

Regular personnel count for both O&M and capital work remain unchanged from the FY 2022/23 budget. This is in contrast to the need for additional staff in WSO to accomplish key initiatives, such as the Regional Recycled Water Program, increased safety and regulatory compliance programs, system and drought resiliency programs, and numerous reliability projects and programs in the Desert, among others.

Temporary labor needs were reduced to meet budgetary goals including continued deferment of WSO student intern positions, which will lead to some desert and water treatment facility tasks, such as weed abatement and general maintenance to be deferred or require existing full time employees to complete at the expense of other O&M duties. .

Refinements to the organizational structure continued to be implemented to better serve the changing operational needs and address gaps in high priority areas. Focus areas include asset management and maintenance management processes, CRA reliability and rehabilitation efforts and aging infrastructure needs.

Salaries and Benefits reflect proposed negotiated labor increases and merit increases for qualified employees.

Materials & Supplies

The budget reflects inflationary pressures anticipated on chemicals, fuel pricing and other materials and supplies.

Non-Professional Services

The budget reflects inflationary increases in labor and fuel costs for services provided in this category such as janitorial, pest control, and inspection services. In addition, costs for compliance-related contract services increased for environmental and safety equipment.

Utilities Charges

The budget reflects an increase in waste disposal costs from facility R&R projects and an increase in expected electrical rates. The overall decrease in utilities is due to pumping at the Greg Avenue facility anticipated for only half of the year.

Other

Includes a reduction in consultant services required to support demonstration testing and technical studies as the environmental planning phase for the Regional Recycled Water Program nears completion.

Operating Equipment – FY 2022/23 and FY 2023/24

The operating equipment budget is maintained to replace aging fleet, construction equipment, laboratory instruments, and other equipment to support the safe and reliable delivery of water. Increased amount reflects inflationary pressures in pricing and the culmination of aging equipment that is at the end of its useful life.

INFORMATION TECHNOLOGY

Information Technology provides innovation and outstanding value to its customers for a wide range of technical services and enterprise business solutions.

PROGRAMS

Information Technology provides innovation and value to its customers for a wide range of technical services and enterprise business solutions. The group collaboratively works with customers to deliver information technology options, services, and solutions in the areas of enterprise and business applications, Engineering Services and Water System Operations applications, data analytics, mobile/wireless computing, telecommunications, network services, cybersecurity, project management and personal computing.

Office of Group Manager oversees the management of the Information Technology (IT) group by providing strategic leadership on initiatives and capital investments to improve operational efficiencies, enhance reliability & cybersecurity capabilities, and deliver innovative options and solutions.

Cybersecurity focuses on security standards and policies to enhance Metropolitan's cybersecurity posture and to ensure protection against evolving and increasing cyber threats.

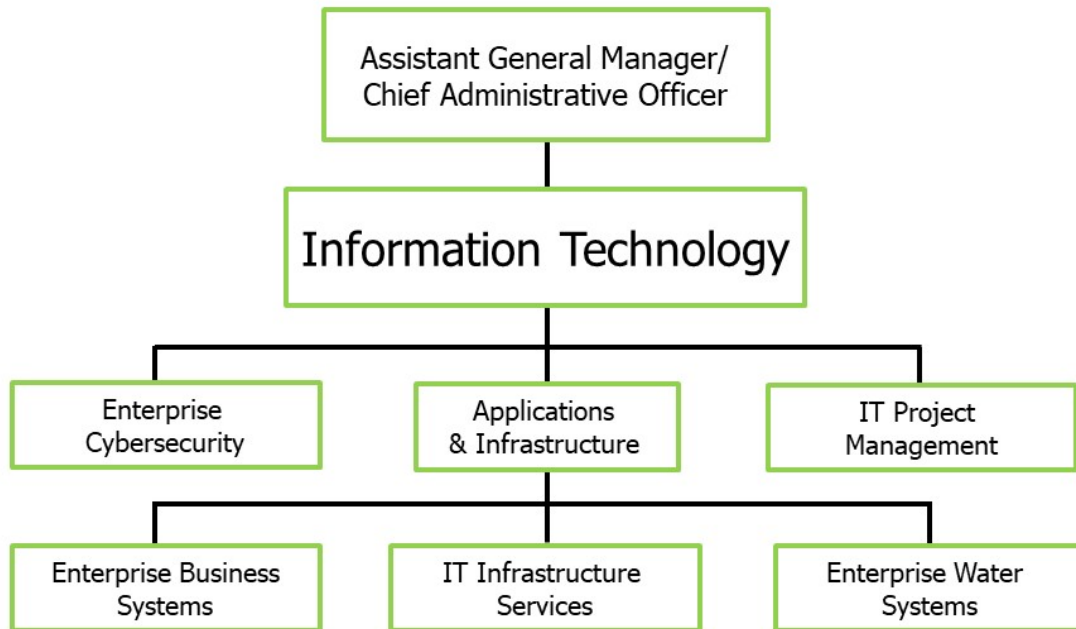
Project Management Office is responsible for the overall governance and project management of the IT program and project portfolio.

Office of IT Section Manager manages and supports IT business and service areas related to IT infrastructure, enterprise business and water systems.

IT Infrastructure monitors, manages, and maintains Metropolitan's enterprise-wide infrastructure services related to telecommunications, networks, servers, data center operations, and related client services.

Enterprise Business Systems develops and supports enterprise and business software applications and business intelligence systems.

Enterprise Water Systems provides services, solutions, and systems that support business functions in Engineering Services and Water Systems Operations.



GOALS AND OBJECTIVES

In FY 2022/23 and FY 2023/24, IT will focus on initiatives and projects that will enhance service reliability, improve resiliency, and improved workplace efficiency.

Key projects in support of strategic priorities include:

- Complete Data Center Modernization
- Implement Cybersecurity Operations Center
- Continue Cloud First Technology
- IT Capital Investment Plan
 - SCADA Control System
 - Replace end-of-life systems
 - IT Infrastructure Upgrades

Business Technology & Process Enhancement

In the prior biennium, the IT Group completed a number of key projects and initiatives providing the foundation for Metropolitan’s move to the cloud. This transformation to cloud computing will enhance productivity, streamline business

processes, enhance resiliency, reliability and security, and mitigate costs for the organization.

During the FY 2022/23 and FY 2023/24 biennium, IT will continue to implement projects in support of Metropolitan’s strategic initiatives, including strengthening Metropolitan’s cybersecurity capabilities by deploying new and emerging technologies and implementing a new security operations center, along with completing the data-center modernization project which will mitigate risks while enhancing IT infrastructure to support critical operations and deliver greater resiliency.

In addition, the planned technology upgrades will provide greater visibility and consolidation of IT costs and performance.

Information Systems Upgrades and Projects

IT continues to collaborate with business areas to enhance the capabilities of systems that achieve Metropolitan’s operational goals and objectives. The following key projects include IT deliverables

that add value to the enterprise while delivering innovative solutions.

Data Center Modernization Project

Provides an upgrade of Metropolitan's data center(s) to meet current and future needs while enhancing our resiliency and redundancy capabilities.

Water Information Systems (WINS)

The WINS upgrade will include much needed enhancement features to Metropolitan's water billing system to allow for automation and increased mobile functionality.

The Enterprise Data Analytics Project

The Enterprise Data Analytics Project will develop a data and analytics strategy, implement best practices, and engage Metropolitan stakeholders on a technology blueprint to serve the data analytics needs of Metropolitan business groups.

Water Systems Control Master Plan

The Water Systems Control Master Plan provides a road map to fully coordinate and further protect the operational and business investments of Metropolitan's SCADA systems. The master plan defines a multi-phased approach for replacing/upgrading the control system critical to Metropolitan's operations, water delivery, water quality, and infrastructure monitoring.

AMR System RTUs and Radio Modem Upgrade

Project phases include the upgrade of the Automatic Meter Reader (AMR) system, implementation of radio modems, and replacement of the Remote Terminal Units (RTUs) in support of updating obsolete equipment.

Enterprise Content Management (ECM)

Continue to partner with Administrative Services on the ECM project for the implementation of an ECM application and for the optimization of digital assets on Metropolitan's network storage devices.

Once fully implemented, the ECM system will provide a framework for collaboration, automation, and enhancements of core business processes.

Wireless Network Infrastructure

Continue deployment of upgrades to improve the reliability, performance, and capacity of Metropolitan's wireless network infrastructure comprising microwave radio wide-area networks (WANs) and wireless access point local-area networks (LANs).

Fuel Management System Upgrade

Fuel Management System Upgrade seeks to upgrade the system that enables management controls over fuel inventories, dispensing, and security to ensure operability, vendor support, and system reliability at Metropolitan facilities as a continuation of the refurbishment initiative.

Maximo Mobile Computing Upgrade

Maximo Mobile Computing Upgrade aims to replace existing mobile devices, used in Water Systems Operations, with mobile technology. This effort will enhance access to business information and vastly increase the functionality of the existing equipment.

Cybersecurity Project

The Cybersecurity Project will assess and remediate potential vulnerabilities and evolving cyber threats with an emphasis on implementing a security operations center (SOC) at Metropolitan.

Asset Monitoring and Management System

As part of the infrastructure reliability objective, the Asset Monitoring and Management System project seeks to develop a common framework to manage condition monitoring across Metropolitan's operations.

Payroll/Timekeeping

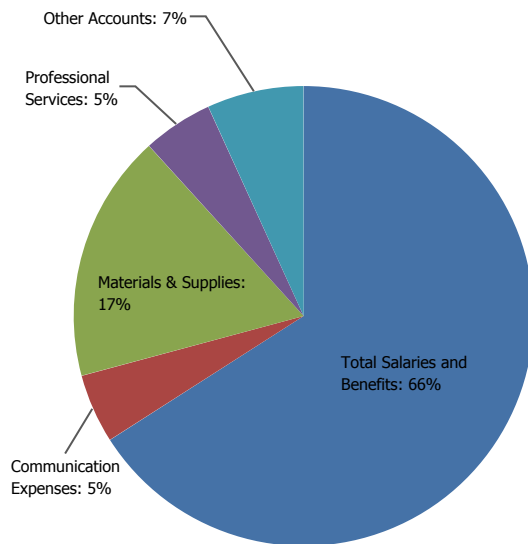
The Payroll/Timekeeping project seeks to upgrade and enhance PeopleSoft payroll and replace the current timekeeping software with a package that integrates with the payroll system and provides for ease-of-use interface for customers.

O&M FINANCIAL SUMMARY

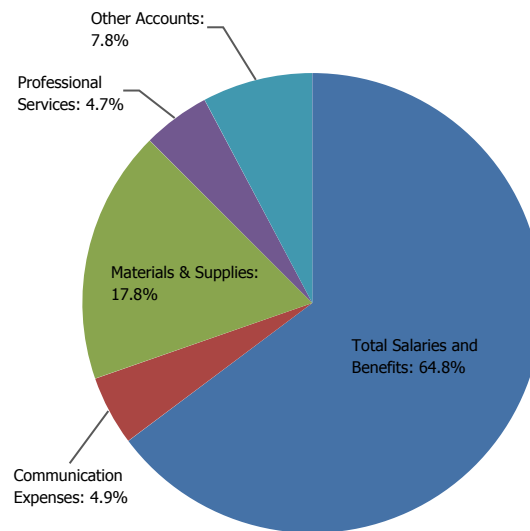
	2020/21 Actual	2021/22 Budget	2022/23 Proposed	Change from 2021/22	2023/24 Proposed	Change from 2022/23
Total Salaries and Benefits	32,791,961	33,340,537	35,296,616	1,956,079	36,472,999	1,176,383
Direct Charges to Capital	(2,643,640)	(1,490,986)	(1,675,060)	(184,074)	(1,731,640)	(56,580)
Total Salaries and Benefits	30,148,321	31,849,551	33,621,556	1,772,006	34,741,359	1,119,803
% Change		5.6%		5.6%		3.3%
Communication Expenses	2,190,086	2,060,370	2,477,800	417,430	2,629,200	151,400
Materials & Supplies	7,036,299	9,117,200	8,893,584	(223,616)	9,569,481	675,897
Outside Services - Non Professional / Maintenance	290,236	1,080,300	1,137,000	56,700	1,211,400	74,400
Professional Services	988,543	2,864,126	2,511,000	(353,126)	2,538,700	27,700
Repairs & Maintenance - Outside Services	941,092	1,643,700	1,766,500	122,800	2,324,500	558,000
Other Accounts	1,282,438	1,024,760	566,160	(458,600)	626,160	60,000
Total O&M	42,877,016	49,640,007	50,973,600	1,333,593	53,640,800	2,667,200
% Change		15.8%		2.7%		5.2%
Operating Equipment	589,989	528,100	244,013	(284,087)	181,385	(62,629)
Total O&M and Operating Equipment	43,467,005	50,168,107	51,217,613	1,049,506	53,822,185	2,604,571
% Change		15.4%		2.1%		5.1%

Totals may not foot due to rounding.

FY 2022/23 BUDGET BY EXPENDITURE



FY 2023/24 BUDGET BY EXPENDITURE



PERSONNEL SUMMARY

		2020/21 Actual	2021/22 Budget	2022/23 Proposed	Change from 2021/22	2023/24 Proposed	Change from 2022/23
Regular	Total	120	130	131	1	131	—
	O&M	112	123	125	2	125	—
	Capital	8	7	6	(1)	6	—
Temporary	Total	8	2	4	2	4	—
	O&M	6	2	4	2	4	—
	Capital	2	—	—	—	—	—
Total Personnel	Total	128	132	135	3	135	—
	O&M	119	125	129	4	129	—
	Capital	10	7	6	(1)	6	—

Totals may not foot due to rounding.

BUDGET HIGHLIGHTS

The Information Technology O&M biennial budget supports the need for Metropolitan to remain resilient, sustainable and innovative. This budget includes key investments on risk mitigation (cybersecurity), infrastructure replacement and refurbishment (data center relocation and modernization), transition to cloud-based computing and deployment of innovative technologies to support business process improvements.

Information Technology's biennial O&M and Operating Equipment budget is \$51.2 million in FY 2022/23 and \$53.8 million in FY 2023/24 or an increase of 2.1% and an increase of 5.1% respectively from the prior budget years. The changes are due primarily to the following key factors:

- Salaries and Benefits reflect proposed negotiated labor increases and the increase of one position in FY 2022/23 to support key cybersecurity initiatives.
- Services within this biennial budget include costs associated with datacenter modernization to mitigate risk to Metropolitan while providing greater redundancy and resiliency capabilities.
- As part of the Cloud First strategy, this biennial budget includes on-going cloud services and consulting to facilitate the transforming of IT services to the cloud environment.
- Increases in communication expenses include co-location (for redundancy and resiliency), cloud-based connections, and new redundant circuits for field locations and increased capacity (bandwidth) to support Metropolitan's operational needs.
- Strengthen Metropolitan's cybersecurity capabilities by implementing a new security operations center and deploy new and emerging technologies to enhanced Metropolitan's cybersecurity countermeasures capabilities.
- Initiate end-of-life replacement/upgrade of the control system critical to Metropolitan's operations, water delivery, water quality, and infrastructure monitoring.

The following are significant changes by budget year:

FY 2022/23

Personnel-Related matters

Total personnel count increased from 130 to 131 FTEs for the FY 2022/23 budget, reflecting the increase of one FTE. to support key cybersecurity initiatives. District temporary increased by 2 FTEs to support cloud security administration, server administration, and increasing demand for IT services (UAV / drone missions).

Salaries and Benefits reflect proposed negotiated labor increases and merit increases for qualified employees.

Professional Services

No significant change in professional services. The budget reflects IT support for critical on-call services for application enhancements, transition to cloud-based computing and other strategic IT priorities.

Communication Expenses

The budget reflects increases in communication expenses including co-location (for redundancy and resiliency), cloud-based connections, and new circuits for field locations and increased capacity (bandwidth) to support Metropolitan's operational needs.

FY 2023/24

Personnel-Related issues

Total regular personnel for O&M remained at 131 for the FY 2023/24 budget. Salaries and Benefits reflect proposed negotiated labor increases.

Professional Services

No significant budget change in professional services for FY 2023/24.

Equipment Expensed

The budget decrease from FY 2021/22 reflects the completion of the PC Replacement Project and the transition to on-going support and replacement of break-fixes.

Materials and Supplies

No significant change in repairs and maintenance for FY 2022/23. Maintained flat budget.

Repairs and Maintenance

Increases to the budget for repairs and maintenance are attributed to hardware equipment (servers) coming off warranty, new Board Room A/V equipment, and expansion of Metropolitan network (FW).

Non-Professional Services

No significant change in repairs and maintenance for FY 2022/23. Maintained flat budget.

Communication Expenses

The budget increase in communication expenses includes inflationary factors and new circuits to improve Metropolitan's operational resiliency.

Equipment Expensed

No significant change in equipment expensed for FY 2023/24.

Materials and Supplies

The budget reflects inflationary increases for software licensing/support agreements, and continued transformation to cloud computing and the increased consumption of cloud services.

Repairs and Maintenance

Increases to the budget for repairs and maintenance are attributed to in-region and out-of-region datacenters, and associated hardware maintenance for servers, networking equipment, routers and switches supporting the business and SCADA networks.

Non-Professional Services

No significant change in repairs and maintenance for FY 2022/23. Maintained flat budget.

Operating Equipment - FY 2022/23 and FY 2023/24

The operating equipment budget reflects the critical replacement of IT equipment that has reached end-of-life, including hardware (servers and storage devices), and GIS-Workstations to supporting Metropolitan operations.

The operating equipment budget continued to decrease in FY 2022/23 and 2023/24 and is primarily attributed to fewer server replacements due to the Cloud First Technology approach. In addition to the reduction of physical servers, corresponding reductions of storage (SAN) requirements also reduces operating equipment expenses.

REAL PROPERTY

Real Property applies strategic approaches to the acquisition, management and protection of Metropolitan's real property assets, and seeks to effectively optimize revenues and control land management costs.

PROGRAMS

Real Property accomplishes its mission through the following programs or organizations:

Office of the Group Manager includes Business Management, Planning & Acquisition, Property Management, and Asset Management. The Group Manager directs the group's efforts in planning acquiring, and managing Metropolitan's real property assets; is responsible for the development of real property policies and strategies to centralize Metropolitan's land activities to ensure properties are maintained, secured, and protected for present and future needs.

Business Management monitors and tracks the group's business plan, financial and budgetary initiatives; and provides administrative and business process support. In addition, the Team handles property tax payments, lease payments, provides contract support, and board letter and report coordination.

Planning & Acquisition is responsible for right of way planning and acquisition of real property and

real property rights for future conveyance and distribution programs and existing infrastructure rehabilitation programs. The unit is also responsible for the disposition of surplus properties.

Property Management is responsible for managing Metropolitan's real property assets, processing requests for secondary uses of real property and identification of properties that are excess to Metropolitan's needs. In addition, the Unit is responsible for the protection of Metropolitan's real property including site inspections, trespass and encroachment resolution.

Asset Management is responsible for management of Metropolitan's headquarters facility, the DVL Visitor Center and provides management and maintenance of employee housing.



GOALS AND OBJECTIVES

In FY 2022/23 and FY 2023/24, Real Property will focus on the following key issues:

Centralized Management of Metropolitan's Real Property Assets

Continue with a centralized management approach of Metropolitan's real property assets to ensure properties are regularly maintained, secured and protected for present and future needs.

Continue and complete the managerial reorganization of employee housing to the Real Property Group.

Implement and test a staffing plan, a maintenance/replacement schedule and cost estimates for the property management of approximately 100 desert housing units.

Continue to budget, administer, and provide property and facility management services for the leased office space in Sacramento, Washington DC, and San Diego.

Continue facility management direction and logistical support throughout the Union Station Headquarters Improvement Project.

Real Property Asset Protection & Stewardship

Monitor legislation regarding eminent domain, relocation assistance, and public agency real estate acquisition and appraisal practices.

Provide timely and suitable responses to property adjacent projects, land developments, and environmental proceedings.

Complete property management and right-of-way operating policies to reflect contemporary best practices.

Implement a new web-enabled right of way software and property management solution to improve processes to monitor financial compliance with terms and conditions of licensing and leasing agreements such as invoicing, insurance coverage, and accounts receivable.

Develop a staffing and implementation plan to detect and address right-of-way encroachments upon Metropolitan properties with a collaborative cross-functional approach to prioritize and remediate the highest risk conditions. Complete annual reviews to identify properties that are excess to Metropolitan's needs, and bring information to the Board for action to declare those properties surplus.

Coordinate a monthly cross-functional Property Review Council to review land-use requests by public and private entities to ensure Metropolitan's rights-of-way, facilities, environmental reserves and water quality are protected.

Complete annual site inspections of conveyed property to identify and correct any conditions in conflict with terms and conditions of the conveyance agreements.

File possessory tax reports and tax payments to appropriate counties on time.

Bay Delta Properties

Complete and start implementation of a specific comprehensive Land Management Plan to optimize use and best land owner management practices.

Maximize utilization of the 20,000 acres of agricultural lands and revenue-leases purchased in the Delta to offset costs of land ownership.

Ensure Water Reclamation District assessments, local property taxes and coalition fees are paid on time.

Provide support to the Delta conveyance and habitat rehabilitation efforts.

Palo Verde Valley Properties

Complete and start implementation of a specific comprehensive Land Management Plan to optimize use and best land owner management practices.

Manage Metropolitan's 29,000 acres of agricultural lands and revenue-leases to encourage a vibrant farming economy, water conservation, and to offset costs of land ownership.

Ensure Palo Verde Irrigation District water tolls, local property taxes, and coalition fees are paid by

the farmers and lease-holders on time.

Diamond Valley Lake Recreation and Management

Identify infrastructure improvements as part of the Diamond Valley Lake Recreation capital appropriation. These projects will enhance recreational opportunities and promote economic self-sustainability.

Explore marina and other recreational opportunities to expand lease revenues, and collaborate with the stakeholders of the DVL Recreation Area Memorandum of Intent.

Identify additional DVL land considered excess to Metropolitan's needs, and bring to the Board for action to declare those properties surplus.

Right of Way Planning, Acquisition & Disposition

Provide right-of-way planning and acquisition of real property and real property rights, including appraisal and relocation services, for future conveyance and distribution programs and infrastructure rehabilitation programs. These include the Regional Recycled Water Program, Right of Way & Infrastructure Protection Program and the Prestressed Concrete Cylinder Pipeline Rehabilitation Program.

Other projects include the CRA Reversionary Interest that is tied to the 1932 Act, which supports water supply reliability. Lastly, services include disposition of surplus properties.

Facility & Energy Management

Continue to optimize the cost of maintaining Metropolitan's headquarters building and DVL Visitor's Center while supporting Metropolitan's sustainability initiatives established by the Building Owners and Managers Association and EPA's voluntary ENERGY STAR program.

Execute a multi-year strategic approach to manage critical rehabilitation projects at Metropolitan's Headquarters as the equipment, components, and furnishings reach the end of their useful life cycle.

Complete an architectural plan and begin implementation to paint, carpet, and replace cubicle/modular furniture on all floors of the Headquarters facility.

Continue to manage employee relocations during the construction phase of the Union Station Headquarters Improvement Project.

Complete a multi-year plan, implemented in the prior budget cycle, to replace asphalt and pavement at DVL recreation areas and roads.

Workforce Development & Succession Planning

Expand knowledge, skills, and abilities of staff through training, succession planning, and educational workshops.

Engage with local universities and professional societies to promote Metropolitan employment opportunities.

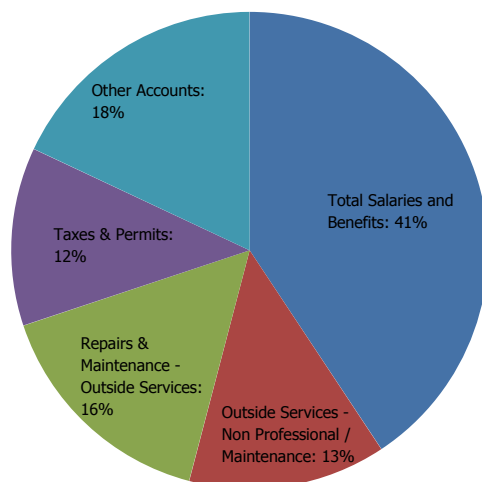
Collaborate with public agencies to identify areas where consistent real property best practices can be applied.

O&M FINANCIAL SUMMARY

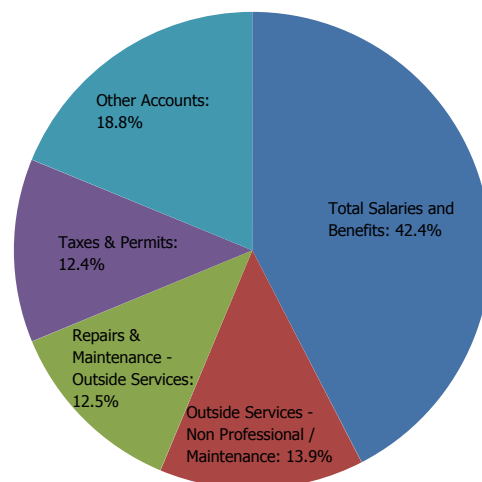
	2020/21 Actual	2021/22 Budget	2022/23 Proposed	Change from 2021/22	2023/24 Proposed	Change from 2022/23
Total Salaries and Benefits	11,283,075	13,521,011	13,433,727	(87,284)	14,060,616	626,889
<i>Direct Charges to Capital</i>	<i>(893,666)</i>	<i>(1,939,027)</i>	<i>(557,084)</i>	<i>1,381,943</i>	<i>(607,753)</i>	<i>(50,669)</i>
Total Salaries and Benefits	10,389,409	11,581,984	12,876,643	1,294,660	13,452,863	576,220
% Change		11.5%		11.2%		4.5%
Materials & Supplies	1,180,954	788,900	1,118,100	329,200	1,118,600	500
Outside Services - Non Professional / Maintenance	3,136,346	4,149,200	4,241,100	91,900	4,402,300	161,200
Professional Services	601,769	1,311,600	1,221,025	(90,575)	1,394,251	173,226
Rent & Leases	1,008,396	1,138,851	1,179,700	40,849	1,226,500	46,800
Repairs & Maintenance - Outside Services	2,437,276	3,492,000	5,002,500	1,510,500	3,951,500	(1,051,000)
Taxes & Permits	5,724,132	6,346,718	3,828,000	(2,518,718)	3,943,000	115,000
Utilities Charges	1,254,298	1,834,800	1,742,000	(92,800)	1,742,000	—
Other Accounts	300,587	469,980	441,510	(28,470)	462,560	21,050
Total O&M	26,033,165	31,114,033	31,650,579	536,546	31,693,575	42,996
% Change		19.5%		1.7%		0.1%
Operating Equipment	7,122	21,000	503,170	482,170	—	(503,170)
Total O&M and Operating Equipment	26,040,287	31,135,033	32,153,749	1,018,716	31,693,575	(460,174)
% Change		19.6%		3.3%		(1.4%)

Totals may not foot due to rounding.

FY 2022/23 BUDGET BY EXPENDITURE



FY 2023/24 BUDGET BY EXPENDITURE



PERSONNEL SUMMARY

		2020/21 Actual	2021/22 Budget	2022/23 Proposed	Change from 2021/22	2023/24 Proposed	Change from 2022/23
Regular	Total	48	53	55	2	55	—
	O&M	44	46	52	7	52	—
	Capital	4	8	3	(5)	3	—
Temporary	Total	2	7	5	(2)	5	—
	O&M	2	5	5	—	5	—
	Capital	—	2	—	(2)	—	—
Total Personnel	Total	51	60	60	0	60	—
	O&M	46	50	57	7	57	—
	Capital	4	10	3	(7)	3	—

Totals may not foot due to rounding.

BUDGET HIGHLIGHTS

Real Property's O&M and Operating Equipment Biennial Budget is \$32.2 million in FY 2022/23 and \$31.7 million in FY 2023/24 or an increase of 3.3% and a decrease of 1.4%, respectively from the prior budget years. The main factors affecting these changes:

- Expanded responsibilities for the group, including the management, maintenance and construction of Employee District Housing and recreation areas throughout the service area.
- Large maintenance and repair projects at Metropolitan's USHQ Facility, DVL Visitor Center and property structures in the Bay Delta and Palo Verde Valley.
- Significant efforts related to encroachment remediation, appraisal and marketing of surplus properties, and office relocation services during the Union Station Headquarters Improvement Project.

The following are the significant changes by budget year:

FY 2022/23

Personnel-Related Issues

Total personnel count is increasing by two regular full time positions offset by a reduction of 2 temporary FTEs from the FY 2021/22 budget. These positions are necessary to support critical district housing projects and land protection projects.

Capital labor allocation reflects a decrease from FY 2021/22 as a result of the completion of some projects related to the Union Station Headquarters Improvement Project, the USHQ Fire Alarm replacement, and Desert Village enhancements.

Salaries and benefits reflect proposed negotiated labor increases and merit increases for qualified employees.

Non-Professional Services

The budget reflects an increase from the FY 2022/23 budget as a result of an increase in necessary contracts needed to support: weed abatement, pool services, pest control, and a new wellness center for our desert housing facilities.

Repairs and Maintenance - Outside Services

The budget reflects an increase in FY 2022/23 due to repairs and demolition of structures at our desert housing and in-town housing. In addition, the increase will support our support of encroachments and trespassing remediation efforts.

Taxes & Permits

The budget reflects decrease to annual property tax payments, due to this responsibility being allocated to the Bay Delta Initiatives group.

FY 2023/24

Personnel-Related Issues

Total personnel count is is not changing in FY 2023/24.

Salaries and Benefits reflect proposed negotiated labor increases and merit increases for qualified employees.

Non-Professional Services

The budget reflects an increase in FY 2023/24 in order to provide additional security for the DVL trail system which is expected to open in FY 2023/24, along with adding portable restrooms for the trails and cost of living increases for our janitorial and building engineer contracts.

Repairs and Maintenance - Outside Services

The budget decrease in FY 2023/24 reflects the completion of certain projects, including the DVL Visitor's Center parking lot resurfacing, partial carpet replacement and courtyard recaulking at USHQ, and demolition of select structures.

Operating Equipment - FY 2022/23 and FY 2023/24

The operating equipment budget for FY 2022/23 reflects the need for six trucks, necessary to support maintenance and inspections throughout the desert villages. The budget also includes the purchase of one boat in FY 2022/23, necessary for maintenance and inspections at the DVL Marina.

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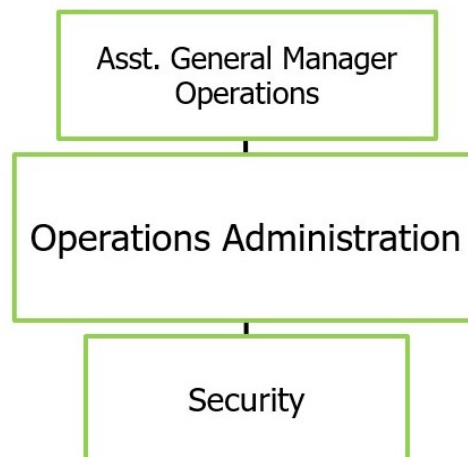
OPERATIONS ADMINISTRATION

Operations Administration provides security management services which protect Metropolitan's Board of Directors, executive management, employees, and physical assets and keep Southern California's critical infrastructure secure.

PROGRAMS

The newly established Operations Administration group accomplishes its mission through the following program or section:

Security Management provides cost-effective and innovative protection of Metropolitan's employees, patrons, infrastructure and equipment.



GOALS AND OBJECTIVES

In FY 2022/23 and FY 2023/24, Operations Administration will focus on the following key issues and initiatives:

Security Management

Implement a Security Strategic plan that is aligned with District goals and objectives and provides for an incremental and phased approach for obtaining resources, including staff, equipment and technology.

Publish specifications for security infrastructure, based on regulatory requirements and industry best practices.

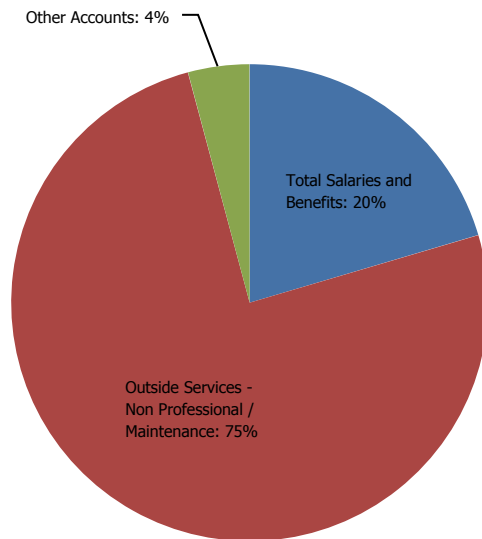
Formalize conceptual approval on capital project plans and specifications to ensure security opportunities and considerations are incorporated.

O&M FINANCIAL SUMMARY

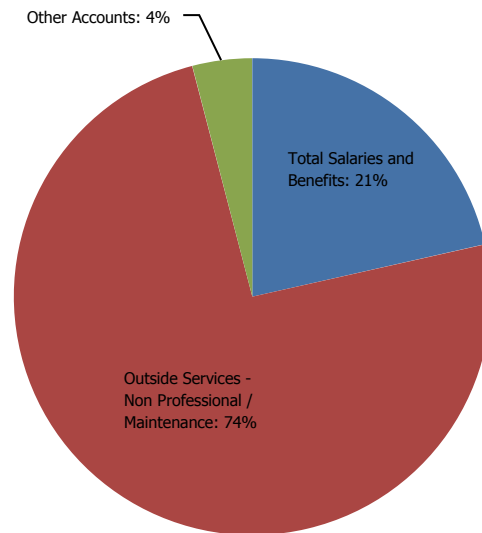
	2020/21 Actual	2021/22 Budget	2022/23 Proposed	Change from 2021/22	2023/24 Proposed	Change from 2022/23
Total Salaries and Benefits	2,474,792	2,860,476	3,148,410	287,934	3,352,186	203,776
<i>Direct Charges to Capital</i>	—	—	—	—	—	—
Total Salaries and Benefits	2,474,792	2,860,476	3,148,410	287,934	3,352,186	203,776
% Change		15.6%		10.1%		6.5%
Outside Services - Non Professional / Maintenance	9,610,741	10,059,000	11,625,000	1,566,000	11,625,000	—
Other Accounts	545,944	633,200	641,150	7,950	631,850	(9,300)
Total O&M	12,631,476	13,552,676	15,414,560	1,861,884	15,609,036	194,476
% Change		7.3%		13.7%		1.3%
Operating Equipment	—	—	68,421	68,421	67,343	(1,079)
Total O&M and Operating Equipment	12,631,476	13,552,676	15,482,981	1,930,305	15,676,379	193,398
% Change		7.3%		14.2%		1.2%

Totals may not foot due to rounding.

FY 2022/23 BUDGET BY EXPENDITURE



FY 2023/24 BUDGET BY EXPENDITURE



PERSONNEL SUMMARY

		2020/21 Actual	2021/22 Budget	2022/23 Proposed	Change from 2021/22	2023/24 Proposed	Change from 2022/23
Regular	Total	9	11	11	—	11	—
	O&M	9	11	11	—	11	—
	Capital	—	—	—	—	—	—
Temporary	Total	—	—	1	1	1	—
	O&M	—	—	1	1	1	—
	Capital	—	—	—	—	—	—
Total Personnel	Total	9	11	12	1	12	—
	O&M	9	11	12	1	12	—
	Capital	—	—	—	—	—	—

Totals may not foot due to rounding.

BUDGET HIGHLIGHTS

The Operations Administration group's Biennial Budget is \$15.5 million in FY 2022/23 and \$15.7 million in FY 2023/24 or an increase of 14.2% and an increase of 1.2% respectively from the prior budget years. The increase is due primarily to the following:

- The development and implementation of Metropolitan's Security Strategic Management Plan requires additional labor and non-labor resources in order to meet vulnerability assessment recommendations.

The following are the significant changes by budget year:

FY 2022/23

Personnel-Related Issues

Total personnel count is increasing by one district temporary position from the FY 2021/22 budget. The increase in district temporary labor is necessary to provide ongoing coverage for each of the treatment and pump plants. The added position can be rapidly deployed to resume security coverage and functions in the impacted area or responsibility should any of the security specialists be on leave, in training, or have circumstances that prevent them from fulfilling their duties.

Salaries and benefits reflect proposed negotiated labor increases and merit increases for qualified employees.

Non-Professional Services

The budget increase from FY 2021/22 is associated with increased security staffing and coverage, as well as an increase in certified security services, in order to provide enhanced security at headquarters and other facilities to meet vulnerability assessment recommendations..

FY 2023/24

Personnel-Related Issues

Total personnel count remains flat with the FY 2022/23 budget.

Salaries and benefits reflect proposed negotiated labor increases and merit increases for qualified employees.

Non-Professional Services

Non-Professional services remains flat with the FY 2022/23 budget.

Operating Equipment – FY 2022/23 and FY 2023/24

The operating equipment budget for Operations Administration reflects the need for two trucks. These vehicles, outfitted with specialized packages not available to the general public, will provide additional protection and personal safety for our security personnel and support them as they keep Metropolitan's facilities secure.

EXTERNAL AFFAIRS

External Affairs builds awareness and support for Metropolitan's mission and programs by directing media and stakeholder communications, public outreach and education projects, legislative activities, business outreach and innovation programs, and member agency support services.

PROGRAMS

External Affairs is responsible for advancing Metropolitan's policy objectives and communicating with large and diverse audiences on behalf of the district. A strong portfolio of communication tools, media services, public outreach and sponsorship programs, education, legislative and innovation activities is used to build positive working relationships and increase awareness of Metropolitan's programs and initiatives with the public, news media, legislators, regulators, educators, community groups, businesses, labor organizations, Metropolitan's public member agencies and other stakeholders.

Staff at the Union Station headquarters and regional representatives give voice to Metropolitan's policy priorities and projects throughout Southern California. External Affairs also manages strategic activities and regional outreach from Metropolitan's offices in Sacramento, Washington, D.C. and San Diego.

Office of Group Manager directs the activities of Business Outreach, Conservation and Community Services, Legislative Services, Media Services and the Member Services and Public Outreach sections, and the Business Management team. The Group Manager leads policy objectives and program initiatives in coordination with the board, executive management and other groups within the organization.

Legislative Services promotes and protects the interests of Metropolitan and its member agencies before executive, legislative, and regulatory agencies of the state and federal governments. The section advances Metropolitan's policy objectives and board-

adopted legislative priorities and principles with legislators and other water policymakers, and engages with member agencies and diverse community partners to mobilize and sustain regional support for Metropolitan's key initiatives.

Conservation and Community Services

advances public awareness of Metropolitan and important water and conservation issues through advertising, education and community outreach. The section promotes and helps market conservation programs and activities, and manages Metropolitan's sponsorships for education and research programs, water forums, events and community partnerships.

The Education Unit supports standards-based water education curriculum and works with educational associations, institutions and teachers to provide water education resources for elementary and secondary schools, colleges and universities.

Member Services and Public Outreach

provides support services to Metropolitan's member agencies and manages outreach efforts for Metropolitan's facility operations, construction activities and other water resource initiatives. The section works with and supports local government, business, agriculture and community organizations, and directs research efforts to support Metropolitan programs.

The Inspection Trip Team conducts board-sponsored and other special inspection trips that offer firsthand knowledge of Metropolitan's operations, introduce current water issues, and communicate Metropolitan's role in responding to

those issues through its facilities, infrastructure, policies, and programs.

The Community Relations Team manages communications and outreach to support Metropolitan's initiatives for new and existing in-region water infrastructure projects. Working in cooperation with Engineering Services, Water System Operations, Real Property and Environmental Planning, the team plans and conducts external outreach for Metropolitan's capital and O&M projects, including the Regional Recycled Water Program. The Community Relations Team serves as a liaison between Metropolitan and the community. The team works with residents, businesses and communities to inform them of upcoming activities and resolve issues. The team helps gain support of projects, manages expectations, and develops trusted relationships to ensure that Metropolitan projects move forward..

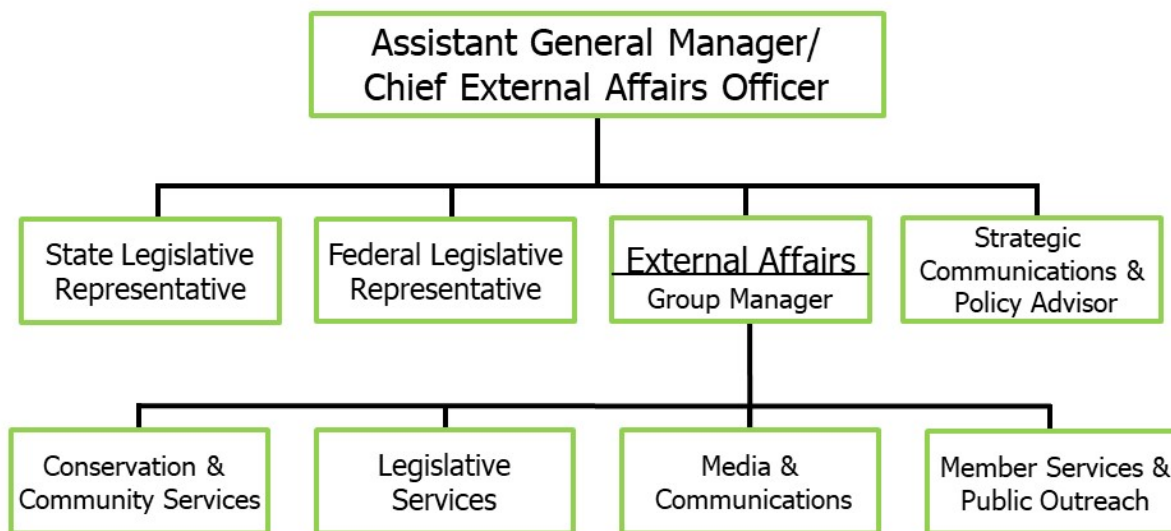
Media and Communications develops, coordinates, produces and communicates messages, information and achievements to support Metropolitan's key objectives and programs. The section comprises Media Services, Graphic Design and Creative Design teams.

Media Services is responsible for handling media inquiries, drafting and issuing press releases, hosting press conferences and other media events,

and producing informational resources and materials, including fact sheets, talking points, brochures and opinion pieces. Media Services also manages Metropolitan's websites, maintains Metropolitan's growing presence on social media platforms and digital platforms, and produces e-newsletters and blogs.

The Graphic Design Team provides Metropolitan's centralized, in-house graphic communication services. Areas of responsibility include all phases of desktop publishing and design and press-ready artwork using traditional and/or digital media; commercial art and technical illustration.

The Creative Design Team was recently established in response to Metropolitan's growing in-house execution of professional media assets, including internal and external video projects and digital advertisements. The team conceptualizes the priorities in visual and compelling ways and devises complex plans using print, video, web, social media, and other similar platforms to communicate to Metropolitan's diverse public audiences and vested stakeholders; Based on Metropolitan service area needs and internal client requests, the team uses project specifications to translate messaging designs.



GOALS AND OBJECTIVES

In FY 2022/23 and FY 2023/24, External Affairs will focus on the following key issues and objectives:

Communications and Outreach Efforts

Expand and continue to improve the use of strategic, impactful and creative communication plans and programs to inform the public, businesses, environmental and other stakeholder groups about Metropolitan's initiatives and leadership to ensure safe, reliable and sustainable water supplies now and into the future.

Maintain content and informational resources on the newly redesigned mwdh2o.com website, manage development of redesigned microsites as needed to improve the functionality, content management, security and end-user experience.

Develop in-house management of social media outreach and marketing activities, search engine optimization and marketing functions to meet business and outreach goals.

Strengthen the capacity of sponsorship and partnership programs, including the Community Partnering Program, legislative sponsorships and

memberships, and enhance information sharing on water issues and stewardship, and maintain strong relationships with non-governmental organizations, business groups, local elected officials, community organizations and other stakeholder groups throughout Southern California.

Engage in research and related activities that provide accurate and timely information on public opinions, consumer attitudes and awareness to inform future outreach activities with member agencies, stakeholders and the public.

Water Supply Reliability, Conservation and Sustainability

Develop and implement an effective and well-managed multimedia, multilingual advertising and outreach campaign to increase public awareness of water supply conditions, Metropolitan and member agency rebate programs, and support for long-term conservation strategies.

Provide communication support for Metropolitan programs, planning activities and projects that ensure water supply reliability, including existing

water operations, imported supplies from the Colorado River and State Water Project, the Integrated Resource Plan and local resource programs that diversify the region's water portfolio, conservation actions and innovative water technologies.

Increase awareness of Metropolitan's long-standing efforts to promote environmental stewardship through actions and investments for projects, programs, research and collaborative activities that promote the use of native plants, protect and enhance habitat and ecosystems, watersheds, and water quality.

Promote public awareness of climate change impacts on water supply conditions and reliability using a range of community and outreach tools to support Metropolitan's current and future initiatives, including the Climate Action Plan.

Bay-Delta and Local Supply Initiatives

Provide information and secure support of stakeholders, the public and legislators for Metropolitan's positions on policies that promote water supply reliability and an environmentally sustainable Bay-Delta. This includes programs and policies related to Delta conveyance, EcoRestore and Metropolitan-owned properties and science investments in the Delta.

Ensure strong coordination and consistent messaging with state and federal agencies, State Water Contractors, JPA-participating agencies, and member agencies on activities related to Delta conveyance.

Provide communication and community outreach to increase public awareness of and support for projects to advance local supply development, including the Regional Recycled Water Advanced Purification Center.

Legislative Policy Objectives

Work with the board, member agencies and executive management to secure support for and/or sponsorship of federal and state legislation and regulatory policies that advance Metropolitan's policy objectives, including strategic water quality and supply initiatives, conservation, Delta solutions, regional water resources projects, and sustainable water and energy management.

Conduct briefings, presentations and tours for elected officials, government leaders, and community-based environmental and business organizations to increase understanding of key water infrastructure systems, investments and key legislative and regulatory policies.

Board and Member Agency Support

Facilitate ongoing communication and coordination between Metropolitan and its member agencies through regular meetings with general managers, legislative and education coordinators, and public information officers.

Effectively manage the inspection trip program in coordination with the Board to educate the public, business and community leaders, elected officials, news media, and members of the public about Metropolitan and encourage a dialogue about the state's water supply and infrastructure, environmental issues and climate change impacts, agriculture and urban water interface and future challenges.

Provide primary support to the Board's Communications and Legislation Committee, the Agriculture and Industry Relations Committee, and the ad hoc Facilities Naming Committee, ensuring that committee presentations, Board letters and associated activities provide timely, accurate and relevant information on programs, trends and activities to help inform Board actions and ensure transparency.

Educational Programs

Update and expand distribution of Metropolitan's K-12 water education materials in the areas of science, math, language arts and social studies.

In coordination with member agencies and the educational community, explore opportunities to expand educational services through the use of new technologies and strategic partnerships to reach more students, teachers and classrooms, including underserved and culturally diverse populations. Support and manage Metropolitan's unique educational programs, including water education grants and sponsorship opportunities, the annual Solar Cup competition, and the annual Student Art Contest.

Emergency Management and Crisis Communication

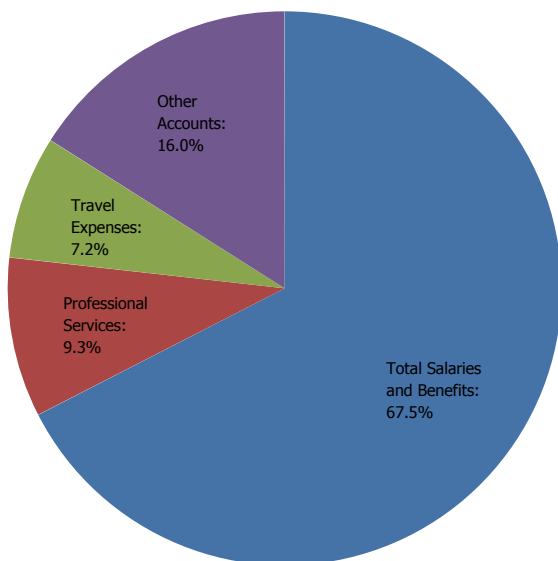
Support Metropolitan's emergency preparedness with a responsive crisis communications plan, well-trained staff, and the use of social media and other communications technologies to provide essential services during times of emergency and in response to disasters.

O&M FINANCIAL SUMMARY

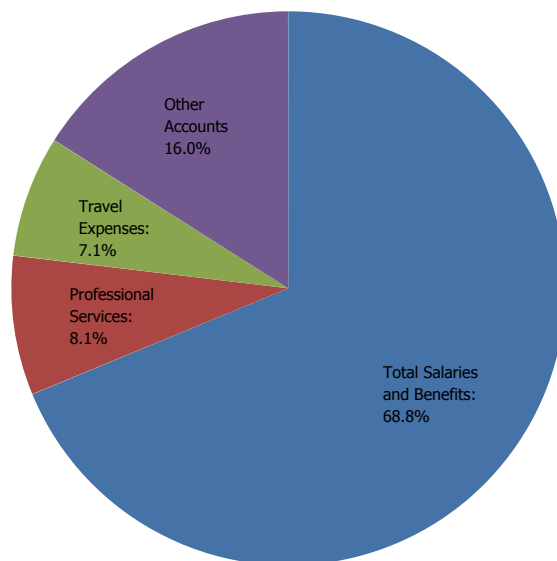
	2020/21 Actual	2021/22 Budget	2022/23 Proposed	Change from 2021/22	2023/24 Proposed	Change from 2022/23
Total Salaries and Benefits	17,036,925	17,666,236	17,725,370	59,134	18,346,581	621,211
Direct Charges to Capital	(28,090)	—	—	—	—	—
Total Salaries and Benefits	17,008,835	17,666,236	17,725,370	59,134	18,346,581	621,211
% Change		3.9%		0.3%		3.5%
Advertising	243,565	610,000	695,000	85,000	695,000	—
Community Outreach Activities	183,000	400,000	524,000	124,000	550,000	26,000
Memberships & Subscriptions	549,813	653,395	774,394	120,999	778,544	4,150
Outside Services - Non Professional / Maintenance	169,134	605,800	848,600	242,800	848,800	200
Professional Services	1,699,917	2,967,050	2,451,771	(515,279)	2,168,744	(283,027)
Sponsorships	85,250	514,000	545,000	31,000	545,000	—
Travel Expenses	541	1,929,500	1,890,000	(39,500)	1,890,500	500
Other Accounts	246,384	861,419	823,329	(38,090)	888,929	65,600
Total O&M	20,186,439	26,207,400	26,277,464	70,064	26,712,098	434,634
% Change		—		—		—
Operating Equipment	—	—	152,673	152,673	—	(152,673)
Total O&M and Operating Equipment	20,186,439	26,207,400	26,430,136	222,736	26,712,098	281,962
% Change		29.8 %		0.8 %		1.1 %

Totals may not foot due to rounding.

FY 2022/23 BUDGET BY EXPENDITURE

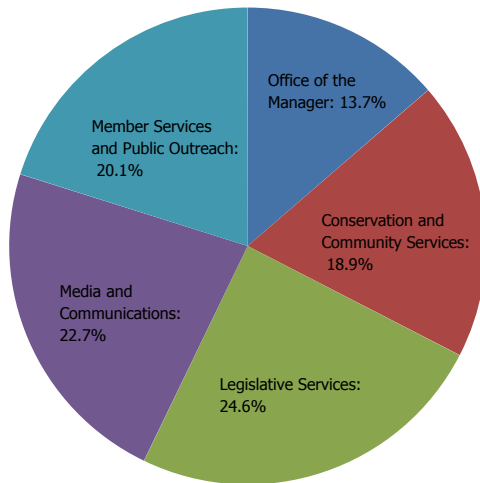


FY 2023/24 BUDGET BY EXPENDITURE

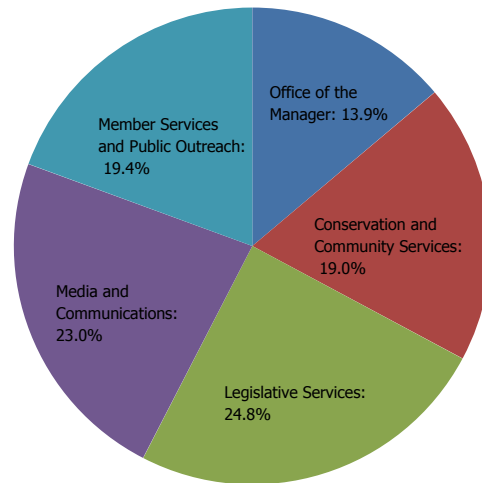


O&M BUDGET BY SECTION

FY 2022/23 BUDGET BY SECTION



FY 2023/24 BUDGET BY SECTION



	2021/22 Budget	2022/23 Proposed	Change from 2021/22	2023/24 Proposed	Change from 2022/23	Personnel Budget		
						21/22	22/23	23/24
Office of the Manager	4,094,600	3,593,700	(500,900)	3,700,100	106,400	9	9	9
Conservation and Community Services	4,929,500	4,968,000	38,500	5,068,200	100,200	11	12	12
Legislative Services	6,590,800	6,457,900	(132,800)	6,614,000	156,100	13	13	13
Media and Communications	5,385,000	5,971,100	586,100	6,145,000	173,900	19	20	20
Member Services and Public Outreach	5,207,500	5,286,700	79,100	5,184,800	(101,900)	10	10	10
Total O&M	26,207,400	26,277,500	70,100	26,712,100	434,600	62	64	64

Totals may not foot due to rounding.

PERSONNEL SUMMARY

		2020/21 Actual	2021/22 Budget	2022/23 Proposed	Change from 2021/22	2023/24 Proposed	Change from 2022/23
Regular	Total	63	62	63	1	63	—
	O&M	63	62	63	1	63	—
	Capital	—	—	—	—	—	—
Temporary	Total	0	—	1	1	1	—
	O&M	0	—	1	1	1	—
	Capital	—	—	—	—	—	—
Total Personnel	Total	63	62	64	2	64	—
	O&M	63	62	64	2	64	—
	Capital	—	—	—	—	—	—

Totals may not foot due to rounding.

BUDGET HIGHLIGHTS

External Affairs' O&M and Operating Equipment Biennial Budget is \$26.4 million in FY 2022/23 and \$26.7 million in FY 2023/24 or an increase of 0.8% and an increase of 1.1%, respectively from the prior budget years, due to increased costs for salaries and benefits.

In an effort to achieve savings for non-labor activities, the External Affairs budget incorporates efficiencies while maintaining the core programs to support communication and outreach through a wide range of programs, business and community partnerships, education initiatives, legislative activities and media presence.

- Advertising: In FY 2021/22, spending for advertising was reduced to \$610,000, from the prior year's \$1.3 million. By utilizing in-house resources for video services, design, social media marketing and member agency partnerships, External Affairs was able to continue its award-winning outreach and marketing efforts to promote rebates, native plants and water-use efficiency with cost savings over outsourcing. For FY 2022/23 and FY 2023/24, External Affairs has budgeted \$695,000 for each year of the biennium. This 13.9% increase over FY 2021/22 will advance the Board-directed conservation messaging through multilingual multimedia advertising to diverse audiences and will provide for new community outreach activities to support the Regional Recycled Water Program.
- Community Outreach: External Affairs will continue to provide a full range of communications and public outreach support for local supply development, capital projects and other major initiatives to promote water supply reliability, drought response, conservation and sustainability. Outreach priorities include infrastructure and rehabilitation projects, such as Delta Conveyance and Colorado River Aqueduct refurbishment. External Affairs also continues to budget for partnerships with community and environmental organizations that expand outreach consistent with direction from the general manager and board, including the outreach efforts that support construction activities expand job development and contracting opportunities.
- In FY 2022/23 and FY 2023/24, External Affairs will increase investments in Regional Recycled Water Program outreach with consultant support services, purchase of the Learning Center trailer, and support for regional recycled water communications with member agencies, impacted communities and organizations. This is in alignment with the Board-approved \$900,000 for outreach during the environmental planning phase of the Regional Recycled Water Program.
- Other outreach efforts include travel funding for a post-pandemic return to operational inspection trips and funding for public attitudes and awareness research to support conservation campaigns and other outreach priorities.
- Board Outreach Support: Resources are provided to support outreach activities by Metropolitan's Board and the general manager, including participation at conferences and community events, media support and training, coordination with member agencies for education, communication and legislative services, and logistical support. External Affairs will manage and monitor expenditures for professional services funding and for partnerships, sponsorships and memberships to support and communicate Metropolitan's mission, enhance collaboration with current and new organizations as directed by the general manager and executive management, and to partner on projects that reach diverse audiences throughout the region.

The following are the significant changes by budget year:

FY 2022/23

Personnel-Related Issues

The total personnel count has been reduced from 70 FTEs to 63 FTEs, which reflects one new position to support added media and communications demands; the reorganization of the Business Outreach Program and its 7 FTEs to the Diversity, Equity and Inclusion section; and the transfer of one Special Projects Manager to the Office of the General Manager -Colorado River Resources. Additionally, there was one FTE transferred into External Affairs from Administrative Services and one FTE transferred out to support workforce development in the Diversity, Equity and Inclusion program for zero additional impact, leaving the total number of FTEs at 63.

In support of the Education Unit and Metropolitan's commitment to advancing career technical education, District Temporary staff funding has been requested for one part-time teacher and one part-time student intern to staff the career technical education efforts.

Other

The total proposed O&M budget for the External Affairs group shows an increase over FY 2021/22 of 0.27% in FY 2022/23, followed by an increase of 1.65% in FY 2023/24.

Memberships and Subscriptions funding have been increased from FY 2021/22 level of \$653,395 to \$774,394 in FY 2022/23. This 18.5% increase will allow for new and continued partnerships that align with priorities of the Board and executive management and will advance Metropolitan's programs and initiatives.

Other non-labor planning and budgeting for External Affairs includes the return of both the state and federal annual legislator inspection trips, and 12 in-person community leader briefings throughout the service area each year of the biennium.

This budget allows for development of curriculum and new partnerships in support of diversity, equity and inclusion, career technical education programs and distance learning, including new programs focused on climate change and environmental justice.

Operating Equipment

The budget reflects operating equipment requests for FY 2022/23, to replace two vehicles being aged out pursuant to Operations/Fleet policy. The aging vehicles are assigned to inspection trip managers for the purpose of conducting inspection trips for the Board of Directors, as well as other educational trips and tours of the California water system and of Metropolitan facilities.

In addition to replacing the aging inspection trip vehicles, External Affairs is requesting one specialized van to support the increased demand for in-house communications, media, photography and video services. This vehicle will safely secure and transport Metropolitan's Creative Design Team's expensive and specialized equipment and allow for more streamlined and real-time logistical support for the general manager, executive staff, Board of Directors.

FY 2023/24

Personnel–Related Issues

The labor budget remains flat with the FY 2022/23 budget at a total of 63 FTEs. Salary and Benefit dollar increases reflect proposed negotiated labor increases and merit increases for qualified employees.

Other

In FY 2023/24, External Affairs has budgeted for the purchase of the Regional Recycled Water Learning Center trailer at the Carson site. This end-of-lease purchase is budgeted at an increase of \$60,000.

Memberships and Subscriptions would see a slight increase from \$774,394 to \$778,544 in FY 2023/24. This additional 0.54% will help fund new and continued partnerships to advance Metropolitan’s programs and initiatives, as well as anticipated cost increases from established long-term partnering organizations.

Operating Equipment

The budget reflects no operating equipment requests for FY 2023/24.

OFFICE OF GENERAL COUNSEL

The Office of General Counsel provides a full range of legal services in a professional, timely, cost–effective, and creative manner.

PROGRAMS

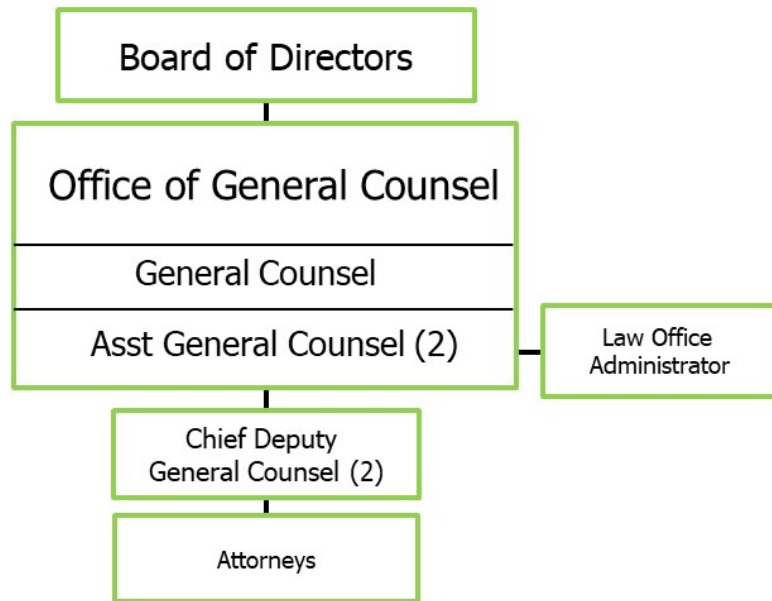
The General Counsel is the chief legal spokesperson for Metropolitan and the Board of Directors and oversees the Office of General Counsel's administrative functions.

The General Counsel represents Metropolitan in litigation and other proceedings to which Metropolitan is a party; provides legal advice to the Board, its committees, and to Metropolitan's staff; drafts, reviews, and negotiates contracts, documents, and other agreements; consults with representatives of other public and private entities on matters of mutual concern; monitors and analyzes pending and enacted legislation and, when appropriate, drafts legislative recommendations.

The Office of General Counsel provides legal services to the Board, its committees, and to Metropolitan staff with regard to the full range of substantive matters addressed by our staff and the Board as well as matters of Board governance.

- Provide support and legal assistance for the Regional Recycled Water Program, water supply, including the impacts of and response to drought conditions, water conservation, water delivery and treatment, and water quality including emerging contaminants.
- Represents Metropolitan's interests with regard to claims and litigation by or against Metropolitan.

- Provides legal advice with respect to the acquisition, management, and disposal of Metropolitan property.
- Provides legal assistance in Metropolitan's procurement and construction contract programs.
- Provides legal advice with respect to Metropolitan's financial activities, including Metropolitan's rates and charges, taxation, disclosure and bond issuance, legality of investments, and fiscal administration.
- Provides legal advice and assistance related to labor and personnel matters.
- Reviews, analyzes, and monitors pending state and federal legislation and drafts legislative recommendations.



GOALS AND OBJECTIVES

The role of the Office of General Counsel is to support the priorities established by the Board of Directors and the General Manager. The goal of the Office of General Counsel is to provide a full range of legal services in a professional, timely, cost-effective and creative manner that minimizes risk to Metropolitan.

In FY 2022/23 and FY 2023/24, the Office of General Counsel will focus on the following key issues:

Water Supply Reliability

Pursue a comprehensive legal strategy that proactively addresses legal issues associated with the operation of the SWP and the related permits and environmental matters while vigorously asserting and defending Metropolitan's interest in litigation and administrative proceedings regarding the SWP.

Provide legal advice in support of the development and implementation of the anticipated Department of Water Resources (DWR) proposal to improve the Delta conveyance facilities including the associated environmental documentation, implementing agreements and litigation in a manner supportive of Metropolitan's goals and objectives.

Develop and implement a legislative and regulatory strategy addressing the Governor's Water Resilience Portfolio.

Assist with the preparation of the SB 60 Report to the California State Legislature regarding Metropolitan's achievements in conservation, recycling and groundwater recharge.

Provide legal advice regarding permitting, implementation and financing, of any proposed improvements to the Delta conveyance facilities including agreements with DWR and other state water contractors.

Provide legal advice and support relative to the continuing litigation relating to the Oroville spillway litigation and other matters potentially impacting Metropolitan.

Provide legal advice and support for water transfers and exchanges and development of local resources, desalination and conservation projects and programs.

Provide legal support for capital projects required to upgrade, repair and provide additional flexibility in the operation of Metropolitan's distribution system.

Provide legal advice and support for update and implementation of Metropolitan's Integrated Water Resources Plan Update and Urban Water Management Plan, including development of the Long-Term Conservation Plan.

Provide legal advice and support in connection with the extension and amendments of the SWC including preparation of supporting environmental documents under CEQA litigation relating to the proposed amendments.

Continue to defend and enforce the terms of the Quantification Settlement Agreement and related agreements among the participating agencies and other agencies with Colorado River contracts.

Assist in developing, negotiating and documenting new water conservation and augmentation projects and implement the Drought Contingency Plan (DCP). Collaborate with policy staff and other agencies to develop and implement programs to protect Lake Mead.

Provide legal support for Metropolitan's efforts to protect and make optimal use of its Colorado River rights and related water transfer, storage, and exchange programs. Provide legal support for initiatives to identify and obtain new water supplies on the Colorado River, and to protect existing Colorado River water supplies against erosion by unlawful or unreasonable uses.

Finance

Provide legal advice regarding adoption of rates and charges. Work to resolve challenges to Metropolitan's rate structure.

Provide legal advice and assist with issuance of bonds and other debt instruments.

Operations

Negotiate and prepare new and amended service connection agreements for new or modified member agency connections. Provide legal assistance on regulatory and real estate issues, including CEQA issues, arising from service connection requests.

District Governance

Continue to provide timely advice to the Board and committees on governance and legal compliance matters.

Serve as the point of contact and coordinate Metropolitan responses to Public Records Act requests.

Corporate Resources/District Infrastructure

Provide legal support for capital investment projects and repair and replacement plans, including professional services and procurement contracts.

Provide legal support for environmental analysis under CEQA of Metropolitan's projects and other discretionary actions, in addition to analyzing potential environmental impacts of other agencies' projects on Metropolitan properties and facilities.

Workforce/Human Resources

Provide proactive counsel, assistance and advice on workforce issues. Continue to defend Metropolitan in EEO and PERB matters, as well as grievance and disciplinary matters. Assist with investigations or engage third party investigators.

Represent Metropolitan in claims and litigation.

Real Property

Assist the Real Property group in the negotiation and documentation of real property acquisitions and the surplusage of real property. Negotiate and provide legal support for the lease and licensing of Metropolitan property. Provide legal support for the grant and acceptance of easements and entry permits.

Represent Metropolitan in real property disputes including landlord tenant issues, condemnation and inverse condemnation issues and other matters.

Technology

Collaborate with Information Technology, External Affairs, and Human Resources groups on Information Governance Policies and the implementation of new technologies and protocols. Assist in educating the staff and Board in matters relating to technology and special media.

Assist with implementation of policies and procedures to enhance cyber-security required to upgrade physical systems including SCADA.

Energy Costs and Management

Assist with implementation of the Energy Management Plan, including providing advice on wholesale energy transactions contracts relating to energy facilities and Hoover Power, renewable energy projects and energy-related contracts and legislation.

Provide assistance including negotiation of and compliance with energy resource adequacy requirements and compliance with NERC standards.

Provide legal support to ensure that SWP energy needs are met in a cost-effective and sustainable manner.

Legal Department Administration

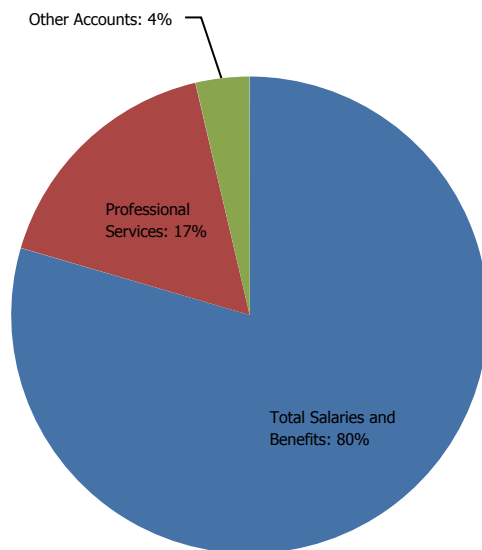
Continue to aggressively manage outside counsel costs, while obtaining effective representation to protect Metropolitan's interests. Provide on-going training opportunities and develop and implement succession planning.

O&M FINANCIAL SUMMARY

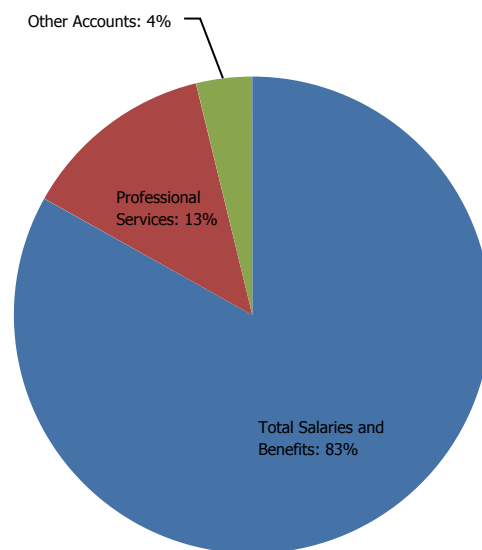
	2020/21 Actual	2021/22 Budget	2022/23 Proposed	Change from 2021/22	2023/24 Proposed	Change from 2022/23
Total Salaries and Benefits	11,971,002	12,775,321	13,057,727	282,406	13,540,273	482,546
<i>Direct Charges to Capital</i>	—	—	—	—	—	—
Total Salaries and Benefits	11,971,002	12,775,321	13,057,727	282,406	13,540,273	482,546
% Change		6.7%		2.2%		3.7%
Professional Services	1,352,384	4,443,000	2,760,000	(1,683,000)	2,130,000	(630,000)
Travel Expenses	871	120,000	170,000	50,000	185,000	15,000
Other Accounts	234,600	414,000	429,000	15,000	434,000	5,000
Total O&M	13,558,857	17,752,321	16,416,727	(1,335,594)	16,289,273	(127,454)
% Change		30.9%		(7.5%)		(0.8%)

Totals may not foot due to rounding.

**FY 2022/23 BUDGET BY
EXPENDITURE**



**FY 2023/24 BUDGET BY
EXPENDITURE**



PERSONNEL SUMMARY

		2020/21 Actual	2021/22 Budget	2022/23 Proposed	Change from 2021/22	2023/24 Proposed	Change from 2022/23
Regular	Total	35	37	37	—	37	—
	O&M	35	37	37	—	37	—
	Capital	—	—	—	—	—	—
Temporary	Total	1	2	2	—	2	—
	O&M	1	2	2	—	2	—
	Capital	—	—	—	—	—	—
Total Personnel	Total	37	39	39	—	39	—
	O&M	37	39	39	—	39	—
	Capital	—	—	—	—	—	—

Totals may not foot due to rounding.

BUDGET HIGHLIGHTS

The Office of General Counsel's Biennial Budget is \$16.4 million in FY 2022/23 and \$16.3 million in FY 2023/24 or a decrease of 7.5% and a decrease of 0.8% respectively from the prior budget years. The change is primarily due to the following factors:

- Professional services costs decrease reflects anticipated expenses for Delta Conveyance legal costs, water quality litigation, labor and employment issues, general litigation and other legal costs.
- Travel expenses increase reflects anticipated travel regarding Delta Conveyance and other project activities.
- Salaries and Benefits costs reflect proposed negotiated labor increases and merit increases for qualified employees.

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OFFICE OF GENERAL AUDITOR

The Office of General Auditor provides independent, professional, and objective assurance and consulting services designed to add value to and improve Metropolitan's operations.

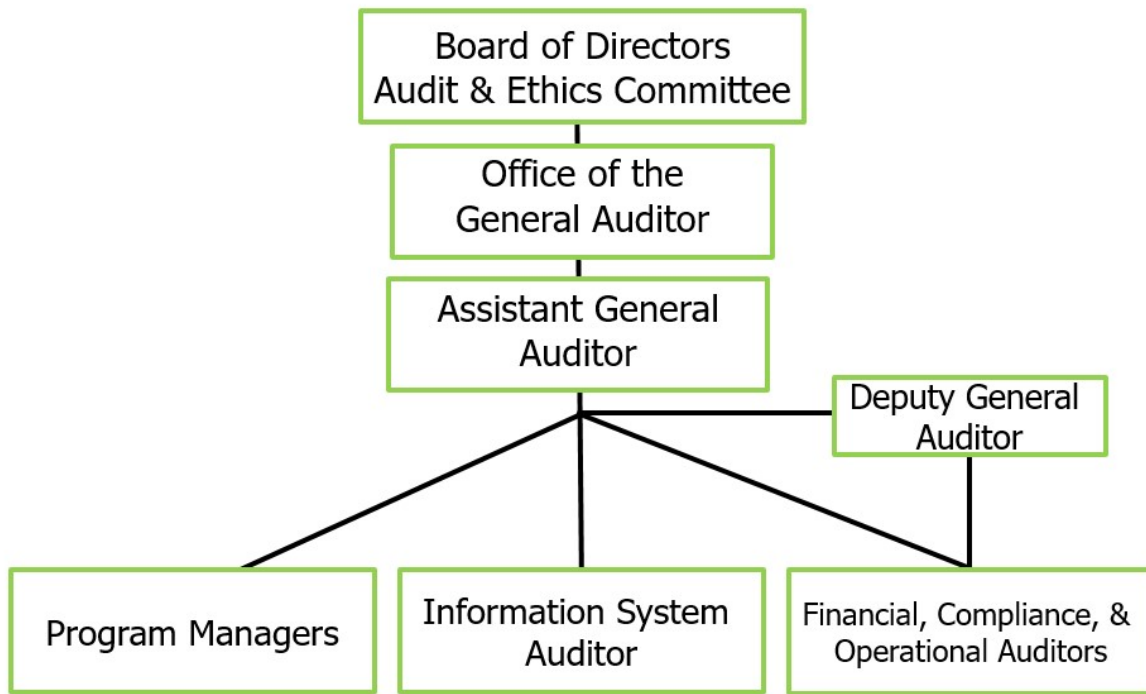
PROGRAMS

The Office of General Auditor helps the organization accomplish its objectives by using a proactive, systematic approach to evaluate and improve the effectiveness of risk management, control, and governance processes.

The scope of work of the Office of General Auditor is to determine whether Metropolitan's network of risk management, internal control, and governance processes, as designed and represented by management, is adequate and functioning in a manner to ensure:

- Risks are appropriately identified, managed, and monitored
- Significant financial, managerial, and operating information is accurate, reliable, and timely.
- Employees' actions are in compliance with policies, standards, procedures, and applicable laws and regulations.
- Resources are acquired economically, used efficiently and protected adequately.
- Programs, plans, and objectives are achieved.
- Quality and continuous improvement are fostered in the organization's control processes.
- Significant legislative or regulatory issues impacting the organization are recognized and addressed appropriately.

Opportunities for strengthening internal controls, improving efficiency, and protecting the organization's image may be identified during audits. These opportunities will be communicated to the appropriate level of management.



GOALS AND OBJECTIVES

In FY 2022/23 and FY 2023/24, the Office of General Auditor will focus on the following key issues:

Risk Analysis, Risk Mitigation and Internal Controls

Provide risk perspective and auditing advice and counsel to the Board and management in operational and financial activities.

Publish risk-focused audit reports designed to clearly communicate the General Auditor's opinion regarding the internal control structure, significant control issues, and recommendations to mitigate noted risk.

Improve the completion time for audits and evaluate the adequacy and timeliness of management's responses to, and corrective actions taken on, all significant control issues noted in audit reports.

Emphasize test work of significant projects.

Workforce Development

Encourage training opportunities for Office of General Auditor staff to enhance competencies in risk assessment and broaden knowledge of Metropolitan operations. Utilize this knowledge in fine-tuning the Annual Audit Risk Assessment and Audit Plan.

Management and Leadership

Efficiently manage the department's budget for maximum effectiveness of state budgetary objectives.

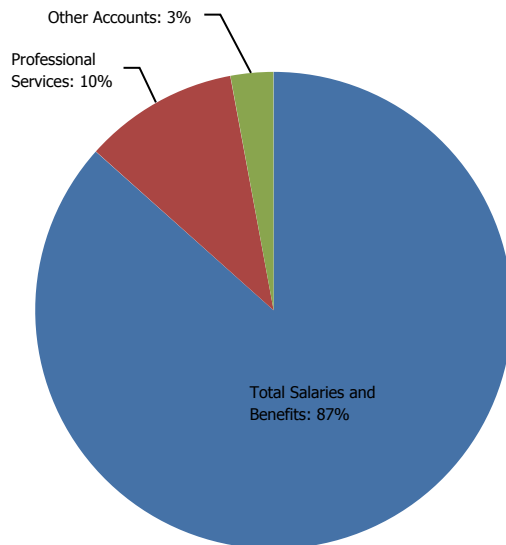
Uphold the mission, roles, and responsibilities of the Office of General Auditor.

O&M FINANCIAL SUMMARY

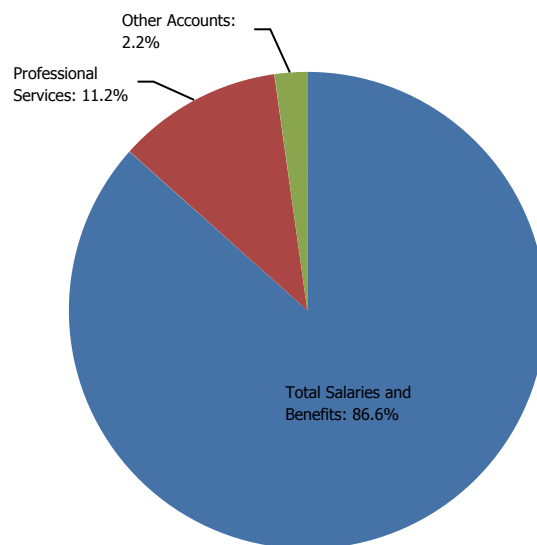
	2020/21 Actual	2021/22 Budget	2022/23 Proposed	Change from 2021/22	2023/24 Proposed	Change from 2022/23
Total Salaries and Benefits	3,839,547	4,159,651	4,130,870	(28,781)	4,256,013	125,143
<i>Direct Charges to Capital</i>	—	—	—	—	—	—
Total Salaries and Benefits	3,839,547	4,159,651	4,130,870	(28,781)	4,256,013	125,143
% Change		8.3%		(0.7%)		3.0%
Materials & Supplies	15,344	35,000	76,000	41,000	43,000	(33,000)
Professional Services	449,100	500,000	500,000	0	550,000	50,000
Other Accounts	30,876	55,500	61,500	6,000	61,500	—
Total O&M	4,334,867	4,750,151	4,768,370	18,219	4,910,513	142,143
% Change		9.6%		0.4%		3.0%

Totals may not foot due to rounding.

FY 2022/23 BUDGET BY
EXPENDITURE



FY 2023/24 BUDGET BY
EXPENDITURE



PERSONNEL SUMMARY

		2020/21 Actual	2021/22 Budget	2022/23 Proposed	Change from 2021/22	2023/24 Proposed	Change from 2022/23
Regular	Total	12	13	13	—	13	—
	O&M	12	13	13	—	13	—
	Capital	—	—	—	—	—	—
Temporary	Total	—	—	—	—	—	—
	O&M	—	—	—	—	—	—
	Capital	—	—	—	—	—	—
Total Personnel	Total	12	13	13	—	13	—
	O&M	12	13	13	—	13	—
	Capital	—	—	—	—	—	—

Totals may not foot due to rounding.

BUDGET HIGHLIGHTS

The Office of General Auditor's Biennial Budget is \$4.8 million in FY 2022/23 and \$4.9 million in FY 2023/24 or an increase of 0.4% and an increase of 3.0% respectively from the prior budget years. The main factors affecting these changes:

- Increases in Salaries and Benefits reflect proposed negotiated labor increases, merit increases for qualified employees.
- The increase to the budget for Materials and Supplies reflects an upgrade of Audit software.
- The increase in Professional Services reflects competitive bid process to obtain a new outside firm to perform the annual financial statements audit.

ETHICS OFFICE

The Ethics Office promotes an ethical culture at Metropolitan by administering and advising Metropolitan's ethics policies and reviewing potential ethics violations.

PROGRAMS

Metropolitan's Ethics Office was established by special legislation enacted in 2000. In doing so, it was with a conviction that a strong ethical culture is the foundation of good governance. Moreover, it was based on the belief that an ethical culture is created through a robust ethics program that sets clear expectations for conducting business within the organization and with external parties. This ensures that Metropolitan is transparent, operates with integrity and upholds high ethical standards.

An ethical culture is based on the following: effective board oversight, strong tone-at-the-top, senior management involvement, organization-wide commitment, a customized code of conduct, ethics training, communications, and ongoing monitoring system. It also involves the administration of financial disclosure reports, an anonymous incident reporting system, timely investigation of reported incidents, publication of summary investigation findings, and, where appropriate, referrals to Department managers for consistent disciplinary action.

These processes promote transparency and accountability, allowing the public insight into how the District conducts its business and holding District officials accountable for meeting internal and state ethics standards. The Ethics Office accomplishes its mission through the following programs and services, each of which is critical to achieving the ultimate goal of internal ethics and compliance - maintaining an ethics-centered culture:

Ethics Compliance The Ethics Office serves as the filing officer for state-mandated financial interest disclosure reports for Directors and employees. These filings are required for individuals who make or participate in making decisions in their official capacity that could affect their personal financial

interests. To date, all Directors and over 700 employees have been identified as mandatory filers.

The Ethics Office also maintains and updates Metropolitan's conflict of interest code, designating employee reporting positions and disclosure categories. These requirements are tailored to the unique responsibilities of each designated position and are reviewed on a periodic basis for compliance with evolving standards.

Advice and Education The Ethics Office advises employees, directors, and contractors on Metropolitan's ethics policies and standards. These include the areas of conflicts of interest and proper use of authority. Advice and education are provided through consultations, training programs, and reference materials. The Ethics Office addresses requests for advice and training and recommends consultations where appropriate.

The Ethics Office also facilitates state-mandated AB1234 training for Directors and provides orientations for new Directors and employees about Metropolitan's internal ethics provisions.

Policy Management and Program Development The Ethics Office proposes ethics rules and modifications to existing rules, performs risk assessment, and analyzes investigation procedures to maintain best practices in the field.

Investigation The Ethics Office conducts investigations to promote accountability and identify systematic changes needed in order to avoid further missteps. Comprehensive investigations, include investigation planning, gathering of evidence, document review, witness interviews, comparative analysis of facts, drafting of reports, and organization and indexing of evidence.

The Ethics Officer reviews the investigation findings, determines whether ethics violations occurred, and makes recommendations to executive management.



GOALS AND OBJECTIVES

In FY 2022/23 and FY 2023/24, the Ethics Office will focus on the following key initiatives:

Education and Outreach

Education and Outreach is a top priority and a cornerstone of our ethics program. We will develop more tailored and focused training for groups of employees like managers or functional areas within Metropolitan and for Directors. Outreach efforts will include visiting field facilities to provide ethics related information and being part of listening sessions. Extensive ethics-related training materials will be updated to reflect administrative code amendments recently approved by the Board, including updates to new employee orientation materials, website content, and online training programs on common ethics topics at Metropolitan.

Ethics Consultation

Provide ethics risk perspective and advisory services to Directors, officers, and employees needing input on ethics-related issues. In specific requests for assistance, provide thorough analysis and prompt responses. Continue to review board agendas and prepare memorandum for directors to help identify potential sources of conflicts of interest in matters coming before them. Review conflict of interest disclosures from potential contractors for the professional services contracting unit and make recommendations for resolving potential conflicts. Perform outreach to Group Managers to proactively engage in the program and project process to help maintain ethics-centered decision-making.

Policy Management and Program Development

Promote transparency by developing and implementing a lobbyist registration program and ensuring data is publicly available. Develop a Contractors Code of Conduct and improve processes and transparency to avoid conflicts of interest. Continue to assess the scope and content of Metropolitan's ethics policies and provisions. Develop new ideas for improvements and work to achieve consensus among stakeholders. Follow developments in legislation and Fair Political Practices Commission proceedings to identify emerging issues that may affect the Metropolitan community.

Investigations

The Ethics Office performs objective and comprehensive investigations of ethics complaints, which entails investigation planning, gathering evidence, document review, witness interviews, comparative analysis of facts, drafting of reports, and organization and indexing of evidence. The Ethics Officer reviews the investigation findings, determines whether ethics violations occurred, and makes recommendations to executive management.

Evaluate opportunities to streamline the investigation process. These efforts include establishing reasonable guidelines to ensure that inquiries proceed in an efficient and responsible manner. Improve the effectiveness and timeliness of communication to interested parties on the progress of investigations. Define accountability standards for investigations that address the need to discontinue or close inquiries when substantiating evidence cannot be obtained within a reasonable time period. Survey best practices in the field and recommend improvements to investigation procedures

Workforce Needs and Development

It is anticipated that the total regular personnel for O&M will be increased. Current assessment is that 4 additional FTEs are needed. Three additional FTEs will support the enhanced Education and Outreach priorities and 1 FTE will support policy and program development in the area of compliance that includes the new lobbyist registration program and database management. We will encourage training opportunities for Ethics Department staff to enhance competencies in governmental ethics and to broaden knowledge of Metropolitan operations.

Management and Leadership

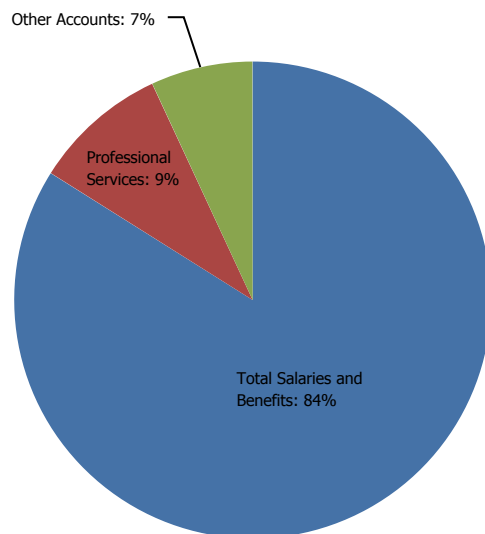
Efficiently manage the Ethics Office's budget for maximum effectiveness. Uphold the mission, roles, and responsibilities of the Ethics Office.

O&M FINANCIAL SUMMARY

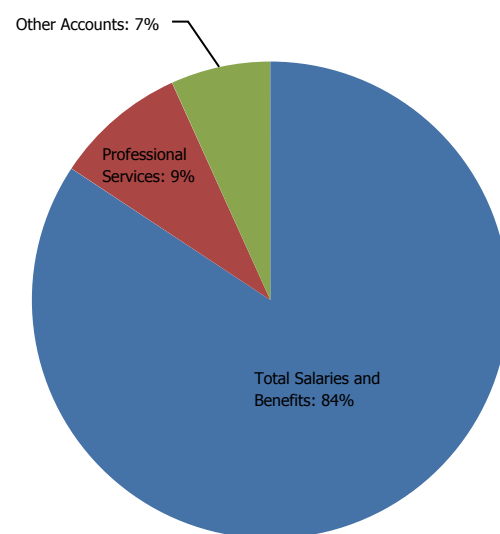
	2020/21 Actual	2021/22 Budget	2022/23 Proposed	Change from 2021/22	2023/24 Proposed	Change from 2022/23
Total Salaries and Benefits	1,553,232	1,518,887	1,833,374	314,487	1,883,922	50,548
<i>Direct Charges to Capital</i>	—	—	—	—	—	—
Total Salaries and Benefits	1,553,232	1,518,887	1,833,374	314,487	1,883,922	50,548
% Change		(2.2%)		20.7%		2.8%
Outside Services - Non Professional / Maintenance	26,523	17,000	70,369	53,369	70,369	—
Professional Services	317,719	85,000	200,000	115,000	200,000	—
Subsidies & Incentives	14,100	13,000	27,660	14,660	27,660	—
Travel Expenses	—	6,000	27,500	21,500	27,500	—
Other Accounts	5,371	40,000	25,300	(14,700)	25,300	—
Total O&M	1,916,945	1,679,887	2,184,203	504,316	2,234,751	50,548
% Change		(12.4%)		30.0%		2.3%

Totals may not foot due to rounding.

FY 2022/23 BUDGET BY EXPENDITURE



FY 2023/24 BUDGET BY EXPENDITURE



PERSONNEL SUMMARY

		2020/21 Actual	2021/22 Budget	2022/23 Proposed	Change from 2021/22	2023/24 Proposed	Change from 2022/23
Regular	Total	5	5	5	—	5	—
	O&M	5	5	5	—	5	—
	Capital	—	—	—	—	—	—
Temporary	Total	—	—	—	—	—	—
	O&M	—	—	—	—	—	—
	Capital	—	—	—	—	—	—
Total Personnel	Total	5	5	5	—	5	—
	O&M	5	5	5	—	5	—
	Capital	—	—	—	—	—	—

Totals may not foot due to rounding.

BUDGET HIGHLIGHTS

The Ethics Office's Biennial Budget is \$2.2 million in FY 2022/23 and \$2.2 million in FY 2023/24 or an increase of 30.0% and an increase of 2.3% respectively from the prior budget years. The increase is due primarily to the following:

- Salaries and Benefits reflect proposed negotiated labor increases and merit increases for qualified employees.
- Professional Services and non-labor budgets are increasing to support ethics program development, including case management and software solutions and investigative services.
- It is anticipated the total regular personnel for O&M will be increased to 9 FTEs. The Ethics Officer will discuss the office needs with the Audit & Ethics Committee in the near future. Current assessment is that 4 additional FTEs are needed. The additional positions will support the realignment of the Ethics Office's functions to meet the enhanced education/outreach and compliance expectations and priorities in accordance with Board objectives.

STAFFING SUMMARY

Group/Department	2020/21 Actual	2021/22 Budget	2022/23 Proposed	2023/24 Proposed
Regular Employees				
Office of the General Manager	11	13	17	17
Water System Operations	884	940	939	939
Information Technology	120	130	131	131
Engineering Services	338	355	355	355
Real Property	48	53	55	55
Finance	49	51	53	53
External Affairs	63	62	63	63
Water Resource Management	63	68	68	68
Administration	79	81	80	80
Human Resources	41	44	44	44
Operations Administration	9	11	11	11
Bay Delta Initiatives	15	17	16	16
Office of Sustainability, Resilience & Innovation	16	20	25	25
Office of Diversity, Equity & Inclusion	7	7	9	9
Equal Employment Opportunity Office	—	—	6	6
Subtotal - General Manager's Department	1,743	1,852	1,872	1,872
Office of the General Auditor	12	13	13	13
Ethics Office	5	5	5	5
Office of General Counsel	35	37	37	37
Total - Departmental Regular Employees	1,795	1,907	1,927	1,927

Temporary Employees				
District Temporary	45	37	47	49

Total Authorized Positions	1,840	1,944	1,974	1,976
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Totals may not foot due to rounding.

OPERATING EQUIPMENT SUMMARY

Classification	2022/23 Quantity	2022/23 Amount	2023/24 Quantity	2023/24 Amount
Audio Visual	2	52,187	2	60,218
Automobiles	1	42,393	3	168,553
Boats	1	113,138	—	—
Communication Equipment	1	17,211	—	—
Computer Peripherals	3	62,629	—	—
Construction/Shop/Maint Equip	37	1,358,144	1	923,849
CPU's, Laptops & Servers	7	194,634	6	181,385
Equipment Accessories	1	21,900	1	21,905
Heavy Equipment	10	1,678,398	1	2,163,618
Lab Equipment	16	913,465	1	716,991
Monitoring Equipment	6	109,212	1	65,200
Other Equipment	7	132,685	1	661,531
Trucks	117	4,494,741	22	3,846,570
Utility Vehicles	5	204,148	1	26,942
Grand Total	214	9,394,884	40	8,836,761

Totals may not foot due to rounding.

STATE WATER PROJECT

OVERVIEW

Metropolitan participates in the State Water Project (SWP), which is managed, owned and operated by the California Department of Water Resources (DWR) and is an integral part of Metropolitan's conveyance system. The SWP is the largest state-built, multipurpose, user-financed water project in the country. It was designed and built primarily to deliver water, but also provides flood control, generates power for pumping, is used for recreation, and enhances habitat for fish and wildlife. The SWP provides irrigation water to 750,000 acres of farmland, mostly in the San Joaquin Valley, and provides municipal and industrial water to approximately 27 million of California's estimated 39.5 million residents.

The SWP consists of a complex system of dams, reservoirs, power plants, pumping plants, canals and aqueducts to deliver water. SWP water consists of water from rainfall and snowmelt runoff that is captured and stored in SWP conservation facilities and then delivered through SWP transportation facilities to water agencies and districts located throughout the Upper Feather River, Bay Area, Central Valley, Central Coast, and Southern California. Metropolitan receives water from the SWP through the California Aqueduct, which is 444 miles long, and at four delivery points near the northern and eastern boundaries of Metropolitan's service area. The budgeted costs for the SWP are as follows:

SWC Cost Summary, \$ millions¹

	2020/21 Actuals	2021/22 Budget	2022/23 Proposed	Change from 2021/22	2023/24 Proposed	Change from 2022/23
Delta Water Charge: Capital	\$57.6	\$59.7	\$80.4	\$20.7	\$85.5	\$5.1
Delta Water Charge: OMP&R	96.1	92.4	110.1	17.7	107.0	(3.1)
Transportation Capital	122.9	148.3	119.4	(28.9)	129.4	10.0
Transportation OMP&R	165.8	182.9	194.1	11.2	198.7	4.6
Power, Variable	127.5	212.7	210.4	(2.4)	257.5	47.1
Power, OAPF	4.3	3.5	5.1	1.6	5.0	(0.1)
Credits	(52.4)	(70.1)	(67.8)	2.4	(56.3)	11.4
CA Water Fix/ Delta Conveyance	—	25.0	30.0	5.0	34.5	4.5
SWC Total	\$521.8	\$654.4	\$681.7	\$27.3	\$761.2	\$79.5
SWC Dues	\$3.6	\$4.7	\$4.1	(\$0.6)	\$4.1	\$0.0
Acre-feet delivered	633,300	1,059,490	669,648	(389,842)	869,076	199,428

¹ Does not include Departmental costs reflected elsewhere in this Budget.

Annually, the DWR reviews and redetermines the water supply aspects of the SWP as required by the SWC, and the financial aspects attributable to the water supply function of the SWP.¹ This results in the annual Statement of Charges to the Contractors for each calendar year. The information that supports the Statement of Charges is published by the DWR as Appendix B to the appropriate Bulletin 132 (i.e., the Statement of Charges for Calendar Year 2022 is supported by Appendix B to Bulletin 132-20). DWR does not charge rates for water service. It does not develop a revenue requirement and then develop rates based on projected billing determinants for a calendar year. Rather, DWR apportions its costs to the Contractors based on their proportionate share of estimated supply costs (Delta Water Charge) and transportation costs (Transportation Charge). All State Water Contractors are obligated to pay all costs incurred by DWR to operate the SWP for water supply delivery, as part of their contractual participation in the project. Therefore, DWR reconciles actual costs for each year and either collects more funds from the Contractors if actual costs exceeded estimated costs, or provides a credit/refund if actual costs were lower than estimated costs.

Metropolitan's budgeted SWP costs are based on the 2022 Statement of Charges and supporting Appendix B. Power costs are estimated by Metropolitan assuming a 15 percent allocation in 2022, 40 percent allocation in 2023, and 50 percent allocation in 2024 and use of the Central Valley storage programs.

STATE WATER CONTRACT

The State Water Contractors have long-term contracts with DWR for participation in the SWP, through which they receive delivery of SWP water and use of the SWP transportation facilities. Metropolitan signed the first State Water Contract (SWC) on November 4, 1960, and received its first delivery of SWP water in 1972. Metropolitan has a contractual right to a proportionate share of the project water that DWR determines is available for allocation to the Contractors. This determination is made each year based on existing supplies in storage, forecasted hydrology, and other factors. Available project water is then allocated to the Contractors in proportion to the amounts set forth in Table A of their SWCs (Table A Allocation). Under its SWC, Metropolitan is entitled to roughly 46% of the annual Table A Allocation.

All water supply-related capital expenditures and operations, maintenance, power and replacement (OMP&R) costs associated with the SWP conservation and transportation facilities are paid for by the 29 State Water Contractors. Through Calendar Year 2020, Metropolitan has paid about 57 percent of the total payments to DWR by all Contractors. Metropolitan's financial records show that total accumulated amounts paid under the SWC are \$14.2 billion through fiscal year 2020/21. Metropolitan's SWC was originally a 75-year contract through December 31, 2035. Although the SWC had been amended for other provisions before, the term of the contract was extended and approved in December 2018. Among other amendments, the Contractors and DWR agreed to an extension to December 31, 2085.

Since inception, the SWC provided Contractors the ability to use the SWP to convey non-SWP water under certain circumstances. Specifically, Article 18(c)(2) of the original SWC addresses situations where there is a shortage in the supply of water made available under the contract and states "[T]he District, at its option, shall have the right to use any of the project transportation facilities which by reason of such permanent shortage in the supply of project water to be made available to the District are not required for delivery of project water to the District, to transport water procured by it from any other source: [p]rovided, [t]hat such use shall be within the limits of the capacities provided in the project transportation facilities for service to the District under this contract". However, Article 18(c)(2) only applied in the event a permanent shortage was declared by DWR and it was unclear on how costs would be charged for using SWP facilities to transport nonproject water. In 1994, the Contractors and DWR negotiated the Monterey Amendment to the SWC, including Article 55, which made explicit that the Contractors' rights to use the portion of the SWP conveyance system necessary to deliver water to them (their "Reaches") also includes the right to convey non-SWP water at no additional cost as long as

¹ The term "supply" is used to distinguish between other functions of the SWP such as recreation and flood control. The term is not used to distinguish between the conservation (supply) and transportation (conveyance) functions of the SWP under the State Water Contracts for participation in the SWP.

capacity exists. Power for the conveyance of non-SWP water is charged at the SWP melded power rate. The Monterey Amendment also expanded the ability to carryover SWP water in SWP storage facilities, allowed participating Contractors to store water in groundwater storage facilities outside a Contractor's service area for later use. These amendments, approved by Metropolitan's Board in 1995, secured the means for individual Contractors to increase supply reliability through water transfers, and storage outside their service areas.

The charges to the Contractors include a SWP supply charge (Delta Water Charge) and a SWP transportation charge (Transportation Charge). The Delta Water Charge recovers both Capital and OMP&R costs for those facilities that conserve and create the actual water supply of the SWP. The Delta Water Charge is based on Contractors' cumulative Table A Allocations, and is paid regardless of whether Contractors receive any Table A Allocations in a given year.

The Transportation Charge recovers the costs associated with the various aqueduct reaches that deliver project water to the Contractors. The Capital and fixed OMP&R portions of the SWP Transportation Charge recover costs from the Contractors based on their proportionate use of facilities. Unlike the Delta Water Charge, which is uniform for a unit of Table A water, the allocation of these portions of the Transportation Charge will vary based on the aqueduct segments needed to deliver water to a specific Contractor. The further a Contractor is from the Delta and the greater its capacity in the transportation facilities, the greater its allocation of the Capital and fixed OMP&R Transportation Charges. The capacity of the SWP to deliver water decreases with distance from the Banks Pumping Plant, located in the Sacramento-San Joaquin Delta, as water is delivered to Contractors through the South Bay Aqueduct and the Coastal Branch Aqueduct, and to turnouts in the San Joaquin Valley and Southern California. Payment of the Transportation Charge entitles Contractors to the right to use their capacity in the SWP facilities for transportation of SWP or non-SWP water, on a space available basis, under the SWC. A Contractor that participates in the repayment of a particular reach, or segment of the SWP, has already paid the costs of using that reach for the conveyance of water supplies through the Transportation Charge.

In addition to the charges for supply (the Delta Water Charge capital and OMP&R) and Transportation (Transportation Capital and OMP&R), DWR also charges for the power needed to deliver project water throughout the system. Two charges recover these power costs: the variable OMP&R portion of the Transportation Charge (Variable Charge) and the Off-Aqueduct Power Facilities (OAPF) charge. Because the SWC are cost recovery contracts, DWR invoices Contractors on an estimated basis for any calendar year, and then provides credits in later years once cost true-ups are finished.

The Variable Charge includes the annually estimated cost of purchased power including capacity and energy, cost of SWP power generation facilities, program costs to offset annual fish losses at the Banks Pumping Plant, purchased transmission services, and credits for sales of ancillary services and excess SWP system power sales. The Variable Charge is calculated on the basis of the energy required to pump an acre-foot of water to its take-out point multiplied by the system energy rate, less energy from the recovery generation plants. The system energy rate is a system-wide average rate calculated as the net cost of energy--total costs less revenues--divided by the net energy required to pump all water. That rate is applied to each acre-foot of water delivered to SWP customer based on the power required to pump the water to designated delivery points on the system. DWR can adjust the system energy rate as the calendar year progresses in order to reflect actual costs.

The OAPF charge recovers environmental remediation costs of power generation facilities not on the aqueduct, namely Reid Gardner Unit 4, and is negligible at this time.

The SWP uses low-cost hydroelectric and recovery generation resources, but they only provide about 50 percent of the SWP energy needs in an average water year. The SWP relies on the wholesale market and contractual resources with exposure to market price volatility for as much as 30 to 35 percent of its needs, using other contractual resources to fill in the difference.

The SWP energy required to move water to Metropolitan is related to the transportation on the East Branch through Devil Canyon and on the West Branch through Castaic.

Cost of SWP Power for Metropolitan Terminal Delivery Points, \$ per Acre-Foot

	CY 2017 DWR	CY 2018 DWR	CY 2019 DWR	CY 2020 DWR	CY 2021 Estimated	CY 2022 Estimated	CY 2023 Estimated
East Branch	\$149.60	\$173.92	\$157.28	\$171.47	\$287.46	\$369.32	\$307.83
West Branch	\$148.70	\$161.50	\$144.89	\$167.40	\$274.45	\$395.45	\$329.61

The SWP energy costs are impacted by two factors. First, the annual hydrology, secondly the energy policies of the state of California. The SWP has invested heavily in hydroelectric power generation facilities. The unit cost of operating the power facilities declines as the amount of available water increases. The SWP is acquiring renewable resources, primarily solar to date, to meet its obligation to reduce greenhouse gas emissions. The SWP energy costs are also impacted by the increasing cost of using the California Independent System Operator's (CAISO) grid to deliver power from its generating sources and the wholesale power market to its pumping loads. The SWP does not own high voltage transmission facilities and must use the CAISO grid to move power. Finally, the SWP has an obligation to acquire and surrender emissions allowances for the generating facilities the SWP owns, primarily the Lodi Energy Center.

BUDGET HIGHLIGHTS

The budget for the SWP is increasing in FY 2022/23 compared to the FY 2021/22 budget due to increased maintenance activity, and substantial capital related expenditures for Oroville Spillway repair not reimbursed by FEMA. Power costs are projected to be higher due to higher market power rates, primarily driven by substantial increases in the natural gas price forecast, along with increased O&M and clean up costs of the Hyatt-Thermalito project.

The Biennial Budget includes Metropolitan's planned contribution of \$99 million over the budget period for DCP planning activities, which contributes to the increase in SWP expenditures in FY 2023/24. This contribution follows Board policy that staff work with the State to find solutions to improve Delta conveyance. The focus over the next two years will be supporting DWR as it seeks permits for a Delta conveyance project; participating in the Delta Conveyance Design and Construction Authority; and continuing to put forward sound scientific research to help inform and improve Delta management decisions. If staff determines that Metropolitan's appropriate contribution toward planning activities should exceed the budgeted amount, the General Manager will request authorization from the Board for additional funding. Additionally, at a later date staff will recommend that the Board separately consider Metropolitan's participation in a new DCP, after project planning has progressed further.

COLORADO RIVER AQUEDUCT

OVERVIEW

Metropolitan was established to obtain an allotment of Colorado River water, and its first mission was to construct and operate the Colorado River Aqueduct (CRA). The CRA consists of 5 pumping plants, 450 miles of high voltage power lines, 1 electric switching station, 4 regulating reservoirs, and 242 miles of aqueducts, siphons, canals, conduits and pipelines terminating at Lake Mathews in Riverside County. Metropolitan first delivered CRA water in 1941 to its member agencies.

Metropolitan owns, operates, and manages the CRA. Metropolitan is responsible for operating, maintaining, rehabilitating, and repairing the CRA, and is responsible for obtaining and scheduling energy resources adequate to power pumps at the CRA's five pumping stations.

Under its contracts with the federal government, Metropolitan has a fourth priority to 550,000 acre-feet per year of Colorado River water, less certain use by higher priority holders and Indian tribes. Metropolitan also holds a fifth priority for an additional 662,000 acre-feet per year that exceeds California's 4.4 million acre-foot per year basic apportionment, 38,000 acre-feet under the sixth priority during the term of the Colorado River Water Delivery Agreement, and another 180,000 acre-feet per year when surplus flows are available. Metropolitan can obtain water under the fourth, fifth, and sixth priorities from:

- Water unused by the California holders of priorities 1 through 3;
- Water saved by extraordinary conservation programs, crop rotation, and water supply program; or,
- When the U.S. Secretary of the Interior makes available:
 - o Surplus water, Intentionally Created Surplus water, and/or
 - o Water apportioned to, but unused by, Arizona and Nevada.

Metropolitan also receives water from the Colorado River pursuant to CRA supply programs and water exchanges.

CRA Cost Summary, \$ millions

	2020/21 Actuals	2021/22 Budget	2022/23 Proposed	Change from 2021/22	2023/24 Proposed	Change from 2022/23
CRA Power ¹	\$50.5	\$57.6	\$105.9	\$48.3	\$85.6	(\$20.3)
CRA Dues ²	\$0.7	\$0.8	\$0.8	\$0.0	\$0.8	—
Acre-feet	891,100	732,790	1,006,948	274,158	922,838	(84,110)

¹Does not include Departmental costs reflected elsewhere in this Budget

²Six Agency and Colorado River Authority of California

Budgeted CRA Power costs represent expenditures for the Hoover and Parker contracts and market power purchases to support budgeted CRA water deliveries.

CRA COSTS FOR TRANSPORTATION AND SUPPLY

Metropolitan incurs capital and operations and maintenance expenditures to support the CRA activities. The costs of the CRA activities include labor, materials and supplies, outside services to provide repair and maintenance, and professional services. The CRA activities benefit from Water System Operations support services and management supervision, as well as Administrative and General activities of Metropolitan. Metropolitan finances past, current and future capital improvements on the CRA, and capitalizes those improvements as assets. The costs of Metropolitan's capital financing activities are apportioned to service functions, such as the CRA.

The costs of the CRA supply portfolio developed by Metropolitan are paid by Metropolitan. The CRA supply portfolio is supported by Water Resource Management labor, materials and supplies. The CRA supply portfolio activities benefit from Water Resource Management support services and management supervision, as well as Administrative and General activities of Metropolitan. Metropolitan finances past, current and future capital improvements associated with the CRA supply portfolio capital assets and has capitalized these investments as Participation Rights.

Accordingly, the CRA costs for transportation and supply are reflected in the Departmental and General District Requirements budgets.

CRA COST FOR POWER

Metropolitan currently has four basic sources of power available to meet CRA energy requirements: Hoover Power, Parker Power, and wholesale power purchases from inside and outside the California Independent System Operator (CAISO). For wholesale power purchases within the CAISO, the appropriate price index is the South Path 15 for Southern California (SP15), whereas wholesale power purchases outside of CAISO utilize the MEAD bi-lateral index. MEAD substation is an import interconnection point for power into CAISO and can be utilized by Metropolitan to import power for the CRA from entities throughout the western United States.

Cost of CRA Power Sources, \$ per Megawatt-hour (MWh)

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
Hoover ¹	\$17.86	\$18.46	\$18.33	\$17.64	\$15.76
Parker ¹	\$15.40	\$14.38	\$17.67	\$18.34	\$15.86
SP15, off-peak ²	\$26.48	\$28.27	\$38.52	\$27.29	\$35.73
SP15, on-peak ³	\$33.46	\$38.84	\$49.97	\$38.84	\$46.60
MEAD, off-peak ⁴	\$22.94	\$25.09	\$31.89	\$23.61	\$36.98
MEAD, on-peak ⁵	\$30.25	\$33.16	\$44.31	\$29.01	\$65.89

¹Information from Annual Reports for years 2017, 2018, 2019, 2020, and 2021.

²SP15, off-peak price, is used to determine Metropolitan's off-peak energy costs.

³SP15, on-peak, is used to determine the market value of Metropolitan's sales of excess energy, if any. SP15 on-peak is also used to determine the pumping costs associated with pumping non-Metropolitan water through the CRA system, unless otherwise provided by contract.

⁴MEAD, off-peak, is used to determine Metropolitan's off-peak supplemental energy costs imported at MEAD substation for power outside of the CAISO.

⁵MEAD, on-peak, is used to determine Metropolitan's on-peak supplemental energy costs imported at MEAD substation for power outside of the CAISO. The market value of Metropolitan's sales of excess energy, when not all power supply is needed for the CRA pumps, if any is valued at SP15 index for on and off-peak periods.

Metropolitan's current basic power resource mix, which is comprised of generation from Hoover and Parker dams, is cost effective but is not sufficient energy to pump Metropolitan's Colorado River water supplies in all years. For that reason, Metropolitan is required to purchase additional or supplemental power to transport Colorado River water supplies in some years. As a result, Metropolitan requires that any party seeking to transport non-Metropolitan water through its Colorado River Aqueduct to purchase, or arrange for Metropolitan to purchase, the power supplies required to pump that water.

Supplemental power can be purchased and transmitted to Metropolitan to pump non-Metropolitan water through the CRA. The market rate for electric energy prices is regularly tracked and published for various regions in California. Metropolitan uses the CAISO Open Access Same-time Information System (OASIS) Day-Ahead Locational Marginal Price as reflective of the supplemental power costs for electric energy used for its pumping plants on the CRA. The regional index applicable to energy sold for use on the CRA is designated as “South-of-Path 15”, or SP15, and is reflective of Southern California market energy prices.

South-of-Path 15 On-Peak Energy Prices, \$/MWh

	CY 2017	CY 2018	CY 2019	CY 2020	CY 2021
January	\$36.22	\$37.09	\$42.56	\$33.60	\$33.22
February	\$28.52	\$36.84	\$72.73	\$26.85	\$71.09
March	\$23.97	\$32.39	\$35.98	\$25.49	\$29.91
April	\$26.71	\$27.69	\$24.83	\$17.11	\$28.04
May	\$32.08	\$24.12	\$20.25	\$16.81	\$26.59
June	\$38.14	\$31.45	\$24.81	\$23.72	\$56.06
July	\$41.49	\$101.04	\$35.24	\$31.63	\$78.89
August	\$54.96	\$85.22	\$36.39	\$108.05	\$65.08
September	\$43.18	\$38.32	\$40.35	\$46.14	\$72.09
October	\$47.86	\$41.09	\$35.71	\$48.29	\$57.89
November	\$44.82	\$55.50	\$37.44	\$39.32	\$60.14
December	\$44.21	\$57.26	\$37.80	\$40.80	\$63.40

MWh = megawatt-hour, or 1,000 kilowatt-hours

Financial forecast for the budget assumes all supplement energy purchased at SP 15 rates.

BUDGET HIGHLIGHTS

The budget for the CRA power is increasing in FY 2022/23 compared to FY 2021/22 due to increased diversions at Intake resulting in increased use of supplemental power and increased market costs of supplemental power. Additionally, the greenhouse gas charge collected by the California Air Resources Board is increasing and a resource adequacy requirement was added to the proposed budget.

In FY 2023/24, costs are lower due to reduced diversions at Intake.

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SUPPLY PROGRAMS

OVERVIEW

Metropolitan's principal sources of water supplies are the State Water Project (SWP) and the Colorado River. Metropolitan receives water delivered from the SWP under State Water Contract (SWC) provisions, including contracted supplies, use of carryover storage in San Luis Reservoir, and surplus supplies. Metropolitan also holds rights to a basic apportionment of Colorado River water and has priority rights to an additional amount from the Colorado River depending on availability of surplus supplies. The Supply Programs supplement these SWP and Colorado River supplies. The budgeted costs for the Supply Programs are as follows:

Supply Programs Cost Summary, \$ millions

	2020/21 Actuals	2021/22 Budget	2022/23 Proposed	Change from 2021/22	2023/24 Proposed	Change from 2022/23
AVEK High Desert Water Bank*	\$6.4	\$26.2	\$38.4	\$12.2	\$46.0	\$7.6
IID/MWD Conservation	11.0	13.2	12.0	(1.2)	12.4	0.4
In Basin	9.2	1.6	2.7	1.1	3.6	0.8
Multi Species Conservation Program	4.0	4.1	4.1	0.0	4.2	0.0
Other CRA	8.6	10.5	13.6	3.1	15.6	2.0
Other SWP Programs	11.5	0.2	9.7	9.5	1.4	(8.3)
PVID Program	7.8	5.4	7.4	2.0	9.0	1.6
Sites Reservoir	10.4	0.0	7.0	7.0	8.0	1.0
System Conservation	0.0	0.0	10.0	10.0	10.0	0.0
Total Supply Programs	\$68.9	\$61.2	\$105.1	\$43.8	\$110.1	\$5.0

* The FY 2022/23 and FY 2023/24 expenditures for AVEK High Desert Water Bank program are proposed to be bond funded.

Budgeted Supply Programs costs represent opportunities and actions associated with a 15 percent SWP allocation in 2022, 40 percent allocation in 2023, and 50 percent allocation in 2024 percent SWP allocation and diversions on the CRA of 923 to 1,007 TAF. On the SWP, Supply Program expenses support maximizing storage capabilities of the Central Valley storage programs, utilizing transfer and exchange programs recently executed, and bringing the balance into the region. On the CRA, the expenses support the Palo Verde Irrigation District land fallowing program and the Imperial Irrigation District/Metropolitan Conservation Program, as well as other programs to conserve and develop supplies.

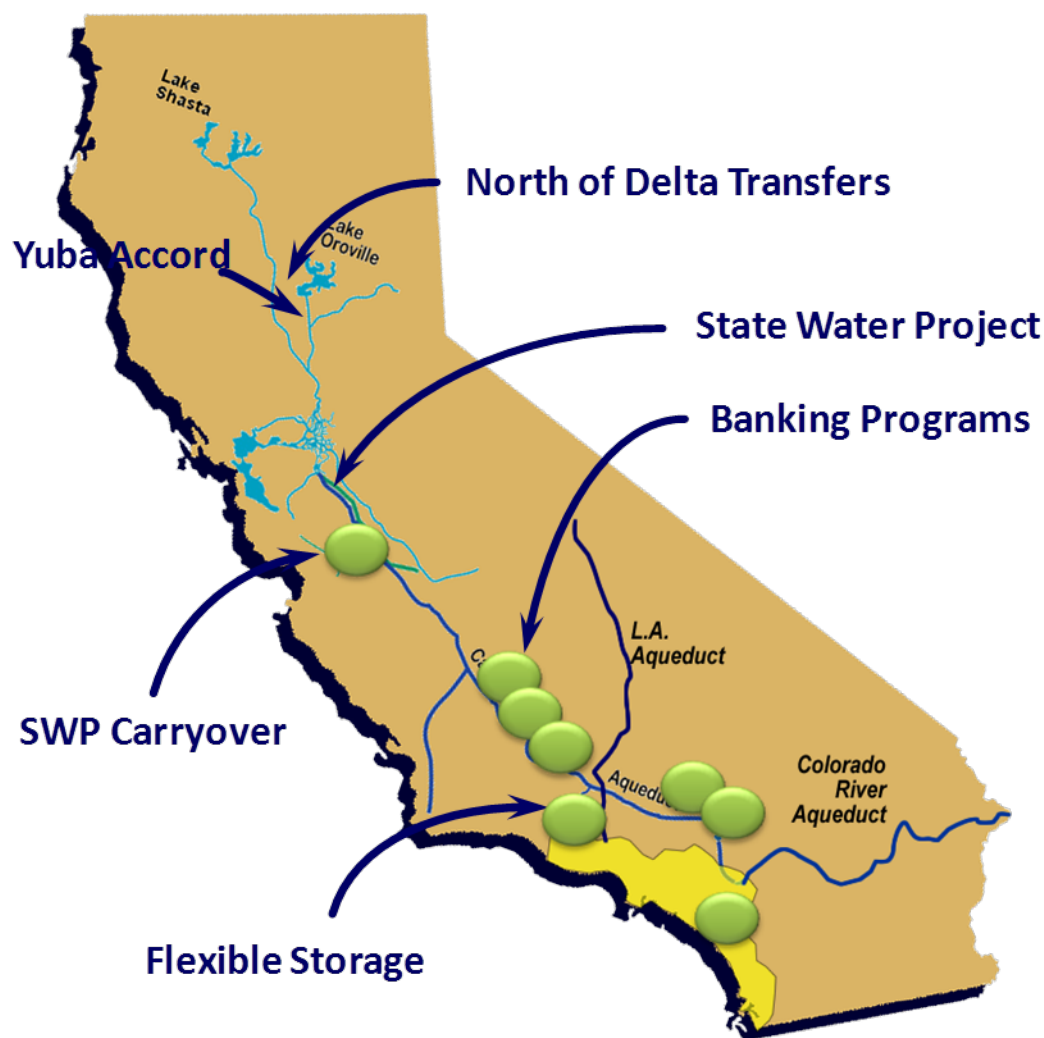
SUPPLY PROGRAMS DEVELOPED ALONG THE STATE WATER PROJECT

Since adoption of the 1996 Integrated Resources Plan (1996 IRP) and subsequent updates, Metropolitan has developed and actively managed a portfolio of supplies to convey through the California Aqueduct, as shown in Figure 10. The geographical locations of the projects are indicated by the green dots; Metropolitan's service area is designated by the yellow highlighted area. Metropolitan submits delivery schedules to DWR for these supplies, and alters these schedules throughout the year based on changes in the availability of SWP and Colorado River water. The portfolio of supplies that Metropolitan has developed to be conveyed through the SWP since adoption of the Monterey Amendments and the 1996 IRP extend from north of the Delta to Southern California.

Since the Monterey Amendments, Metropolitan has secured one-year water transfer supplies through Metropolitan-only purchases, buyer coalition-purchases, and Governor Drought Water Banks. The most recent years that Metropolitan secured these one-year transactions were 2008 through 2010, and 2015. Metropolitan opted not to pursue these transactions in 2012 through 2014 or 2018. Most of the sellers were Sacramento Valley water users who are not Contractors. Other Contractors obtained one-year water transfers during this time frame as well. There were no single-year transfer programs in 2011, 2016-2017, or 2019 because of favorable water supply conditions and lack of capacity to move transfer supplies through the Delta.

In addition to the above one-year water transfers, Metropolitan purchases long-term water transfer supplies through the Yuba Accord. The Yuba Accord has provided water to enhance SWP and CVP water supply reliability by offsetting Delta export reductions and providing dry year water supplies for participating SWP and CVP contractors. Acting as the intermediary for Yuba Accord transactions, DWR purchases water made available by the Yuba County Water Agency and sells a portion of such water to Metropolitan. Water purchased under the Yuba Accord is not SWP water.

Figure 10: California Aqueduct Portfolio of Supplies

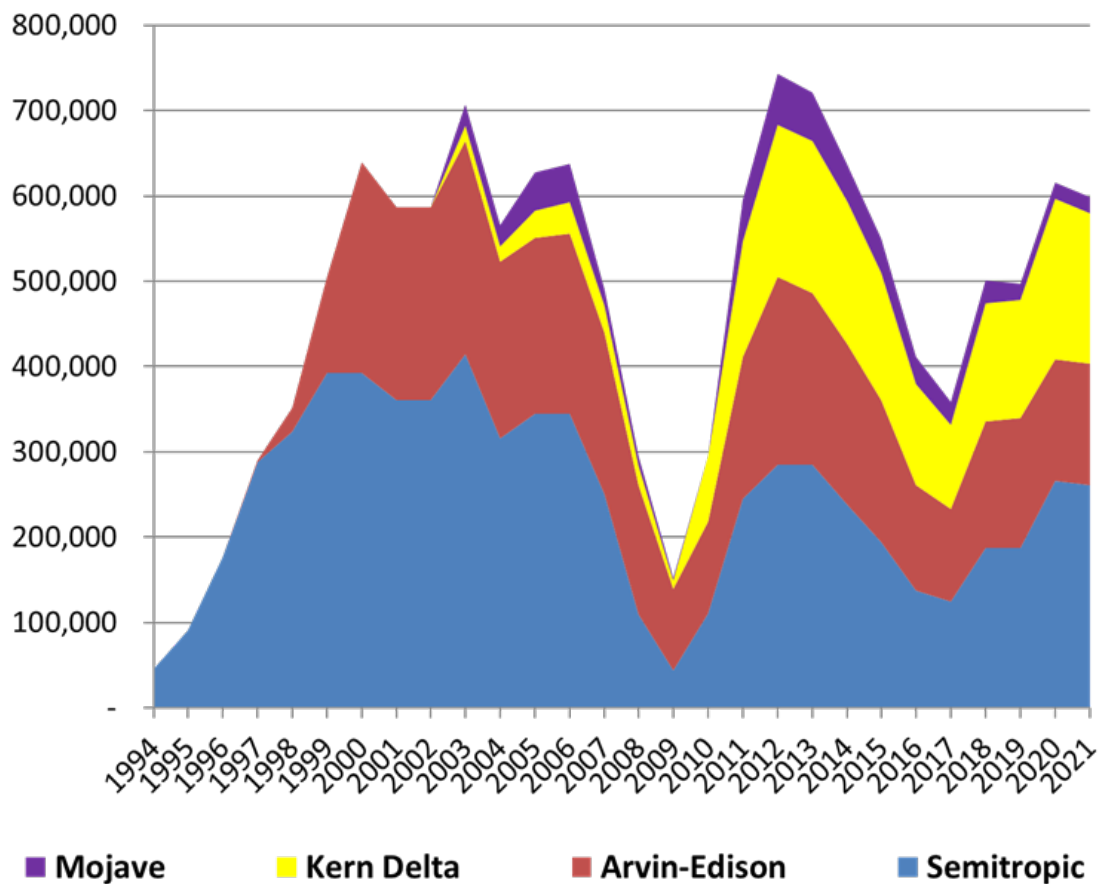


In addition to one-year transfers, and the Yuba Accord water, Metropolitan has developed groundwater storage agreements that allow Metropolitan to store available supplies in the Central Valley for return later. Metropolitan enters into point of delivery agreements with DWR to deliver water supplies from the SWP facilities to these

storage programs. Later, Metropolitan enters into introduction of local supplies agreements to return these water supplies to the SWP system for delivery to Metropolitan's service area. Metropolitan's storage activities are shown in Figure 11. The figure shows how the programs function to store supplies during surplus conditions and return supplies during a drought. The storage programs have demonstrated that they can provide a significant amount of water when needed.

SWP Groundwater Storage Programs year-end balance, acre-feet

- Arvin-Edison Storage Program: under the agreement, Arvin-Edison Water Storage District stores water on behalf of Metropolitan. Up to 350,000 acre-feet can be stored; Arvin-Edison is obligated to return up to 75,000 acre-feet of stored water in any year to Metropolitan, upon request. The water is returned by direct groundwater pump-in and exchange of SWP supplies. A 2017 State Water Resources Control Board (SWRCB) regulation setting a Maximum Contaminant Level (MCL) for trichloropropane (TCP) has temporarily suspended use of this program due to the levels detected in the program groundwater wells. In November 2021, a change in point-of-delivery was initiated to allow Metropolitan access to its stored water through an operational exchange of Friant Division CVP water supplies with SWP supplies in San Luis Reservoir.
- Semitropic Storage Program: under the agreement, Metropolitan stores water in the groundwater basin underlying land within the Semitropic Water Storage District. The maximum storage capacity is 350,000 acre-feet. Currently, the minimum annual yield to Metropolitan is 38,200 acre-feet, and the maximum annual yield is 229,700 acre-feet depending on the available unused capacity and the SWP allocation. The water is returned by direct groundwater pump-in and exchange of SWP supplies.
- Kern Delta Storage Program: under the agreement, Kern Delta Water District provides groundwater banking and exchange transfer to allow Metropolitan to store up to 250,000 acre-feet of SWP water in wet years and take up to 50,000 acre-feet annually during droughts. The water is returned by direct groundwater pump-in or by exchange of surface water supplies.
- Mojave Storage Program: under the agreement, Mojave Water Agency provides groundwater banking and exchange transfers to allow Metropolitan to store up to 390,000 acre-feet for later return. The agreement allows Metropolitan to annually withdraw Mojave Water Agency's SWP contractual amounts, after accounting for local needs. The Mojave storage program returns water only by exchange of surface water supplies.
- Antelope Valley-East Kern (AVEK) Storage Program: under the storage agreement, Metropolitan, at its discretion, would return half of the exchange water to AVEK at the Banks pumping plant. Under the Storage Program, Metropolitan, at its discretion, could store up to 30,000 acre-feet of its SWP Table A amount or other supplies in the Antelope Valley Groundwater Basin in an account designated for Metropolitan. The water is returned by exchange of SWP supplies or direct groundwater pump-in.
- Antelope Valley-East Kern (AVEK) High Desert Water Bank Program: under this agreement, AVEK provides storage for up to 70,000 acre-feet per year of its unused SWP Table A amount to Metropolitan or other supplies for later return. The maximum storage capacity for Metropolitan supplies would be 280,000 acre-feet. The program is designed to return up to 70,000 acre-feet per year by direct pump-in to the East Branch of the California Aqueduct. Water can also be returned by exchange of SWP supplies when available.
- Sites Reservoir: under a participation agreement, Metropolitan is contributing to planning activities for a proposed reservoir project of approximately 1.3 to 1.5 million acre-feet being analyzed by the Sites Reservoir Authority, to be located in Colusa County. Water stored for the proposed project would be diverted from the Sacramento River. The maximum storage capacity for Metropolitan supplies would be 311,700 acre-feet. As proposed, the program would be designed to return up to 50,000 acre-feet per year on average to Metropolitan by direct pump-in to the Sacramento River. Metropolitan's agreement to participate in funding of this phase of project development activities does not commit Metropolitan to participate in any actual reservoir project that may be undertaken in the future.

Figure 11: SWP Groundwater Storage Programs, acre-feet

Metropolitan has developed exchanges and transfers with other Contractors to enhance supply flexibility. Some of these agencies have extensive groundwater supplies and are willing to exchange their SWP supplies.

- San Gabriel Valley Water District: under this agreement, Metropolitan delivers treated water to a San Gabriel Valley Water District (SGVMWD) sub-agency in exchange for twice as much untreated SWP supplies delivered into the Main San Gabriel groundwater basin. The groundwater basin supplies water to both Metropolitan and SGVMWD sub-agencies. Each year Metropolitan purchases 5,000 acre-feet minus the unbalanced exchange amount. By mutual agreement Metropolitan may purchase more than the 5,000 acre-feet per year should SGVMWD have additional supplies available. This program has the potential to increase Metropolitan's reliability by providing 115,000 acre-feet through 2035.
- Desert Water Agency/Coachella Valley Water District Advance Delivery Program: under this program, Metropolitan delivers Colorado River water to the Desert Water Agency (DWA) and Coachella Valley Water District (CVWD) in advance of the exchange for their SWP Contract Table A allocations. In addition to their Table A supplies, the agencies can take delivery of SWP supplies available under Article 21 and the Turn-back Pool Program, and non-SWP supplies separately acquired by each agency. These non-SWP supplies have included Yuba Accord water, drought water bank water, and San Joaquin Valley water. By delivering enough water in advance to cover Metropolitan's exchange obligations, Metropolitan is able to receive DWA and CVWD's available SWP supplies in years in which Metropolitan's supplies are insufficient without having to deliver an equivalent amount of Colorado River water. In December 2019, the exchange agreements were amended to provide more flexibility and operational certainty for the parties involved. Additionally, under

the amended agreement, CVWD and DWA in wet years pay a portion of Metropolitan's water storage management costs, up to a combined total of \$4 million per year.

SUPPLY PROGRAMS DEVELOPED ALONG THE COLORADO RIVER AQUEDUCT

Since adoption of the 1996 IRP and subsequent updates, Metropolitan has developed and actively manages a portfolio of supplies to convey through the CRA. Metropolitan determines the delivery schedule of those resources throughout the year based on changes in the availability of SWP and of Colorado River water. Figure 12 shows the geographic location of the portfolio of additional CRA supplies, designated by the red dots, which Metropolitan has developed for diversion into the CRA since adoption of the 1996 IRP. These resources extend from Lake Mead to Southern California and provide supply to Metropolitan's service area, which is shown in the yellow highlighted area.

Figure 12: Colorado River Aqueduct Portfolio of Supplies



- **Bard Fallowing**: Approved by the MWD Board in December 2019, the Bard Water District (Bard) Seasonal Fallowing Program (Program) incentivizes farmers to fallow land irrigated with Colorado River water for the spring and summer months in order to reduce water consumption in Bard and augment Metropolitan's Colorado River supplies. Metropolitan estimates a water savings of 2.2 acre-feet per irrigable acre. A fallowing call inviting farmers in Bard Unit to participate has been made for the summer of 2022.

- Imperial Irrigation District/Metropolitan Conservation Program: Under a 1988 Conservation Agreement, Metropolitan has funded water efficiency improvements within the Imperial Irrigation District's (IID) service area in return for the right to divert the water conserved by those investments. Metropolitan provided funding for IID to construct and operate a number of conservation projects that have conserved up to 109,460 acre-feet of water per year that is then available to Metropolitan. Execution of the Quantification Settlement Agreement (QSA) and related agreements resulted in changes in the availability of water under the program. As a result of a 2014 IID-Metropolitan letter agreement, the amount of water conserved by IID has been quantified at 105,000 acre-feet per year beginning in 2016. Metropolitan is guaranteed at least 85,000 acre-feet per year, with the remainder of the conserved water being made available to the Coachella Valley Water District (CVWD), if needed under the 1989 Approval Agreement as amended. However, in a recent clarifying agreement, CVWD has agreed to limit its call to 15,000 acre-feet per year through 2026, yielding 90,000 acre-feet annually from the program for Metropolitan, with Metropolitan delivering the remaining 15,000 AF to CVWD at Whitewater.
- N-Drip Irrigation: Metropolitan has agreed to jointly fund a pilot project in Arizona to test the efficacy of a novel drip irrigation technology produced by an Israeli company called N-Drip. The key component of the technology is a drip emitter that resists clogging under relatively low water pressure, which allows for drip irrigation systems without pumps or electricity, significantly reducing the cost of installation and operation. Other funding partners include the Central Arizona Water Conservation District (the project lead), the Southern Nevada Water Authority, the Central Utah Water Conservancy District, and Denver Water. The pilot is primarily a research project expected to yield minimal water savings for Metropolitan (at most, 400 AF in 2022). However, if the technology is widely adopted in the future, it could yield significant additional conservation savings that could increase Metropolitan's Colorado River supplies.
- Palo Verde Land Management, Crop Rotation, and Water Supply Program: Under this program, participating landowners in the PVID's valley service area are paid to reduce water use by not irrigating a portion of their land. A maximum of 35 percent of the participating lands within the Palo Verde Valley can be fallowed in any given year. This program saves up to 133,000 acre-feet of water in certain years, and a minimum of 33,000 acre-feet per year. The term of the program is 35 years. Fallowing began in 2005. In March 2009, Metropolitan and PVID entered into a supplemental emergency fallowing program within PVID that provided for the fallowing of additional acreage in 2009 and 2010. Since 2005, over 1.3 million acre-feet total of Colorado River water has been conserved. The volume of water that becomes available to Metropolitan is governed by the QSA and the Colorado River Water Delivery Agreement. Under these agreements:
 - Metropolitan must reduce its consumptive use of Colorado River water by that volume of consumptive use by PVID and holders of Priority 2 that is greater than 420,000 acre-feet in a calendar year, or
 - Metropolitan may increase its consumptive use of Colorado River water by that volume of consumptive use by PVID and holders of Priority 2 that is less than 420,000 acre-feet in a calendar year.

In both cases, each acre-foot of reduced consumptive use by PVID is an additional acre-foot that becomes available to Metropolitan.

- Quechan Fallowing: Approved by the MWD Board in December 2021, the Metropolitan/Quechan Tribe Seasonal Fallowing Pilot Program (Pilot) incentivizes farmers to fallow land irrigated with Colorado River water for the spring and summer months in order to reduce water consumption in the Quechan tribal land and augment Metropolitan's Colorado River supplies. Since the Quechan Tribe's water supplies have a higher priority than Metropolitan's on the Colorado River, Metropolitan benefits from the reduced water consumption as the saved water will remain in the Colorado River and be made available for diversion.
- Southern Nevada Water Authority and Metropolitan Storage and Interstate Release Agreement: Under this 2004 agreement and a related Operational Agreement, the Southern Nevada Water Authority (SNWA) may offer a portion of its Colorado River water supplies to Metropolitan when there is space available in the CRA

to receive the water. SNWA may call for return of the water in a future year, in which Metropolitan would reduce its Colorado River water order to return this water. In 2009, 2012, and 2015, Metropolitan, the Colorado River Commission of Nevada, and SNWA amended the related Operational Agreement dealing with volumes of water that may be stored or called at various times. The agreements can be terminated upon 90 days' notice following the return of the water stored by Metropolitan.

- Lower Colorado Water Supply Project: This project develops additional water supplies by pumping groundwater into the All-American Canal for delivery to IID. An equal volume of Colorado River water is then made available for other water users along the river. Under a contract among Metropolitan, the City of Needles, and the United States Bureau of Reclamation, Metropolitan receives any excess unused water developed by the project. Metropolitan makes payments to a trust fund to develop a replacement project or to desalt the groundwater should the groundwater become too saline for discharge into the All-American Canal.
- Exchange with the United States (San Luis Rey): 16,000 acre-feet from the All-American and Coachella Canal lining projects is allocated to the San Luis Rey Settlement Parties. The United States furnishes this water at Metropolitan's Colorado River Intake on Lake Havasu. Metropolitan takes possession of the water and by exchange delivers an equal volume of Metropolitan's blended supplies to SDCWA. By separate agreement, SDCWA conveys the water to the San Luis Rey Settlement Parties.
- California ICS Agreement: Under a 2007 agreement and its amendment, Metropolitan may store a portion of IID's excess conservation in Metropolitan's service area, subject to both annual creation and total accumulation limits. IID may call for return of the water in a future year, in which Metropolitan would reduce its Colorado River water order to return the water.
- Lake Mead Storage Program: In December 2007, Metropolitan entered into agreements to set forth the guidelines under which Intentionally Created Surplus (ICS) water is developed, stored in, and delivered from Lake Mead. The amount of water stored in Lake Mead must be created through extraordinary conservation, system efficiency, or tributary conservation methods. ICS is available for delivery in a subsequent year, with Extraordinary Conservation ICS subject to a one-time deduction to benefit the river system and annual evaporation losses. Extraordinary conservation methods used by Metropolitan to date are water saved by fallowing in the Palo Verde Valley, projects implemented with IID in its service area, the Lower Colorado Water Supply Project, All American and Coachella Canal water received under the San Luis Rey Indian Water Rights Settlement Agreement prior to the settlement parties receiving the water, groundwater desalination, groundwater recovery, water conserved from Metropolitan's Landscape Transformation Program, water conserved from implementation of indoor water conservation devices, and water recycling. "System Efficiency ICS" can be created through the development and funding of system efficiency projects that save water that would otherwise be lost from the Colorado River. Metropolitan has participated in two projects to create System Efficiency ICS, and two projects to create ICS by conservation in Mexico:
 - Yuma Desalting Pilot Project: Metropolitan contributed funds toward the 2010-2011 pilot run of the Yuma Desalting Plant in exchange for a portion of the desalinated water produced by the project. The Yuma Desalting Plant treated brackish agricultural drainage that flows into Mexico to the Ciénega de Santa Clara at the terminus of the Colorado River but does not count as deliveries to Mexico under the Mexican Water Treaty. Metropolitan's portion of the desalinated water was 24,397 acre-feet and this water was stored in Lake Mead. Metropolitan can take delivery of up to the entire amount in any single year.
 - Drop 2 (Warren H. Brock) Reservoir: Metropolitan contributed funds toward the Bureau of Reclamation's construction of an 8,000 acre-foot off-stream regulating reservoir near Drop 2 of the All-American Canal in Imperial County. This reservoir conserves about 55,000 acre-feet of water per year by capturing and storing otherwise non-storable flow. In return for its funding, Metropolitan received 100,000 acre-feet of water that was stored in Lake Mead, and has the ability to take delivery of up to 25,000 acre-feet of water in any single year. Besides the additional water supply, the new reservoir adds to the flexibility of Colorado River operations.

- In November 2012, Metropolitan executed agreements in support of a program to augment Metropolitan's Colorado River supply between 2013 and 2017 through an international pilot project in Mexico. Metropolitan's total share of costs was \$5 million for 47,500 acre-feet of project supplies. The costs were paid, and the conserved water was credited to Metropolitan's intentionally-created surplus water account. In December 2013, Metropolitan and IID executed an agreement under which IID paid half of Metropolitan's program costs, or \$2.5 million, in return for half of the project supplies, 23,750 acre-feet.
- In September 2017, Metropolitan executed agreements in support and continuation of a program to augment Metropolitan's Colorado River supply through international pilot projects in Mexico. Under the new set of agreements, Metropolitan's total share of costs are expected to be \$3.75 million for 27,275 acre-feet of project supplies. The costs will be paid in three parts, 2020, 2023, and 2026. Water was and will be received in the year of payment.
- In May 2019, Upper and Lower Basin Drought Contingency Plans (DCP) were executed and became effective. The Lower Basin DCP Agreement requires California, Arizona, and Nevada to store defined volumes of water in Lake Mead at specified lake levels. Pursuant to intrastate implementation agreements, and the September 16, 2021 Settlement Agreement with IID, Metropolitan will be responsible for 93 percent of California's DCP Contributions under the Lower Basin DCP. Implementation of the Lower Basin DCP enhances Metropolitan's ability to store water in Lake Mead, changes the one-time deduction and annual evaporation rates, and ensures that water in storage can be delivered at lower elevation levels. The Lower Basin DCP increases the total volume of water the California may store in Lake Mead by 200,000 acre-feet, which Metropolitan will have the right to use. The Lower Basin DCP will be effective through 2026.

In September 2021, Metropolitan and IID executed a settlement agreement. Provisions included Metropolitan's creation of an IID ICS-Sub Account. IID can store water in this sub account, subject to both annual creation and accumulation limits. Terms of IID's ICS Sub-Account mirror those of the Drought Contingency Plan with respect to one-time deductions, annual evaporation rates, and accessibility at various Lake Mead elevations. IID may call for return of the water in a future year, in which Metropolitan would reduce its Colorado River water order to return this water.

In addition to programs that add water to Lake Mead in an ICS account in Metropolitan's name, Metropolitan has entered into various agreements to create system water. System water does not accrue to the benefit of a user, but does increase the elevation of Lake Mead, thereby increasing the reliability of Metropolitan's base and transfer supplies. Programs or agreements that generate system water include:

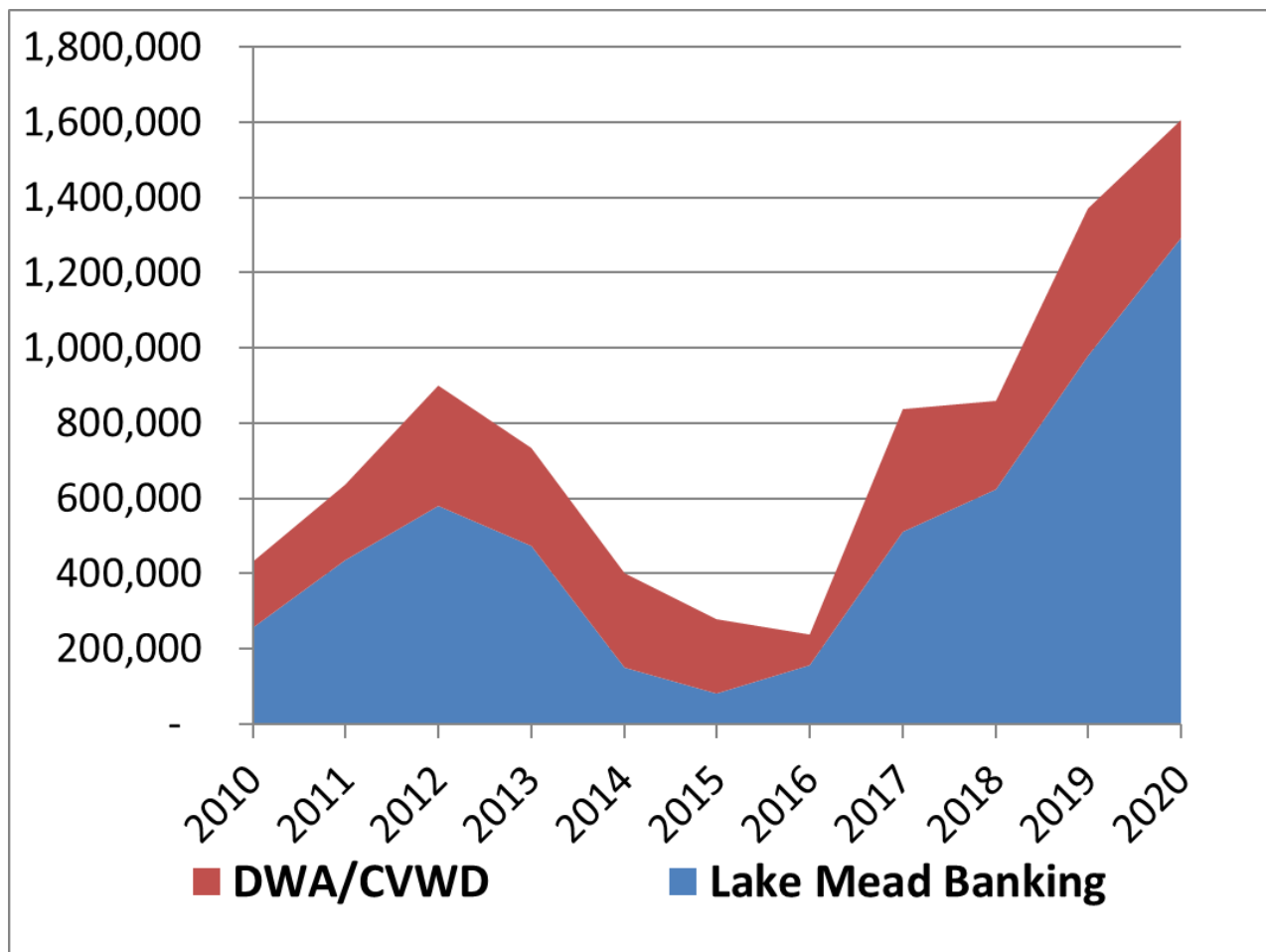
- PVID System Conservation - In June 2021, Metropolitan board approved entering into a funding agreement with the U.S. Bureau of Reclamation, Central Arizona Water Conservation District, and Southern Nevada Water Authority to fund fallowing additional acres under the Palo Verde Land Management, Crop Rotation, and Water Supply Program. The water conserved from the additional fallowed acres stays in Lake Mead to improve the system storage, thereby reducing risk of future water curtailments. The fallowing of the additional acres started August 1, 2021 and will continue through July 31, 2024. The projected water conserved under the agreement is up to 246,000 acre-feet.
- System Conservation – On July 30, 2014, Metropolitan entered into an agreement with USBR, CAWCD, SNWA, and DW for a Pilot Program for funding the creation of Colorado River system water through voluntary water conservation and reduction in use. While the pilot has ended, it was successful, and Metropolitan expects that a similar structure may be used to fund additional voluntary water conservation and reductions in use in response to the 24 Month Study's minimum probable projection of Lake Mead falling below elevation 1,030 feet within the next two years. While system conservation does not directly generate supplies for Metropolitan, it

does increase the elevation of Lake Mead, thereby increasing the reliability of Metropolitan's base and transfer supplies.

- Desert Water Agency/Coachella Valley Water District/Metropolitan Water Exchange and Advance Delivery Programs: Under these programs, Metropolitan delivers Colorado River water to the DWA and CVWD, in exchange for future deliveries by DWA and CVWD of an equal volume of their SWP supplies. By delivering enough water in advance to cover Metropolitan's exchange obligations, Metropolitan is able to receive DWA and CVWD's available SWP supplies in years in which Metropolitan's supplies are insufficient to deliver an equivalent amount of Colorado River water. In December 2019, the exchange agreements were amended to provide more flexibility and operational certainty for the parties involved. Additionally, under the amended agreement, Coachella and Desert in wet years pay a portion of Metropolitan's water storage management costs, up to a combined total of \$4 million per year¹.

Figure 13 shows the year-end balance in Metropolitan's Colorado River storage programs. The combined capacity of the Lake Mead Storage program and the DWA/CVWD advance delivery program is 2,300,000 acre-feet. This is inclusive of the amount of water in storage in Lake Mead as a result of the Drop 2 Reservoir and Yuma Desalting Plant system efficiency projects.

¹ DWA has a SWP Table A contract right of 55,750 acre-feet per year and CVWD has a SWP Table A contract right of 138,350 acre-feet per year, for a total of 194,100 acre-feet per year. In addition to their Table A supplies, DWA and CVWD, subject to Metropolitan's written consent may by exchange take delivery of SWP supplies available under Article 21 of their SWP Contracts, the Turn-back Pool Program, and non-SWP supplies they may acquire and convey through SWP facilities. Under the Metropolitan-CVWD Delivery and Exchange Agreement for 35,000 Acre-feet, up to 35,000 acre-feet of Metropolitan's SWP Table A supply can be requested annually by CVWD for delivery by exchange. Through the Second Amendment to this agreement, CVWD can request an additional 15,000 acre-feet annually from 2020 through 2026, for an additional transfer amount of 105,000 acre-feet.

Figure 13: Colorado River Storage Programs, acre-feet

In addition to the supply programs developed by Metropolitan, Metropolitan entered into an exchange agreement with the San Diego County Water Authority (SDCWA) in 1998, which was amended in 2003. The entire agreement, consideration exchanged between the parties, and obligations are found in the Amended and Restated Exchange Agreement and the related QSA Agreements. SDCWA acquires Colorado River water from two sources and exchanges up to 277,700 with Metropolitan for Metropolitan water deliveries. SDCWA makes available to Metropolitan Colorado River water it purchases from IID that is conserved within IID and conserved water from the lining of the All-American and Coachella canals. In exchange, Metropolitan delivers its own blended water to SDCWA in even monthly installments.

BUDGET HIGHLIGHTS

The budget for the Supply Programs increases over the budget period compared to FY 2020/21, primarily due to a lower SWP allocation of 15% in 2022 and 40% in 2023. As a result of lower than average SWP supplies, supply programs are being utilized to ensure adequate supplies are available to Metropolitan's service area. Additionally, as a result of historically low Lake Mead storage levels and a potential future shortage of Colorado River supplies, new and existing supply programs are being utilized to increase levels in Lake Mead.

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DEMAND MANAGEMENT

OVERVIEW

Demand Management costs are Metropolitan's expenditures for funding local water resource development programs, water conservation programs and all the Future Supply Actions Program. These demand management programs incentivize the development of local water supplies, the conservation of water to reduce the reliance on imported water, and funding of programs focused on removing barriers to the development of local water supplies. These programs are implemented after the service connection between Metropolitan and its member agencies and, as such, do not add any water to the quantity Metropolitan obtains from other sources or to Metropolitan's own supply. Rather, the effect of these downstream programs is to produce a local supply of water for the local agencies, and as a result, Metropolitan avoids and defers the need to deliver more water to its agencies, and accordingly, also avoids and defers additional costs associated with delivery of that additional water.

The budgeted costs for Demand Management are as follows:

Demand Management Cost Summary, \$ millions

	2020/21 Actuals	2021/22 Budget	2022/23 Proposed	Change from 2021/22	2023/24 Proposed	Change from 2022/23
Conservation Credits Program*	\$16.9	\$43.0	\$43.0	\$0.0	\$43.0	\$0.0
Local Resources Program	\$16.9	\$20.3	\$22.2	\$1.8	\$27.5	\$5.3
Future Supply Actions / Stormwater Pilot	\$1.2	\$7.1	\$3.6	(\$3.5)	\$2.4	(\$1.2)

* In FY2023 and FY2024 \$18 million per year of the expenditures for the Conservation Credits Program are proposed to be bond funded.

Budgeted Demand Management costs reflect the financial commitment for the Conservation Program, conservation messaging, and maintaining the financial incentives for existing contracts under the Local Resources Program.

In addition to Metropolitan's own objectives, Metropolitan also pursues local water resource development because it has uniquely been directed to do so by the state Legislature. In 1999, then Governor Davis signed Senate Bill (SB) 60 (Hayden) into law. SB 60 amended the Metropolitan Water District Act to direct Metropolitan to increase conservation and local resource development. No other water utility in California, public or private, has been specifically identified by the state Legislature and directed to pursue water conservation and local water resource development.

Metropolitan's Demand Management programs also support the region's compliance with the requirements of AB 1668 and SB 606. These bills build on Governor Brown's efforts to make water conservation a way of life in California and create a new foundation for long-term improvements in water conservation and drought planning. They establish guidelines for efficient water use and a framework for the implementation and oversight of the new standards, which must be in place by 2022. The two bills strengthen the state's water resiliency in the face of future droughts with provisions that include:

- Establishing water use objectives and long-term standards for efficient water use that apply to urban retail water suppliers; comprised of indoor residential water use, outdoor residential water use,

commercial, industrial and institutional (CII) irrigation with dedicated meters, water loss, and other unique local uses.

- Providing incentives for water suppliers to recycle water.
- Identifying small water suppliers and rural communities that may be at risk of drought and water shortage vulnerability and provide recommendations for drought planning.
- Requiring both urban and agricultural water suppliers to set annual water budgets and prepare for drought.

Metropolitan coordinates closely with its member agencies to achieve these provisions both at a retail agency level in compliance with legislative requirements and as a region.

Demand Management costs also support the Strategic Plan Policy Principles approved by Metropolitan's Board on December 14, 1999. These principles embody the Board's vision that Metropolitan is a regional provider of wholesale water services. In this capacity, Metropolitan is the steward of regional infrastructure and the regional planner responsible for coordinated drought management and the collaborative development of additional supply reliability and necessary capacity expansion. Through these regional services, Metropolitan ensures a baseline level of reliability and quality for service in its service area.

SB 60 DIRECTED METROPOLITAN TO EXPAND DEMAND MANAGEMENT PROGRAMS

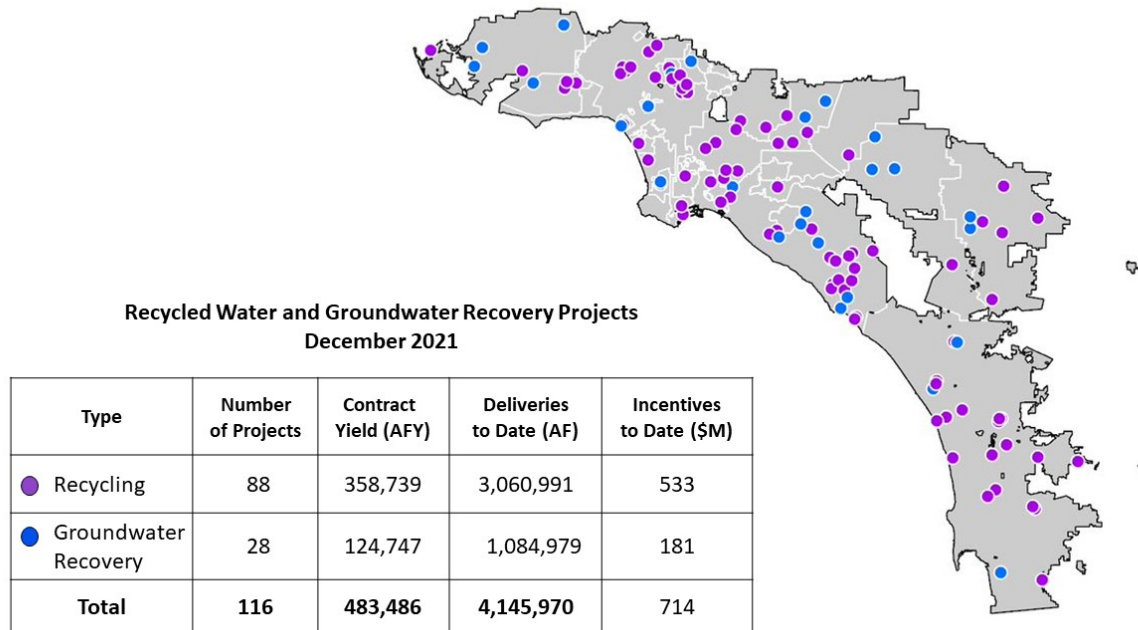
In September 1999, Governor Gray Davis signed SB 60 (Hayden) into law. SB 60 amended the Metropolitan Water District Act to direct Metropolitan to increase "sustainable, environmentally sound, and cost-effective water conservation, recycling, and groundwater storage and replenishment measures." SB 60 also requires Metropolitan to hold an annual public hearing to review its urban water management plan for adequacy in achieving an increased emphasis on cost-effective conservation and local water resource development, and to invite knowledgeable persons from the water conservation and sustainability fields to these hearings. Finally, Metropolitan is required to annually prepare and submit to the Legislature a report on its progress in achieving the goals of SB 60. SB 60 specifically indicated that no reimbursement was required by legislation because Metropolitan, as a local agency, has the authority to levy service charges, fees or assessments sufficient to pay for the program or level of service mandated by SB 60. No other water utility in California, public or private, has been specifically identified by the state Legislature and directed to pursue water conservation and local water resource development.

In FY 2020/21 alone, Metropolitan's service area achieved 1.7 million acre-feet of water savings from conservation, recycled water and groundwater recovery programs. The 1.7 million acre-feet of water savings from water management activities in fiscal year 2020/21 exceeded actual water transactions with member agencies in the same period of 1.57 million acre-feet. These savings derived from programs for which Metropolitan paid incentives, as well as code-based conservation achieved through legislation, building and plumbing codes and ordinances, and reduced consumption resulting from changes in water pricing. Cumulatively, since 1982 Metropolitan has invested more than \$1.5 billion and Metropolitan's service area has achieved 7.6 million acre-feet of water savings.

Metropolitan's Conservation Program provides incentives to residents and businesses for use of water-efficient products and qualified water-saving activities. Rebates have been provided to residential customers for turf removal and purchasing of high-efficiency clothes washers and toilets. Rebates are also provided to businesses and institutions for water-saving devices. In fiscal year 2020/21, the Conservation Program achieved 1.1 million acre-feet of saved water through new and existing conservation initiatives funded with incentives and maintained through plumbing codes. Cumulatively, through fiscal year 2020/21 the Conservation Program has achieved 3.5 million acre-feet of water savings.

Metropolitan provides financial incentives through its Local Resources Program for the development and use of recycled water and recovered groundwater. The Local Resources Program consists of 88 recycling projects and 28 groundwater recovery projects located throughout Metropolitan's service area. Under the program, there are a total of 116 projects in Operation. Since inception in 1982 through FY 2020/21, Metropolitan has provided about \$528 million in incentives to produce about 3.0 million acre-feet of recycled water and approximately \$181 million to recover 1,099,000 acre-feet of degraded groundwater for municipal use.

Local Resources Program Projects



BUDGET HIGHLIGHTS

The budget for the Demand Management is increased when comparing the Biennial Budget to FY 2021/22.

Increases in the Local Resources Program are offset by reductions in the Future Supply Actions and Stormwater Pilot Programs. The Conservation Program increases from \$25 million in FY 2021/22 to \$43M in each year of the biennium with \$18 million each year to be bond financed. Historically, conservation activity peaks during years of shortfalls and diminishes during periods of wet years. The Demand Management is budgeted at \$68.8 million for FY 2022/23 and \$72.9 million in FY 2023/24.

The proposed rates and charges for CYs 2023 and 2024 exclude a separate rate or charge to recover demand management costs, as a result of Metropolitan's Board action on November 23, 2021, directing staff to recover 100 percent of demand management costs from Metropolitan's supply rate elements. Accordingly, all demand management costs (regardless of funding source, such as bond financing or current revenues) are functionalized as supply and collected on the Tier 1 and Tier 2 supply rates. However, because there are no projected Tier 2 transactions in the biennium, the demand management costs are recovered entirely by the Tier 1 supply rate.

DEVELOPMENTS

OVERVIEW

Today, Metropolitan finds that its challenges and goals are evolving. The Board of Directors in the 1990s was deeply concerned with member agencies relying too much on importing supplies from Northern California and the Colorado River. Programs to regionalize conservation efforts and to incentivize new local supplies such as the LRP were developed. This approach was developed through regional long-term planning via Metropolitan's Integrated Water Resources Plan (IRP) initiated in 1996.

Today, there is a shifting water landscape. Population growth and water demands, in large part due to tremendous strides in water use efficiency, are far less than once predicted. Metropolitan's water transactions, which include sales, exchanges, and wheeling, in fiscal year 2019 were the lowest in nearly 40 years, and a new generation of larger local supply projects are in the planning stages.

Delivery of imported supplies will always be a foundation to meet ongoing regional demands, even with climate change, and importantly so will storage of imported water for droughts and emergencies. Given the fluctuations in the availability of water resources, maintaining and enhancing system flexibility is a priority for Metropolitan. The evolving mix of Southern California's future water portfolio is still to be determined and will be impacted by future policies and decisions made by Metropolitan's Board.

Delta Conveyance

Within the region's water portfolio, supplies from the SWP remain an essential baseline water source for Southern California. Water from Northern California delivered through the SWP has provided key supplies in wet years to manage against dry years, and it is the only imported supply that can physically reach significant portions of Metropolitan's service area. This water source faces uncertainties due to climate change and the Delta's badly outdated delivery system; these problems are compounded by a declining ecosystem and 1,100-mile levee systems that are increasingly vulnerable.

California WaterFix was a comprehensive science-based solution proposed by the state to modernize critical water delivery infrastructure of the SWP. The California WaterFix proposed construction of new water intakes in the north Delta and two 40-foot diameter tunnels under the Delta terminating at a forebay in the south Delta. This would have fulfilled the requirement of the 2009 Delta Reform Act to contribute toward meeting the coequal goals of more reliably delivering water for California and protecting, restoring and enhancing the Delta ecosystem.

On April 29, 2019, Governor Newsom issued an executive order directing State agencies to develop a comprehensive statewide strategy to build a climate-resilient water system that included consideration of a single-tunnel Delta conveyance facility instead of the approved two-tunnel WaterFix project. In light of this order, DWR and the State Water Contractors deleted the WaterFix cost provisions from the current amendment process leaving only the water management provisions and embarked on a new public process to further negotiate proposed amendments related to cost allocation for a potential new Bay-Delta conveyance project. As a result, the costs of any such new project are yet unknown and Metropolitan's projected up to \$10.8 billion costs for California WaterFix are no longer included in its current or future budgeting or projections.

Consistent with the Governor's direction, the formal environmental review process for a proposed single tunnel Delta Conveyance Project commenced with the issuance by DWR of a Notice of Preparation under CEQA on January 15, 2020. Planning, environmental review and conceptual design work by DWR is expected to be

completed in the 2023-2024 time frame. The Proposed Biennial Budget includes Metropolitan's planned contribution of \$99.0 million for Delta conveyance project planning activities. This contribution follows Board policy that staff work with the State to find solutions to improve Delta conveyance. The focus over the next two years will be supporting the DWR as it seeks permits for a Delta conveyance project; participating in the Delta Conveyance Design and Construction Authority; and continuing to put forward sound scientific research to help inform and improve Delta management decisions. If staff determines that Metropolitan's appropriate contribution toward planning activities should exceed the budgeted amount, the General Manager will request authorization from the Board for additional funding. Additionally, the Board will separately consider Metropolitan's participation in a new Delta conveyance project once that proposed project is finalized by DWR. Information regarding the Delta conveyance project is located on Metropolitan's website at <https://www.mwdh2o.com/planning-for-tomorrow/securing-our-imported-supplies/delta-conveyance/>.

Regional Recycled Water Program

The Regional Recycled Water Program (RRWP), is a partnership between Metropolitan and the Sanitation Districts of Los Angeles County. In November 2020, Metropolitan's Board voted to proceed with the Environmental Planning Phase of the Program. This work will prepare the documentation needed for future Board approval of the Program Environmental Impact Report. As it has since its completion in 2019, the RRWP's demonstration facility will produce approximately 500,000 gallons per day and will continue to be operated to generate information needed for regulatory approval and to increase the efficiency of the treatment processes that may be used in a potential full-scale recycled water facility. The potential full-scale project, viewed as a potential third source of water for Metropolitan, would provide a reliable, drought-proof, climate-resilient, local supply for indirect potable reuse (IPR) through groundwater basin recharge, direct potable reuse (DPR) through raw water augmentation at Metropolitan's treatment plants, and direct industrial use. If approved, the full-scale project will produce 150 million gallons per day (mgd), or approximately 168,000 acre feet (AF) per year (AFY), of purified water.

Construction of the 0.5 mgd advanced water treatment demonstration plant was approved in 2017 and was completed in August 2019. Testing and operation of the plant began in October 2019 to confirm treatment costs and provide the basis for regulatory approval of the proposed treatment process and technical recommendations concerning design, operation, and optimization of the full-scale RRWP. The initial phase of testing is scheduled for completion in 2021 with future testing phases planned that will form the basis for the design, operation and optimization of, and will inform Metropolitan's Board decision whether to move forward with, a full-scaled advanced water treatment facility. The Board has not yet committed to a full-scale project; however, the planning costs for the backbone system of the RRWP are included in the Biennial Budget in the order of approximately \$20 million over the biennial period. Metropolitan has secured partners in the Southern Nevada Water Authority and Central Arizona Project who have each committed to pay a portion of the planning costs of the project and executed Memorandum of Understandings with Metropolitan to document their commitment to the program's success. Information regarding the RRWP is located on Metropolitan's website at <https://www.mwdh2o.com/planning-for-tomorrow/building-local-supplies/regional-recycled-water-program/>.

CAPITAL FINANCING

OVERVIEW

Capital financing costs are Metropolitan's expenditures for revenue bond debt service, General Obligation bond debt service, debt administration costs, and the funding of capital expenditures from current operating revenues, or Pay-As-You-Go (PAYGO).

The budgeted costs for capital financing are as follows:

Capital Financing Cost Summary, \$ millions

	2020/21 Actuals	2021/22 Budget	2022/23 Proposed	Change from 2021/22	2023/24 Proposed	Change from 2022/23
Debt Service	\$275.7	\$292.7	\$283.3	(\$9.4)	\$296.4	\$13.1
GO Bond Debt Service	7.1	8.2	2.0	(6.3)	2.0	0.0
Debt Administration	4.3	6.1	2.8	(3.3)	2.7	(0.1)
PAYGO	110.0	135.0	135.0	—	135.0	—
Total¹	\$397.1	\$442.0	\$423.0	(\$19.0)	\$436.0	\$13.0

¹ Does not include Departmental costs reflected elsewhere in this Budget.

Budgeted amounts for Capital Financing represent the expenditures for existing and future debt service, anticipated debt administration costs to support the debt portfolio, and PAYGO amounts to support the Capital Investment Plan. Metropolitan generally incurs long-term debt to finance projects or purchase assets which will have useful lives equal to or greater than the related debt. Revenue supported debt can be authorized by Metropolitan's Board of Directors.

CAPITAL INVESTMENT PLAN

The Capital Investment Plan (CIP) expenditures for FY 2022/23 and FY 2023/24 which includes Minor Capital Projects are estimated to be \$600 million. They are funded by current operating revenues (PAYGO) and revenue bond proceeds. The FY 2022/23 CIP expenditures are \$75 million higher than the FY 2021/22 budget, while the FY 2023/24 is unchanged from the FY 2022/23 budget. The largest areas of expenditures in the Biennial Budget are infrastructure refurbishment and replacement and infrastructure upgrades.

PAYGO Percentage of Funding, \$ millions

	2021/22 Budget	2022/23 Proposed	2023/24 Proposed
CIP	\$225.0	\$300.0	\$300.0
Project Funding:			
Bond Proceeds	90.0	165.0	165.0
Prior Bond Funds/Construction Fund	—	—	—
Grants and Loans Funds	—	—	—
Operating Revenues (PAYGO)	135.0	135.0	135.0
PAYGO Percentage of Funding	60.0 %	45.0 %	45.0 %

In FY 2022/23 and FY 2023/24, the percentage of capital that is funded by operating revenues is set at 45% consistent with the FY 2022/23 and FY 2023/24 ten-year forecast for this time period. The projected percentage of capital funded from operating revenues will range from 17 percent to 47 percent over the ten years of the long-range forecast.

SUPPLY PROGRAMS

In FY 2022/23 and FY 2023/24, the Supply Programs include capital expenditures related to the development of the AVEK High Desert Water Bank program. These capital expenditures will be recorded as participation rights and are proposed to be funded by debt. Remaining project costs total \$97.9 million and would be covered by a tax-exempt, fixed rate bond issuance in FY 2022/23 assuming a 15-year maturity and interest rate of 1.75%. The 10-year forecast, which is described in detail later in this report, does not assume additional debt issuances to fund Supply Programs beyond the proposed budget biennium period.

CONSERVATION

In FY 2022/23 and FY 2023/24 the Conservation Program is budgeted at \$43 million in each year. It is proposed that expenditures in excess of \$25 million will be funded by debt. These additional expenditures are proposed to be covered by a \$36 million taxable, fixed rate bond issuance in FY 2022/23 assuming a 10-year maturity and interest rate of 2.25%. The 10-year forecast, which is described in detail later in this report, does not assume additional debt issuances to fund Conservation beyond the proposed budget biennium period.

OUTSTANDING DEBT

Metropolitan has total debt outstanding of \$3.9 billion as of December 31, 2021. Metropolitan's debt issues are summarized below and discussed in detail thereafter.

Outstanding Debt, \$'s, as of December 31, 2021

Issue	Debt Outstanding
2000 Authorization, Series B-3, Water Revenue Bonds (1)	\$78,900,000
2011 Series C, Water Revenue Refunding Bonds	29,315,000
2012 Series A, Water Revenue Refunding Bonds	181,180,000
2012 Series F, Water Revenue Refunding Bonds	26,540,000
2012 Series G, Water Revenue Refunding Bonds	88,230,000
2014 Series E, Water Revenue Refunding Bonds	62,835,000
2015 Series A, Authorization Water Revenue Bonds	199,000,000
2016 Series A, Water Revenue Refunding Bonds	239,455,000
2016 Series B-1, Special Variable Rate Water Revenue Refunding Bonds (1)	41,450,000
2016 Series B-2, Special Variable Rate Water Revenue Refunding Bonds (1)	41,455,000
2017 Series A, Authorization Water Revenue Bonds (1)	80,000,000
2017 Series A, Subordinate Water Revenue Refunding Bonds	219,215,000
2017 Series B, Subordinate Water Revenue Refunding Bonds	106,930,000
2017 Series C, Subordinate Water Revenue Bonds (1)	80,000,000
2017 Series D, Subordinate Water Revenue Refunding Bonds (1)	95,630,000
2017 Series E, Subordinate Water Revenue Refunding Bonds (1)	95,625,000
2018 Series A, Subordinate Water Revenue Refunding Bonds	49,990,000
2018 Series A-1, Special Variable Rate Water Revenue Refunding Bonds (1)	45,035,000
2018 Series A-2, Special Variable Rate Water Revenue Refunding Bonds (1)	45,035,000
2018 Series B, Subordinate Water Revenue Bonds	64,345,000
2018 Series B, Water Revenue Refunding Bonds	129,125,000
2019 Series A, Water Revenue Refunding Bonds	218,090,000
2019 Series A, Subordinate Water Revenue Refunding Bonds	228,880,000
2020 Series A, Water Revenue Bonds	207,355,000
2020 Series A, Subordinate Water Revenue Refunding Bonds	152,455,000
2020 Series B, Special Variable Rate Water Revenue Refunding Bonds (2)	271,815,000
2020 Series C, Water Revenue Refunding Bonds	265,680,000
2021 Series A, Water Revenue Bonds	188,890,000
2021 Series A, Variable Rate Water Revenue Refunding Bonds (1)	222,160,000
2021 Series B, Water Revenue Refunding Bonds	98,410,000
Total Revenue Bonds	\$3,853,025,000
2019 Series A, WaterWorks General Obligation Refunding Bonds	13,165,000
2020 Series A, WaterWorks General Obligation Refunding Bonds	13,665,000
Total General Obligation Bonds	\$26,830,000
Total Revolving Note Program	—
Total Debt:	\$3,879,855,000

(1) Outstanding variable rate obligation.

(2) Issued in fixed mode.

DEBT SERVICE

Debt Service payments in FY 2022/23 are budgeted at \$288.0 million and includes \$2.0 million in General Obligation bond debt service, \$283.3 million in revenue bond debt service, and \$2.8 million for debt administration costs.

Debt Service payments in FY 2023/24 are budgeted at \$301.0 million and include \$2.0 million in General Obligation bond debt service, \$296.4 million in revenue bond debt service, and \$2.7 million for debt administration costs. Total debt service costs in FY 2023/24 are expected to be \$13.0 million greater than the FY 2022/23 payments. Interest payments on synthetic fixed rate debt were calculated at their associated swap rates. Interest rates on variable rate debt were calculated at 0.5 percent for FY 2022/23 and 0.75 percent for FY 2023/24.

Outstanding variable rate debt on December 31, 2021 was approximately \$825.3 million, including bonds bearing interest in the Index Mode, variable rate demand obligations, and revolving note programs. Of the \$825.3 million, \$406.0 are treated by Metropolitan as fixed rate debt by virtue of interest rate swap agreements. The remaining \$419.3 million of variable rate obligations represent approximately 8.0 percent of total outstanding water revenue bonds and revolving notes.

Summarized in the table below is the current projected debt service payment schedule as of December 31, 2021, grouped by fiscal year and bond type, for existing long-term debt.

Fiscal Year	Revenue Bonds		General Obligation Bonds		Total Debt Service
	Principal	Interest	Principal	Interest	
2023	\$138,960,000	\$140,889,909	\$960,000	\$1,008,750	\$281,818,659
2024	150,245,000	134,582,620	1,005,000	960,750	286,793,370
2025	148,050,000	133,555,227	1,055,000	910,500	283,570,727
2026	156,180,000	130,814,481	1,110,000	857,750	288,962,231
2027	163,915,000	122,310,666	1,160,000	802,250	288,187,916
2028	174,045,000	113,523,783	1,220,000	744,250	289,533,033
2029	185,812,500	106,569,576	1,245,000	683,250	294,310,326
2030	178,022,500	97,099,953	1,300,000	621,000	277,043,453
2031	170,197,500	88,239,159	1,365,000	556,000	260,357,659
2032	186,847,500	80,339,003	1,435,000	487,750	269,109,253
2033	163,282,500	74,654,873	1,510,000	416,000	239,863,373
2034	191,112,500	67,539,389	1,580,000	340,500	260,572,389
2035	208,575,000	60,332,005	1,660,000	261,500	270,828,505
2036	215,285,000	52,871,369	1,740,000	178,500	270,074,869
2037	220,665,000	45,713,108	1,830,000	91,500	268,299,608
2038	204,470,000	40,013,533	-	-	244,483,533
2039	151,885,000	34,824,106	-	-	186,709,106
2040	158,915,000	27,900,452	-	-	186,815,452
2041	166,010,000	20,912,022	-	-	186,922,022
2042	71,035,000	16,273,651	-	-	87,308,651
2043	73,295,000	14,228,258	-	-	87,523,258
2044	38,135,000	12,704,600	-	-	50,839,600
2045	39,725,000	11,165,650	-	-	50,890,650

Fiscal Year	Revenue Bonds		General Obligation Bonds		Total Debt Service
	Principal	Interest	Principal	Interest	
2046	67,580,000	9,160,658	-	-	76,740,658
2047	69,765,000	7,067,744	-	-	76,832,744
2048	71,955,000	4,981,148	-	-	76,936,148
2049	30,810,000	3,442,388	-	-	34,252,388
2050	27,930,000	1,984,500	-	-	29,914,500
2051	12,540,000	972,750	-	-	13,512,750
2052	13,185,000	329,625	-	-	13,514,625
2053	-	-	-	-	-
Total	\$3,848,430,000	\$1,654,996,206	\$20,175,000	\$8,920,250	\$5,532,521,456

Going forward, Metropolitan will finance a portion of its construction program, Supply Program capital expenditures, and additional Conservation Program expenditures through issuance of fixed-rate debt. Metropolitan intends to issue approximately \$463.9 million of new debt over the biennium.

DEBT RATINGS

Credit risk is the risk that a financial loss will be incurred if a counterparty to a transaction does not fulfill its financial obligations in a timely manner. This is measured by the assignment of a rating by a nationally recognized statistical credit rating organization. Strong credit ratings provide tangible benefits to ratepayers in the form of reduced debt service cost. A strong credit rating provides better access to capital markets, lower interest rates and better terms on debt, and access to a greater variety of debt products. Prudent financial management policies have resulted in Metropolitan's senior lien bond ratings of AAA from Standard & Poor's, Aa1 from Moody's, and AA+ from Fitch.

DEBT POLICY AND COVERAGE

Metropolitan is subject to limitations on additional revenue bonds. Resolution 8329 (the "Master Revenue Bond Resolution"), adopted by Metropolitan's Board in 1991 and subsequently supplemented and amended, provides for the issuance of Metropolitan's revenue bonds. The Master Revenue Bond Resolution limits the issuance of additional obligations payable from Net Operating Revenues, among other things, through the requirement that Metropolitan must meet an Additional Bonds Test, as defined in the Master Revenue Bond Resolution. Metropolitan's Master Subordinate Bond Resolution, Resolution 9199, adopted by the Board in March 2016, and subsequently supplemented and amended, also incorporates limitations on additional revenue bonds.

The Metropolitan Act also provides two additional limitations on indebtedness. The Act provides for a limit on general obligation bonds, water revenue bonds and other indebtedness at 15 percent of the assessed value of all taxable property within Metropolitan's service area. As of December 31, 2021, outstanding general obligation bonds, water revenue bonds and other evidences of indebtedness in the amount of \$3.9 billion represented approximately 0.11 percent of the FY 2021/22 taxable assessed valuation of \$3,392 billion. The second limitation under the Act specifies that no revenue bonds may be issued, except for the purpose of refunding, unless the amount of net assets of Metropolitan as shown on its balance sheet as of the end of the last fiscal year prior to the issuance of the bonds equals at least 100 percent of the aggregate amount of revenue bonds outstanding following the issuance of the bonds. The net position of Metropolitan at June 30, 2021 was \$7.2 billion. The aggregate amount of revenue bonds outstanding as of December 31, 2021 was \$3.9 billion.

Metropolitan has also established its own policy regarding debt management. The purpose is to maintain a balance between current funding sources and debt financing to retain Metropolitan's financing flexibility.

Flexibility allows Metropolitan to use a variety of revenue or debt-financing alternatives, including issuing low-cost variable rate and other revenue supported obligations.

Metropolitan's debt management policy is to:

- Maintain an annual senior/subordinate lien revenue bond debt coverage ratio of at least 2.0 times coverage;
- Maintain an annual fixed charge coverage ratio of at least 1.2 times coverage;
- Limit debt-funded capital to no more than 40 percent of the total capital program over the ten-year planning period; and
- Limit variable rate debt such that the net interest cost increase due to interest rate changes is no more than \$5 million, and limit the maximum amount of variable rate bonds to 40 percent of outstanding revenue bond debt (excluding variable rate bonds associated with interest rate swap agreements).

In order to comply with the debt management policy, Metropolitan has taken the following measures:

Revenue Bond Debt Coverage Ratio

This policy ensures that Metropolitan has sufficient annual operating revenues to pay its operating expenses and meet its debt service obligations on its revenue bonds and other senior debt. The revenue bond debt coverage ratio is defined as Metropolitan's net operating revenue (current year's operating revenue less the current year's operating expenses) divided by the current year's senior/subordinated lien debt service on all revenue bonds and other senior debt. The target is 2.0 times. In FY 2022/23 and FY 2023/24, the projected debt coverage ratio is 1.5 and 1.5 times, respectively.

Fixed Charge Coverage Ratio

In addition to revenue bond debt service coverage, Metropolitan also measures total coverage of all fixed obligations after payment of operating expenditures. This additional measure is used to account for Metropolitan's recurring capital costs for the State Water Contract, which are funded after debt service on revenue bonds and other parity obligations. Rating agencies expect that a financially sound utility will consistently demonstrate an ability to fund all recurring costs, whether they are operating expenditures, debt service payments or other contractual payments. Metropolitan's fixed charge coverage ratio target is 1.2 times. In FY 2022/23 and FY 2023/24, the projected fixed charge coverage ratio is 1.5 and 1.5, respectively. These levels help maintain favorable credit ratings and access to the capital markets at low cost.

BUDGET HIGHLIGHTS

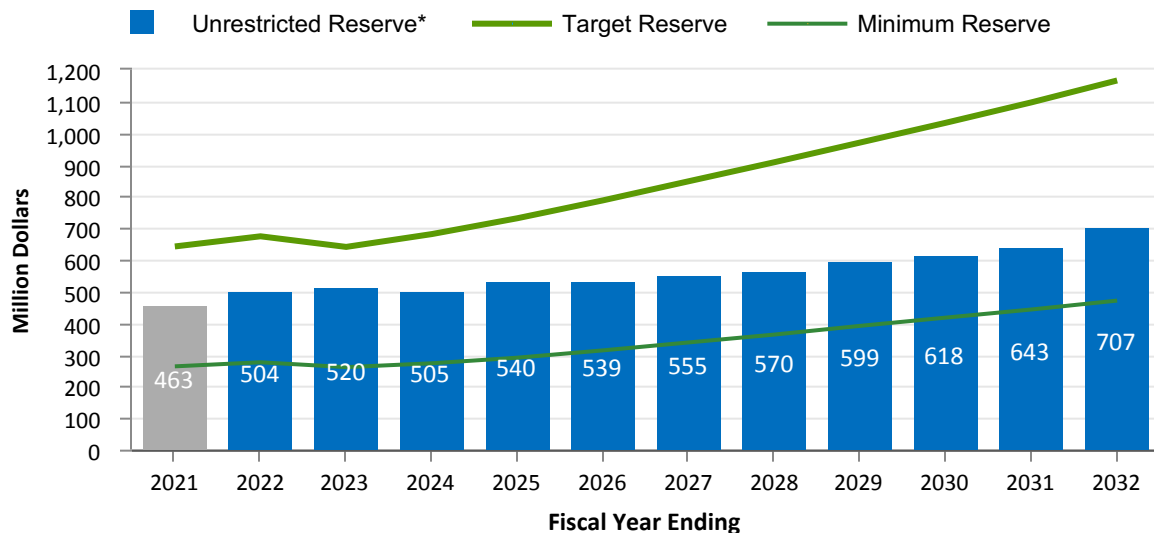
The FY 2022/23 and FY 2023/24 Capital Financing budget is decreasing from the FY 2021/22 budget due to lower debt service expenditures overall. Debt service costs decrease by \$6 million over the biennium compared to the FY 2021/22 budget due to favorable refundings and lower interest rates. Lower overall Capital Financing costs provide increased financial flexibility and resiliency.

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TEN-YEAR FINANCIAL FORECAST

The ability to ensure a reliable supply of high quality water for Metropolitan's 26 member agencies depends on Metropolitan's ongoing ability to fund operations and maintenance, maintain and augment local and imported water supplies, fund replacements and refurbishment of existing infrastructure, and invest in system improvements. This ten-year forecast (Ten-Year Financial Forecast) builds on the biennial budget to support long range resource, capital investment and operational planning. As such, it includes a forecast of future costs and the revenues necessary to support operations and investments in infrastructure and resources that are derived from Metropolitan's planning processes while conforming to Metropolitan's financial policies. These financial policies, which address reserve levels, financial indicators, and capital funding strategies, ensure sound financial management and fiscal stability for Metropolitan. The Ten-Year Financial Forecast is updated with every budget to reflect the most up-to-date planning assumptions and projections.

Projected Financial Indicators



Ave Rate Increase	3.0%	4.0%	8.0%	8.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
Water Transactions** (MAF)	1.57	1.60	1.59	1.54	1.54	1.51	1.53	1.53	1.54	1.55	1.55	1.57
Rev. Bond Cvg	2.0	1.6	1.5	1.5	1.8	1.7	1.8	1.7	1.7	1.7	1.8	1.7
Fixed Chg Cvg	2.0	1.6	1.5	1.5	1.8	1.7	1.8	1.7	1.7	1.7	1.7	1.6
PAYGO, \$M	110	135	135	135	175	175	175	175	200	200	200	200

* includes Revenue Remainder and Water Rate Stabilization Fund

** includes water sales and exchanges presented on a Cash Year basis

The figure above summarizes the financial metrics of the Ten-Year Financial Forecast. Metropolitan projects that the fixed charge coverage ratio will meet the board-established target of 1.2 times throughout the ten-year period. Revenue bond coverage will not meet the target of 2.0 times during this forecast period. Reserve levels will be above minimums as established by board policy; PAYGO expenditures will range to fund between 17 percent and 47 percent of the Capital Investment Plan (CIP) expenditures; and projected overall rate increases are expected to range between 5 to 8 percent.

The estimated overall rate increases for the Ten-Year Forecast is a result of higher projected costs, catch-up for the loss of the Water Stewardship Rate (WSR) revenues, lower projected water transactions over the forecast period and inclusion of the the full RRWP starting in FY 2024/25. Annual expenditures are expected to increase from \$1.9 billion in FY 2022/23 to \$2.9 billion by FY 2031/32, or an annual average increase of about 5 percent. During this same period, capital investments are expected to be about \$6.9 billion. To finance these capital investments, the ten-year forecast anticipates funding \$1.8 billion of the CIP from water revenues or PAYGO. The balance of the CIP, or \$5.2 billion, will be financed by issuing revenue bond debt, assumed to be fixed rate bonds.

Planning is necessary for Metropolitan to successfully fund the many investments necessary to meet the challenges facing the region over the next ten years with manageable rate increases. Among the more significant challenges are:

- Investing in the elements of the 2020 IRP Update to ensure reliable water supplies for Metropolitan's service area and preparing for uncertainty.
- Continuing to provide supply reliability through a diversified portfolio of actions to stabilize and maintain imported supplies.
- Meeting future growth through increased water conservation and the development of new local supplies, while protecting existing supplies, to achieve higher retail water use efficiency, in compliance with state policy.
- Building storage in wet and normal years to manage risks and drought.
- Funding an estimated \$6.9 billion capital program that provides projects meeting water quality, reliability, stewardship, information technology directives, and includes the RRWP.
- Funding for Metropolitan's planned contribution for Delta Conveyance Project (DCP) planning costs of \$110.6 million are included in the years FY 2023 through FY 2025. The focus over the next two years will be supporting the California Department of Water Resources as it seeks permits for a DCP; participating in the Delta Conveyance Design and Construction Authority; and continuing to put forward sound scientific research to help inform and improve Delta management decisions. If staff determines that Metropolitan's appropriate contribution toward planning activities should exceed the amount included in the Biennial Budget for FY 2023 and 2024, the General Manager will request authorization from the Board for additional funding. Metropolitan's planning contribution for FY 2025 will be considered with the next biennial budget to be considered in FY 2024. Long-term costs for a DCP have not been included in the forecast. At a later date staff will recommend that the Board separately consider Metropolitan's participation in a new DCP after project planning has progressed further.
- Funding for the proposed Regional Recycled Water Program of \$20 million for preparation of a programmatic environmental impact report is included in the Operating and Maintenance budget for FY2023 and FY2024. This is the next step before the Board will be fully informed and ready to make a decision on if, how, and when to proceed with further investments in this project. Long-term costs of the RRWP are included in the forecast.

ASSUMPTIONS FOR THE TEN-YEAR FORECAST

The following table summarizes key assumptions that underlie the Ten-Year Forecast.

Fiscal Year Ending	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
Water Transactions, MAF *	1.59	1.54	1.54	1.51	1.53	1.53	1.54	1.55	1.55	1.57
CRA Diversions, TAF	1,007	923	774	772	765	758	778	833	876	882
SWP allocation, %	15% / 40%	40% / 50%	50%	50%	50%	50%	50%	50%	50%	50%
CIP, \$M	300	300	372	381	475	838	1,045	1,191	1,202	842
PAYGO, \$M	135	135	175	175	175	175	200	200	200	200
Conservation, \$M **	43	43	30.5	30.5	30.5	30.5	30.5	30.5	30.5	30.5
Interest on investments, %	0.35%	0.50%	0.75%	1.00%	1.25%	1.25%	1.25%	1.25%	1.25%	1.25%
Interest rate, fixed bonds, %	2.75%	2.75%	3.00%	3.00%	3.25%	3.25%	3.50%	3.50%	3.50%	3.50%
Interest rate, variable bonds, %	0.50%	0.75%	1.00%	1.00%	1.00%	1.00%	1.25%	1.25%	1.25%	1.25%

* includes water sales and exchanges presented on a Cash Year basis

**Conservation will be funded with \$18 million of bonds each year in 2023 and 2024.

Metropolitan's principal sources of water supplies are the SWP and the Colorado River. Metropolitan receives water delivered from the SWP under SWC provisions, including Table A allocation, use of carryover storage in San Luis Reservoir, and surplus supplies. Metropolitan holds rights to a basic apportionment of Colorado River water and has priority rights to an additional amount depending on availability of surplus supplies. The Supply Programs and other contractual arrangements supplement these SWP and Colorado River supplies. The SWP and Colorado River sources derive from two different hydrologic regions, which have helped buffer shortages. The Ten-Year Forecast assumes an average hydrology on the Colorado River and hydrology on the SWP starting under drought conditions and returning to average conditions by calendar year 2024. Together with Metropolitan's Supply Programs, dry periods in either region can be managed.

The CIP has been reviewed to maintain affordability throughout the ten-year period. CIP projects have been carefully reviewed, scored and ranked to continue the ability to deliver water reliably and safely while meeting all regulatory requirements.

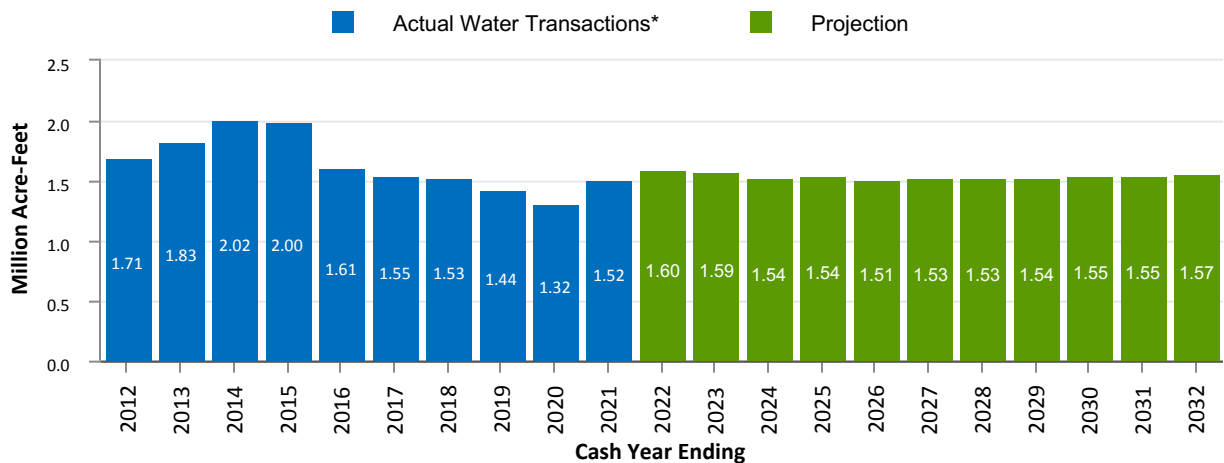
The inflation factor is based on forecasts by economists and is applied to Metropolitan's O&M expenses, such as chemicals, but excluding labor and additives, which are based on the Memoranda of Understanding for the represented employees. The interest rate applicable to Metropolitan's investment portfolio is based on an analysis of the current forward curve for investments over a ten-year period. This interest rate forecast informs the interest rate applicable to variable rate bonds. The interest rate for new fixed rate bonds is also based on forecasts.

FORECAST OF WATER TRANSACTIONS

Revenues from water transactions (sales, exchanges, and wheeling) provide approximately 80 percent of the revenues necessary to support Metropolitan's capital and operating costs. It is expected that demand for Metropolitan supplies will decrease over the ten-year period, from 1.59 million acre-feet in Cash Year 2022/23 to 1.57 million acre-feet by Cash Year 2031/32. This forecast includes water delivered to the San Diego County Water Authority (SDCWA) pursuant to the 2003 Amended and Restated Exchange Agreement (exchange water).

The figure below shows historic and forecasted water transactions, including the exchange water and wheeling.

Water Transactions, MAF



SOURCES OF FUNDS

Revenues

Through FY 2031/32, revenues from rates and charges, which include the Readiness-to-Serve (RTS) Charge, Capacity Charge, and water transaction revenues, collected from the member agencies will account for approximately 89 percent of total revenues. Total revenues are projected to increase from about \$1.9 billion in FY 2022/23 to \$3.0 billion in FY 2031/32. This increase is almost entirely attributed to increases in water rates and charges.

Water Rates and Charges

The table below shows the estimated unbundled water rates and charges under the current rate structure. The rate structure components may experience different increases, on a percentage basis, depending on the costs recovered. The full-service treated Tier 1 water rate is estimated to be \$1,956 per acre-foot by January 1, 2032, compared to \$1,143 per acre-foot on January 1, 2022, reflecting an average increase of 5.5 percent per year over the ten-year period.

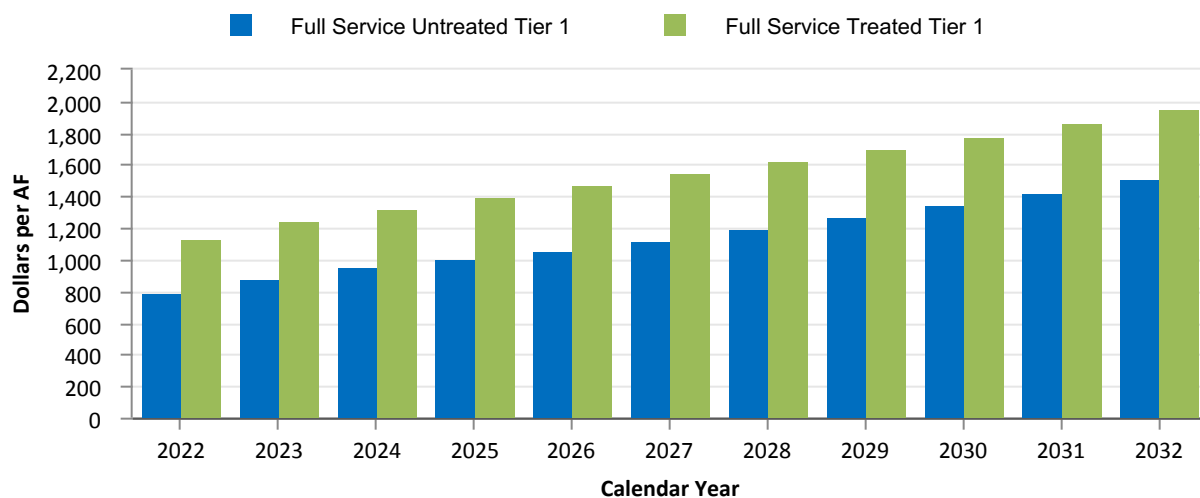
Rates & Charges Effective January 1st	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
Tier 1 Supply Rate (\$/AF)	\$243	\$329	\$355	\$380	\$412	\$436	\$464	\$489	\$513	\$542	\$569
Tier 2 Supply Rate (\$/AF)	\$285	\$532	\$540	\$575	\$605	\$628	\$653	\$671	\$688	\$705	\$723
System Access Rate (\$/AF)*	\$389	\$381	\$412	\$425	\$443	\$474	\$514	\$555	\$597	\$640	\$687
System Power Rate (\$/AF)*	\$167	\$169	\$190	\$203	\$211	\$219	\$224	\$227	\$239	\$251	\$256
Full Service Untreated Volumetric Cost (\$/AF)											
Tier 1	\$799	\$879	\$957	\$1,008	\$1,066	\$1,129	\$1,202	\$1,271	\$1,349	\$1,433	\$1,512
Tier 2	\$841	\$1,082	\$1,142	\$1,203	\$1,259	\$1,321	\$1,391	\$1,453	\$1,524	\$1,596	\$1,666
Treatment Surcharge (\$/AF)	\$344	\$367	\$373	\$397	\$417	\$431	\$430	\$435	\$435	\$440	\$444
Full Service Treated Volumetric Cost (\$/AF)											
Tier 1	\$1,143	\$1,246	\$1,330	\$1,405	\$1,483	\$1,560	\$1,632	\$1,706	\$1,784	\$1,873	\$1,956
Tier 2	\$1,185	\$1,449	\$1,515	\$1,600	\$1,676	\$1,752	\$1,821	\$1,888	\$1,959	\$2,036	\$2,110
Readiness-to-Serve Charge (\$M)	\$140	\$157	\$175	\$175	\$175	\$175	\$178	\$185	\$191	\$193	\$208
Capacity Charge (\$/cfs)	\$12,200	\$10,800	\$11,800	\$13,300	\$14,100	\$15,000	\$15,500	\$16,900	\$16,900	\$16,900	\$16,900

* This rate element is currently included in the price term of the MWD-SDCWA Exchange Agreement

The long-term rate projection is highly influenced by the addition of the full-scale RRWP, which is assumed to begin construction in FY2024/25 and affect the 2025 to 2032 rates and charges. The allocation of the RRWP costs to the rates and charges is based on preliminary information and might substantially change as a result of an upcoming COS study for the RRWP. In addition, this rate projection does not include the Delta Conveyance project which would substantially increase the rate projections.

In 2023, the Water Stewardship Rate is no longer collected as per Board direction in December 2021. All demand management costs (regardless of funding source, such as bond financing or current revenues) are functionalized as supply and collected on the Tier 1 and Tier 2 supply rates. However, because there are no projected Tier 2 transactions in the biennium, the demand management costs are recovered entirely by the Tier 1 supply rate.

Volumetric Cost, \$ AF



Property tax revenue is expected to increase from \$163.1 million in FY 2022/23 to 224.4 million in FY 2031/32. This projection assumes the Board maintains the ad valorem tax rate at 0.0035 percent of assessed valuations, by determining the inapplicability of MWD Act Section 124.5, and assessed value increases by 4.0 percent per year. Property tax revenue is used to pay Metropolitan's general obligation bonds and a portion of the SWC costs.

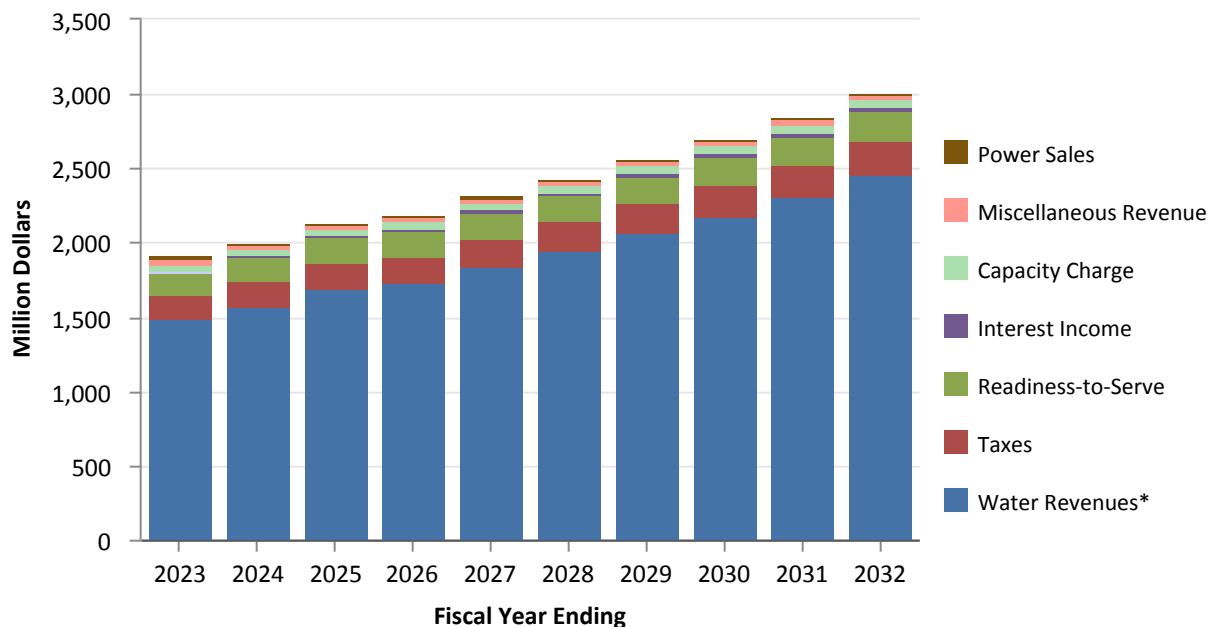
Power sales from Metropolitan's hydroelectric power recovery plants and the CRA are projected to average about \$15 million per year over this ten-year period. Metropolitan has 16 small hydroelectric plants on its distribution system. These revenues are dependent on the amount of water that flows through Metropolitan's distribution system and the price paid. Power from some of the plants is sold under existing contracts that are priced higher compared to the prices currently being offered for renewable power. CRA revenues derive from the management of loads and resources on the CRA; energy not needed to meet hourly CRA loads is sold into the California Independent System Operator.

Interest income is projected to increase from \$6.6 million in FY 2022/23 to \$26.8 million in FY 2031/32 as a result of increased balances with returns of 0.35 percent in FY 2022/23 growing to 1.5 percent annually in FY 2026/27 through FY 2031/32. Metropolitan earns interest on invested fund balances and uses this income to reduce the costs that must be recovered through rates and charges. These invested funds also act as a partial hedge against changes in interest rates on Metropolitan's variable rate debt obligations. Interest income will vary over the ten-year forecast period as interest rates and cash balances available for investments will fluctuate.

Miscellaneous revenue is forecasted to average \$31.6 million over the ten-year forecast period. Miscellaneous revenue includes items such as leases, late fees, and water transactions with non-member agencies including Coachella Valley Water District and United States Bureau of Reclamation.

Forecasted revenues by major category are shown in the figure below.

Revenue Forecast, \$ millions



* includes revenues from water sales, and exchanges

Other Funding Sources

Other sources of funds include withdrawals from bond construction funds, Refurbishment and Replacement (R&R) Fund, General Fund, Water Stewardship Fund (WSF), Treatment Surcharge Stabilization Fund (TSSF), Water Rate Stabilization Fund (WRSF), and the Revenue Remainder Fund.

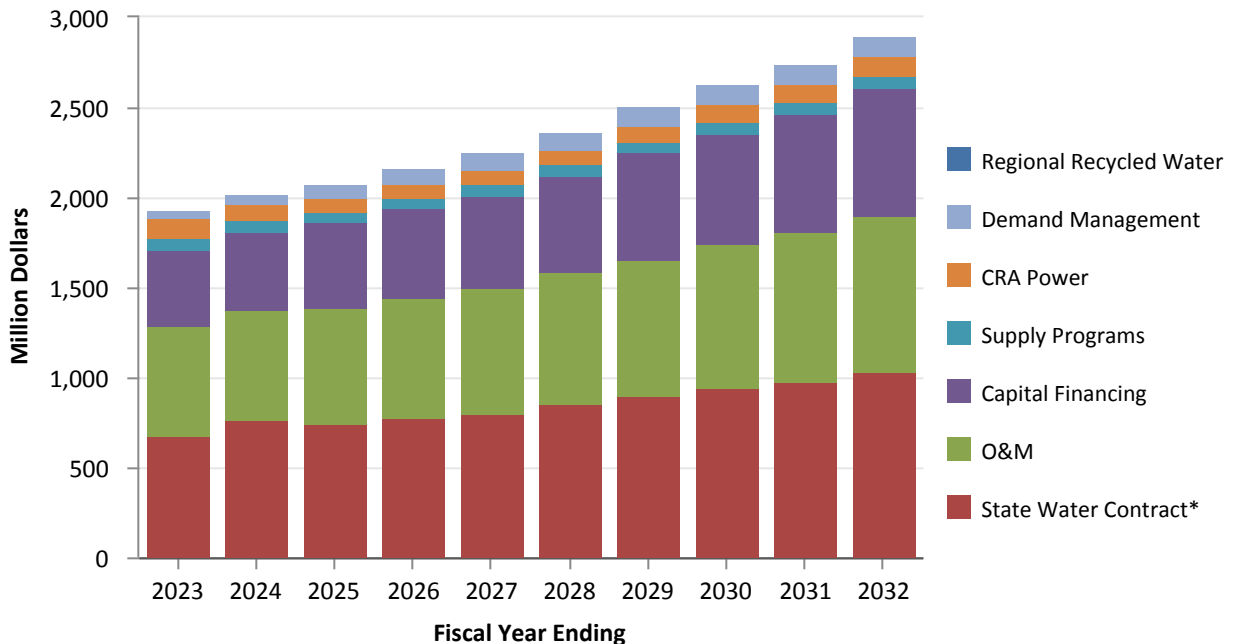
USES OF FUNDS

Over the next ten years, total annual expenditures are projected to range from \$1.94 billion in FY 2022/23 to \$2.90 billion in FY 2031/32.

Expenditures

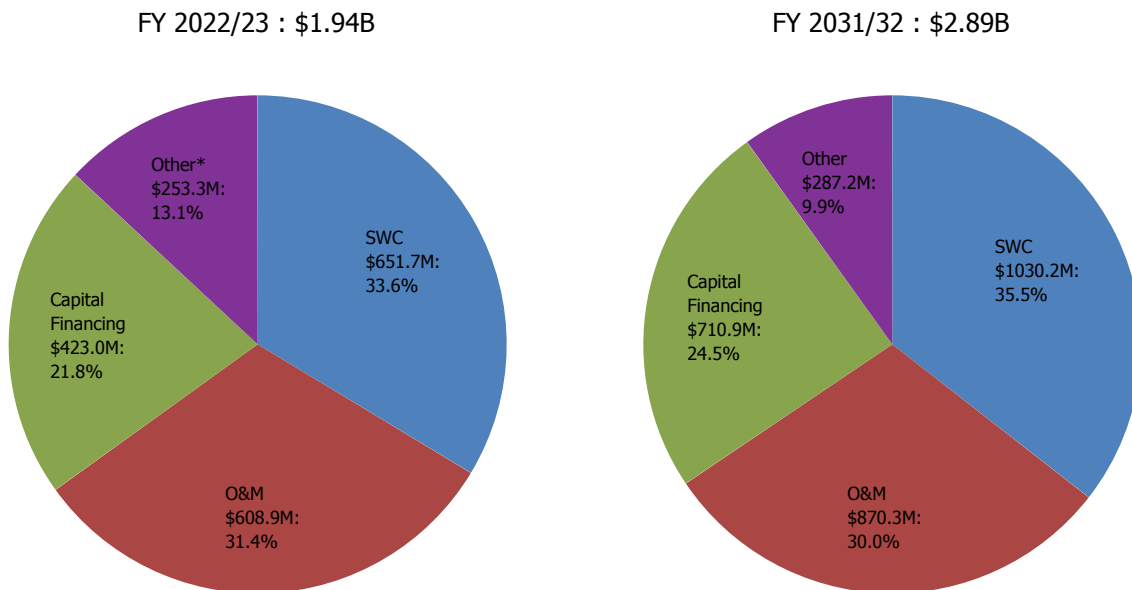
Expenditures are grouped into eight major categories: SWC, O&M, Regional Recycled Water, Delta Conveyance, demand management programs, CRA power costs, supply programs, and capital financing. The first figure below illustrates the general trends in expenditures over the ten-year period from FY 2022/23 to FY 2031/32. The second figure following shows the comparison of FY 2022/23 to FY 2031/32 in terms of the contribution of expenditures to the total.

Expenditure Forecast, \$ millions



* includes Delta conveyance planning costs

Expenditure Forecast, Contribution by Major Area



* includes Delta conveyance planning costs

Regional Recycled Water Program Planning Costs

The ten year forecast includes planning costs for the Regional Recycled Water Program at \$12.9 million in FY 2022/23 and \$7.4 million in FY 2023/24 for preparation of a programmatic environmental impact report. This is the next step before the Board will be fully informed and ready to make a decision on if, how, and when to proceed with further investments in this project.

State Water Project

Metropolitan is one of 29 agencies that contract with the State of California for participation in the SWP's water supply function¹. Metropolitan is obligated to pay its share of the capital and minimum operations, maintenance, power, and replacement charges of the SWP regardless of the amount of water actually received. In addition, Metropolitan pays the power costs to convey the water. The Ten-Year forecast assumes that SWC annual costs, including power, will increase from \$651.7 million in FY 2022/23 to \$1,030.2 million in FY 2031/32, as shown in the figure below. SWC costs account for 34 percent of Metropolitan's expenses in FY 2022/23, growing to 36 percent in FY 2031/32. The remainder of the fixed costs is based upon information provided by the DWR, and is associated with Transportation Capital and Minimum Operations & Maintenance, and the Delta Water Supply Capital and Minimum Operations & Maintenance. Variable SWP power costs are projected to gradually increase over the ten-year period.

Power costs will vary depending on the price of electricity, total system deliveries, storage operations, and the amount of water pumped on the SWP. SWP variable power costs are projected to increase about 4 percent per year over the ten-year forecast period. The SWP energy costs are impacted by two factors. First, the annual hydrology, secondly the energy policies of the state of California. The SWP has invested heavily in hydroelectric power generation facilities. The unit cost of operating the power facilities declines as the amount of available water increases. The SWP is acquiring renewable resources, primarily solar to date, to meet its obligation to reduce greenhouse gas emissions. The SWP energy costs are also impacted by the increasing cost of using the California Independent System Operator's (CAISO) grid to deliver power from its generating sources and the wholesale power market to its pumping loads. The SWP does not own high voltage transmission facilities and must use the CAISO grid to move power. Finally, the SWP has an

obligation to acquire and surrender emissions allowances for the generating facilities the SWP owns, primarily the Lodi Energy Center. Net flows through the SWP that incur power are expected to average about 861 TAF per year.

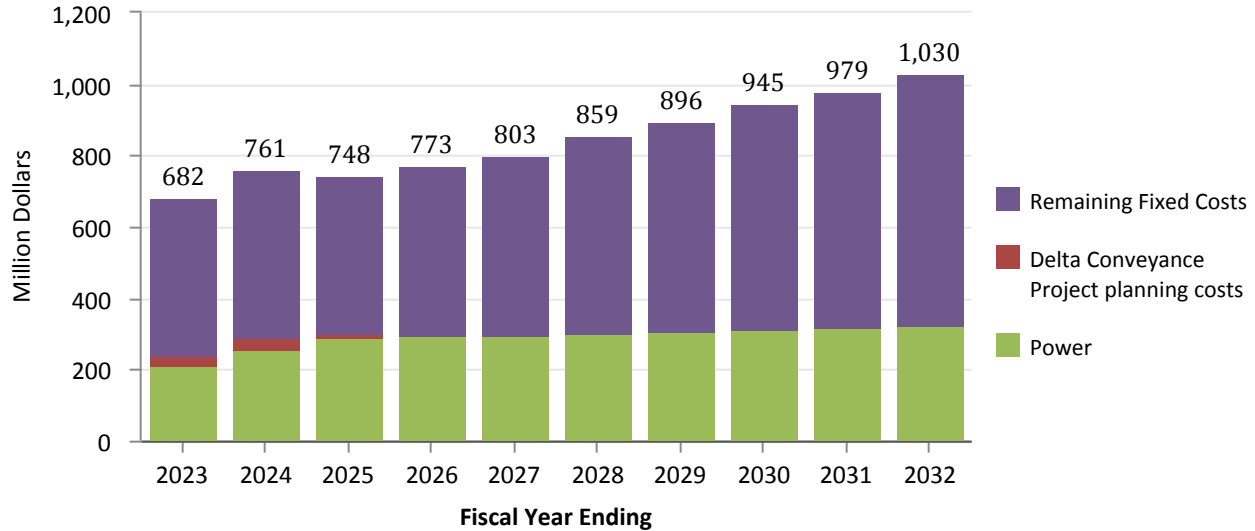
¹ The term "supply" is used to distinguish between other functions of the SWP such as recreation and flood control. The term is not used to distinguish between the conservation (supply) and transportation (conveyance) functions of the SWP under the State Water Contracts for participation in the SWP.

On April 29, 2019, Governor Newsom issued an executive order directing State agencies to develop a single-tunnel Bay-Delta conveyance facility instead of the approved WaterFix project. In light of this, the WaterFix project is no longer included in the ten year projection. Funding for Metropolitan's contribution for Delta conveyance project planning activities of \$110.6 million is included in the years FY 2022/23 through FY 2024/25. The focus over the next two years will be supporting the DWR as it seeks permits for a Delta Conveyance Project; participating in the Delta Conveyance Design and Construction Authority; and continuing to put forward sound scientific research to help inform and improve Delta management decisions. If staff determines that Metropolitan's appropriate contribution toward planning activities should exceed the amount included in the Biennial Budget for FY 2022/23 and 2023/24, the General Manager will request authorization from the Board for additional funding. Long-term costs for a Delta conveyance project has not been included in the forecast. At a later date staff will recommend that the Board separately consider Metropolitan's participation in a new Delta conveyance project after project planning has progressed further.

Please refer to the section on the SWP for additional details on SWP expenditures.

The total SWC costs are shown in the figure below. The SWP is described under the Non-Departmental Budgets section of the Biennial Budget.

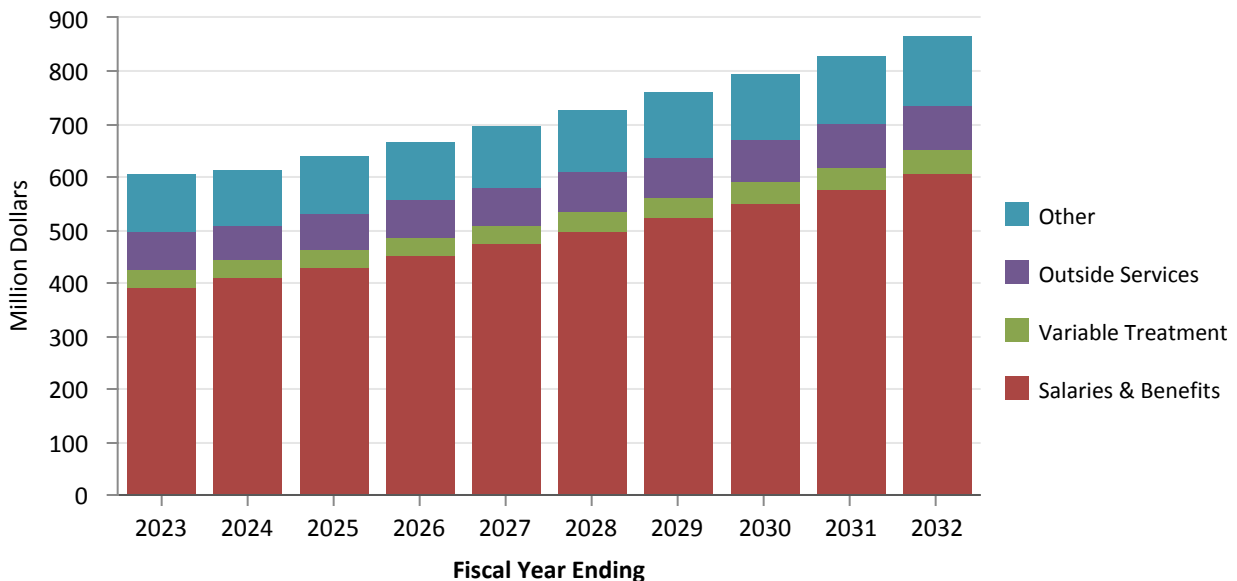
SWP Forecast, \$ millions



Operations and Maintenance

O&M costs are projected to increase from \$609 million in FY 2022/23 to \$870 million in FY 2031/32. This represents an average annual increase of 4.0 percent from FY 2022/23. During this time frame, inflation is assumed to be 3.0 percent. The ten-year forecast assumes Metropolitan continues to fully fund the annual required contribution to meet future retiree medical costs (Other Post-Employment Benefits, or OPEB) and retirement benefits.

O&M Forecast, \$ millions



Demand Management

Demand management costs include funding for the Local Resource Programs (LRP), the Conservation Program, Future Supply Actions Program and the Stormwater Pilot Program. These expenditures are projected to increase from \$50.8 million in FY 2022/23 to \$106.2 million in FY 2031/32. The LRP costs are projected to increase from \$22.2 million in FY 2022/23 to \$73.9 million in FY 2031/32. The projections anticipate that new projects will receive funding to meet IRP goals. The Conservation costs are projected to be \$43 million per year in the budget years and \$30.5 million per year for the remainder of the ten-year period. This program provides continued funding of residential, commercial, and outdoor conservation programs, and conservation messaging. In addition, Future Supply Actions and Stormwater Pilot costs average about \$2.2 million per year throughout the ten-year period.

Demand Management programs are described under the Non-Departmental Budgets section of the Biennial Budget.

CRA Power Costs

CRA Power costs are projected to increase from \$105.9 million in FY 2022/23 to \$111.9 million in FY 2031/32. Power costs will vary depending on the price of electricity, Metropolitan's resource portfolio to meet electricity needs, storage operations, and the amount of water pumped on the CRA.

Colorado River diversions are expected to average about 837 TAF over the ten-year period, slightly more than deliveries as water is stored.

Power costs are described under the Non-Departmental Budgets section of the Biennial Budget.

Supply Programs

Supply programs increase slightly over the ten-year period from \$66.7 million in FY 2022/23 to \$69.1 million in FY 2031/32. The estimates represent expenditures for average year conditions. If extreme weather conditions are experienced, these cost estimates could be much higher or lower. If higher than normal demand is coupled with lower than normal supply, supply program costs could be significantly higher.

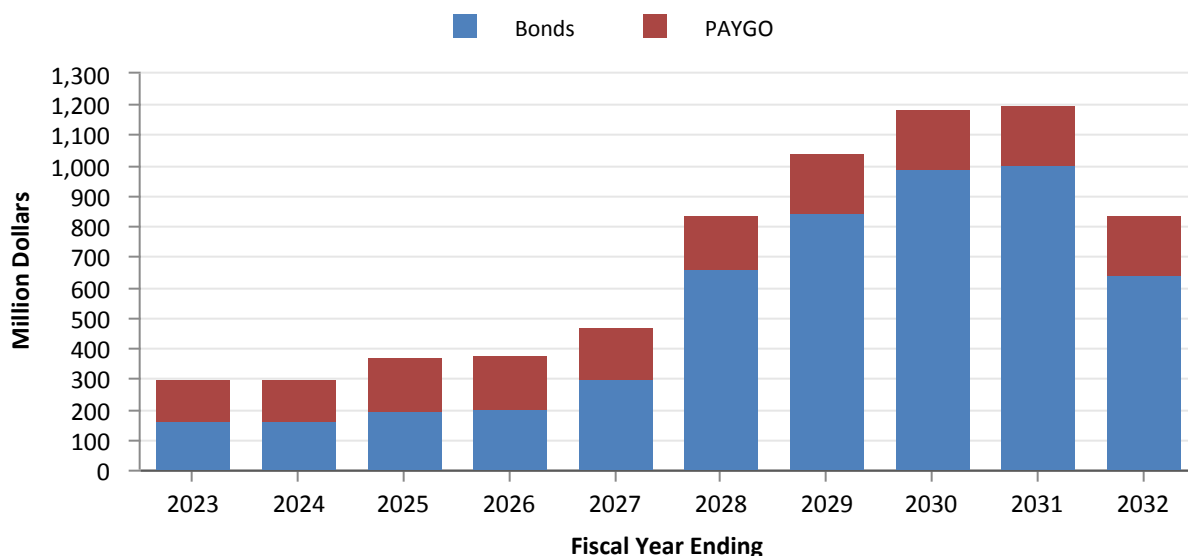
A description of Metropolitan's Supply Programs is provided under the Non-Departmental section of the Biennial Budget.

Capital Investment Plan

The ten-year projected CIP through FY 2031/32 is estimated at \$6.9 billion and includes the RRWP. The CIP continues to reflect the deferral of facility expansion projects. The CIP focuses on projects that enhance reliability while focusing on necessary refurbishment and replacement of aging infrastructure and compliance with regulatory requirements. Accordingly, the O&M impact from the resulting CIP is negligible. Without this emphasis on repair and replacement of aging facilities, O&M expenditures could potentially be much higher.

The following figure shows the funding source for the ten-year CIP.

CIP Ten-Year Forecast and Funding Sources, \$ millions



Capital Financing Options

The CIP will be funded from a combination of bond proceeds and operating revenues. In order to mitigate increases in water rates, provide financial flexibility, and support Metropolitan's high credit ratings including maintaining revenue bond debt service and fixed charge coverage ratios, it is anticipated that 17 to 47 percent of the CIP will be funded from current revenues, or PAYGO. This level of PAYGO funding is appropriate given that a significant portion of future CIP projects has been identified as R&R projects. This level of PAYGO also helps ensure that Metropolitan meets its coverage targets by generating a margin of revenues over operating and debt expenditures. The additional revenue required to meet Metropolitan's revenue bond debt service coverage target of 2.0 times and fixed charge coverage of 1.2 times is available to fund the CIP. PAYGO funding throughout the ten-year horizon of the planning period ensures that current customers are always contributing funds towards the capital investments from which they benefit, and not deferring these costs entirely to future generations of ratepayers.

Bond funded expenditures may include a combination of variable and fixed rate debt. Debt has been structured to mitigate near-term rate impacts and smooth out long-term debt service. The principal advantage of variable rate debt is the opportunity for a lower interest cost. Normally, short-term interest rates are lower than long-term interest rates for debt of comparable credit quality. If interest rates remain constant, Metropolitan will generally have significantly lower interest costs on variable rate debt than on fixed rate debt, even after remarketing and liquidity facility costs. Also, if interest rates decline, Metropolitan will benefit from lower interest costs without the necessity or cost of a refunding. If interest rates rise, variable rates could stay lower than the fixed rate originally avoided, and the longer the variable rate debt is outstanding at favorable spreads, the higher the break-even point becomes on fixed rate debt. Variable rate debt is used to mitigate interest costs over the long term, and provides a natural hedge against changes in investment earnings: when interest rates are high, interest costs on variable rate debt is higher but so are earnings from Metropolitan's investment portfolio. When interest rates are low, interest earnings are lower, but so are variable rate interest costs.

Typically, fixed rate bonds are only redeemable a given number of years after their issuance. Variable rate debt, on the other hand, is generally redeemable on any interest payment or reset date.

However, variable rate debt does have risks. These risks include:

- Rising interest rates. Because future interest rates are unknown, the costs of capital improvements financed with variable rate debt are more difficult to estimate for revenue planning purposes. Significant interest rate increases could cause financial stress.
- Liquidity facility renewal risk. Variable rate debt normally requires a liquidity facility to protect the investors and issuers against "puts" of a large portion or all of the debt on a single day. Liquidity facilities generally do not cover the full term of the debt. If an issuer's credit declines or the liquidity facility capacity is not available, the issuer runs the risk of not being able to obtain an extension or renewal of the expiring liquidity facility. In that event, the issuer may have to retire the debt or convert it to fixed rate debt.

Debt Financing

It is anticipated that there will be about \$6.9 billion of capital expenditures over the ten-year period. Of this, \$5,175.8 million, or 75 percent of future capital expenditures, are anticipated to be funded by debt proceeds. Provided below are the schedule of CIP debt issuances and interest rates assumed over the 10-year forecast period.

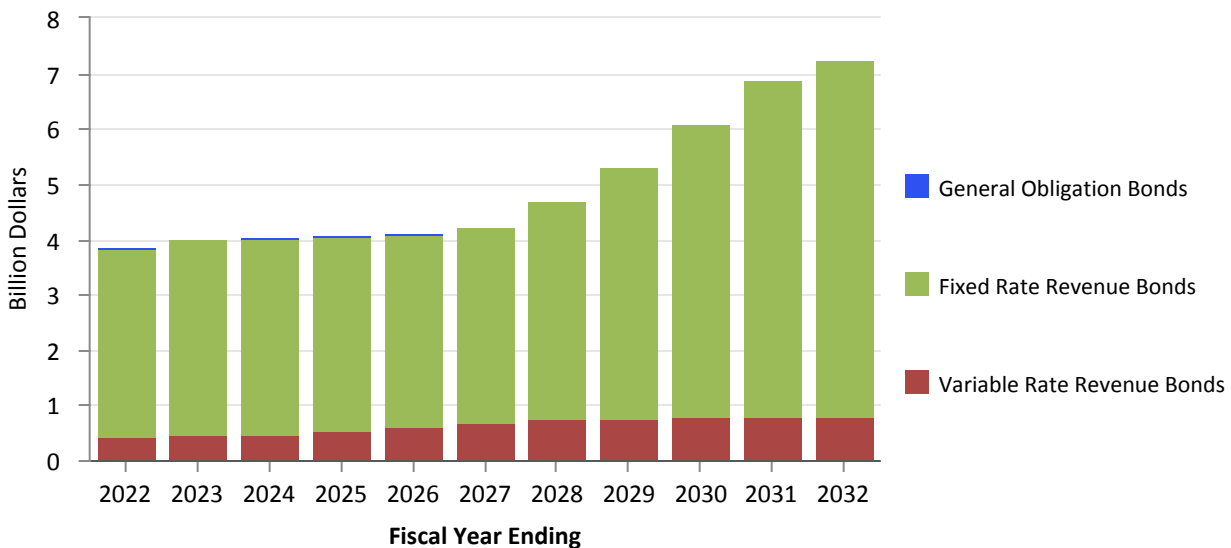
Assumption	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
CIP Revenue Bonds* (\$ millions)	170	160	200	210	300	670	850	990	1,010	640
Fixed Interest Rate (%)	2.75	2.75	3	3	3.25	3.25	3.5	3.5	3.5	3.5

*All bond issuances are anticipated to be tax-exempt and have a maturity of 30 years.

Outstanding debt, including revenue and general obligation bonds ("GO bonds"), as of December 31, 2021 is \$3.9 billion. The net position of Metropolitan at June 30, 2021 was \$7.2 billion. Metropolitan is limited to not have outstanding revenue bond debt in amounts greater than 100 percent of its net position (equity). As of June 30, 2021, Metropolitan's debt to equity ratio was 56 percent.

Total outstanding debt is illustrated below. Total outstanding debt is estimated to be \$7.2 billion by FY 2031/32, approximately 85 percent higher than the current level.

Outstanding Debt, \$ billions

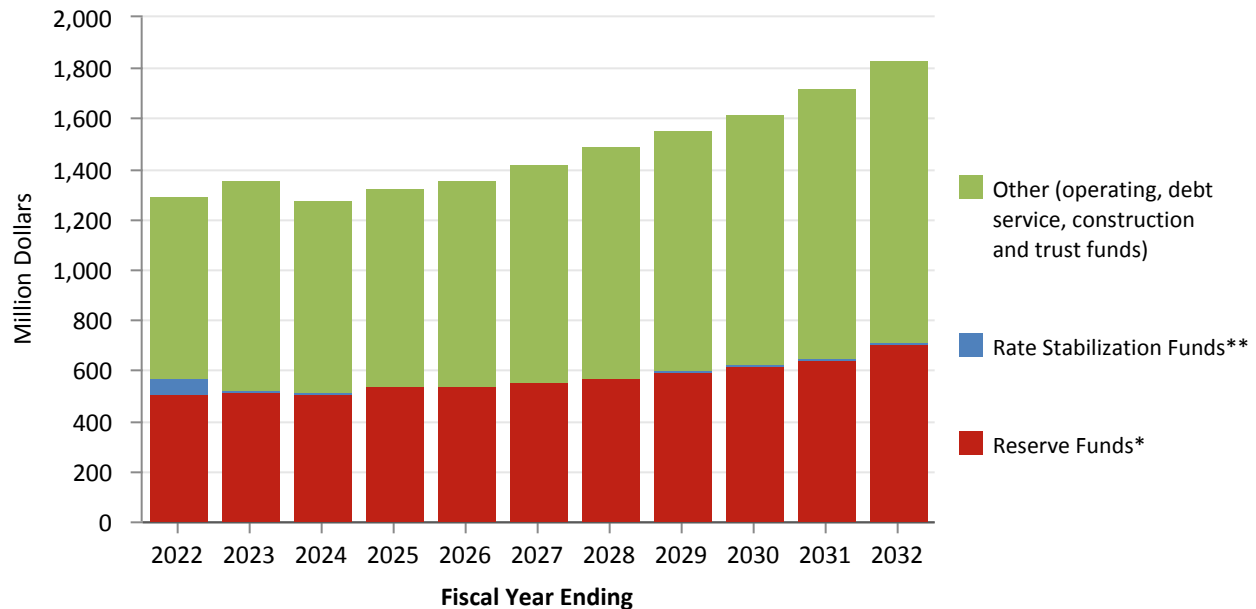


Metropolitan's variable rate debt as a percentage of total revenue bond debt is projected to stay approximately the same at 11% percent over this time period. The appropriate amount of variable rate debt will continue to be monitored and adjusted depending on market rates, financing needs, available short-term investments, and fund levels in the investment portfolio with which variable interest rate exposure can be hedged. GO bond debt will decrease as voter approved indebtedness matures.

FUND BALANCES AND RESERVES

As shown in the figure below, over the next ten years total fund balances are projected to increase to \$1.8 billion in FY 2031/32.

End of Year Fund Balances, \$ millions



* includes Water Rate Stabilization Fund and Revenue Remainder Fund.

** includes Water Stewardship Fund and Treatment Surcharge Stabilization Fund.

FINANCIAL RATIOS

Revenue bond debt service coverage is one primary indicator of credit quality, and is calculated by dividing net operating revenues by debt service. Revenue bond debt service coverage measures the amount that net operating revenues exceed or "cover" debt service payments over a period of time. Higher coverage levels are preferred since they indicate a greater margin of protection for bondholders. For example, a municipality with 2.0 times debt service coverage has twice the net operating revenues required to meet debt service payments. The ten-year forecast projects that Metropolitan's revenue bond coverage ratio ranges from 1.5 times to 1.8 times over the period. Metropolitan's minimum coverage policy is vital to continued strong credit ratings and low cost bond funding.

In addition to revenue bond debt service coverage, Metropolitan also measures total coverage of all fixed obligations after payment of operating expenditures. This additional measure is used primarily because of Metropolitan's recurring capital costs for the SWC. Rating agencies expect that a financially sound utility consistently demonstrate an ability to fund all recurring costs, whether they are operating expenditures, debt service payments or other contractual payments. The ten-year forecast projects that Metropolitan's fixed charge coverage ratio is at least 1.5 times over the ten-year period. These levels help maintain strong credit ratings and access to the capital markets at low cost, and provide PAYGO funding for the CIP.

Ten-Year Financial Forecast, Sources and Uses of Funds, \$ millions

Fiscal Year Ending	2023 Proposed	2024 Proposed	2025 Forecast	2026 Forecast	2027 Forecast	2028 Forecast	2029 Forecast	2030 Forecast	2031 Forecast	2032 Forecast
SOURCES OF FUNDS										
Revenues										
Taxes	163.1	168.3	175.0	178.5	185.5	192.7	200.2	207.9	216.0	224.4
Interest Income	6.6	9.8	13.0	16.8	20.9	21.9	22.9	23.9	25.2	26.8
Power Sales	16.7	14.2	15.5	15.7	15.7	16.2	16.3	13.3	12.9	13.1
Fixed Charges (RTS & Capacity Charge)	187.5	202.5	215.5	219.2	221.9	225.7	233.8	242.5	246.5	255.0
Water Revenues (1)	1,496.9	1,579.6	1,691.5	1,735.1	1,847.1	1,954.6	2,068.7	2,186.7	2,317.2	2,463.7
Miscellaneous Revenue	48.9	33.6	28.4	29.1	31.4	26.7	27.4	29.2	30.0	30.8
Bond Proceeds	303.1	159.2	199.0	209.0	298.5	666.7	845.8	985.1	1,005.0	636.8
Sub-total Revenues	2,222.7	2,167.2	2,337.9	2,403.5	2,621.0	3,104.5	3,414.9	3,688.6	3,852.7	3,650.6
Fund Withdrawals										
R&R and General Fund	135.0	135.0	175.0	175.0	175.0	175.0	200.0	200.0	200.0	200.0
Bond Funds for Construction	—	69.8	11.3	—	1.8	—	—	6.1	—	4.8
Water Stewardship Fund	56.1	—	—	—	—	—	—	—	—	—
Treatment Surcharge Stabilization Fund	2.9	—	10.9	3.2	—	—	—	—	—	—
Decrease in Required Reserves	—	—	—	—	—	—	—	—	—	—
Decrease in Water Rate Stabilization Fund	—	26.4	—	23.7	9.4	9.9	—	6.7	1.0	—
Sub-total Fund Withdrawals	194.0	231.2	197.2	201.9	186.2	184.9	200.0	212.9	201.0	204.8
TOTAL SOURCES OF FUNDS	2,416.7	2,398.4	2,535.1	2,605.4	2,807.2	3,289.5	3,614.9	3,901.5	4,053.7	3,855.4
Water Transactions* (MAF)	1.59	1.54	1.54	1.51	1.53	1.53	1.54	1.55	1.55	1.57

Totals may not foot due to rounding.

(1) includes revenues from water sales and exchanges presented on a Cash Year basis

Fiscal Year Ending	2023 Proposed	2024 Proposed	2025 Forecast	2026 Forecast	2027 Forecast	2028 Forecast	2029 Forecast	2030 Forecast	2031 Forecast	2032 Forecast
USES OF FUNDS										
Expenditures										
State Water Contract*	651.7	726.7	736.3	773.1	803.4	858.9	895.7	945.1	978.7	1,030.2
Supply Programs (cash funded portion)	66.7	64.1	55.6	59.5	62.1	62.8	63.8	65.6	67.4	69.1
Delta Conveyance Project planning costs	30.0	34.5	11.6	—	—	—	—	—	—	—
Colorado River Power	105.9	85.6	74.9	77.3	78.6	80.5	85.2	94.8	108.8	111.9
Debt Service	288.0	301.0	305.3	324.1	338.2	356.8	392.2	415.6	450.1	510.9
Demand Management (cash funded portion)	50.8	54.9	76.4	90.3	98.1	107.0	110.5	110.5	109.4	106.2
Departmental O&M	562.1	568.0	593.6	620.3	648.4	677.7	708.4	740.6	774.3	809.5
Treatment Chemicals, Sludge & Power	32.5	34.9	35.5	34.8	36.0	37.3	38.7	40.2	41.7	43.3
Other O&M	14.4	13.8	14.3	14.7	15.1	15.6	16.0	16.5	17.0	17.5
Sub-total Expenditures	1,802.0	1,883.6	1,903.4	1,994.1	2,079.8	2,196.5	2,310.6	2,429.0	2,547.3	2,698.6
Capital Investments	356.4	364.0	385.3	381.1	475.3	837.8	1,045.1	1,191.2	1,201.9	841.6
Fund Deposits										
R&R and General Fund	135.0	135.0	175.0	175.0	175.0	175.0	200.0	200.0	200.0	200.0
Revenue Bond Construction	81.7	—	—	2.9	—	3.8	0.6	—	3.0	—
Water Stewardship Fund	—	—	—	—	—	—	—	—	—	—
Treatment Surcharge Stabilization Fund	—	7.7	—	—	—	1.8	1.5	4.3	2.4	0.9
Interest for Construction & Trust Funds	0.2	0.3	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Increase in Required Reserves	11.0	7.9	54.7	52.3	77.0	74.4	55.3	76.9	99.0	78.3
Increase in Water Rate Stabilization Fund	30.5	—	16.6	—	—	—	1.7	—	—	36.0
Sub-total Fund Deposits	258.3	150.8	246.4	230.2	252.1	255.2	259.2	281.3	304.5	315.2
TOTAL USES OF FUNDS	2,416.7	2,398.4	2,535.1	2,605.4	2,807.2	3,289.5	3,614.9	3,901.5	4,053.7	3,855.4

Totals may not foot due to rounding.

* Without Delta Conveyance Costs

Ten-Year Financial Forecast, Coverage Ratios and Fund Balances, \$ millions

Fiscal Year Ending	2023 Proposed	2024 Proposed	2025 Forecast	2026 Forecast	2027 Forecast	2028 Forecast	2029 Forecast	2030 Forecast	2031 Forecast	2032 Forecast
RATIOS										
Fixed Charge Coverage	1.5	1.5	1.8	1.7	1.8	1.7	1.7	1.7	1.7	1.6
Revenue Bond Coverage	1.5	1.5	1.8	1.7	1.8	1.7	1.7	1.7	1.8	1.7
Var. Rate Debt as % of Rev. Bond Debt	11.3 %	12.1 %	13.6 %	15.3 %	16.3 %	16.1 %	14.5 %	13.1 %	11.7 %	10.9 %
RESTRICTED AND DESIGNATED FUNDS										
General Fund	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
Treatment Surcharge Stabilization Fund	6.4	14.0	3.2	—	—	1.8	3.3	7.7	10.1	10.9
Water Stewardship Fund	—	—	—	—	—	—	—	—	—	—
R&R Fund	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7
Other	775.5	701.7	727.4	759.5	809.7	863.2	891.8	936.6	1,013.0	1,058.5
Sub-total Restricted Funds	839.6	773.5	788.3	817.3	867.4	922.8	952.8	1,002.0	1,080.8	1,127.2
UNRESTRICTED FUNDS										
Reserve Funds (1)	519.6	505.4	539.6	539.0	554.8	569.6	598.8	618.1	642.8	706.9
Sub-total Unrestricted Funds	519.6	505.4	539.6	539.0	554.8	569.6	598.8	618.1	642.8	706.9
TOTAL FUNDS	1,359.2	1,278.8	1,328.0	1,356.3	1,422.2	1,492.4	1,551.6	1,620.1	1,723.6	1,834.0

Totals may not foot due to rounding.

(1) includes Water Rate Stabilization Fund and Revenue Remainder Fund.

CAPITAL INVESTMENT PLAN

Summary

The primary focus of the CIP Appendix is to provide information on all capital programs and projects that have been proposed, evaluated, and included in the budget forecast to begin or continue during and after fiscal year (FY) 2022/23 and FY 2023/24. Projects included in this document are referred to as “planned” and upon appropriation of the CIP budget for FY 2022/23 and FY 2023/24 are authorized to proceed by the Chief Engineer’s approval under the authority of the General Manager.

Scope, accomplishments, objectives and financial projections are provided for each capital program. Every project with work planned for the two budget years and beyond is listed under the Individual Program Summaries. However, projects in the post-construction phase are not included but will proceed to completion and closeout.

The total planned capital spending for FY 2022/23 and FY 2023/24 of approximately \$600 million includes all anticipated costs for labor including administrative overhead, construction and professional services contract costs, right of way, materials, operating equipment, and incidental expenses.

Annual planned capital spending for FY 2022/23 and FY 2023/24 is estimated to be approximately \$300 million and \$300 million, respectively, and is planned to be funded by a combination of current operating revenues (i.e., PAYGO) and debt. Engineering Services tracks actual spending against the plan and adjusts priorities and staff assignments to manage spending consistent with the overall CIP budget.

Capital Program	FY 2022/23	FY 2023/24	Total
Colorado River Aqueduct Reliability	\$ 39,270,000	\$ 36,900,000	\$ 76,170,000
Cost Efficiency & Productivity	\$ 15,610,000	\$ 12,630,000	\$ 28,240,000
Dams & Reservoirs Improvements	\$ 5,300,000	\$ 44,700,000	\$ 50,000,000
Distribution System Reliability	\$ 51,250,000	\$ 12,790,000	\$ 64,040,000
District Housing & Property Improvements	\$ 12,000,000	\$ 15,700,000	\$ 27,700,000
Minor Capital Projects	\$ 8,700,000	\$ 8,000,000	\$ 16,700,000
Prestressed Concrete Cylinder Pipe Rehabilitation	\$ 51,210,000	\$ 53,180,000	\$ 104,390,000
Regional Recycled Water	\$ 3,860,000	\$ 16,030,000	\$ 19,890,000
Right-of-Way & Infrastructure Protection	\$ 7,770,000	\$ 3,790,000	\$ 11,560,000
System Flexibility/Supply Reliability	\$ 31,590,000	\$ 40,610,000	\$ 72,200,000
System Reliability	\$ 48,500,000	\$ 37,700,000	\$ 86,200,000
Treatment Plant Reliability	\$ 24,940,000	\$ 17,170,000	\$ 42,110,000
Water Quality	\$ —	\$ 800,000	\$ 800,000
Total	\$ 300,000,000	\$ 300,000,000	\$ 600,000,000

Capital Investment Plan Organization

CIP Structure

The CIP is structured into three levels for clearer planning and reporting into the following format:

1. PROGRAM
2. PROJECT GROUP
3. PROJECT

The highest level of the CIP structure is Program. Programs are comprised of one or more Project Groups. There are 13 capital programs described in Table 1.

Table 1 - Capital Programs

Program	Definition
Colorado River Aqueduct (CRA) Reliability	Projects under this program will replace or refurbish facilities and components on the CRA system in order to reliably convey water from the Colorado River to Southern California.
Cost Efficiency & Productivity	Projects under this program will upgrade, replace, or provide new facilities, software applications, or technology that will provide economic savings that outweigh project costs through enhanced business and operating processes. Projects that address climate change in addition to providing the economic savings are also included.
Dams & Reservoirs Improvements	Projects under this program will upgrade or refurbish Metropolitan's dams, reservoirs, and appurtenant facilities in order to reliably meet water storage needs and regulatory compliance.
Distribution System Reliability	Projects under this program will replace or refurbish existing facilities within Metropolitan's distribution system including pressure control structures, hydroelectric power plants, and pipelines in order to reliably meet water demands.
District Housing & Property Improvements	Projects under this program will refurbish or upgrade Metropolitan workforce housing to enhance living conditions and attract and retain skilled employees.
Minor Capital Projects	This program will execute refurbishments, replacements, or upgrades at Metropolitan facilities that cost less than \$400,000 each, and which projects will be identified after adoption of the budget.
Prestressed Concrete Cylinder Pipe (PCCP) Rehabilitation	Projects under this program will refurbish or upgrade Metropolitan's PCCP feeders to maintain reliable water deliveries without unplanned shutdowns.
Regional Recycled Water	Projects under this Program are planned to demonstrate the feasibility of recycling wastewater for recharge of groundwater basins, and provide a new, sustainable and drought resistant source of supply for Southern California.
Right-of-Way and Infrastructure Protection	Projects under this program will refurbish or upgrade above-ground facilities and rights-of-way along Metropolitan's pipelines in order to address access limitations, erosion-related work, and security needs.
System Flexibility/Supply Reliability	Projects under this program will enhance the flexibility and/or increase the capacity of Metropolitan's water supply and delivery infrastructure to meet current and projected service demands. Projects under this program address climate change affecting water supply, regional drought, and alternative water sources for areas dependent on State Project Water.

Program	Definition
System Reliability	Projects under this program will improve or modify facilities throughout Metropolitan's service area in order to utilize new processes and/or technologies, and to improve facility safety and overall reliability. These include projects related to Metropolitan's Supervisory Control and Data Acquisition (SCADA) system and other Information Technology projects.
Treatment Plant Reliability: <ul style="list-style-type: none">• Diemer Plant• Jensen Plant• Mills Plant• Skinner Plant• Weymouth Plant	Projects under this program will replace or refurbish facilities and components at Metropolitan's five water treatment plants in order to continue to reliably meet treated water demands.
Water Quality	Projects under this program will add or upgrade facilities to ensure compliance with water quality regulations for treated water at Metropolitan's treatment plants and throughout the distribution system.

Capital Investment Plan Development

Background

The projects that comprise the proposed CIP have been identified from many Metropolitan studies of projected water needs as well as ongoing monitoring and inspections, condition assessments, and focused vulnerability studies. Staff continues to study operational demands on aging facilities and has made recommendations for capital projects that will maintain infrastructure reliability and ensure compliance with all applicable water quality regulations, and building, fire, and safety codes. Staff has also studied business and operations processes and proposed projects that will improve efficiency and provide future cost savings. Additionally, several projects have been identified and prioritized to provide flexibility in system operations to address uncertain supply conditions from the Colorado River and the State Water Project.

CIP Development Process

The CIP is structured to reflect Metropolitan's strategic goals of providing a reliable supply of high-quality water at the lowest cost possible. As part of the CIP development process, all new and existing projects are evaluated against an objective set of criteria to ensure existing and future capital investments are aligned with Metropolitan's priorities for water supply reliability, water quality, and public safety.

This rigorous evaluation process has resulted in a thorough review and assessment of all proposed capital projects by staff and managers prior to inclusion in the CIP budget. Staff continues to conduct comprehensive field investigations that identify critical replacement and refurbishment projects and a variety of necessary facility upgrades related to infrastructure reliability as well as regulatory compliance. Project schedules are evaluated regularly in order to plan for necessary capital investments in infrastructure reliability and to accommodate the urgency of each project. Additionally, current demand projections that account for ongoing conservation, planned increased local supply production, and the economy, have been evaluated to ensure that demand and growth-related projects are appropriately scheduled.

Project Proposals

Sponsors are required to submit proposals for all projects that have not yet been authorized through the completion of the project to be considered for inclusion into the CIP. For newly proposed projects, proposals must include scope, justification, alternatives, impacts of re-scheduling work for a later time, impact on operations and maintenance costs, and an estimate of total project cost. For existing projects, staff must also provide justification for continuing the project, explain any changes since the proposal was last evaluated, and describe critical phases for the upcoming years.

The projects are evaluated, rated, and prioritized based on the contents of the proposals. The guidelines provided to the project sponsors are summarized in Table 2.

Table 2 - Project Proposal Guidelines

Section	Guideline
Appropriation No., CIP Index No., Project No., (if existing) and Project Title	If a proposed project has been previously included in the CIP and has been assigned a CIP index number, provide the appropriation and CIP index number along with the project title and project number if one has been assigned. If not previously included in the CIP, provide a project title only.
Sponsoring Group	Indicate the Group sponsoring the project, as follows: 1) Office of General Manager 2) Water System Operations 3) Water Resource Management 4) Engineering Services 5) Information Technology 6) Real Property 7) Human Resources 8) External Affairs 9) General Counsel Department 10) General Auditor Department 11) Ethics Office 12) Environmental Planning
Project Manager and Proposal Preparer	Enter the name of the project manager if one was assigned and enter the name of proposal preparer.
Estimated Total Project Cost	Show the total estimate of cost from inception to completion of a project, including administrative overhead and contingency, as applicable.
GM Business Plan	Indicate the strategic priorities under GM's Business Plan the project best supports.
Current Project Phase	Indicate the phase (Study, Preliminary Design, etc.) as of the date proposal submitted.
Current Phase % Complete	Current phase percent complete as of the date proposal submitted.
Project Description	Describe the project scope of work.
Changes to Existing Project	For an existing project, describe any changes to the project scope, budget, or schedule over the past two years.
Justification	<p>Describe the nature of the issue to be addressed by the project. What is the problem? What is the function of the facility/component being addressed by the project? Why is the project needed? Why can't the project be postponed?</p> <p>Consider issues such as:</p> <ul style="list-style-type: none"> • Operational flexibility • New facility expansion • New water supply • Aging infrastructure deterioration/failure • Process improvement/failure • Maintenance capability • Seismic vulnerability • Obsolescence (vendor support, parts, technology, etc.) • Security • Regulatory Compliance (water quality, environmental, health and safety, etc.) • Cost savings • Revenue generation • Energy savings • Productivity <p>Include an explanation of how the project addresses any of the above issues and provide documentation, when applicable, to substantiate the need for the project.</p>

Section	Guideline
Directive	<p>Regulatory/Legal Settlement: Indicate if this is related to a written citation or directive, verbal/written directive, or in-house identification (includes environmental mitigation mandated by an MND or EIR).</p> <p>Special Initiative/Directive: Indicate if the project is specifically identified in one of the core or strategic initiatives; identified via Area Study, System Overview Study, etc.; and/or what phase(s) of the project have been authorized such as study, preliminary design, or final design.</p>
Service Disruption	Describe how Metropolitan's day-to-day operations could be impacted if the project is not approved. Consider business, as well as water system operations, including maintenance activities.
Cost/Productivity/Sustainability	Describe potential cost, water, and/or energy savings, waste reduction, revenue/energy generation, better customer service, etc., that justify the project. Include a pay-back period.
Alternatives	Provide a brief description of any potential project scope alternatives, including any opportunities to "stage" the work. Include if it is possible to only perform a portion of a project to meet foreseeable customer needs. Consider the possibility of new technology, changing demands, as well as environmental impacts and economies of scale. Describe any reasonable projects, processes, or other initiatives available as alternatives to the project. Discuss both positive and negative aspects of each alternative. If possible, explain what other similar agencies are doing about this or similar issue.
Additional Background Information	Provide any other supplemental information (e.g. detailed history of a problem, supporting technical information, shutdown constraints, etc.) that will help in evaluating the project. This can also be attached to the proposal.
Schedule	Indicate the proposed beginning and end dates for all appropriate phases.
Detailed Project Cost Estimate	<p>Include an itemized list of all costs for the project, as follows:</p> <ol style="list-style-type: none"> 1) Direct Labor with additives at the indicated rate 2) Equipment and Materials 3) Incidental Expenses 4) Professional/Technical Services (e.g., consultants) 5) Right-of-Way and Land Purchases (e.g., easements, fee title, escrow fees) 6) Operating Equipment Use and Rental 7) Contract Payments (e.g., construction contracts) 8) Administrative Overhead at the indicated rate 9) Contingency <p>All new project proposals and existing projects must include this estimate.</p>
Post-Implementation O&M Impacts	To the extent available/known, provide a description of the impacts, costs, and/or benefits this capital project is anticipated to have on Metropolitan's current and future O&M expenses and services upon completion (e.g. labor, maintenance, and equipment costs; enhanced reliability; improved water quality, etc. For example, "Ozone generators will substantially increase electrical consumption by approximately \$1 million annually and the number of new pieces of equipment will require periodic maintenance per the manufacturer's recommendations beginning in FY 2021/22. PDR and future studies will provide additional detail on the overall lifecycle costs"). This is required for projects greater than \$2 million and whose planned implementation date is within the next five fiscal years.
Approvals	<ol style="list-style-type: none"> 1) Person submitting the proposed project - Type name only 2) Team manager sponsoring the project 3) Unit manager sponsoring the project 4) Section manager sponsoring the project (e.g., all new and existing projects) 5) Group manager sponsoring the project (e.g., all new projects)

Evaluation Criteria

The evaluation criteria cover four characteristics or objectives for capital projects: Project Justification, Directive, Service Disruption, and Cost/Sustainability/Customer Service. In addition, a multiplier is applied to a project rating to factor in a risk assessment. Table 3 provides a description of the criteria and multiplier.

Table 3 - Evaluation Criteria and Multiplier

Criteria	Description
Justification	<p>Assessment of the overall importance of a project. Criterion looks at whether or not a project supports the following:</p> <ul style="list-style-type: none"> - Supply reliability - Infrastructure reliability - Regulatory compliance - Other goals (e.g., cost savings, revenue generation, energy savings, and increased productivity)
Directive	<p>Assessment of whether or not a project is specifically identified in one of the core or strategic initiatives, if any permitting agency such as the California State Department of Safety of Dams has issued a directive or citation to take corrective actions, the current authorized scope of work, and/or support the GM Business Plan:</p> <ul style="list-style-type: none"> - Regulatory/Legal Settlement - Special Initiative/Directive - GM Business Plan
Service Disruption	<p>Assessment of not doing a project. Criterion evaluates the following:</p> <ul style="list-style-type: none"> - Impact to Metropolitan's business operations - Impact to water system operations (e.g., system delivery and/or reliability, cascading impact on system due to failure, etc.)
Cost/Sustainability/Customer Service	<p>Assessment of whether or not a project improves the following:</p> <ul style="list-style-type: none"> - Cost efficiency - Sustainability - Customer service

Multiplier	Description
Risk Assessment	<p>Assessment of the probability of:</p> <ul style="list-style-type: none"> - Facility/component/process failure - Health, safety, water quality, or environmental impact - Missed opportunity (e.g., available resources, shutdown, revenue generation, cost savings, supply) - Not meeting service demands

Project Evaluation

A CIP Evaluation Committee comprised of staff from Water System Operations, Water Resource Management, Real Property, Engineering Services, Finance, Information Technology, Environmental Planning, and External Affairs evaluate and rate all project proposals. The evaluation criterion is designed to prioritize projects that directly support reliability, quality, and safety for inclusion in Metropolitan's proposed CIP.

An iterative process is employed to first score and rank every new and existing project, and then solicit feedback from project sponsors, customers, and resource providers in order to establish schedules and cash flow requirements. Those schedules, along with analyses of facility shutdown requirements, environmental permitting timeframes, and contracting process requirements, also enable resource managers to identify staffing needs. The final schedule and implementation plan for FY 2022/23 and FY 2023/24 are reflected in the budget and objectives summarized under each of the Individual Programs Summaries that appear later in this document.

Capital Investment Plan for Fiscal Years 2022/23 and FY 2023/24

Process Improvements

In October 2018, Metropolitan's Board amended the Administrative Code to allow for an appropriation of the total amount of planned biennial CIP spending following the approval of the biennial budget and authorize work on all capital projects identified in the CIP subject to the requirements of CEQA and limits on the General Manager's authority; and delegate responsibility to the General Manager to determine whether a project is exempt from CEQA. In order to be considered a planned project, the project must be included and described in this Capital Investment Plan Appendix for the two-year budget cycle. Consistent with this action, all requests to allocate appropriated CIP funds and proceed with planned capital projects are reviewed and approved by the Chief Engineer acting under the General Manager's authority. Upon approval, such requested funds are then transferred to the pertinent capital project. These transfers are based on both board actions and/or management decisions to initiate capital projects and/or proceed to the next phase of planned work.

In order to arrive at the spending plan for individual programs, the budget and schedule for each individual project is paired with project metadata (sponsor priorities, CIP scores, project status, etc.). The projects are then organized (or leveled) using an algorithm that combines anticipated capital spending with project prioritization. The resulting plan represents a spending model snapshot in time and is adjusted during the biennium as priorities and conditions change.

For this budget preparation cycle, we have deployed a new cloud-based CIP budgeting tool that performs the pairing and leveling work more efficiently. This new tool also makes it easier to create budget scenarios and to better maintain project and budget information, which helps with administration of CIP.

New to this budget cycle, in addition to the CIP scoring described above, each project is being reviewed against set risk criteria to evaluate the relative consequence and likelihood of failure. This data is used as a tool to assist in prioritizing projects.

In addition to the budgeting tool, two other web-based forms were deployed for this budget preparation cycle. One of the forms is a new web-based CIP proposal form, which streamlined the process.

Additions

Projects not described in this CIP Appendix are considered unplanned and are not included in the planned biennial spending. Unplanned projects require specific board authorization to add unplanned projects to the CIP Appendix before work can be initiated. Five unplanned projects totaling \$57.52 million were added to the FY 2020/21 and FY 2021/22 budget as authorized by the Board. These projects were identified after adoption of the budget and included projects such as Jensen, Skinner, & Weymouth Battery Energy Storage Systems, Gene Communication System Upgrade, Inland Feeder-Rialto Pipeline Intertie, Wadsworth Pump Discharge to Eastside Pipeline Bypass, and Inland Feeder-Citrus Reservoir and Pump Station Intertie. These projects are now included in this document and are considered planned projects for FY 2022/23 and FY 2023/24.

New Projects

Since the start of the current biennium, a total of approximately 100 new project proposals, including unplanned but excluding Minor Capital projects have been submitted and reviewed by the CIP Evaluation Committee to either proceed as proposed, or be staged to perform only a portion of the work in the biennial budget period, and have been incorporated into the current or the next CIP Appendix.

Major Objectives

Below, grouped by CIP Program, are descriptions of some of the capital project major activities anticipated to be underway or completed over the next two fiscal years.

Colorado River Aqueduct Reliability

Complete construction of the CRA Pumping Plant Sump System Rehabilitation and CRA Pumping Plants Crane Improvements projects. Continue construction of CRA 6.9 kV Power Cables Replacement for Pump Units 6 to 9, CRA Pumping Plants Water Treatment Systems Replacement, and CRA Pumping Plant Storage Buildings at Hinds, Eagle Mountain and Iron Mountain.

Cost Efficiency and Productivity

Deploy the new WINS Water Billing System. Complete the Jensen, Skinner, and Weymouth Battery Energy Storage Systems project. Start the Payroll-Timekeeping Reimplementation project.

Dams & Reservoirs Improvements

Complete design and begin construction of the Diamond Valley Lake Dam Monitoring System Upgrades project. Complete design of the Mills and Jensen finished water reservoir floating cover replacement projects. Complete preliminary investigations of the Lake Mathews and Lake Skinner spillways.

Distribution System Reliability

Complete construction of the Casa Loma Siphon Barrel No. 1 Seismic Retrofit, Orange County Feeder Relining - Stage 3, and Etiwanda Pipeline Lining Replacement - Stage 3. Begin design of the Lake Mathews Forebay Pressure Control Structure and Bypass project.

District Housing and Property Improvements Program

Complete final design and begin construction of District Housing Improvements and Employee Village Enhancement at Hinds, Eagle Mountain, Iron Mountain, and Gene.

Prestressed Concrete Cylinder Pipe Rehabilitation

Continue design, valve procurement, and construction to rehabilitate the remaining PCCP portions of the Second Lower Feeder. Continue preliminary design to rehabilitate the PCCP portions of the Allen-McColloch Pipeline, Calabasas Feeder, Rialto Pipeline, and Sepulveda Feeder. Continue annual electromagnetic inspections of all PCCP pipelines.

Regional Recycled Water Program

Complete design and initiate construction of Demonstration Plant Direct Potable Reuse Modifications.

Right-of-Way and Infrastructure Protection

Complete construction of pipeline protection and access improvements of San Bernardino County Region – Stage 1. Start construction of pipeline protection and access improvements of the Orange County Region – Stages 2 & 3 project. Continue efforts to develop and certify programmatic EIRs for the western San Bernardino, Los Angeles, Riverside and San Diego County regions.

System Flexibility/Supply Reliability

Complete construction of the drought-related projects such as Inland Feeder-Rialto Pipeline Intertie and Wadsworth Pump Discharge to Eastside Pipeline Bypass. Continue design of the Inland Feeder-Citrus Reservoir and Pump Station Intertie project. Begin construction of the Perris Valley Pipeline tunnel project.

System Reliability

Complete construction of La Verne Shops Improvements-Equipment Installation and Building Completion project. Complete deployment of Maximo Mobile Upgrade, Wifi Upgrade at La Verne, and Fuel Management System Upgrade projects.

Treatment Plant Reliability

Complete construction of the Jensen Electrical Upgrades – Stage 2 and Mills Electrical Upgrades – Stage 2 projects. Substantially complete construction of Weymouth Basins 5-8 and Inlet Channel Refurbishment project. Complete design of Diemer Filter Rehabilitation.

Water Quality

Complete the design for the Mills Bromate Control project.

Financial Projections

Planned capital spending for FY 2022/23 and FY 2023/24 is estimated to be \$300 million and \$300 million, respectively, and are planned to be funded by a combination of current operating revenues (R&R and PAYGO) and debt. Considerations for timing of nearby projects and facility shutdowns, urgency, aging infrastructure, updated service demand projections, and regulatory requirements are taken into account. Estimated capital spending is updated on a regular basis as new projects are added, other projects are completed, construction cost estimates are refined, or contracts awarded. From time to time, projects that have been undertaken are delayed, redesigned or deferred for various reasons and no assurance can be given that a project in the CIP will be completed in accordance with its original schedule.

The total planned spending for the FY 2022/23 and FY 2023/24 biennium is approximately \$600 million as shown in Figure 1 by Program. Planned spending has been estimated based on anticipated project progress and estimated costs for all ongoing and planned work for the new biennium budget period.

Figure 1 - Capital Investment Plan for FY 2022/23 and FY 2023/24 by Program

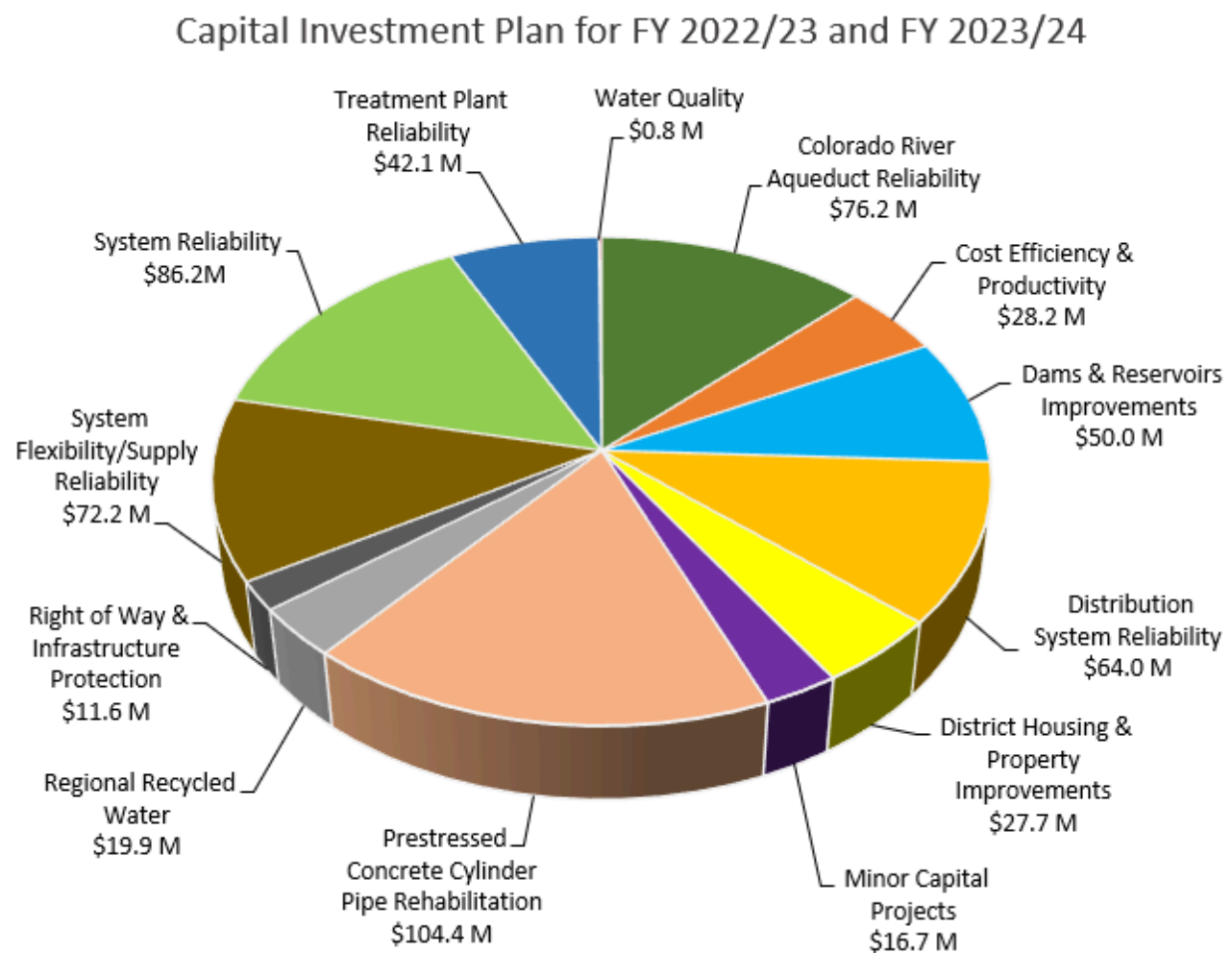


Figure 2 depicts the planned capital spending profile, including actual and projected cash flow, for the 15-year period from FY 2017/18 through FY 2031/32 and Table 4 provides a more detailed two-year outlook.

Figure 2 - CIP 15-year Window by Program FY 2017/18 through FY 2031/32

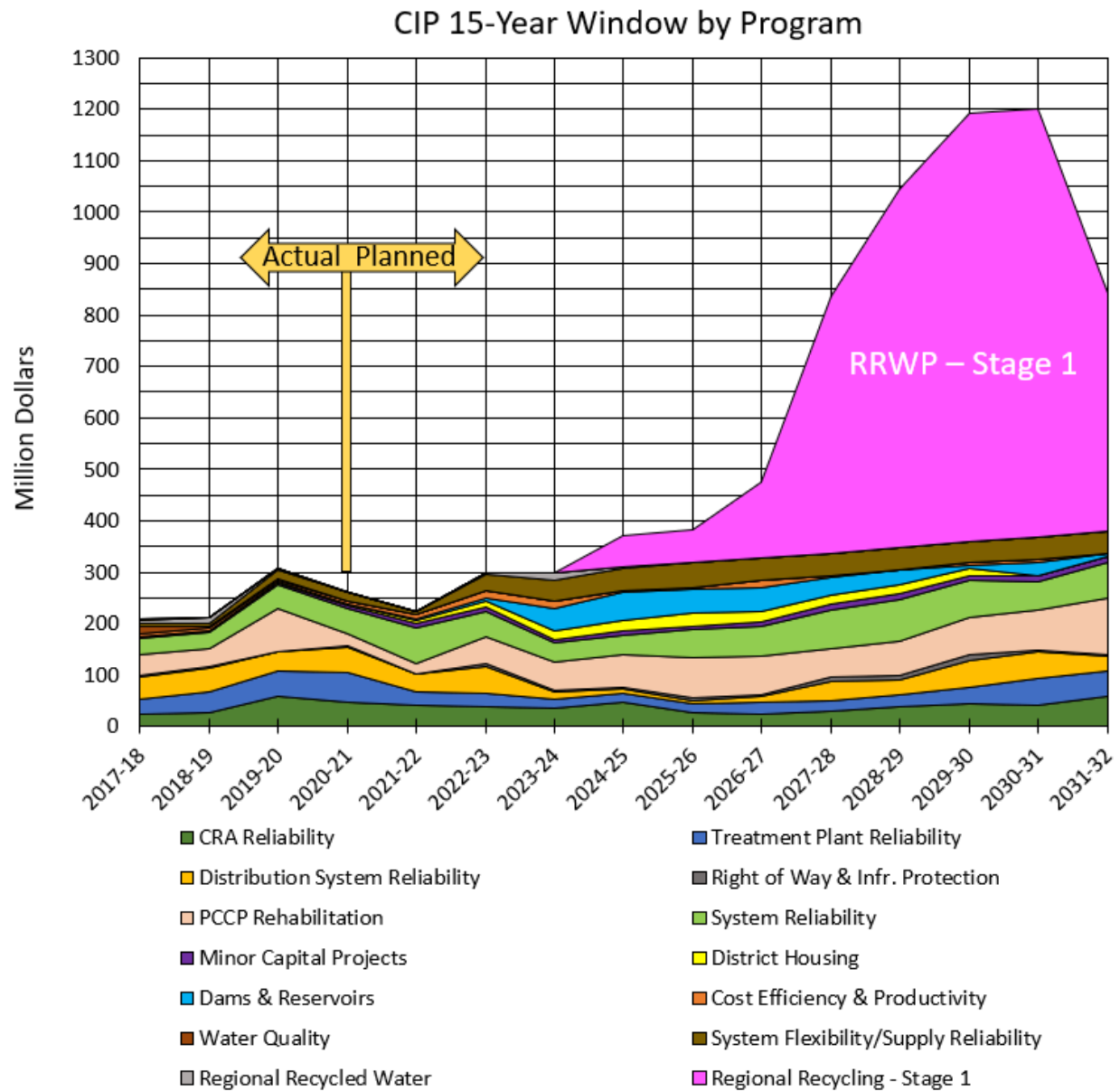


Table 4 - Two-Year Outlook

Capital Program and Project Groups	FY 2022/23	FY 2023/24
Colorado River Aqueduct Reliability	\$ 39,270,000	\$ 36,900,000
CRA - Conveyance	\$ 9,720,000	\$ 170,000
CRA - Electrical Systems	\$ 4,560,000	\$ 8,900,000
CRA - Pumping Plants	\$ 17,940,000	\$ 18,300,000
CRA - Other	\$ 7,050,000	\$ 9,530,000
Cost Efficiency & Productivity	\$ 15,610,000	\$ 12,630,000
Diamond Valley Lake Recreation - New/Improvements	\$ 2,660,000	\$ 4,000,000
Diamond Valley Lake Recreation - Refurbishment & Replacement	\$ 150,000	\$ —
IT - Business Support	\$ 5,100,000	\$ 1,230,000
Cost Efficiency & Productivity - Other	\$ 7,700,000	\$ 7,400,000
Dams & Reservoirs Improvements	\$ 5,300,000	\$ 44,700,000
Dams & Reservoirs - All	\$ 5,300,000	\$ 44,700,000
Distribution System Reliability	\$ 51,250,000	\$ 12,790,000
Pipelines, Tunnels, Canals	\$ 30,000,000	\$ 8,400,000
Pressure Control Structures/Hydroelectric Plants/Service Connections/Valves & Gates	\$ 12,400,000	\$ 4,300,000
Distribution System - Other	\$ 8,850,000	\$ 90,000
District Housing & Property Improvements	\$ 12,000,000	\$ 15,700,000
Housing & Property Improvements	\$ 12,000,000	\$ 15,700,000
Minor Capital Projects	\$ 8,700,000	\$ 8,000,000
Minor Capital Projects - All	\$ 8,700,000	\$ 8,000,000
Prestressed Concrete Cylinder Pipe Rehabilitation	\$ 51,210,000	\$ 53,180,000
Allen McColloch Pipeline	\$ —	\$ —
Calabasas Feeder	\$ —	\$ —
Rialto Feeder	\$ 3,300,000	\$ 5,900,000
Second Lower Feeder	\$ 43,500,000	\$ 46,900,000
Sepulveda Feeder	\$ 3,900,000	\$ 380,000
PCCP - Other	\$ 510,000	\$ —
Regional Recycled Water	\$ 3,860,000	\$ 16,030,000
Regional Recycled Water - All	\$ 3,860,000	\$ 16,030,000
Right-of-Way & Infrastructure Protection	\$ 7,770,000	\$ 3,790,000
Los Angeles Region	\$ 3,780,000	\$ 2,390,000
Orange County Region	\$ 630,000	\$ —
Riverside/San Diego Region	\$ —	\$ —
Western San Bernardino Region	\$ 1,800,000	\$ —
RWIPP - Other	\$ 1,560,000	\$ 1,400,000
System Flexibility/Supply Reliability	\$ 31,590,000	\$ 40,610,000
System Flexibility/Supply Reliability - All	\$ 31,590,000	\$ 40,610,000
System Reliability	\$ 48,500,000	\$ 37,700,000
IT/SCADA - Infrastructure	\$ 12,700,000	\$ 18,300,000
Operations Support	\$ 21,700,000	\$ 15,000,000

Capital Program and Project Groups	FY 2022/23	FY 2023/24
System Reliability - Security and Other	\$ 14,100,000	\$ 4,400,000
Treatment Plant Reliability	\$ 24,940,000	\$ 17,170,000
Diemer	\$ 7,100,000	\$ 320,000
Jensen	\$ 9,050,000	\$ 2,540,000
Mills	\$ 120,000	\$ 40,000
Skinner	\$ 1,470,000	\$ 250,000
Weymouth	\$ 7,200,000	\$ 14,020,000
Treatment - General	\$ —	\$ —
Water Quality	\$ —	\$ 800,000
Water Quality - All	\$ —	\$ 800,000

Potential Changes to the Proposed CIP

The program described below will require specific Board decisions prior to funding and authorization to proceed. Descriptions for proposed projects are included in the Individual Program Summaries section of this Appendix.

Regional Recycled Water Program (RRWP)

Currently, activities associated with the RRWP are limited to operations and testing at the Advanced Water Treatment Demonstration Plant (demo plant) and environmental permitting. Ongoing modifications to the demo plant are included in the CIP, while preparation of a Programmatic Environmental Impact Report is funded under the O&M budget.

The decision to proceed with the full-scale recycled water program is expected to be brought to the Board during FYs 2022/23 and 2023/24. At that time, the regulatory, operational, and financial impacts of developing the full-scale program will be presented to the Board to decide whether or not to proceed. If the full-scale recycled water program proceeds, the project will be added to the CIP at that time. Subsequent changes to that program such as consideration of direct potable reuse or expanding capacity will be treated the same way.

Diamond Valley Lake Recreation

The Diamond Valley Lake (DVL) Recreation Program is a unique appropriation. The program was fully funded with \$92.8M in 2004 with the intent of constructing recreational facilities at the East and West Dams. One condition placed on the appropriation was that proceeds from the sale of any surplus DVL properties would be used as additional funds to the program. In 2021, Metropolitan sold DVL land valued at \$4.5M and this amount was added to the DVL Recreation appropriation. Future sales will be addressed similarly.

Drought Projects

In response to the ongoing historic statewide drought, this CIP includes several projects that address decreasing water supplies both in specific parts of Metropolitan's service area and across the entire District (e.g., Wadsworth Pump Discharge to Eastside Pipeline Bypass project, Rialto Feeder and Mills Plant Pump Station). Engineering Services and Water System Operations are continuing to investigate capital improvements that mitigate drought impacts and more projects are expected to be brought to the Board during FYs 2022/23 and 2023/24.

Capital Investment Plan Detail

The core of this section is the Individual Program Summaries, which provide information for each capital project that has been proposed, evaluated, and included in the budget forecast to begin or continue during and after FY 2022/23 and FY 2023/24. Scope, accomplishments, objectives and financial projections are provided for each capital program. Every project with work planned for the two budget years and beyond is listed under the appropriate Program Summary by Project Group. The information provided reflects project details current as of the time of publication and is subject to change. The Individual Program Summaries are ordered alphabetically by program title. The information contained in the Individual Program Summaries is described in further detail below.

Key Information

For each program, key information is highlighted at the top of the Individual Program Summary page and includes the FY 2022/23 and FY 2023/24 biennial estimate. Table 5 provides an explanation of each item.

Table 5 - Key Program Information

Item	Description
Program Description	A brief explanation of the types of projects included in the Program
Fiscal Year 2022/23 Estimate	Estimate of planned spending from July 2022 through June 2023. It does not include a contingency amount.
Fiscal Year 2023/24 Estimate	Estimate of planned spending from July 2023 through June 2024. It does not include a contingency amount.
Accomplishments for FY 2020/21 and FY 2021/22	Listing of new projects initiated and major milestones achieved during the last biennium
Objectives for FY 2022/23 and FY 2023/24	Listing of key projects with major milestones planned during the budget biennium with the total project estimate, estimated construction completion, and the planned milestone for FY 2022/23 and FY 2023/24

Narratives

Each Individual Program Summary also contains a narrative portion that includes a description of each project planned to be underway during the two-year budget period and beyond.

Table 6 - Program Summary Index

Program Title	Page No.
Colorado River Aqueduct Reliability	235
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Individual Program Summaries

Colorado River Aqueduct (CRA) Reliability Program

Fiscal Year 2022/23 Estimate: \$39.3 million

Fiscal Year 2023/24 Estimate: \$36.9 million

Program Information: The CRA Reliability Program is composed of projects to replace or refurbish facilities and components of the CRA system in order to reliably convey water from the Colorado River to Southern California.

Accomplishments for FY 2020/21 and FY 2021/22

- New projects initiated:
 - Black Metal Mountain 2.4 kV Electrical Power Upgrade
 - CRA Conduit Protection & Lining – Stage 1
 - CRA Eagle Mountain 230 kV Local Breaker Failure Backup
 - CRA Pumping Plant 2.3 kV and 480 V Switchrack Rehabilitation
 - CRA Whipple Mountain Tunnel Flow Metering Equipment Upgrades
 - Eagle Lift and Eagle West Siphons Seismic Improvements
 - Eagle Mountain 230 kV Physical and Cyber Security Upgrades
- Major milestones achieved:
 - Construction completed:
 - CRA Radial Gates Rehabilitation
 - CRA Pumping Plants Discharge Line Isolation Bulkhead Couplings
 - CRA Pumping Plant Sump System Rehabilitation – Procurement
 - CRA Radial Gates Rehabilitation
 - Gene Wash Reservoir Discharge Valve Rehabilitation
 - Construction contracts awarded:
 - CRA Pumping Plants Crane Improvements
 - CRA Pumping Plants Water Treatment Systems Replacement
 - Mile 12 Flow and Chlorine Monitoring Station Upgrades

Objectives for FYs 2022/23 and 2023/24

Project	Total Project Estimate	Estimated Construction Completion	Major Milestones
Copper Basin Reservoirs Discharge Valve Rehabilitation	\$ 24,000,000	2025	Begin construction
CRA 6.9 kV Power Cables Replacement for Pump Units 6 to 9	\$ 25,000,000	2025	Begin construction
CRA Conduit Structural Protection	\$ 16,000,000	2024	Begin construction
CRA Desert Region Security Improvements	\$ 8,200,000	2024	Begin construction
CRA Main Transformer Refurbishment	\$ 41,000,000	2027	Begin equipment procurement and construction
CRA Pumping Plant Sump System Rehabilitation	\$ 43,000,000	2024	Begin construction
CRA Pumping Plants Crane Improvements	\$ 19,000,000	2023	Complete construction
CRA Pumping Plant Storage Buildings at Hinds, Eagle Mountain and Iron Mountain	\$ 9,000,000	2024	Begin Construction
Eagle Mountain Pumping Plant Village Utilities & Paving Replacement	\$ 7,600,000	2024	Begin construction
Gene Pumping Plant Village Utilities & Paving Replacement	\$ 24,000,000	2025	Begin construction
Hinds Pumping Plant Discharge Valve Pit Platform Replacement	\$ 8,400,000	2026	Begin construction
Hinds Pumping Plant Village Utilities & Paving Replacement	\$ 9,500,000	2024	Begin construction
Mile 12 Flow and Chlorine Monitoring Station Upgrades	\$ 6,000,000	2022	Complete construction

CRA - Conveyance Project Group

Cabazon Radial Gate Facility Improvements

The Cabazon Radial Gate facility is located on the CRA in the city of Cabazon within Riverside County and approximately one mile upstream of the San Jacinto Tunnel. The Cabazon Radial Gate facility was constructed in 1936 and consists of a 17-foot-wide by 16-foot-tall radial gate controlled by an electric motor actuator. The facility was designed to protect the downstream conduits and tunnels from becoming over-pressurized in the event of a blockage by diverting water into an 800-foot long, concrete-lined channel which flows into the San Gorgonio Wash. The existing radial gate, motor, and controls have reached the end of their service life and are no longer reliable. This project will replace the radial gate, motor, and controls.

CRA Conduit Structural Protection

The CRA has 55 miles of cut-and-cover conduits where vehicles and storm water flows can cross over the aqueduct. These conduits are unreinforced concrete horseshoe-shaped structures placed upon an invert slab. At some locations, these conduits are subject to heavy vehicle loading or over pressurization due to friction inside the conduits during high pump flow. Few locations include existing dirt roads that cross the aqueduct with insufficient soil cover over the conduit; including locations where heavy equipment must be placed over or near the conduit for access into tunnels or siphons. This project will install new protective structures such as reinforced concrete slabs that span over the unreinforced conduits and epoxy lining the conduits at specific locations. New pressure sensor systems will be installed to monitor the pressure inside the conduits during the high pump-flow operation. The slabs will protect the conduits from damage by distributing the equipment loading to the surrounding soil and epoxy liner will decrease internal friction to allow increased flow through the CRA conveyance system.

CRA Conveyance System High Flow Reliability Upgrades

With recent drought conditions and low State Project Water allocations, Metropolitan has needed to maximize flow through the CRA. With climate change impacting regional hydrology, this operational flexibility will continue to be a priority. This project will strengthen the conveyance portion of the CRA system and make other improvements to provide reliable flow through eight CRA pumps year-round. Some of the options that will be considered include: carbon fiber lining, polyurethane lining, epoxy lining, steel lining, and structural strengthening from the outside of the conduits. This project will also add new gauging stations along the conveyance system that will be tied into SCADA to provide flow data and information that will assist with maintaining uniform and steady state flow conditions through the CRA system. This is a new project for this budget cycle.

CRA Freda Siphon Barrel No. 1 Improvements

Like many of the CRA's 146 siphons, the Freda Siphon was constructed of cast-in-place reinforced concrete in the 1930s. And like many of these siphons, the Freda Siphon leaks measurably. This project will investigate methods to permanently address reoccurring leaks and will perform improvements that are cost-effective, long-term, and require minimal shutdown time and maintenance. This is a new project for this budget cycle.

CRA Freda Siphon Barrel No. 1 Leak Repairs

Surface investigations of the CRA Freda Siphon Barrel No. 1 conducted over the past two years revealed as many as eight leakage locations. This project will install internal seals along the siphon during the 2023 CRA scheduled shutdown, reducing the risk of future unplanned outages and costly emergency repairs. This is a new project for this budget cycle.

CRA Sodium Hypochlorite Injection Improvements

Sodium hypochlorite is added along the Colorado River Aqueduct (CRA) to control algal growth, which could damage downstream process equipment and reduce flow through the aqueduct. The existing process of providing weekly chlorine addition into the canal produces spikes in chlorine concentrations, which causes the Colorado River water to be more corrosive to conveyance systems and plant equipment, and produce higher concentrations of trihalomethanes (THMs). This project will construct new chlorine storage and injection facilities to provide a steady rate of chlorine addition at five locations along the CRA. Each new chlorine injection facility will be upgraded to include a sodium hypochlorite tank and pump skid, chemical storage building with climate control and spill containment, delivery driveway with spill containment area, piping, chlorine injection system, security cameras, fencing, electrical and Supervisory Control and Data Acquisition (SCADA) upgrades, and other appurtenances. This is a new project for this budget cycle.

CRA Tunnels - Seismic Resilience Upgrades

The CRA is a 242-mile-long conveyance system that transports water from the Colorado River to Lake Mathews in Riverside County, including 124 miles of tunnels which were constructed in the late 1930s and was placed into service in 1941. While the CRA was constructed in accordance with current seismic codes of that time, recent seismic risk assessments of the CRA identified that some tunnels are vulnerable to damage from a strong earthquake on the southern San Andreas Fault. The scope of this project includes detailed seismic evaluations and completion of upgrades to strengthen vulnerable tunnel sections.

Eagle Lift & Eagle West Siphons Seismic Improvements

The CRA was placed into service in 1941. As the aqueduct traverses the desert, it must cross numerous drainage channels, ravines, and other natural depressions. At each crossing, the aqueduct's open channel transitions into a buried conduit (an inverted siphon) which drops below ground and passes beneath the natural surface feature. At the downstream end of the siphon, water re-emerges into the open aqueduct. Typically, siphons are cast-in-place reinforced concrete conduits, which vary in length from 150 feet to 5 miles. An initial assessment of the Eagle Lift and Eagle West Siphons identified potential slope failure of the soil covering the siphons as a result of a strong seismic event. This project will perform a detailed slope stability analysis and evaluate and implement mitigation options.

Iron Mountain Tunnel Rehabilitation

The Iron Mountain Tunnel was constructed between 1933 and 1938 as part of the CRA system. The tunnel is located downstream of the Iron Mountain pumping plant, and is eight miles long. The tunnel's cross-section is horseshoe-shaped, with overall dimensions of 16 feet high by 16 feet wide. Longitudinal and transverse cracks up to 1 inch wide have developed along a 2,500-foot-long stretch of the tunnel. This project will mitigate the cracks with focus on tunnel strengthening and corrosion protection.

Mile 12 Flow and Chlorine Monitoring Station Upgrades

One of the CRA's critical points for monitoring flow rates and chlorine levels is located at Mile Marker 12 (Mile 12) along the aqueduct. Monitoring equipment includes a set of flowmeters with instrumentation, chlorine analyzers, communication equipment, solar panels, and batteries. Although the equipment has performed well, it has exceeded its life span and is beginning to fail. This project will replace the existing deteriorated flow meters, chlorine analyzers, transducers, and associated cabling; relocate the data and communications equipment from the underground manhole to a new aboveground monitoring station with air-conditioned cabinets to enable stable operation; construct a reliable power source by upgrading the solar power system and installing a propane generator; and install security system.

Whitewater Tunnel No. 2 Seismic Upgrades

The CRA consists of five pumping plants, 124 miles of tunnels, 63 miles of canals, and 55 miles of conduits, siphons, and reservoirs. One of the tunnels, CRA Whitewater Tunnel No. 2, is a 1.5-mile long; 16-feet-high by 16-feet-wide horseshoe-shaped tunnel that parallels closely to the southern San Andreas Fault and crosses a splay of the fault approximately one-third mile from its west portal. A recent seismic risk assessment of the CRA identified that this tunnel is vulnerable to major damage from a strong earthquake on the southern San Andreas Fault. This project will perform near-term upgrades to strengthen vulnerable tunnel sections at the east and west portals of this tunnel and will improve access at the west portal. Furthermore, in order to expedite post-earthquake repairs of damaged tunnel sections, the design of a new bypass tunnel will be prepared in advance, steel sets will be procured and stockpiled, and tunnel repair contractors will be prequalified so that specialized equipment and crews may mobilize rapidly.

CRA - Electrical Systems Project Group

Electrical Power Distribution Upgrades - Gene, Iron Mountain, Eagle Mountain and Hinds Pumping Plants

The 2.4 kV electrical power distribution system at all five Desert pumping plant facilities conveys power from the Metropolitan-owned 2.4 kV switchyard to all areas within the property confines, including the operations and maintenance (O&M) areas and the villages. The power is stepped down from 2.4 kV, typically by a pole-mounted transformer, to the required voltage based on the end-user's requirements, usually 120 V for houses and buildings, or 480 V for workshops. The existing breakers are no longer common in the power industry, and spare parts are difficult to obtain.

This project will replace the existing electrical power distribution systems at Gene, Iron Mountain, Eagle Mountain and Hinds Pumping Plants with new distribution systems. The work will include replacing existing 2.4 kV breakers with 4160 V breakers, and replacing associated cables, conduits, feeders, risers, wooden poles and transformers, and appurtenances. Underground power distribution will be used when feasible. This project will improve the reliability of water deliveries and will optimize maintenance.

Black Metal Mountain 2.4 kV Electrical Power Upgrade

Black Metal Mountain (Black Metal) Site No. 1 and Site No. 2 are two of Metropolitan's communication sites, located in the San Bernardino Mountains. The sites are situated on top of a mountain and provide line-of-sight propagation to subsequent communication sites. Given their prime location, the communication sites on Black Metal Mountain house communication equipment for Metropolitan, several state and local government agencies, and local radio stations and cellular service providers. The existing power line that serves the two communication sites is aging and deteriorated, and is located in rocky, mountainous terrain, with some poles on the edge of 600-foot cliffs. This project will design and construct the replacement of the existing 2.4 kV power line that serves MWD's Black Metal Mountain communication sites. The work will include installation of new power poles and larger conductors to increase the available power to the sites; and improvements to the service roads to improve access for maintenance and safety.

CRA 230 kV Transmission Line Rehabilitation and Improvements

The CRA has an extensive 230 kV transmission system that originates from Hoover Dam and supplies power to all five pumping plants. This 305-mile-long transmission system was installed in the 1930s and consists of approximately 75-foot-high steel towers with concrete and wood footings, aluminum and copper conductors and supports to attach the conductors and insulators to the towers. Spans between the towers average 1,200 feet with varying ground elevations. Vertical clearances between the lowest conductor and the ground in a span can vary with temperature, wind speeds, and power loads. Over the years, operating under maximum power loads and extreme desert temperatures has led to insufficient vertical clearances as required by the current electrical standards. This project will assess ground clearances of the conductor spans and increase clearances, as needed, by raising the heights of existing towers and/or adding new towers between spans, and construct tower refurbishment or replacement.

This project will also rehabilitate and improve substations, switching stations, and control rooms related to the CRA's 230 kV transmission system in order to comply with NERC (North American Electric Reliability Corporation) standards, increase system reliability, and reduce the risk of unplanned CRA outages. Rehabilitations and upgrades include new relays at Eagle Mountain Pumping Plant to mitigate potential cascading power outages from a stuck breaker scenario at Eagle and installation of physical and cyber security systems at Gene and Eagle Mountain pumping plants control rooms and switch yards (NERC requirements); replacement of outdated bank protection relays at Intake, Gene, Iron Mountain and Hinds pumping plants; replacement of outdated 230 kV disconnect switches at Camino Switching Station and at the Gene and Iron Mountain 230 kV transfer buses; installation of a new 230 kV circuit breaker at Iron Mountain to enable isolation of the Iron-Eagle 230 kV transmission line without disruption of CRA water deliveries; and, purchase of SCE circuit breakers which are integrated with the CRA's 230 kV system at Gene and Eagle Mountain pumping plants in order to give MWD greater flexibility without having to rely on SCE. Additional scope may be added as a result of the planned assessment of the existing system.

CRA 6.9 kV Power Cable Replacement for Pump Units 6 to 9

There are a total of 45 primary pumps and motors at the five CRA pumping plants. Power is transmitted to the motors via 3-inch-diameter cables which run through a tunnel that connects each switch house to each pump house. The quantity of cables varies from nine to 27 per plant. These cables were installed in four phases from 1939 through 1959. After 57 to 77 years of continuous service, the power cables have deteriorated and need to be replaced. Oil has begun to leak through cracks in the lead jacket, at the cable connection joints, and at the cable termination points. Frequent repairs are required to address the leaks and maintain the cables' insulating capacity. The cables for pump units 1 to 5 have been replaced. This project includes the replacement of the deteriorated main power cables for pump units 6 to 9 at each of the five CRA pumping plants. Final design for units 6 to 9 is underway.

CRA Auxiliary Power Systems

All five CRA pumping plants have medium and low voltage systems that were constructed to the design standards of the 1930s-1950s. They provide power for general lighting, cranes, computers, shop equipment, and critical equipment such as the pumping plant sump pumps and lubrication oil pumps. Over the years, numerous additional electrical loads have been added to the auxiliary power systems. As a result, the distribution panel capacity limits have been exhausted, and some wiring is now undersized. The scope of this project includes upsizing the distribution panels to allow additional capacity and space for future loads and replacing the cables and conduits to comply with current National Electrical Code and safety standards. Additional scope may be added as a result of preliminary assessment of each of the sites to make the auxiliary power systems reliable.

CRA Hinds Sand Trap & Wasteway Radial Gate Power Cable Replacement

The power cables that feed the Hinds sand trap and wasteway radial gate are installed in a shallow ductbank that is deteriorating due to heat, in a conduit that is overfilled. This project will construct a new ductbank with power conductors designed to address these deficiencies. This is a new project for this budget cycle.

CRA Main Transformer Rehabilitation

Seven transformers provide electrical power to each CRA pumping plant to maintain continuous operation. All existing transformer units are original equipment, with many dating from the 1940s. Recent inspections revealed oil leakage and other signs of aging for some of the transformers. Failure of an existing transformer would disrupt power supply to a pumping plant and interrupt water delivery. The scope of the project includes rehabilitation of existing transformers, replacement of transformers, or the addition of spare transformers along with spill containment structures. This work also includes rehabilitation of transformer cranes, upgrade of transformer monitoring and protection equipment, and replacement of leaky circulating oil pumps that are used to cool the transformers and construction of secondary spill containment for the transformer banks. Additional scope may be added as a result of preliminary assessment to ensure reliable and safe operation of the CRA pumping plants.

CRA Pumping Plants 2.3 kV and 480 V Switchrack Rehabilitation

All five CRA Pumping Plants have a 2.3 kV and 480 V switchracks that are the central power distribution for the 2.3 kV, 480 V and 120 V that feed multiple medium and low voltage critical equipment within the pumping plants. These switchracks have been in service since the original construction of the CRA. The equipment is old, obsolete and replacement parts are difficult to obtain. This project will rehabilitate or replace the 2.3 kV and the 480V switchracks and associated support systems at all five CRA pumping plants to ensure the equipment meets the current safety and electrical codes and provides a reliable power supply to the plants.

CRA Standby Diesel Engine Generator Replacements

Back-up power for critical auxiliary systems at the Iron Mountain, Gene, and Intake pumping plants is provided by stand-by diesel generators. The standby generators are over 50 years old, require frequent repairs, and have reached the end of their service lives. In addition, upgrades to the generators' ancillary equipment are planned to meet current fire codes and environmental regulations. This project will improve the reliability of emergency power for critical auxiliary systems at the pumping plants. The scope of the project includes relocation and installation of new generators. The replacement generator will include alarms, valves, meters, and a control system capable of automatic start-up upon loss of primary power, automatic transfer back to primary power once the normal source is reestablished, and remote status monitoring.

CRA - Pumping Plants Project Group**CRA Intake Pumping Plant Shore Protection**

The existing shore protection consisting of rocks and concrete was installed around the time the Intake Pumping Plant was constructed in the 1930s and has exceeded its service life. This project will improve the shore adjacent to the Intake Pumping Plant to protect the access road and facilities and mitigate against short and long-term coastal erosion due to wave attack, flooding, and water surface level changes in Lake Havasu. This is a new project for this budget cycle.

CRA Iron Mountain and Eagle Mountain Pumping Plant Reservoirs Floor Relining

The Iron Mountain and Eagle Mountain CRA Pumping Plants each have approximately 9.3-acre forebay reservoirs, constructed in the 1930s. Recent geotechnical investigations of the asphalt reservoir floor liners found them to be in poor condition. This project will replace the liners at each plant with a material that precludes seepage water loss and extends the life of the facility. This is a new project for this budget cycle.

CRA Main Pump, Motor & Discharge Valve Refurbishment

Each of the five CRA pumping plants has nine main pumps that lift the water to the required elevation necessary to continue flow down the aqueduct. The 45 main pumps rely on multiple auxiliary systems including lubricating oil systems, circulating water systems, controls and instrumentation systems, discharge valves, electrical and control panels, and individual equipment components. In the mid-1980s, a major rehabilitation project was undertaken on the 45 main pumps. As a result, the 45 main pumps have performed well over the nearly 30 years since the rehabilitation work was completed. However, the pumps are now showing signs of deterioration caused by continuous operation over that length of time. While that project successfully extended the service life of the pumps and increased their hydraulic capacity, the pump auxiliary systems were not addressed at that time. The pump auxiliary systems are from the original CRA construction and are now deteriorating and need to be replaced. An assessment of the main pumps, motors, and their auxiliary systems at all five CRA pumping plants will capture current operating conditions, create updated baseline documents of all existing equipment and systems, and provide replacement or rehabilitation recommendations for all pump and auxiliary system components. This project will refurbish the 45 main pumps and their auxiliary systems, including lubricating oil systems, circulating water systems, controls and instrumentation systems, discharge valves, electrical and control panels, and individual equipment components, as deemed appropriate by the assessment.

CRA Main Pumping Plants Sand Removal System

At each of the five CRA pumping plants, water is withdrawn from the CRA, filtered to remove large debris and sand, and then pumped through a circulating water system. The circulating water system feeds the pump house service water system, the cooling system at each pump unit, the fire water system, the irrigation water system, and the domestic water treatment system. The existing filtration system is not designed to strain out fine silts. Consequently, the fine silt has built up as sediment in the circulating water systems leading to excessive wear and failure of equipment such as pump packing, cooling water piping, and heat exchangers. This project will upgrade the filtration system to remove fine silt and eliminate sediment build up and refurbish or replace any identified damaged components.

CRA Main Pumping Plant Unit Coolers and Heat Exchangers

Each of the five CRA pumping plants has nine main pumps. Each main pump has a cooling system to cool various components of the pump system. At each pump house, water is pumped through a circulating water system, which feeds multiple unit coolers and heat exchangers for each individual main pump unit. Over the years, the unit coolers have developed many leaks. Lack of sufficient cooling water could cause equipment overheating, and the leaks could damage nearby electrical equipment. This project will replace, refurbish, or upgrade the cooling and heat exchange system at each pump unit.

CRA Pumping Plant Flow Meter Replacement

Acoustic flow meters are installed at each of the five CRA pumping plants on each 10-foot-diameter delivery lines. Flow measurements are used to adjust pumping rates and balance the flows from plant to plant. The existing meter units have begun to deteriorate due to their age and exposure to harsh desert conditions. Continued loss of accuracy could lead to incorrect flow adjustments or unsynchronized pumping rates, which could cause flooding at the plants or overtopping of the aqueduct. This project will install new acoustic flow meters on the delivery lines which will connect to nearby flow meter consoles housed inside new pre-fabricated equipment enclosures.

CRA Pumping Plant Sump System Rehabilitation

Each of the five CRA pumping plants has two independent main sumps that collect water leakage from the main pumps and discharge valves. Each main sump is approximately 9 feet wide, 20 feet long, and 35 feet deep, and can hold up to 48,000 gallons, or approximately one day's worth of leakage water. The sump system pumps this water back to the pumping plant's main intake manifold or to its forebay, depending on the plant. The 72-year-old sump piping systems and support structures are deteriorating and have exceeded their service lives. Failure of the sump piping systems has the potential to cause extensive flooding and damage to valves and pumps within the pumping plants. This project will rehabilitate the pumping plant sump systems, including replacement of corroded sump mechanical equipment, piping, and access structures at all five CRA pumping plants. Access features will be upgraded by replacing corroded catwalks, ladders and handrails within the sumps. This project will also rehabilitate circulating water equipment and piping systems, which are in the sump area. A construction contract was awarded by the Board in December 2018, but construction activities were suspended in March 2020 due to the COVID-19 pandemic, which led to cancellation of the construction portion of the contract. The delivered equipment and materials will be installed by another contractor.

CRA Pumping Plants Circulation Water Systems

Each of the five CRA pumping plants has nine main pumps. Each of these pump units use cooling equipment to cool various components of the pump system that feeds from the plant's circulating water system. This system has a loop with branch connections and an isolation valve at each unit. The piping and the valves that supply the circulating water systems run through the entire length of the plants and are all from the original CRA construction. The piping and the valves are now showing signs of deterioration. They are clogged, corroded and leaking. This project will replace and upgrade the circulation water systems for each pumping unit. Additional scope may be added as a result of preliminary assessment to ensure reliable operation of the CRA pumping plants.

CRA Pumping Plants Crane Improvements

All five CRA Pumping Plants have a single overhead bridge crane which spans the motor room floor and a portable bridge crane for the individual pump bay below the motor room floor. These overhead cranes were installed in the pumping plants during the original CRA construction and have been in operation since 1939. The cranes are used to raise, shift, and lower main pump components and motors for maintenance and replacement. These cranes were rehabilitated in the late 1980s. They have now reached the end of their service life where spare parts for the original crane components are difficult to obtain or no longer available. Parts which were replaced in the 1980s are outdated and the electronic features are no longer supported by vendors. This project will replace all the overhead bridge cranes on the motor room floor and the portable pump-bay cranes below the motor room floor at all five pumping plants. The replacement includes the bridges, trolleys, hoists, drive trains, the system controls, and other associated support systems.

CRA Pumping Plants Delivery Line Rehabilitation

Each of the nine main pumps at the five CRA pumping plants discharges the water into individual six-foot diameter discharge lines. The nine discharge lines then merge and transition into three 10-foot diameter pipelines, Delivery Line Nos. 1, 2 and 3, that convey flow to the top of the lift and then discharge into a headgate structure which empties the water into the next section of the aqueduct. These delivery lines vary in length from 500 feet to 1,400 feet up steep and rocky slopes. The five Delivery Line No. 1s were constructed in the 1930s and were lined with coal tar enamel to protect the interior of the pipe from corrosion. After 82 years of service, the existing coal tar enamel lining on Delivery Line No. 1 at each plant is cracking, flaking, and the steel is starting to corrode. The mortar linings for Delivery Line Nos. 2 and 3 are still in good condition and do not require repair.

Additionally, depending on the length of each delivery line, there are a total of three or four expansion joints located along the line. These expansion joints are deteriorated and showing signs of corrosion. A number of the most deteriorated joints have been rehabilitated recently. This project provides a comprehensive rehabilitation of the remainder of delivery lines at each of the five CRA pumping plants, including replacement of the coal tar enamel with a cement mortar lining, expansion joints, and minor coating repairs.

CRA Pumping Plant Public Address and Alarm Communication System Upgrades

The existing communication signals at each of the five CRA pumping plants are currently separated into different systems including: the public address system; plant alarms; evacuation, fire, and carbon dioxide alarms; and phones. The signals in these systems were originally installed to utilize the existing 1930's era phone line systems and is becoming increasingly difficult to maintain as replacement parts are becoming harder to find and troubleshooting is difficult. This project will replace the existing communication systems with a new integrated and modernized auditory communication system with alarms that are able to be identified based on different distinct alarm tones. Signal wires will be routed to a network enabled public address and general alarm system and new speakers will be added at each plant to improve ability to hear audible alarms throughout the plants, even when loud pumps are operating. This is a new project for this budget cycle.

CRA Pumping Plant Pump Lower Guide Access Improvements

At each of the CRA pumping plants, maintenance staff performs a monthly inspection of the lower guides below each main pump. The access hatch utilized for this inspection is located about twenty feet above the deck and situated where it is difficult for workers to reach and inspect the lower guides. This project will design, fabricate, and install a total of 45 new work platforms/mezzanines to improve safety and to facilitate the routine inspections. This is a new project for this budget cycle.

CRA Pumping Plant Rollup Door and Window Replacements

Over the past 80 years, the desert has taken its toll on the windows and rollup doors at all five CRA pumping plants. Many windows can no longer be opened, making it difficult to keep the main pump motors cool on 120-degree summer days. And the rollup doors in the pumphouses and head gate structures require continual maintenance to keep them operable. This project will replace these building features while remaining consistent with architectural standards. This is a new project for this budget cycle.

CRA Pumping Plants Water Treatment Systems Replacement

All five of Metropolitan's Pumping Plants are located in remote areas of Riverside and San Bernardino Counties where municipal water treatment systems are not available. Each plant is instead served by a community on-site water treatment system. These on-site treatment systems are skid-mounted membrane filtration units that include a strainer, a pair of activated carbon vessels, and a domestic water storage tank. These systems have been in continuous operation for almost 30 years and now suffer from frequent membrane and pipe failures. This project will replace the skid-mounted water treatment systems in its entirety including replacement of water quality monitoring instrumentation and laboratory equipment, upgrading electrical and instrumentation control systems for the disinfection system, construction of a temperature-controlled building to house GAC vessels and disinfection equipment, and construction of ancillary support systems.

CRA Pumping Plant Reservoir Spillway Auto Rejection - Iron Mountain and Eagle Mountain

The Iron Mountain and Eagle Mountain Reservoirs are located on the upstream side of the Iron Mountain and Eagle Mountain pumping plants, respectively. The reservoirs dampen fluctuations in flow between the five pumping plants. Each reservoir contains a spillway which allows discharge of water to the desert in the event of a power outage of the main pumps. The two spillways were designed in the 1930s to safely reject up to approximately 1,200 cubic feet per second (cfs). The pumping plants were expanded in the 1950s and the aqueduct can now operate up to approximately 1,750 cfs. Rejection of flows greater than 1,200 cfs would cause uncontrolled release of water at these two reservoirs, which could damage nearby facilities and public roads or property. This project will modify the reservoir spillways to allow safe rejection of up to 1,750 cfs of water in the event of a power outage of the main pumps.

Erosion and Drainage Control Protection for CRA Switchracks and Ancillary Structures

The five CRA pumping plants are located in remote areas of the California desert which are periodically subjected to flash floods that carry high volumes of water, silt, and debris. During major storm events, the pumping plants' pump houses and support facilities are susceptible to flooding and deposition of silt and debris. In recent years, at several of the plants, debris flows have affected various critical electrical facilities. This project will include site grading, addition of perimeter drainage channels to intercept offsite flows, upsizing of storm drain culverts and extension of patrol roads to access the new storm drain facilities for maintenance. Additional scope may be added as a result of preliminary assessment to ensure reliable operation of the CRA pumping plants.

Gene and Intake Pumping Plant Outlet Structure Gate Rehabilitation

Each of the five CRA pumping plants has nine main pumps that lift water from the pump house through a series of converging delivery lines that convey water from the pump house to a headgate structure located at the top of a hill. These structures then convey water to the downstream portion of the aqueduct. Flow from each headgate structure is regulated by three nine-foot square steel gates. Recent inspections at the Intake and Gene pumping plants have revealed that the protective coatings on various components of the gates have begun to crack and peel. This project will recoat the headgate structure outlet gates at the Intake and Gene pumping plants in order to prevent metal loss due to corrosion. Additional scope may be added as a result of preliminary assessment to ensure proper operation and maintenance of the outlet gates.

Hinds Pumping Plant Discharge Valve Pit Platform Replacement

At each of the CRA pumping plants, water is pumped from the plants' intake manifold through the main pumps and out of the discharge valves. From the discharge valves, water travels through the delivery lines and into the aqueduct. The discharge valves are located in small concrete pits below the pumping plant floor room. At the Hinds Pumping Plant, the concrete pit is equipped with a raised platform due to the deep pit. The platform is necessary to maintain the discharge valve's ancillary equipment. After over 77 years of service in a humid environment created mainly from the pump cooling water discharge, the metal platform has corroded significantly and needs to be replaced. This project will replace the discharge valve platform and relocate cooling water discharge piping in all nine discharge pits at the Hinds Pumping Plant. Additional scope may be added as a result of preliminary assessment to replace the platform that will ensure the safety of the workers as well as improving access to maintain the discharge valves.

Iron Mountain, Hinds & Eagle Mountain Hazardous Waste Containment

Hazardous wastes such as chemicals, oil, paint, paint thinners and antifreeze are generated through routine operations at the Iron Mountain Pumping Plant. Hazardous wastes are collected and placed into either metal or plastic drums ranging in size from five to 55 gallons. The existing hazardous wastes are then stored in a fenced temporary storage area. This project will replace the existing hazardous waste storage facility with a code-compliant hazardous waste storage facility.

Seismic Upgrades of CRA Support Facilities

A recent initial seismic risk assessment has revealed that several CRA support structures may be vulnerable from a major seismic event. These support structures include office and maintenance buildings, guest lodges, and dining and recreation halls located at Hinds, Eagle Mountain, Iron Mountain and Gene Pumping Plants. This project will perform detailed seismic assessments and retrofit the support structures if necessary.

CRA - Other Project Group**Copper Basin Reservoir Discharge Valve Rehabilitation & Meter Replacement**

The Copper Basin Reservoir provides critical storage that enables flowrates along the CRA to be stabilized and controlled. If the reservoir needed to be drained rapidly in the event of an emergency, the discharge valves located at the base of the dam would be opened to safely release the water. Following 72 years of continuous service, the valves have begun to leak and need to be replaced. The dam is under the jurisdiction of the California Division of Safety of Dams (DSOD), which requires that the discharge valves be fully operational at all times. The project scope includes replacement of the fixed cone valves at the base of the dams; refurbish hydraulically operated gate valve, repair pipes, upgrade of the electrical and control systems; install cathodic protection system, replace ladders on the dam, and improve access road to safely enable construction personnel, materials, and equipment to reach the work site.

In order to determine how much water is released to downstream pumping facilities, flow out of the Copper Basin Reservoir is measured at the entrance to Whipple Mountain Tunnel. Flow meters were installed at this location to collect information that is used to adjust the flow rate through the Copper Basin Reservoir outlet gate and the flow rates at each pumping plant, and to determine the amount of chlorine injected into the CRA to control quagga mussels. The existing flow transducers and meters were installed in 2007 and must be replaced to ensure reliable CRA water deliveries. This project will replace the flow meters, transducers, and cabling in the CRA's Whipple Mountain Tunnel.

CRA Copper Basin Road Improvements

The Copper Basin road provides operational access to the facility, and notably enables critical sodium hypochlorite deliveries used to disinfect the downstream CRA facilities, preventing growth of quagga and zebra mussels. This existing access road is commonly closed for maintenance after a storm event, so sodium hypochlorite tankers are unable to make deliveries. Among other improvements, this project will improve the 4.2-mile dirt road by providing an enhanced driving surface, erosion protection, and adding turn-out areas. This is a new project for this budget cycle.

CRA Desert Region Security Improvements

CRA facilities are critical components of Metropolitan's water delivery system. These facilities include five pumping plants and the El Camino Electrical Substation. These facilities have inadequate perimeter fencing. This project will install physical security improvements such as fencing, signage, cameras, motion detectors, remote speakers, card readers, and lighting at Metropolitan's CRA pumping plants and at the El Camino Electrical Substation. This project will also include road and access control improvements at the main entrances to the pumping plants and integration of security devices with Metropolitan's security system. Construction of permanent guard stations will be also considered.

CRA Erosion Protection

The CRA is comprised of 55 miles of cut-and-cover conduits. The cut-and-cover conduits are arch or horseshoe shape, unreinforced, cast-in-place concrete. In most locations along the CRA, the overlying soil protects the cut-and-cover conduits from rock and debris flows. However, at narrow ravine crossings, heavy storm events often erode the soil and expose the conduits making them vulnerable to structural damage from the rock and debris flows. This project will provide erosion protection features such as gabion structures or concrete slabs; including grading of the eroded areas to protect the conduit. In addition, diversion berms or concrete swales will be constructed to divert storm flows over the concrete slabs.

CRA Pumping Plant Storage Buildings at Hinds, Eagle Mountain and Iron Mountain

Between 1950 and 1955, several metal-sided buildings with timber frames were built at the CRA pumping plants to store equipment, spare parts, and maintenance supplies. Two of these buildings have been replaced at the Gene Pumping Plant; however, four original buildings still remain in service. These buildings have deteriorated after 67 years of service in the harsh desert environment and no longer seal properly to prevent rain and dust from entering the interiors. This project will replace the four remaining deteriorated storage buildings and add asphalt paving leading to and around each of the buildings. As part of the design considerations, an assessment will be conducted to determine space requirements for storage of equipment and parts to support ongoing maintenance activities and upcoming capital rehabilitation work at the pumping plants.

CRA Village Water, Sewer & Asphalt Replacement

All five of Metropolitan's pumping plants are located in remote areas of Riverside and San Bernardino Counties where municipal water distribution systems are not available. Each plant is instead served by a community on-site water treatment system. Water from the CRA is treated and conveyed to each village house and to the industrial portions of the pumping plants through a gravity-fed water distribution system which consists of distribution piping, isolation valves and valve boxes. Recent inspections of the distribution systems have found blockages, leaks, taste and odor problems, and root intrusion. This project will replace the domestic water distribution systems at all five CRA pumping plants which include the main line pipes, building laterals, new backflow prevention devices, valves, meters, remote water quality analyzers, and other appurtenances to deliver quality water reliably.

Municipal wastewater collection and treatment facilities are not available where the pumping plants are located. The pumping plants are served by community on-site wastewater systems. These on-site systems collect, treat, and dispose of domestic wastewater generated from bathrooms, kitchen facilities, maintenance buildings, guest lodges, and staff residences at the plants. The on-site systems consist of three primary components: community septic tanks and leach fields; collector lines located throughout the pumping plants which convey wastewater to the septic tanks; and sewer laterals which convey wastewater from individual buildings to the collector lines. The existing wastewater systems at the plants have deteriorated through continual use and need to be replaced. This project will replace the wastewater systems at the pumping plants. The systems will include new main-line pipes, building laterals, septic tanks and leach fields, and other appurtenances to reliably collect and treat wastewater.

The asphalt roadways at the pumping plants provide access between buildings and the villages for Metropolitan staff, residents, and visitors. There is a total of approximately 30 acres of asphalt-paved roadways and surfaces at all five pumping plants, and these asphalt surfaces are over 30 years old. Due to the harsh desert conditions and deterioration of the subgrade over time, potholes and cracks have developed throughout the villages. The planned upgrades to the roadway pavement include placement of a new layer of asphalt on less distressed areas throughout the CRA villages; removal and replacement of more heavily damaged roadways; and grading and installation of culverts to improve drainage.

Gene Wash Reservoir Discharge Valve Rehabilitation

The Gene Wash Reservoir provides critical storage that enables flowrates along the CRA to be stabilized and controlled. If the reservoir needed to be drained rapidly in the event of an emergency, the discharge valves located at the base of each dam would be opened to safely release the water. Following 70 years of continuous service, the valves have begun to leak and need to be replaced. The dam is under the jurisdiction of the California Division of Safety of Dams (DSOD), which requires that the discharge valves be fully operational at all times. The project scope includes replacement of the fixed cone valves at the base of the dam; refurbish hydraulically operated gate valve, repair pipes, upgrade of the electrical and control systems; install cathodic protection system, replace ladders on the dam, and improve access road to safely enable construction personnel, materials, and equipment to reach the work site.

Intake Pumping Plant Road Improvements

The 1.75-mile long asphalt access road into the Intake Pumping Plant travels between a large hill and Lake Havasu. At approximately the midpoint of the access road, it crosses a culvert that drains storm runoff from the hillside into the lake. This culvert is undersized, has partially collapsed, and fills with debris from an unlined wash during rain events. After rain events, Metropolitan staff must clear debris from the culvert in order to prevent rain water from overtopping the culvert and eroding the access road. This project will replace the existing culvert with a new culvert and deteriorated portions of the asphalt road. The project will also add traffic safety rails along the road to enhance safety.

Cost Efficiency and Productivity Program

Fiscal Year 2022/23 Estimate: \$15.6 million

Fiscal Year 2023/24 Estimate: \$12.6 million

Program Information: The Cost Efficiency and Productivity Program is comprised of projects to upgrade, replace, or provide new facilities, software applications, or technology, which will provide economic savings that outweigh project costs through enhanced business and operating processes. Projects that address climate change in addition to providing the economic savings are also included.

Accomplishments for FY 2020/21 and FY 2021/22

- New projects initiated:
 - Diamond Valley Lake Floating Wave Attenuator Expansion
 - Incident Reporting System
 - Jensen, Skinner, and Weymouth Battery Energy Storage Systems
 - Real Property Group Business System Replacement
 - Service Procurement Implementation
 - WINS Water Billing System Upgrade
- Major milestones achieved:
 - Budget System Replacement – deployment completed
 - Diamond Valley Lake Floating Wave Attenuator Rehabilitation – construction completed
 - Incident Reporting System – deployment completed
 - MWDH2o.com Redesign – main site redesign and deployment completed
 - Project Controls and Reporting System – deployment completed

Objectives for FYs 2022/23 and 2023/24

Project	Total Project Estimate	Estimated Construction Completion	Major Milestones
Diamond Valley Lake Floating Wave Attenuator Expansion	\$ 4,300,000	2024	Complete Construction
Digital Assets Optimization	\$ 1,500,000	2023	Complete implementation
Enterprise Content Management	\$ 11,000,000	2023	Complete deployment
Jensen, Skinner, and Weymouth Battery Energy Storage Systems	\$ 15,000,000	2023	Complete construction
MWDH2o.com Redesign	\$ 1,900,000	2022	Complete deployment
Payroll-Timekeeping Reimplementation	\$ 1,500,000	2024	Begin project
Real Property Group Business System Replacement	\$ 740,000	2022	Complete deployment
WINS Water Billing System Upgrade	\$ 3,600,000	2023	Complete deployment

Cost Efficiency & Productivity - Other Project Group

Jensen, Skinner, and Weymouth Battery Energy Storage Systems

In 2020, Metropolitan completed the Energy Sustainability Plan effort to identify new projects and initiatives within the Energy Management Policies' framework. The plan combined an analysis of Metropolitan's electricity charges and a holistic multi-criteria decision analysis framework, in which potential projects were vetted against a range of future scenarios based upon historical water and power demands and time-of-use tariff updates. Through this effort, battery energy storage systems (BESS) facilities at the Jensen, Skinner, and Weymouth plants were recommended for near-term implementation.

BESS is a peak-load reduction technology, which stores energy during off-peak hours and discharges stored energy for use during peak hours. This system will be paired with existing solar facilities of which the excess solar energy will be stored for later use instead of sending this energy to the nearby off-site electrical grid. The construction of the BESS facilities will enable Metropolitan to reduce exposure to energy price volatility, electrical supply reliability, improve operational reliability and resiliency, and support Metropolitan's Climate Action Plan by reducing greenhouse gas emission. The cost of this project will be offset by incentives from the Self-Generation Incentive Program, which is administered by California Public Utilities Commission.

Weymouth Energy Management Dashboard

In 2020, Metropolitan completed the Energy Sustainability Plan (ESP) proposing an adaptive energy management strategy to: contain costs and reduce Metropolitan's exposure to energy price volatility; increase operational reliability and flexibility; move Metropolitan towards energy independence and sustainability; and support Metropolitan's Climate Action Plan effort to reduce greenhouse gas emissions (GHG). In support of that effort, this new project will develop and implement a comprehensive energy monitoring system that will bring access, awareness, and knowledge to operations staff regarding energy usage and cost of the water treatment process, promote sustainable operational decision making, and reduce energy costs at Weymouth plant and other Metropolitan facilities at the La Verne site. This is a new project for this budget cycle.

Yorba Linda Power Plant Power Supply to Diemer Water Treatment Plant

This project will modify the Yorba Linda Power Plant to directly supply power to the Diemer Water Treatment Plant and sell excess power to the wholesale energy market. The scope of work includes installation of new 4.16 kV feeder between the power plant and the Diemer switchgear, breakers, power meters; reprogramming of programmable logic controllers; and modification of switchgears and auxiliary equipment.

DVL Recreation - New/Improvements Project Group

Diamond Valley Lake East Marina Utilities

Diamond Valley Lake (DVL) offers recreational opportunities to the region including boating, fishing, hiking, and biking. The facility supports 4,500 acres of on-water activity, 28 miles of trails, and 13,500 acres of protected open space. This project will extend the existing water, sewer, gas, and communication facilities from the intersection of Searle Parkway and Angler Avenue to the DVL East Marina to support existing operations and future development. The construction of the new infrastructure will replace existing failing tanks which are filled with trucked-in water to service the Marina store, enhance utility service reliability, and serve to comply with flows and pressures required to develop the Marina into a self-sustainable recreational facility.

Diamond Valley Lake-Lake Skinner Trails

This project will create a regional network of trails connecting DVL and Lake Skinner as identified in the DVL Memorandum of Intent. The Lakeview Trail and North Hills Trail at DVL and certain trails at Lake Skinner already exist. Metropolitan jointly funded a trails study with Riverside County Regional Park and Open-Space District to investigate trail alignments connection feasibility through a Consultant agreement. The proposed trail alignments minimize impacts to the Southwestern Riverside County Multi-Species Reserve and link DVL and Lake Skinner using existing roads to the greatest extent possible. Trail uses under consideration include hiking, bicycling, and horseback riding.

DVL Recreation - Refurbishment & Replacement Project Group**Diamond Valley Lake Boat Dock Anchoring System Replacement**

The boat dock anchoring system at the Diamond Valley Lake (DVL) marina is over 15 years old and past its service life. Recently, one cable failed and other cables are deteriorating rapidly. The anchor cables run from the top of the boat launch ramp, through the floating boat docks, and terminate at the anchor blocks on the lake floor to secure and stabilize the marina docks for individuals boarding and disembarking vessels. Some of the cables were replaced in 2015 due to the need to extend the boat launch ramps but the remaining system components such as the anchor blocks were not addressed. This project will redesign and replace the DVL marina boat dock anchoring system consisting of galvanized steel cables, associated connectors, anchor blocks, and associated dock components to ensure the continued operation of the boat launching facilities at the marina. This is a new project for this budget cycle.

Diamond Valley Lake Domestic Water System Improvements

Potable water used in the Diamond Valley Lake (DVL) facility is conveyed through a 16-inch water pipeline, sized to meet fire system demand. This configuration is oversized for domestic water usage and often results in low chlorine residual levels that requires regular flushing of the system. A volume of approximately 700,000 gallons of potable water is flushed into the DVL Forebay each month to ensure adequate disinfectant is available to inactivate pathogens and prevent recontamination. This project will install approximately 2,500 linear feet of 4-inch domestic water pipe to convey potable water to the DVL facility to address the ongoing low chlorine residual caused by high detention time in the existing larger diameter potable water line that currently serves the facility. This is a new project for this budget cycle.

Diamond Valley Lake Floating Restroom Replacement

The floating sanitation facilities at Diamond Valley Lake (DVL) are 18 years old and are at the end of their service life. Restroom equipment requires constant maintenance, particularly because failure of the holding tanks could lead to sewage leaking into the reservoir. New facilities would eliminate these concerns. This project is also needed for Metropolitan to continue to provide operable floating restroom facilities to recreational boaters in accordance with the Recreation Activity Plan approved by the Department of Drinking Water. This is a new project for this budget cycle.

Diamond Valley Lake Floating Wave Attenuator

The existing floating wave attenuator (FWA) has been operational since 2006 as part of a two-phase approach. Phase 1 was completed by installing one 800-foot FWA. Phase 2 was to provide an additional attenuation system but was not implemented. Water levels at Diamond Valley Lake have fluctuated with severity and frequency for the last several years due to draw-down activities during drought conditions, then rebounding during the rainy seasons. Due to age and changing conditions, the concrete sections of the FWA have significantly degraded and the reinforcing bars are exposed to the elements which have accelerated corrosion of the existing FWA system. The original FWA has been refurbished to original condition in Spring of 2021. This project will construct additional attenuation system.

IT - Business Support Project Group

Digital Asset Optimization

The Digital Asset Optimization project will remove redundant, obsolete and trivial (ROT) information from files on Metropolitan's network files shares (NFS). This work is being performed to allow for more effective and efficient searching and collection of information as it pertains to public requests, legal holds and other Metropolitan needs for information. Additionally, the data will be categorized, and metadata captured for easier retrieval capabilities.

Enterprise Content Management

The Enterprise Content Management (ECM) application will classify and manage electronic documents and other media to allow for easy retrieval, review, and destruction of information in accordance with Metropolitan's records retention schedule. In addition, the new ECM application will allow Metropolitan to more effectively and efficiently manage its digital asset needs for business needs to respond to requests under the California Public Records Act (CPRA), and for eDiscovery purposes, and will automate compliance with records retention policies. This project includes designing a taxonomy for storing unstructured data and the development of a thesaurus to support the implementation of Metropolitan's ECM application. Phase I has been initiated. Phase II of this project completes the design and delivers the initial deployment of the enterprise content management software into the Metropolitan environment. The system will allow for the organization, collaborations and automated enforcement of records retentions policies to non-structured electronic media. The final phase III will deliver the balance of the deployment of the enterprise content management software throughout Metropolitan.

HR Information System Improvements

With the future of Metropolitan's hybrid working environment (telecommute & onsite) initiatives, improved self-services are needed that require less printing, secured electronic transactions, and allowing proper approvals from managers, while working remotely. This project will enhance the current Human Resource (HR) interface with mobile interface capabilities, enhance the Manager Self-Service Module; and implement a new Performance Management Module. This system will provide employees and managers the tools and technology to improve business operations, promote collaboration, and enhance workforce productivity by simplifying access to HR information. This is a new project for this budget cycle.

MWD Intramet Upgrade

The Intramet is a restricted and internal network that enables Metropolitan employees to store, share, and organize information. Initially developed in 1997, the Intramet is built on technologies which have become obsolete. This project will replace Metropolitan's Intramet with newer technologies to serve as a central hub that performs a broad range of purposes which the current Intramet site is not able to. This includes cloud-based file sharing, document management, content management, inclusion of social technology, employee profiles, live messaging, forums, status updates, and Group sites coupled with published data catalogs to allow data sharing which is accessible from any type of device such as laptop, tablets, and mobile phones. This is a new project for this budget cycle.

MWDH2o.com Redesign

The existing website will be replaced with a new site offering more functionality and capability to spread Metropolitan's mission of providing water to Southern California.

MyWarehouse Shopping Cart Replacement Project

Staff currently uses an outdated system for checking availability and acquisition of Metropolitan owned inventory items that lacks an easy-to-use interface and integration with financial systems. The proposed innovative system will provide staff with a fully integrated, “Amazon-like” user experience to improve efficiency of field, warehouse, and financial staff in checking the inventory in real-time, advance ordering of items in low inventory, and by allowing mobile device capability. This is a new project for this budget cycle.

Oracle Database Upgrade

Metropolitan currently owns over 50 Oracle databases containing critical systems that will no longer be supported after December 2022. Any database affected by a performance or security issue would have to be removed from the production environment, rendering the associated application inoperable. This project will upgrade all the associated Oracle databases and update or reconfigure the connection points of all affected applications. This is a new project for this budget cycle.

Oracle EBusiness Suite Upgrade

Metropolitan’s Oracle e-Business Suite (EBS) is an integrated set of business applications for automating Metropolitan’s financials, procurement, project management, and grants management activities. Metropolitan’s e-Business Suite was last upgraded in 2016 and since then, the technology has been superseded by newer hardware, operating systems, and Oracle database versions. This project will upgrade soon-to-be unsupported, end-of-life EBS to the newer version with more functionality and capabilities. This is a new project for this budget cycle.

Payroll-Timekeeping Reimplementation

This project will re-implement PeopleSoft payroll and will replace the current timekeeping software with a package that provides better integration with the payroll software and a better user interface. The current payroll and timekeeping applications both have deficiencies that have caused significant compensation issues for employees and have resulted in the need for excessive manual corrections by payroll staff. This project will enhance workforce productivity by simplifying access to business information and will maintain sound business practices and fiscal integrity.

Real Property Group Business System Replacement

This project will select and implement a new cloud-based solution for the Real Property Group (RPG). The new solution will replace existing software to streamline planning, tracking, execution, and compliance management of Real Property business processes for both the Planning and Acquisition, and Land Management Unit(s). RPG’s goal is to centralize the disparate, stand-alone applications and processes, and migrate existing data into one integrated system to increase productivity and improve business processes.

Services Procurement Implementation

In the current Oracle Business Suite (EBS), it is difficult to automate and record certain transactions such as retention payments, Stop Notices, and Liquidated Damages. These transactions are tracked separately by Finance and Engineering. The Oracle on-premise Service Procurement Module is part of the Oracle E-Business Suite. The module automates retention transactions at the time of payment, and can, through customization, accommodate the need to hold other payments as liabilities in the General Ledger (GL).

This project will implement the Oracle Service Procurement Module, as part of the Oracle E-Business Suite, to automate retention or other withholdings required as liabilities in the GL.

Supplier Portal Implementation

This project will implement Oracle's web-based Supplier Portal, which provides self-service capabilities to Metropolitan's supplier community. Suppliers have access to a secure area that provides complete visibility to transactions, including purchase orders, payments and planned payments, offers collaboration with Metropolitan staff, and allows the electronic submission of invoices and other documents. The implementation of the portal will reduce repetitive inquiries from vendors, saving staff time and reducing vendor frustration.

Water Planning Application Upgrade

Water planning staff makes decisions every day that affect storage, cost, and movement of water within our system. The current software tool used is inefficient and obsolete, which was initially launched more than 20 years ago and last partially updated in 2008. This project will replace the existing water planning application with a new cloud-based application, which will build a foundation needed for innovative solutions addressing water supply and operational challenges. The new application will also be able to automate the process of gathering, categorizing, cleaning, validating, and reporting of critical data used by planners and meet today's cyber security standards. This is a new project for this budget cycle.

WINS Water Billing System Upgrade

The Water Information System (WINS) bills Metropolitan's member agencies, on a monthly basis, for approximately \$75 million. WINS is known as Metropolitan's "cash register". The custom application is over 10 years old and needs to be updated. The billing logic is complicated and "hard-coded" into the application, requiring assistance from Metropolitan's Information Technology to make even minor modifications, such as adding new meters or programs. Member agencies have also requested additional functionality. This project will replace the WINS to add needed enhancements to the system to add security and functionality for both Metropolitan and member agencies.

Incident Reporting System

This project delivers a replacement for the 17+ year-old Incident Reporting System. This system reports and tracks incidents that occur on Metropolitan property. Incidents include safety, security, environmental, and workers compensation related events.

Dams and Reservoirs Improvements Program

Fiscal Year 2022/23 Estimate: \$5.3 million

Fiscal Year 2023/24 Estimate: \$44.7 million

Program Information: The Dams & Reservoirs Improvements Program is comprised of projects to upgrade or refurbish Metropolitan's dams, reservoirs, and appurtenant facilities in order to reliably meet water storage needs and regulatory compliance.

Accomplishments for FY 2020/21 and FY 2021/22

- New projects initiated:
 - Live Oak Reservoir Rehabilitation
 - Live Oak Reservoir Emergency Dewatering System Upgrade
 - Weymouth Finished Water Reservoir Rehabilitation
- Major milestones achieved:
 - Lake Skinner Butterfly Valve Replacement – preliminary field investigations completed
 - Mills Finisher Water Reservoir Rehabilitation – preliminary design completed

Objectives for FYs 2022/23 and 2023/24

Project	Total Project Estimate	Estimated Construction Completion	Major Milestones
Diamond Valley Lake Dam Monitoring System Upgrades	\$ 10,000,000	2025	Begin construction
Jensen FWR # 2 Floating Cover Replacement	\$ 8,600,000	2025	Complete design
Mills Finished Water Reservoir Rehabilitation	\$ 17,000,000	2026	Complete design
Lake Skinner Outlet Tower Seismic Upgrade	\$ 170,000,000	2022	Begin design
Live Oak Reservoir Rehabilitation	\$ 9,300,000	2026	Begin construction

Dams & Reservoirs - All Project Group

Dam Monitoring System Upgrades at Lake Mathews and Lake Skinner

Metropolitan relies on extensive instrumentation and regular inspections as a cornerstone of its dam monitoring program. The instrumentation provides warning signs of dam distress and provides real-time monitoring of the embankments and foundations. Extensive monitoring equipment has been installed at Lake Skinner and Lake Mathews over the last 46 years and 81 years, respectively. Recent inspections have noted that several of the piezometers and weirs at these facilities no longer function reliably and require rehabilitation or replacement.

Field surveys and condition assessments will be conducted at both dams to develop a staged replacement schedule. Based on the results of the assessments, installation of automated dam monitoring systems and upgraded communications system with remote monitoring units at each dam may be required. This project will also rehabilitate embankment surfaces to address erosion and surface drainage issues.

Diamond Valley Lake Dam Monitoring System Upgrades

The three rock-fill dams which form Diamond Valley Lake (DVL) are monitored continuously by the facility's geodetic deformation monitoring system, which transmits real-time displacement data to Metropolitan's Headquarters at Union Station and to the Operations Control Center at Eagle Rock. This data is collected to provide early indication of a potential problem within the dam embankments or foundations, and to prepare mandatory reports on the dams' performance for submission to DSOD. After 19 years of continuous operation, the existing monitoring equipment has deteriorated and needs to be replaced. The planned upgrades will maintain the capability to continuously monitor dam performance in compliance with the DSOD operating permit.

Upgrades to the dam monitoring network at DVL will be accomplished in three stages. Stage 1- procurement and installation of the weir level sensors and strong motion accelerographs; Stage 2 - design and preparation of procurement documents for the geodetic deformation monitoring system; and Stage 3 - design and procurement of automated data acquisition system, upgrades to the communication network, and replace remote monitoring units and ancillary equipment. Stages 1 and 2 have been completed. Stage 3 will be accomplished in two phases. Phase 1 will upgrade the West Dam area and Phase 2 will upgrade the East Dam and Saddle Dam areas.

Diemer FWR Slope Protection Improvements

The California Division of Safety of Dams' annual inspection of the Diemer Finished Water Reservoir (FWR) noted that the existing dense vegetation on the abutting slope was obscuring dam safety inspections and providing shelter for burrowing rodents. This project will remove the existing 2.5-acre dense vegetative ground cover on the embankment slopes of the Diemer FWR and rehabilitate the embankment surface with a new slope protection system that minimizes surface erosion, prevents rodent burrowing, and maintains the stability and integrity of the reservoir embankment slopes. This is a new project for this budget cycle.

Etiwanda Reservoir Rehabilitation

The Etiwanda Reservoir has been in operation for 28 years. The liner and appurtenances are in need of refurbishing to maintain their integrity and prevent excessive seepage as noted during periodic inspections. This project will rehabilitate the reservoir by replacing the reservoir liner with a geomembrane liner, replacing the sub-drain sump pump system, and installing new electronic monitoring instrumentation and equipment to better monitor operational status of the sump pump system. The project scope will also include inspection, evaluation, and rehabilitation or replacement of: (1) the asphalt pavement for the reservoir perimeter roads and parking lot; and (2) various valves and gates.

Garvey Reservoir Rehabilitation

Garvey Reservoir was placed into operation in 1954. It is located at the junction of the Middle Feeder and the Garvey-Ascot Cross Feeder in the city of Monterey Park. Garvey Reservoir provides hydraulic grade stabilization, pressure relief, and operational and emergency storage for the Central Pool portion of the distribution system. A flexible membrane liner and reservoir floating cover were installed in 1999. The service life of a reservoir floating cover is approximately 20 years. The existing floating cover at Garvey Reservoir has become increasingly difficult to repair and needs replacement.

This project will replace the reservoir's aging floating cover and flexible membrane liner. In addition, this project will remove the existing inlet/outlet tower and construct new inlet/outlet facilities; modify circulation piping; replace the standby generator and upgrade the electrical system; replace/repair perimeter and security fences; improve surface drainage and erosion controls; replace the outdated on-site water quality laboratory building; install additional sodium hypochlorite storage tank plus containment and appurtenances; replace valves at the junction structure; construct on-site storage building for equipment and tools; and other improvements necessary to rehabilitate the reservoir and support facilities.

Gene Wash and Copper Basin Dams Safety Monitoring Improvements

The Copper Basin and Gene Wash Dams are in a very remote area with difficult access requiring four-wheel drive vehicles and boats. Both dams are visually inspected twice per year by Engineering Services including the annual inspection by the California Division of Safety of Dams (DSOD). This project will improve the safety monitoring system at the Gene Wash and Copper Basin dams to maintain compliance with DSOD regulations and Metropolitan's ability to detect dam safety issues in a timely manner. The project scope includes installation and implementation of a modern dam monitoring system that utilizes automatic data acquisition system (ADAS) for continuous monitoring. This project also will perform dam concrete condition assessments, geological evaluations of dam abutments, inspection, survey, and stability analysis. This is a new project for this budget cycle.

Jensen Finished Water Reservoirs Refurbishment

The Jensen plant has two 50-MG finished water reservoirs. Reservoir No. 1 is a concrete structure with a concrete roof that was completed in 1972. The concrete roof of Reservoir No. 1 has a bituminous built-up roofing system and lightweight concrete cap made of perlite. Portions of the perlite cap have deteriorated over time due to weathering. Any further deterioration may result in ponded rainwater leaking into the reservoir, leading to the reservoir being removed from service in order to maintain treated water quality. The rehabilitation work will replace the damaged perlite with a thin concrete layer, which will extend the cover life for approximately 20 years. This project will also install bollards with daisy chain around the reservoir to prevent vehicles from entering the top of the reservoir and other improvements necessary to complete the refurbishment of the reservoir.

Reservoir No. 2 has a polypropylene floating cover that was installed in 1997. The floating cover at Reservoir No. 2 is showing significant signs of wear and needs to be replaced. In addition, modifications to the Reservoir No. 2 inlet are needed, as turbulent flow at the inlet has torn holes in the floating cover on several occasions near the corners of the fixed metal air vents. The rehabilitation work will include installation of a new finished water reservoir liner and floating cover with a rainwater removal system, improvement of the existing inlet configuration, modification of plant domestic water system connection, refurbishment of the effluent gate and dewatering system, replacement of instruments and flow meters, installation of diffuser system to enhance mixing, replace perimeter fence, and other improvements necessary to complete the refurbishment of the reservoir.

Within both reservoirs, inadequate mixing contributes to chloramine decay, which in turn increases the nitrite levels within the reservoirs and downstream distribution system. In accordance with the Water Quality Action Response Guidelines, elevated nitrite levels will require additional monitoring, as they may result in bacterial regrowth, and may require operational changes to mitigate chlorine decay. This project will conduct a study of the mixing characteristics of Reservoirs Nos. 1 and 2 and will test and implement solutions for mixing improvements to enhance mixing and reduce the occurrence of nitrification within the reservoirs.

Lake Mathews Reservoir Dredging and Emergency Dewatering Facilities Lake Skinner Outlet Tower

Sediment has accumulated in the reservoir since it was first built and filled in 1938. Sediment is a result of continual erosion within the Lake Mathews watershed and has led to increased turbidity at water treatment plants, reservoir storage loss, and plugged the main dam diversion tunnel into Cajalco Creek. In addition, the California Department of Water Resources, Division of Safety of Dams (DSOD), has specific outlet dewatering requirements for large dams/reservoirs that impound over 5,000 acre-feet of water. Although the current dewatering method at the forebay meets DSOD's requirement, there is a possibility that the Upper Feeder and Lower Feeder that take water from the forebay may be damaged and become unusable during a seismic event. It is now recommended to reestablish access to the diversion tunnel at the bottom of the main dam by dredging. This project will evaluate dredging options for Lake Mathews Reservoir. Dredging will remove decades of accumulated sediment that reduces reservoir storage capacity, contributes to decreased water quality, and blocks access to dewatering infrastructure at both Outlet Tower No. 1 and the main dam diversion tunnel. The evaluation will identify and prioritize dredging locations through bathymetric surveys and other remote methods, as well as identify mitigation options for the environmental hazards of dredging. The project will also determine the condition of the main dam diversion tunnel and all its mechanical equipment and perform a comprehensive refurbishment to restore its full function.

Lake Skinner Outlet Tower Butterfly Valve Replacement

The Lake Skinner Outlet Tower is a critical component of the Skinner plant and distribution system operations and is equipped with five tiers of submerged butterfly valves. The valves have been in operation for 45 years and are approaching the end of their service lives. Replacement parts are not available and must be custom fabricated. This project will replace or rehabilitate all the butterfly valves at the Lake Skinner Outlet Tower. Although there is a plan to potentially add a new outlet tower to Lake Skinner, improving the condition of the existing outlet tower valves will allow for operational flexibility and maintain operational reliability at the lake. This is a new project for this budget cycle.

Lake Skinner Outlet Tower Seismic Upgrade

Lake Skinner was constructed in the 1970s and is located in the city of Temecula, in Riverside County. Water is delivered from the lake through its outlet tower to the Skinner Water Treatment Plant. If the lake needed to be drained rapidly in the event of an emergency, the outlet tower would be used to safely release the water. The outlet tower is under the jurisdiction of the California Division of Safety of Dams (DSOD) which requires that the tower meet current seismic codes.

Metropolitan has an ongoing program to evaluate the seismic stability of its facilities in order to maintain reliable water deliveries and to meet current design practices and building codes. Under Metropolitan's seismic assessment program, staff conducted an initial assessment of the Lake Skinner Outlet tower. Seismic analyses of the Lake Skinner Outlet Tower have identified that the tower may be damaged during a major earthquake. This project will (1) replace two valves located at tier 5 of the outlet tower, which are currently not operational, (2) develop an emergency dewatering plan for DSOD's review and approval; and (3) conduct detail seismic evaluation of the tower, develop options to mitigate impacts to the tower, and to implement a preferred option to mitigate the seismic impact to the inlet/outlet operation.

Live Oak Reservoir Rehabilitation

The Live Oak Reservoir has a 2,500-acre-foot capacity and is located in the city of La Verne. The main purpose of the reservoir is to allow peaking of the Devil Canyon Power Plant and to provide for outages. The reservoir water surface controls the upstream hydraulic gradient for the San Dimas Hydroelectric Power Plant. An inspection identified the following: (1) several valves that are leaking; (2) the reservoir liner is damaged in several areas; (3) the emergency backup generator is no longer manufactured and parts are obsolete; (4) the existing HVAC system including the ductwork for the control room has exceeded its expected service life; (5) improvements to provide access control, intrusion alarm, and surveillance are needed; and (6) improvements to the grading, surface drainage, and paved roads adjacent to the Live Oak Reservoir are also needed. This project will replace leaking valves, reline the influent manifold with reinforced mortar, rehabilitate the fire loop, rehabilitate the existing asphalt concrete (AC) liner and install liner subdrainage system as necessary, replace the existing Emergency Standby Generator and hydraulic power pack unit, replace the existing Heating, Ventilation, and Air Conditioning (HVAC) system, improve surface drainage and erosion controls for the facility, identify and restore all electrical components to new condition or replace with new, including electrical, panel boards and grounding, sump pumps, and associated instrumentation, replace instruments in piezometer room, conduct a security assessment of the facility to reinforce or upgrade physical features and protect infrastructure, which includes replacement of the inner fencing for the reservoir with security type fencing, and other improvements necessary to rehabilitate the reservoir and support facilities.

This project will also improve the emergency dewatering system for Live Oak Reservoir. The project scope will include the design and construction of appurtenant structures such as gantry cranes for lifting spillway drop gates, an emergency generator to back up the crane power source, automation of valves, modification of spillway and blow-off structures, or addition of secondary discharge lines to provide a more direct, reliable, and efficient means to dewater Live Oak Reservoir in the event of an emergency.

Mills Finished Water Reservoir Rehabilitation

The Mills plant relies on two finished water reservoirs with floating covers and geomembrane liners to provide storage for the downstream distribution system. Their capacity is approximately 25 million gallons (MG) each. The Hypalon cover on Reservoir No. 1 was installed in 1997, while the polypropylene cover on Reservoir No. 2 was installed in 1996. Over the past five years, an increasing number of rips and pinhole leaks in the covers were discovered and repaired. Due to their deterioration, the floating covers and geomembrane liners at both reservoirs need to be replaced. The rehabilitation work will include installation of new finished water reservoir liners and floating covers with a rain removal system, refurbishment or replacement of existing reservoir gates, installation of a new drop gate, replacement of instruments and flow meters, evaluation of reservoir mixing and implementation of mixing improvements, installation of enhanced security features and rehabilitation of perimeter fences, and other appurtenances for both reservoirs.

Palos Verdes Reservoir Groundwater Management

This project will address long-term groundwater management at the Palos Verdes Reservoir. The project will evaluate monitoring and disposal options for groundwater seepage, install monitoring instrumentation, develop groundwater and stormwater handling systems, if needed, and provide a connection to the sewer.

Spillway Upgrades - Lake Mathews and Lake Skinner

Following the incidents at Oroville Dam in 2017, the California Division of Safety of Dams (DSOD) is now requiring that dam owners in California assess the condition of dam spillways to confirm that they meet minimum safety standards. In July 2017, DSOD issued an initial list of 93 dams requiring comprehensive spillway assessments to evaluate hydraulic capacity, geotechnical stability, structural integrity, and potential erosion from dam releases. Of the 20 Metropolitan facilities that are permitted by DSOD, two have been directed to undergo the comprehensive assessments: Lake Mathews and Lake Skinner.

Metropolitan submitted the required work plans for re-evaluation of the spillways at Lake Mathews and Lake Skinner and received approval of those plans in September 2017. For each dam, a comprehensive spillway assessment report was prepared and submitted to DSOD for review. As part of these comprehensive assessments, re-evaluation of the outlet tower and conduit at Lake Skinner were performed to identify potential risks and vulnerabilities of lowering the reservoir pool after a major seismic event. Due to its integral role in withdrawing water from the reservoir, the spillway work plan will be expanded to include the Lake Skinner outlet tower and conduit. Based on the input from DSOD, the dam spillway and underdrain system will be rehabilitated.

Weymouth Finished Water Reservoir Rehabilitation

The Weymouth plant's 50-million-gallon finished water reservoir was built in 1964 to meet then-current building code. Because the finished water reservoir's concrete roof was constructed with no expansion joints, numerous cracks in the roof slab continue to open and close with the expansion/contraction cycles caused by daily fluctuation in temperature. Repair is required to protect the concrete and to prevent corrosion of the exposed reinforcing steel. In addition, a rapid seismic assessment conducted in 2000, indicated that the reservoir was marginally stable under seismic loading conditions of that time. Since then, seismic evaluations for the Weymouth facilities and revised building codes have indicated that greater ground motions should be considered.

This project will repair cracked and spalling concrete on the underside of the finished water reservoir roof slab, support beam connections, and entry staircase. The project will also perform seismic evaluation and any needed seismic retrofit to meet the latest DSOD standards.

Distribution System Reliability Program

Fiscal Year 2022/23 Estimate: \$51.2 million

Fiscal Year 2023/24 Estimate: \$12.8 million

Program Information: *The Distribution System Reliability Program is comprised of projects to replace or refurbish existing facilities within Metropolitan's distribution system, including reservoirs, pressure control structures, hydroelectric power plants, and pipelines, in order to reliably meet water demands.*

Accomplishments for FY 2020/21 and FY 2021/22

- New projects initiated:
 - 108th Street Pressure Control Structure Valve Replacement
 - Appian Way Valve Replacement
 - Etiwanda Pipeline Lining Replacement – Stage 3
 - Garvey Reservoir Drainage & Erosion Control Improvements – Areas 6, 7, 8, 10 and 11
 - OC-88 Pumping Plant Chiller Replacement
 - Palos Verdes Feeder - Long Beach Lateral Turnout Structure Sta. 1442+15 Valve Replacements
 - Rehabilitation of Metallic and Concrete Pipelines Phase 1 - Select High Priority Feeders
 - Rio Hondo Pressure Control Structure Valve Replacements
 - Rialto Pipeline Rehabilitation at Station 2986
 - San Diego Pipelines 1 and 2/Rainbow Tunnel Improvements
 - San Diego Pipelines 3 & 5 Vacuum Valve Replacement
 - Upper Feeder Blow Off Structure Replacement
 - Washington Street Pressure Control Structure Valve Replacement & Security Upgrades
 - West Valley Feeder No. 1 - Access Road & Valve Structure Improvements
- Major milestones achieved:
 - Construction completed:
 - East Orange County Feeder No. 2 Service Connection A-6 Rehabilitation
 - Electrical Upgrades at 15 Structures in Orange County Region
 - Lake Perris Bypass Pipeline Relining
 - Lakeview Pipeline Improvements
 - Orange County C&D Team Support Facility
 - Orange County Feeder Cathodic Protection
 - West Valley Feeder No. 1 – De Soto Valve Structure Improvement

- Completed design:
 - Casa Loma Siphon Barrel No. 1 Seismic Retrofit
 - Etiwanda Pipeline Lining Replacement – Stage 3
 - Orange County Feeder Relining – Stage 3
 - Sepulveda Feeder/East Valley Feeder Interconnection Electrical Upgrades
 - Santa Monica Feeder Cathodic Protection

Objectives for FYs 2022/23 and 2023/24

Project	Total Project Estimate	Estimated Construction Completion	Major Milestones
Casa Loma Siphon Barrel No. 1 Seismic Retrofit	\$ 50,000,000	2023	Complete construction
Etiwanda Pipeline Lining Replacement	\$ 24,000,000	2023	Begin construction
Garvey Reservoir Drainage & Erosion Control Improvements - Zones 6, 7, 8, 10 & 11	\$ 2,100,000	2022	Complete construction
Garvey Reservoir Sodium Hypochlorite Feed System Upgrades	\$ 9,000,000	2022	Complete construction
Lake Mathews Forebay Pressure Control Structure and Bypass	\$ 110,000,000	2026	Begin design
Orange County Feeder Lining Repair - Reach 3	\$ 14,000,000	2023	Begin construction
Rialto Pipeline Rehabilitation at Station 2986	\$ 3,000,000	2024	Begin construction
San Gabriel Tower and Spillway Improvements	\$ 17,000,000	2026	Complete design
West Valley Feeder No. 1 - Access Road and Valve Structure Improvements	\$ 4,600,000	2024	Begin construction

PCSs/HEPs/Service Connections/Valves & Gates Project Group

108th Street Pressure Control Structure Valve Replacement

The 108th Street Pressure Control Structure (PCS) located on the Palos Verdes Feeder was constructed in 1941. The pipeline has a design capacity of 80 CFS in this area and provides the flexibility to deliver water through the Inglewood Lateral and Culver City Feeders to member agencies, including the city of Los Angeles, Central Basin Municipal Water District, and West Basin Municipal Water District. This project will rehabilitate the control structure including replacing valves, a corroded ladder, and catwalk grating; restoring electrical components to new condition; installing an emergency backup generator and security features; and refurbishing or replacing other appurtenances. Electrical components consist of electrical panel boards and grounding, sump pumps, and associated instrumentation.

Appian Way Valve Replacement

The Appian Way Sectionalizing Valve Structure on the Palos Verdes Feeder was constructed in 1937. The pipeline has a design capacity of 60 CFS in this area and delivers water to Metropolitan's member agencies, Central Basin Municipal Water District, and the city of Los Angeles. The sectionalizing valve provides Metropolitan the flexibility to isolate flows on the Palos Verdes Feeder between the Long Beach Lateral Turnout Structure and Appian Way Sectionalizing Valve Structure to perform preventive maintenance, planned shutdowns, and emergency activities if required. This operational reliability allows for continued delivery of water to Metropolitan's central pool. The failing sectionalizing valve is 82 years old. Over the past few years, the 24-inch valve has been rebuilt several times to extend its service life. This valve can no longer be rebuilt and has become extremely difficult to operate as it gets stuck and does not fully open or close. The body and cone have eroded, which prevents the valve from properly sealing. This project will replace failing valves, dresser couplings, corroded pipe spools, and install a new precast concrete roof slab at the Appian Way Sectionalizing Valve Structure. Additionally, the project would identify and restore all electrical components add 240-volt electrical service, provide for SCADA control of the valves, and refurbishment or replacement of other appurtenances. Electrical components include electrical panel boards and grounding system, sump pumps, and associated instrumentation.

Conveyance and Distribution System Electrical Structures Rehabilitation

Metropolitan's distribution system includes over 1,000 structures which house equipment used to measure pipeline flow, control pipeline flow and/or pressure, relieve pressure or vacuum, and isolate or sectionalize a pipeline. The conduits and electrical equipment inside the structures have corroded and no longer provide adequate grounding. In addition, the wiring inside the conduits may be compromised. These electrical components have been in continuous service in a damp, underground environment for over 50 years, and need to be upgraded. The rehabilitation for the Conveyance and Distribution System Electrical Structures has been prioritized and will be completed in five stages. Upgrades of the first 15 highest priority service connection structures within Orange County have been completed as Stage 1. Stage 2 improvements will upgrade the remaining 244 structures within Orange County. Stage 3 improvements will upgrade 258 structures in northern Los Angeles County. Stage 4 improvements will upgrade 258 structures in southern Los Angeles County. Stage 5 improvements will upgrade 301 structures in Riverside, San Diego, and San Bernardino Counties. The precise number of structures to be improved may vary depending on condition assessments. The planned work includes identification and restoration of all electrical components to new conditions including service panels, conduits, wiring lights, and receptacles; and providing new grounding systems, sump pumps, exhaust fans, remotely monitored flood alarms at each structure, and other appurtenances.

Conveyance and Distribution System Hydraulic Pilot Valve Standardization

There are approximately 265 pilot valves within the conveyance and distribution system, located at pressure relief or pressure control structures. A pilot valve works together with a control or relief globe valve to set pressures within the distribution system. Currently, several different types of valve and superstructure assemblies exist throughout the system and as they age, lack of a common design makes replacement difficult. This project will develop, fabricate, and install a standardized hydraulic control/relief pilot valve and superstructure at pressure control structures District-wide across the conveyance and distribution system. Utilizing a standardized valve and superstructure assembly will increase productivity and reliability. This is a new project for this budget cycle.

Covina Pressure Control Structure Rehabilitation

The Covina Pressure Control Structure (PCS) controls flow in the Middle Feeder North and multiple service connections. It has recently experienced numerous valve failures and pin-hole leaks. This project will replace valves, pipes, and control and electrical systems; rehabilitate the restroom and structural components; install security features and other work necessary to restore reliability of the pressure control structure. This is a new project for this budget cycle.

Coyote Creek Hydroelectric Plant/PCS Emergency Standby Generator Replacement

The existing emergency stand-by generator was installed when the Hydroelectric Plant/Pressure Control Structure (HEP/PCS) was constructed in 1982. The emergency generator is 39 years old and has deteriorated with age. This project will replace the existing emergency generator with a new 150 kW, 3-phase 480-volt, diesel engine driven generator and construct an additional manual transfer switch outside the stationary generator room to provide for a secondary portable generator hookup. This project will also upgrade electrical and mechanical system to the generator building to meet current emission and fire code regulations under the Environmental Protection Agency's Tier 3 Emission and Fuel Standards Program.

Dominguez Channel Pressure Relief Structure Improvements

The Dominguez Channel Pressure Relief Structure is located on the Palos Verdes Feeder near the Harbor Freeway and Hoover Street at the Dominguez Channel Crossing. Recent inspections have found leaking valves, inoperable needle valves, failed electrical services, and failed communication cables. This project will replace valves, modify piping and concrete, and construct new underground electrical and communication service as necessary to restore reliability of the relief structure. This is a new project for this budget cycle.

DVL Secondary Inlet Sleeve Valve Refurbishment

Diamond Valley Lake (DVL) is used for operational and dry-year, and emergency storage. The existing sleeve valve at the DVL Secondary Inlet is corroding, which will eventually make the valve inoperable. This is the only control valve for the secondary inlet, which is used to refill DVL. This project will remove, refurbish, and replace the existing sleeve valve; recoat existing appurtenant piping; and replace associated couplings. This is a new project for this budget cycle.

Eagle Rock Tower Distribution System Upgrades

Eagle Rock Tower diverts the flow of water from the Weymouth plant into the Palos Verdes Feeder, Santa Monica Feeder, and the Eagle Rock Lateral. The tower is also used to maintain the required hydraulic grade to the service connections upstream of the tower. This project will perform needed rehabilitation of various components of the Eagle Rock Tower distribution system. The project will include the following: (1) replace the leaking control and isolation valves at the interconnections to the Palos Verdes and Santa Monica Feeders, (2) replace corroded slide gate, and tower access ladder and cover, (3) repair slide gate rails and associated components, (4) fabricate and install new drop gate at inlet side of Eagle Rock Tower to improve isolation capability, (5) extend Santa Monica Feeder interconnection blow-off structure and install isolation valves to improve maintenance flexibility, (6) construct new access road from main access road to the Palos Verdes and Eagle Rock Interconnection Structure to facilitate safe access to the structure, (7) replace corroded work platforms and ladders in interconnection structures to improve worker safety, and (8) refurbishment and upgrades of other appurtenances as they are identified during the facility assessments.

East Orange County Feeder No. 2 Service Connection OC-44A Valve Replacement

The East Orange County Feeder #2 is a 25-mile-long pipeline which delivers treated water from the Diemer plant to the cities of Anaheim, Orange, Santa Ana, and Irvine. Service Connection OC-44A, which is located in Newport Beach, was constructed in 1967 and delivers water to the Municipal Water District of Orange County. Gradual corrosion and wear from over 52 years of operation has led to the deterioration of the 16-inch plug valve. The valve is currently leaking and needs to be replaced. The plug valve shaft was installed in the horizontal position to allow placement of the valve within the vault. This unconventional position may have accelerated the deterioration of the valve. This project will replace a 16-inch-diameter plug valve, flowmeter, and appurtenant piping and equipment as required in the Service Connection OC-44A Structure. This project will also identify and restore all electrical components to new condition. Electrical components consist of electrical panel boards and grounding system, sump pump, and associated instrumentation.

Flow Meter Replacement Project

Metropolitan has over 500 flowmeters used for water revenue metering at service connections, operation of the conveyance and distributions, and for process control. Many flowmeters have been in operation over 50 years. Some of these meters are exhibiting signs of deterioration. Spare parts for older meters are increasingly difficult to procure.

This project will be conducted in three stages. Under Stage 1, a comprehensive evaluation of the flowmeters will be conducted to assess their current condition and availability of spare parts. Under Stage 2, deteriorating meters in critical services will be replaced. Under Stage 3, a comprehensive, risk-based approach will be implemented to replace the remaining flow meters.

Foothill Feeder PCS Valve Replacement

Foothill Pressure Control Facility (PCF) is located at Castaic Lake Dam in northern Los Angeles County. The structure takes untreated water from the west branch of the State Water Project system and controls all untreated water flows into the Jensen plant. Foothill PCS consists of two turbines, two 60-inch inline sleeve valves, and three parallel trains of conical plug valves. Each plug valve train consists of three 48-inch conical plug valves in series, that are throttled to dissipate pressure. Although the conical plug valves are currently used to control flow, these types of valves are not well-suited for this application. In addition, recent valve inspections have identified leaks, cracks, and corrosion. This project will replace the conical valves with valves that are better suited for flow control and will replace all other valves that are at the end of their service life and other facility improvements.

Foothill Hydroelectric Plant Refurbishment

The Foothill Hydroelectric Plant was constructed in 1981. An assessment has identified that the facility is seismically vulnerable and should be upgraded. The scope of work also includes reinforcing the roof, replacing a cracked beam, and installing connectors and seismic restraints to the roof, columns, and walls. Retrofit work will also include upgrades for non-structural components such as equipment anchors, pipe/conduit supports, and crane rail bracing. In addition, the electrical and mechanical systems are exhibiting signs of normal wear and tear after 32 years of service. This project will refurbish control and electrical protection systems, mechanical piping for the generator cooling water systems, add a Programmable Logic Controller, install on-line data acquisition and monitoring system, refurbish runner, replace wicket gates, and refurbish or replace other deficient equipment.

Hollywood Tunnel North Portal Equipment Upgrades

Built as part of the Santa Monica Feeder in 1937, the North Portal of the Hollywood Tunnel is one of three control points along the feeder, which delivers water to the cities of Burbank, Beverly Hills, Los Angeles, and Santa Monica. The valves and mechanical control system at the North Portal of the Hollywood Tunnel are obsolete. Repair parts are not available and must be fabricated at a machine shop. This project will replace the existing sleeve valves and hydraulic actuators at the North Portal of the Hollywood Tunnel with new control valves with electric actuators. The upgrade includes replacing the mechanical controls with electronic, PLC/SCADA controls, which will allow the facility to be monitored and controlled from the Eagle Rock Operations Control Center, and replacement of the isolation valves. This project will also replace control valves for the bypass, install new electrical service to support the load necessary for the new control systems, and other improvements necessary to upgrade and rehabilitate the equipment and support systems.

Hydroelectric Plant Rehabilitation

Metropolitan owns and operates 15 hydroelectric power plants with a total installed capacity of 130 megawatts. Approximately 10% of Metropolitan's income is derived from these power plants. The first plant to be commissioned was the Greg Avenue Power Plant in 1979, and the last was the Wadsworth Hydroelectric Power Plant in 2002. Many of these plants have been in operation over 37 years and have not undergone refurbishment or upgrade. Several plants are beginning to show signs of deterioration and several have already been refurbished. A comprehensive approach to rehabilitation of the other hydroelectric plants is needed to protect Metropolitan assets and fortify infrastructure reliability.

This project will assess and evaluate Metropolitan's hydroelectric plants, determine the rehabilitation requirements for each plant, identify needed pilot efforts, prioritize the needed rehabilitation, and develop a multi-phase plan to complete the rehabilitation. New facilities or those that have already undergone rehabilitation will not be included in the evaluation. For the included hydroelectric plants, the assessment will evaluate the following equipment and systems: turbine, generator, power equipment and switchyard, control system, protection system, auxiliary systems such as lube oil and cooling water, and the overall facility. This project will also perform seismic evaluation and improvements as necessary to safeguard the hydroelectric plants from known seismic risk.

LADWP Connection in Magazine Canyon

The Los Angeles Department of Water and Power (LADWP) connection in Magazine Canyon is rated for 400 cfs and was designed to supply water to the Jensen plant from LADWP's aqueduct system. However, the connection is unreliable as the bar screen located in the LADWP piping builds up debris and clogs. This project will redesign and build new flow control equipment downstream of the LADWP turnout valve with the capability to collect and remove debris. This equipment would allow the LADWP bar screen to be removed and the LADWP turnout valve to be left in the fully open position during operation providing the Jensen plant with a reliable, back-up source water supply to limit disruptions during unforeseen events. This is a new project for this budget cycle.

Lake Mathews and Temescal Hydroelectric Plants Circuit Breaker and Oil Circuit Recloser Replacement

The Lake Mathews & Temescal Sulfur Hexafluoride (SF6) circuit breakers have operated for the last 40 years and are at their end of life. Sulfur Hexafluoride is an ozone depleting greenhouse gas with annual leakage reporting requirements. This project will replace the Temescal and Lake Mathews Hydroelectric plant electrical interrupting devices with vacuum circuit breakers and replace damaged switchyard disconnects which will satisfy Metropolitan's regulatory requirements under new proposed regulations to phase out SF6 gas insulated equipment. This is a new project for this budget cycle.

Lake Mathews Forebay Pressure Control Structure and Bypass

Lake Mathews is the terminus of Metropolitan's CRA and was constructed in the 1930's. Untreated water stored in the reservoir is withdrawn through the lake's forebay and hydroelectric plant and is then conveyed through the Upper Feeder and Lower Feeder to the Weymouth and Diemer plants, respectively. The Lake Mathews forebay discharge valves and outlet tower have gradually deteriorated over 77 years of operation. Portions of the facilities need to be replaced to maintain reliable deliveries from Lake Mathews into the Central Pool. The ten 32-inch-diameter Howell-Bunger valves that are used to withdraw water from the lake have gradually deteriorated through continuous use. The frequency of repairs is increasing, while replacement parts are difficult to obtain. These 62- to 77-year-old valves need to be replaced.

Upgraded facilities may include a new bypass system with pressure control structure, which includes new headworks regulating valves, upgraded outlet tower gates, and a new overflow spillway structure. This project will also include seismic retrofit of the existing forebay, forebay tower, and dike; and replacement of mechanical equipment including slide gates as these facilities are used with the existing turbine operation. The system is expected to provide full-service capacity and deliver water to the Upper and Lower Feeders year-round.

Lake Mathews Junction Shaft Gate Hydraulic Power Unit Study - Outlet Tower No. 2 Isolation

The roller gates at the Lake Mathews junction shaft do not operate consistently and reliably. The large isolation gates utilize hydraulic power units (HPUs) to operate under normal conditions and store energy for use in emergency conditions when electric power is not available. Although maintained in accordance with the manufacturer's recommendations, the gates no longer function as designed. This project will evaluate the two roller gate operators at the Lake Mathews junction structure that provide isolation for Outlet Tower No. 2 and rehabilitate the HPUs and support systems. This project also includes instrumentation and controls upgrade at Outlet Tower No. 2 to obtain accurate readings of the valve positions. The study will focus on the condition of hydraulic power unit equipment, safety elements related to pressurized hydraulic reservoirs/tanks, and operating procedures/practices.

Lake Mathews Outlet Tower No. 2 Valve Rehabilitation

The outlet tower valves operate intermittently and do not open and close completely. Without proper operation of the valves, tier selection and flow rates are impacted which may adversely affect system operations including raw water quality, water treatment processes at the downstream Weymouth and Diemer plants, and secure isolation of the tower from the lake needed for maintenance and inspection work. This project will complete a comprehensive study and implement recommendations on replacement or refurbishment of the butterfly valves on the Lake Mathews Outlet Tower No. 2, which may include replacement or refurbishment of 30 butterfly valves.

Oak St. Pressure Control Structure Rehabilitation

The Oak St. Pressure Control Structure (PCS) is one of two control facilities on the Second Lower Feeder (SLF) and provides water to the Palos Verdes Reservoir and several service connections. Recent inspections have identified various work to be performed to restore reliability of the pressure control structure. This project will replace valves, gratings, fasteners, and control and electrical systems; rehabilitate structural components; install security features; and other work necessary to restore reliability of the pressure control structure. This is a new project for this budget cycle.

OC-88 Pumping Plant Rehabilitation

The OC-88 Pumping Plant, consisting of the OC-88 and OC-88A pump stations, was constructed in 1990 and is located in the city of Lake Forest. Treated water from the Diemer plant is conveyed through the Allen McColloch Pipeline (AMP) to the OC-88 Pumping Plant, which in turn pumps water directly into the Municipal Water District of Orange County's (MWDOC's) South County Pipeline. The surge tank system protects the AMP and the South County Pipeline from pressure surges. Two new surge tanks were added when the OC-88 Pumping Plant modifications were completed in 2005. However, the air compressor was not upgraded at that time. A recently completed high-flow test at the OC-88 Pumping Plant identified that a second air compressor should be installed to adequately protect the AMP and the South County Pipeline. In addition, Southern California Edison performed an efficiency test on the three existing pump motors located at the OC-88A pump station and found that improvements in motor efficiency could result in annual savings of approximately \$25,000 in electricity costs, and an estimated 235 tons of CO₂ emissions. Lastly, the chiller units and ultrasonic flow meters have exceeded expected useful service lives and are in need of replacement. This project will upgrade the OC-88 Pumping Plant's surge tank system, install a second air compressor, replace flow meters and pumps with ones that have high-efficiency motors equipped with variable frequency drives, perform overhead crane improvements, fire protection, and HVAC systems; and perform other associated facility improvements.

Olinda Pressure Control Structure Valve Replacement

The Olinda Pressure Control Structure was constructed in 1969 to provide regulation of flows in the Lower Feeder between the Santiago Control Tower and Diemer Filtration Plant. This project will replace two conical plug valves to increase efficiency, reliability, and mitigate the vibrations caused by operating the valves. The structure's electrical and instrumentation components and other facility components will also be evaluated and refurbished or replaced. Replacing the existing 51-year-old valves will improve operational control of the Lower Feeder between the Santiago Control Tower and the Diemer plant. If cost effective, relocation of the PCS will also be considered.

Orange and Riverside/San Diego County Operating Regions Valve Replacement

Metropolitan's distribution system includes over 830 miles of pipelines and 5,400 individual structures that require regular maintenance and monitoring. The system is comprised of four regions: the Los Angeles County, Orange County, Riverside/San Diego County, and Western San Bernardino County regions. The subject project will replace valves within the Orange and Riverside/San Diego County operating regions. Replacement of these valves is a priority due to the age of the feeders and the number of critical valves that need to be replaced.

The valves on the Second Lower Feeder, Orange County Feeder, East Orange County Feeder, Lower Feeder, Santiago Lateral, the Allen-McColloch Pipeline, Lakes Skinner Outlet Conduit, San Diego Pipelines Nos. 3, 4, and 5 have been in service up to 52 years and have reached the end of their useful and expected service life. Failure of these valves or their associated components may result in an unplanned emergency shutdown of one of these pipelines impacting delivery to our member agencies. The valves to be replaced include air release/vacuum valves that are installed at high points in the lines to exhaust or admit air during pipeline filling or dewatering operations, and small globe, plug, and butterfly valves. The latter valves are used for isolation of air release/vacuum valve assemblies, blow-off structures, and pressure control structures. Closing these isolation valves allows inspection and maintenance activities to proceed without requiring a shutdown of the feeder. The scope of work is to replace approximately 120 deteriorated valves ranging in size from 1 to 12 inches in diameter on various pipelines in the Orange, Riverside, and San Diego County Operating Regions. This project will also include relocation of air release/vacuum valves from underground to above-ground structures.

Palos Verdes Feeder - Long Beach Lateral Turnout Structure Sta. 1442+15 Valve Replacements

The Palos Verdes Feeder - Long Beach Lateral turnout structure, located in the County of Los Angeles, was constructed in 1938. The Long Beach Lateral turnout structure consists of seven valves that allows Metropolitan to continue delivering water upstream and downstream to member agencies during preventive maintenance, shutdowns, and emergencies. This project will replace the seven valves on the Palos Verdes Feeder/Long Beach Lateral Turnout Structure that are 82 years old. The structure will also be refurbished and include replacing the existing catwalk grating, a new precast concrete roof slab, lifting mechanism, security type entry hatches, and identify and restore all electrical and instrumentation components to like new condition. Electrical components consist of electrical panel boards and grounding system, sump pump and associated instrumentation.

Rio Hondo Pressure Control Structure Valve Replacements

The Rio Hondo Pressure Control Structure (PCS) on the Middle Feeder pipeline was constructed in 1983. Construction of the Rio Hondo PCS incorporated an existing valve structure, so the valves at this location have been in operation since 1953 as part of the original underground valve structure. The existing valves have been in continuous service for approximately 67 years, and over time have required frequent repairs/rebuilding.

The Eagle Rock Operations Control Center utilizes the Rio Hondo PCS to maintain the lower pressure zone on the southern half of the Middle Feeder, and to assure deliveries to member agency water demands in the southwestern service area. This project will replace failing valves at the Rio Hondo PCS. The work will include replacing dresser couplings, pipe spools and fittings, and pipe supports; providing improved ventilation, insulation, equipment access, and structural resiliency for the structure; rehabilitating the existing wastewater system; upgrading various security features, and identifying and restoring all electrical components to new condition. Electrical components consist of electrical panel boards and grounding system, sump pumps, and associated instrumentation. This project will also perform condition assessment of inlet and outlet manifold piping as well as remaining control lines to identify rehabilitation needs and evaluate hydraulic impact on the adjacent hydroelectric plant resulting from this project.

San Diego Canal Radial Gates Rehabilitation (V-06 & V-08)

The protective coatings on the radial gate at the San Diego Canal and the operating components of the gates have begun to fail, and significant metal loss has occurred. In addition, the performance of the existing motor actuators used to open and close the gates has diminished. Should this gate fail, there would be loss of control to regulate flow into Lake Skinner from the San Diego Canal, along with loss of control in surface elevation that regulates flows through the Lake Skinner Bypass screening structures. The bypass structures supply the Skinner area raw water pipelines and the Skinner plant when Lake Skinner is being bypassed, typically due to a taste and odor issue in the lake. This project will rehabilitate or replace the San Diego Canal Radial Gates V-06 and V-08. The rehabilitation may include strengthening or replacing steel members as needed, replacing the radial gate actuator and controls, modifications to the seals and guide rails, and preparing and coating steel surfaces with an approved coating, such as a galvanic metalized coating. This project will also add sensors and software to report the elevation of the gates relative to the water elevation and percent opening of the gates.

San Diego Pipelines 3 & 5 Vacuum Valve Replacement

This project will remove and replace 73 existing vacuum valves on San Diego Pipeline No. 3 (SDPL3) and San Diego Pipeline No. 5 (SDPL5). The existing valves on SDPL3 have been in service for almost 62 years, while those on SDPL5 have been in use for almost 42 years. All the valves have reached the end of their service lives, and the majority are not in a condition to be rehabilitated. All valves will be replaced in-kind. This project will lower corrective maintenance costs, and the risks of valve failures resulting in property or pipeline damage or unscheduled pipeline outages.

San Dimas and Red Mountain Power Plants Standby Diesel/Engine Generator Replacements

The emergency generator at Red Mountain Hydroelectric plant was installed during the original plant construction in 1983. The generator at the San Dimas Hydro Electric Power Plant was installed during original Pressure Control Structure construction in 1975. These generators are necessary to ensure all operating equipment performs the required flow transfers between the Hydroelectric Power Plant (HEP) and the Pressure Control Structure (PCS) during un-scheduled HEP interruptions and SDGE station-power failures. The scope of work is to design, procure, and construct two standby diesel engine generators, one each at the San Dimas and Red Mountain Power Plants. The project scope includes removal of the existing generators and fuel tanks, construction of a new unloading facility with spill containment, steel overhead canopies, and electrical and mechanical system upgrades to the replacement generator to meet current emission and fire code.

San Dimas Hydroelectric Plant Rehabilitation

The San Dimas Hydroelectric Plant was constructed in 1981, and the electrical and mechanical systems are exhibiting signs of normal wear and tear after 41 years of service. The scope of work is to rehabilitate the electrical and mechanical systems including turbine, generator, generator cooling system, all bearing and bearing lubrication systems, switchgear, protection and control relays, speed controller, data logger, annunciator, vibration and exciter systems, and to provide associated controls. This project will also include seismic evaluation and upgrades consistent with current building and safety codes and other facility upgrades.

San Jacinto Diversion Structure Slide Gates Rehabilitation

The San Jacinto Diversion Structure, located at the base of the San Jacinto Mountains, was completed in 1939. The diversion structure divides incoming flow from the CRA to three different outlets, using slide gates to control each flow. Although the existing gates were originally designed for open/close operation only, they had historically also been used for throttling the flow, which had caused substantial damage to the gates. This project will replace the existing V-01 and V-02 cast iron slide gates with a single stainless-steel slide gate designed for throttling, replace existing V-03 cast iron slide gate designed for throttling, install a new stainless-steel drop gate at the valve structure V-04, and appurtenances at the both facilities. This project will increase the operational reliability of the structure and the connection to the Casa Loma Siphon No. 1 and CRA.

Santa Monica Feeder and East Valley Feeder Bypass for Sectionalizing Valves

The lack of a bypass line at the Santa Monica Feeder and East Valley Feeder creates the potential for damage to the valves and their operators due to the inability to equalize pressure across the valves before operating. Further operation of these valves, without installing a bypass, will continue to place the valves and pipeline at risk for damage and potentially emergency or unplanned shutdown. This project will design, fabricate, and install bypass lines at three sectionalizing valve locations that currently do not have a bypass line, and replace existing sectionalizing valves

Santiago Lateral Station 216+40 Butterfly Valve Replacement

The Santiago Lateral is a pre-cast concrete pipeline, ranging in size from 60-inch to 72-inch, and was constructed in 1955. It extends southerly from the Santiago Control Tower in the Anaheim Hills approximately 7.4 miles to Irvine Lake. The pre-cast concrete pipeline provides raw CRA water to Anaheim, IRWD and Irvine Lake. The 42-inch sectionalizing butterfly valve currently leaks resulting in unwanted flows to the south portion of the Santiago Lateral. This project will investigate alternatives to replace existing sectionalizing butterfly valve, which could also be able to handle lower flow rates. The options may include replacing with same type of valve and motor with construction of a bypass or expansion of the existing valve vault or construction of a new vault to accommodate a multi-orifice valve with a knife gate valve for better flow control.

Sepulveda Canyon Control Facility Electrical and Mechanical Rehabilitation & Seismic Upgrades

The Sepulveda Canyon Facility consists of a pressure control structure, hydroelectric plant, and two water storage tanks. The pressure control structure was constructed in the early 1970s to reduce pressure in the 9-foot-diameter Sepulveda Feeder as it conveys treated water from the Jensen Plant. The two water tanks have a combined capacity of 18 million gallons of water and are used to regulate flows through the pipeline. The hydroelectric plant, which was constructed in 1982, takes advantage of excess pressure in the Sepulveda Feeder to generate up to 8.6 megawatts of electricity with its single turbine. The facility is located on top of a large pad that was constructed by filling a steeply sloped V-shaped ravine. The pad is approximately 120 feet above the toe of the slope. The site is located within one mile of the Santa Monica Fault, which is capable of generating a 6.8 magnitude earthquake. Preliminary slope analyses indicate that the fill could slide down the slope during a major earthquake, causing significant damage to the pressure control structure, the water tanks, and the hydroelectric plant. This project will consolidate all seismic upgrade efforts for the entire Sepulveda Canyon Control Facility and seismically upgrade the facility. This project will also consider construction of a 96-inch diameter bypass line and new pressure control structure at the Sepulveda Canyon Facility to continue water deliveries if the existing facility is out-of-service due to a major earthquake.

The Sepulveda Canyon Hydroelectric Plant was constructed in 1982, and the electrical and mechanical systems are exhibiting signs of normal wear and tear after 30 years of service. The scope of work is to perform an investigation and survey of the facility, and rehabilitate the electrical and mechanical components including the turbine/generator and upgrades to the protection and control systems. The project also includes replacement of cooling water piping for the generator enclosure, rehabilitation and structural improvements to the switchyard, and rehabilitation of other facility components.

Sepulveda Feeder/East Valley Feeder Interconnection Electrical Upgrades

The East Valley valve structure is located on the north sidewalk of the Rinaldi Street and Hayvenhurst Avenue intersection in Granada Hills. During the wet season, this structure receives intrusive storm water leakage causing the junction boxes, electrical enclosures, and conduits to corrode and short circuit. The extent of damage has accelerated, and storm water now enters the structure. This project will install new wiring and control panels for operation of the existing valve, remove the existing aboveground disconnect switch and install a new power distribution panel, install new duct banks and conduits to supply power to each of the critical structures, install additional bollards around the distribution panel to minimize damage from vehicles, repair damaged sidewalk, and assess potentially relocating the existing metering structures. This project will also replace access ladder, modify stairs and install a platform to meet current Cal OSHA requirements, install guardrail at the upper landing of the ladder, install a swing-gate for the catwalk, and mitigate water infiltration into the vaults by replacing curbs and gutters around the valve structures, sealing the interior of the manway riser joints, and implementing other mitigation measures.

Sepulveda-West Basin Interconnection Valve Replacements

The Sepulveda-West Basin Interconnection was constructed in 1970. The interconnection allows Metropolitan's Sepulveda Feeder pipeline the flexibility to convey supplemental flow to the West Basin Feeder. The structure includes two 16-inch lines with sleeve valves and one 12-inch line with a globe valve. Each line may be isolated at the either end with plug valves. This project will replace failing valves at the Sepulveda-West Basin Interconnection structure. The work will include replacing associated dresser couplings, pipe spools, and pipe supports. Additionally, work on the structure will include installing a new precast concrete roof slab, providing adequate ventilation for the structure, replacing a sump pump, structure modifications to address algae accumulation on adjacent sidewalk due to frequent water discharge from the sump pump, identifying and restoring all electrical components to new condition, and refurbishing other facility components. Electrical components will consist of electrical panel boards and grounding, sump pumps, and associated instrumentation.

Service Connection A-02 Rehabilitation

A recent inspection of service connection A-02 in the City of Anaheim, revealed that piping in the meter vault had displaced, resulting in misalignment of a coupling and damage to the check valve support pedestal. If not addressed, continued movement of the piping could result in a leak, flooding, disruption of service, and costly repairs. This project will refurbish or replace the Service Connection A-02 Meter Vault piping, thrust restraint(s), meter, coupling, check valve, and plug valve in adjacent isolation valve vault. This is a new project for this budget cycle.

Service Connection LA-17 Rehabilitation

Service Connection LA-17 is located in the city of Los Angeles at the terminus of the Eagle Rock Lateral. It includes three lines: (1) 17A is a 24-inch line with a capacity of 30 cfs, (2) 17B is a 48-inch line with a capacity of 100 cfs, and (3) 17C is an 85-inch line with a capacity of 310 cfs. Three venturi tubes at the LA-17 service connection have been in service for more than 62 years and require significant rehabilitation or replacement.

Significant coating deterioration and metal loss with extensive pitting and corrosion were identified on the bottom side of the 48-inch venturi tube. The wall thickness of this venturi tube is approximately 30% of its original thickness. Failure to replace this venturi tube will lead to eventual leakage, flooding the structure, and impacting water deliveries to the member agency. This project will replace the deteriorating LA-17B welded steel venturi tube located at the Service Connection LA-17 structure along with installation of new 24" piping and a mechanical coupling. The work will also recoat the LA-17A and LA-17C venturi tubes within this structure. Additionally, work will include replacing the sump pump and identifying and restoring all electrical components to new condition. Electrical components will consist of electrical panel boards and grounding, and associated instrumentation.

Upper Feeder Raw Water Vacuum Valves and Blowoff Improvements

Isolation valves along the Upper Feeder Raw have failed to isolate due to a service life of nearly 80 years and there is a need to install sectionalizing valves in strategic locations along the feeder to facilitate isolation and access to the feeder for internal inspections and repairs without having to shut down the Weymouth plant. Further, a higher hydraulic grade is required to pass Upper Feeder flows through the ozone contactors since the ozone facility at the Weymouth plant was commissioned. The grade difference has impacted various systems and operations along the Upper Feeder. This project will study the hydraulic grade elevation changes and impacts to the Upper Feeder and associated systems (Etiwanda and La Verne Pipelines, and Glendora Tunnel); update feeder operations manual, dewatering profiles, and plan and profile drawings; replace various vacuum valves with improved self-closing units; identify new design flow rates at Upper Feeder service connections; replace isolation valves with regulating type valves; install sectionalizing valves to isolate flows to the Weymouth plant; install inflatable rubber dam on the Etiwanda bypass channel to restore bypass channel flow capabilities; and replace failed blow off and vacuum valve isolation valves. This is a new project for this budget cycle.

Upper Newport Bay Blow-off Structure Rehabilitation

The existing blow-off structure on the Orange County Feeder enables the pipeline to be dewatered in the event of an emergency and provides access for routine maintenance and inspection. Following 75 years of continuous operation in a moist environment near Upper Newport Bay, the blow-off valves and piping inside the structure have corroded and need to be replaced. In addition, due to ongoing erosion, the only road available to access the blow-off structure has been damaged and requires repairs. This project will restore access to the structure and replace its internal valves and piping. The planned repairs include regrading of the existing access road and reinforcement of crossings where the road intersects drainage channels; strengthening of the existing turn-around area adjacent to the blow-off structure, which will allow maintenance vehicles to set up for repair activities; installation of new valves and replacement of corroded piping; and modification of piping to ensure continued compliance with current California Division of Drinking Water regulations to prevent potential cross connections.

Venice Hydroelectric Plant Rehabilitation

The Venice Hydroelectric Plant (HEP) was constructed in 1982, and the electrical and mechanical systems are exhibiting signs of normal wear and tear after 32 years of service. The scope of work is to rehabilitate the electrical and mechanical components including the turbine generator, the protection and control systems, and other facility components. The project also includes rehabilitation and structural improvements to the switchyard.

Venice PCS Valve and Security Upgrades

Venice Pressure Control Structure (PCS) is the second of two pressure control structures located along the Sepulveda Feeder. Venice PCS performs the critical operational functions of reducing grade and controlling flows in the Sepulveda Feeder. The PCS consists of multiple control valves and associated piping. The valves are almost 49 years old and have been experiencing increased failures over the last 12 years. This project will refurbish valves and other appurtenances. This project will also install multi-hazard security features for facility infrastructure protection.

Wadsworth Pumping Plant Sleeve Valve Refurbishment

Recent inspections have identified numerous deteriorated sleeve valves at the Wadsworth Pumping Plant. The sleeve valves originally installed in 1999 control the flow of water from DVL to the San Diego Canal. While operation of the pumping plant has not yet been impacted, failure of the valves could lead to an unplanned shutdown and interruption of water delivery to member agencies. This project will refurbish seven 66-inch by 42-inch sleeve valves at the Wadsworth Pumping Plant at DVL.

Washington Street Pressure Control Structure Valve Replacement & Security Upgrades

The Washington Street Pressure Control Structure (PCS) located on the Palos Verdes Feeder was constructed in conjunction with the Palos Verdes Feeder pipeline in 1941. The pipeline has a design capacity of 100 CFS in this area. This project will replace two failing hydraulically operated and three electronically operated globe valves at the Washington Street PCS. The work will also include replacing all block valves, identifying and restoring all electrical components to new condition, and moving electric meter from outside to inside the structure. Electrical components consist of electrical panel boards and grounding, sump pump, and associated instrumentation. Additionally, a security assessment of the facility will be conducted to determine the need to reinforce or upgrade physical features for enhanced infrastructure protection.

West Orange County Feeder OC-09 Rehabilitation

The West Orange County Feeder was constructed in 1956 as a component of the Lower Feeder system. It delivers treated water from the Robert B. Diemer Water Treatment Plant in Yorba Linda to the northwestern portion of Orange County. Service Connection OC-09 on the West Orange County Feeder consists of a turnout tee, a venturi meter, and a shutoff valve. The turnout tee is encased in concrete and is located beneath the traffic lanes of Katella Avenue in the city of Garden Grove, adjacent to the boundary line with the city of Stanton. The meter vault is located below Dale Street. This structure contains a 14-inch conical plug valve, a venturi meter, and associated piping and electrical systems. Gradual corrosion from over 62 years of operation in a damp underground environment has led to deterioration of the equipment within the vault. This equipment needs to be replaced and other facility components rehabilitated to maintain reliable deliveries from the service connection.

West Orange County Feeder Valve Replacement

The West Orange County Feeder was constructed in 1956 as a component of the Lower Feeder system. It delivers treated water from the Diemer plant in Yorba Linda to the northwestern portion of Orange County. A recent condition assessment identified that 13 structures require rehabilitation, including the replacement of air release/vacuum valve assemblies and adjacent plug valves. These valves were installed during the original construction of the feeder and have been in service for over 62 years. Six of the air release/vacuum valves will also be relocated from a manhole to an above ground cabinet within the street-side parkway zone to prevent the potential of treated water in the distribution system becoming exposed to stormwater under certain operating conditions. Refurbishment or replacement of other facility components, including meter replacement or relocation, may be implemented based on the additional site evaluations.

West Valley Feeder No. 1 - Access Road & Valve Structure Improvements

The West Valley Feeder No. 1 and appurtenant valves were constructed and installed by Calleguas Municipal Water District in 1962. Metropolitan acquired the feeder in 1970. Most of the deteriorated valves were replaced and valve structures improved between 2006 and 2012. This project will replace the remaining deteriorated valves located in Chatsworth Park, add new valve structures to house isolation valves that are presently directly buried, install enclosures for air release/vacuum valves, and perform grading of an all-weather access road to support maintenance activities.

Valley View Hydroelectric Plant Rehabilitation

The Valley View Hydroelectric Plant was constructed in 1986. The mechanical components were rehabilitated in 2019. The electrical and control systems are yet to be rehabilitated and have been requiring increased maintenance. Many of the components are no longer manufactured or supported. This project will replace the electrical protection and control relays, data acquisition equipment, electrical panels, annunciator, vibration system, automated voltage regulator, governor and speed controller, switchyard circuit breakers, and other improvements to extend the service life and improve reliability.

Willits Street Pressure Control Structure

The Willits Street Pressure Control Structure (PCS), located in the city of Santa Ana, was built in 1944. This pressure control structure located on the Orange County feeder regulates pressure and conveys treated water to the Irvine Regulating Structure. This PCS is an underground structure consisting of three parallel trains of pressure control valves. At full capacity, two trains are in operation while the third train acts as a stand-by. The existing structure is congested and does not provide suitable access for maintenance, repairs or the replacement of valves. The maintenance access was impacted during street widening that required the size of the structure to be reduced. The modified structure configuration does not have a lifting mechanism to remove or transport these valves out of the structure for replacement or repairs. Additionally, the existing catwalk does not have adequate coverage. This project will construct a new pressure control structure to replace the existing Willits street PCS located on the Orange County Feeder. The work includes a new concrete substructure, relocating and replacing the control and isolation valves, new sampling connections for water quality, and all necessary electrical and ventilation equipment. Once the new structure is complete, the older structure will be abandoned, and the pipeline will be attached to the new structure during a brief outage.

Yorba Linda PCS Rehabilitation

The Yorba Linda Pressure Control Structure (PCS) was constructed in 1975 and controls pressure on the Yorba Linda Feeder prior to the influent flow reaching the Diemer plant. A recent inspection of the facility revealed extensive corrosion at the sleeve valves, damage and failure of mortar lining in appurtenant piping, observed damage to the valve body seat on the butterfly valves, and inadequate cathodic protection. This project will rehabilitate this PCS to restore reliability. This is a new project for this budget cycle.

Yorba Linda Power Plant Improvements

The Yorba Linda Power Plant is located on the Yorba Linda Feeder at the inlet to the Diemer plant and can generate up to 5 megawatts. Installation of a new turbine generator was completed in November 2015, and generator enclosure in May 2020. This project will improve emergency shutdown, alarm, and public address systems; and upgrade Human Machine Interface (HMI) panel to improve reliability and safety of the plant operation by replacing the existing shutdown system that requires operator intervention that could cause undesired pipeline pressure surges to a redundant and automated system that will engage in the event of wicket gate closing system failure. Extension of the Diemer plant's public announcement system into the Yorba Linda Power Plant and addition a new alarm system in key locations will enhance personnel safety and improve operator's response time. This project will also install a new wicket gate drive system and rehabilitate the turbine shutoff valve actuator system.

Pipelines, Tunnels, Canals Project Group

Casa Loma Siphon Barrel No. 1 Seismic Retrofit

In November 2016, leaks were detected on Barrel No. 1 of the Casa Loma Siphon. It was determined that the pipe has had significant horizontal and vertical movements. The leaks do not immediately jeopardize the structural integrity of the aqueduct but if repairs are not performed, the continued leakage over time could erode soil, undermine the siphon, and cause damage to the siphon structures. The Casa Loma Siphon Barrel No. 1 is vital to Metropolitan's conveyance system moving water from the desert pumping plants to Lake Mathews. The work is conducted in two stages. Under Stage 1, internal seals were installed on 13 joints as an interim measure to address the leaks. These repairs were completed in February 2017, during a planned shutdown of the CRA. Stage 2 will permanently repair the pipe joints within the siphon by replacing 148-inch diameter steel and concrete pipe segments that cross the Casa Loma Fault zone with two parallel barrels of 104-inch diameter earthquake resistant ductile iron pipe segments and steel pipe, which will accommodate relatively large ground displacements from an earthquake and the ongoing ground settlement.

Casa Loma Siphon No. 1 and San Jacinto Pipeline Protection

The Casa Loma Siphon No. 1 and the San Jacinto Pipeline cross the San Jacinto River in Hemet, CA. The river experiences periodic high flows during severe storms, exposing the pipelines at the river crossing to damage due to exposure, undermining, or flotation. The scope of the project is to construct a weighted protective cover system, consisting of cable-connected articulated concrete blocks, spanning approximately 200 feet in length over Casa Loma Siphon No. 1 and the San Jacinto Pipeline. This project will enhance infrastructure safety, security, and resiliency, and will improve the reliability of water deliveries.

Etiwanda Pipeline (South) Protection - Sta. 332+00 to 349+00

The City of Rancho Cucamonga is planning to construct a grade separation on Etiwanda Avenue where the Etiwanda Pipeline is located, south of the Etiwanda Reservoir near the tie-in point to the Upper Feeder. Metropolitan is required to either relocate or protect its pipeline, at its own expense, to allow for improvements by the City. The option to protect the pipeline was selected over the relocation option due to time constraints imposed by the grade separation project. The City will install cast-in drilled hole piles (CIDH) in isolation casing within the main bridge span to protect the pipeline. Metropolitan is responsible for the cost of the City's relocation of rectifier and electrical service cabinets, underground conduits, electrolysis test stations, anode well, and patrol road to access manholes; modification of manholes and vent piping for flowmeters and air release vacuum valves, and sump discharge lines.

Etiwanda Pipeline Lining Replacement

The Etiwanda Pipeline was constructed in 1993 to convey untreated water from the Rialto Pipeline to the Upper Feeder. This 6.4-mile-long welded steel pipeline is 144 inches in diameter. The northern portion of the pipeline, which is 5.4 miles long, conveys high-pressure water to the Etiwanda Power Plant. From that facility, the southern portion of the pipeline continues for one mile to an interconnection with the Upper Feeder. During an internal inspection, staff discovered that approximately 37 percent of the northern portion of the line has missing or delaminated mortar lining. At the present time, the structural integrity of the pipeline remains sound. Over time, however, the loss of mortar lining will expose the pipeline to accelerated rates of corrosion and eventual leakage. This project will remove existing and failing cement mortar lining and install a flexible polyurethane lining system. Stages 1 and 2 of this three-stage project have been completed, and rehabilitation of the remaining 2.5 miles of the middle reach of the feeder will be completed under Stage 3, which will also include installation of 1,200 feet of steel liner.

Lakeview Pipeline Relining

The Lakeview Pipeline was constructed in 1973 to provide water from the East Branch of the State Water Project (SWP) to the Skinner area. Since it was completed, the Lakeview Pipeline has been shut down on numerous occasions to repair leaking joints. The line has experienced significant deformation which has caused leaks at pipe joints and loss of mortar lining. Due to the significant potential for corrosion of the pipeline, and the lack of structural integrity in many locations, permanent repairs should proceed expeditiously. In March 2015, in response to the ongoing state-wide drought, the Stage 1 repairs were completed. This work included lining a one-mile portion of the Lakeview Pipeline known as the Bernasconi Tunnel with a steel liner. In conjunction with the recently completed Lakeview Pipeline/Inland Feeder intertie, this improvement enables up to 200 cubic feet per second (cfs) of water stored in Diamond Valley Lake to be delivered to the Mills plant. Stage 2 construction was completed in May 2021, which relined a 133-inch diameter section of pipe referred to as a “wye” branch near the east portal of the Bernasconi Tunnel and replaced a 60-inch diameter “tee” section of pipe located at the Lake Perris Control Facility. Completion of this stage, up to 120 cfs of water stored in Diamond Valley Lake can be reliably delivered to the Mills plant, while maintaining overall pipeline structural integrity. The Stage 3 work includes lining 3.7 miles of the Lakeview Pipeline between the Inland Feeder’s PC-1 control structure and the Perris Control Facility, along with installation of a 1,000-foot-long reach of 9.5-foot-diameter pipe to bypass the Perris Control Facility. Upon completion of the Stage 3 work, the Lakeview Pipeline will be capable of delivering up to 340 cfs from Devil Canyon through the Inland Feeder to the Mills plant, providing an alternate delivery route to the plant as backup to the Santa Ana Valley Pipeline. The Stage 4 work will include lining the remaining 6.7 miles of the Lakeview Pipeline that extends from PC-1 to the San Diego/Casa Loma Canal junction structure.

Orange County Feeder Relining

The Orange County Feeder conveys treated water from the Weymouth Water Treatment Plant in La Verne to six member agencies in Los Angeles and Orange Counties. Recent internal inspections of the feeder have identified significant deterioration of the existing coal-tar enamel lining, which is 77 years old. While the pipeline’s structural integrity remains sound at present, the interior lining displays blistering and disbonding, which expose the pipeline to accelerated rates of corrosion and eventual leakage. The lining needs to be repaired in order to maintain long-term reliability of the pipeline.

This project repairs the lining on the 11-mile-long Feeder, which is being accomplished in three stages. Stages 1 and 2 of this three-stage project have been completed. Stage 3 will reline the remaining four miles of the middle reach of the feeder. Stage 3 work includes replacement of the lining, welding of corroded pipe joints, and replacement of deteriorated valves along the feeder.

Rehabilitation of Metallic and Concrete Pipelines Phase 1 - Select High Priority Feeders

Metropolitan's water delivery system consists of 830 miles of pipelines, of which 670 miles are comprised of reinforced concrete, welded steel, and cast-iron pipe. The majority of Metropolitan's non-PCCP lines were installed over 50 years ago. Experience has shown that degradation from corrosion of reinforced concrete and metallic pipelines can often develop undetected. Some of these pipelines are also showing signs of deterioration, as evidenced by several recent lining and joint repair projects (e.g., Etiwanda Pipeline, Orange County Feeder, and Lakeview Pipeline).

Phase 1 for high priority pipelines, including Santa Monica Feeder, Upper Feeder, Lower Feeder, and Middle Feeder, will include a complete risk assessment and prioritization of pipeline inspections, condition assessment of these high priority pipelines using prequalified inspection technologies, and recommendations for inspection technologies to be used for future condition assessments. This project also includes installation of permanent pipeline appurtenances required to access the pipeline and rehabilitation of pipelines to reduce the risk of failure, minimize repair costs, and prevent unplanned shutdowns. During the course of this project, other feeders may be identified and added to the high priority list.

Rialto Pipeline Rehabilitation at Station 2986

The Rialto Pipeline conveys untreated water from Lake Silverwood to the Live Oak Reservoir in La Verne. The pipeline supplies water from the East Branch of the State Water Project to the Weymouth Water Treatment Plant, and directly services three member agencies through 11 service connections. The size of the pipeline ranges in diameter from 96 to 120 inches and is part of the greater Rialto Pipeline System, which includes the Rialto Pipeline, Etiwanda Pipeline, and La Verne Pipeline.

In February 2010, an internal condition assessment of the pipe mortar lining and remote field eddy current inspection of prestressed concrete cylinder portions were performed. One pipe section with significant mortar damage was observed at Station 2986+09 through Station 2986+44, exposing roughly 26 linear feet of steel. This pipe segment was again inspected in December 2018 and 2020 where it was discovered that an entire 30-foot segment of pipe was completely devoid of mortar lining with a significant amount of the exposed steel needing immediate weld repair. This project will perform extensive weld repair of pipe wall and replacement of missing mortar lining. This project will also replace failed pipe spool and isolation valve at CB-11 service connection, eight 72-inch butterfly valve seats at San Dimas Pressure Control Structure, and six lubricated plug valves ranging in size from 4 inches to 16 inches; reconfigure CB-15 service connection to allow blow off discharge and provide access to one blow off and one pump well structure; and install internal pipe seals at San Dimas Pressure Control Structure.

San Diego and Auld Valley Canals Concrete Repairs

The scope of this project is a comprehensive repair of damaged concrete liner within the San Diego and Auld Valley Canals. The repair work will need to be performed during an extended shutdown of the two canals, to the extent that demands, and storage can be accommodated. An extended outage of approximately 30 days will facilitate repair to priority areas and reaches of the canals, will shorten the overall repair timeline, and will reduce the risk of further deterioration. Failure of the liner in either canal will interrupt or reduce raw water deliveries to the Skinner plant and to various downstream member agencies and sub-agencies. The canals are the sole conveyance route for Colorado River water and State Project water to the Skinner plant.

San Diego Pipelines 1 and 2/Rainbow Tunnel Improvements

The San Diego Pipelines 1 and 2 were built in the 1940s and have multiple diameters and pipe materials consisting of steel, precast concrete cylinder pipe, and precast non-cylinder pipe. Some of the steel section have cement mortar lining, the remaining sections all have coal tar lining. The Rainbow Tunnel has an approximate 72-inch diameter, and is horseshoe-shaped. A recent inspection identified sections where the lining needs replacement. Several valves at turnout structures have reached the end of their service lives and require replacement. This project will perform a detailed evaluation of the pipelines and tunnel and appurtenant structures, replace damaged lining, and refurbish or replace other components as needed.

San Diego Pipeline 1 and 2 Station 1214+00 Exposure Repair

On February 14, 2019, the Temecula area experienced heavy and sustained precipitation followed by additional storm events over the 2019-2020 storm season. The resulting accelerated stream flows exposed the buried San Diego Pipeline Nos. 1 and 2 where the pipelines cross an ephemeral stream channel. Emergency repairs were made in October 2020 under an emergency permit from the Regional Water Quality Control Board. As a condition of the permit, a permanent solution for the site must be constructed within two years of the authorization of the emergency permit. This project will develop and construct a permanent erosion control solution for the pipeline exposure on San Diego Pipeline Nos. 1 and 2. This is a new project for this budget cycle.

Santa Monica Feeder Cast Iron Pipe Rehabilitation

The Santa Monica Feeder was constructed in 1941 as part of Metropolitan's original distribution system. The feeder is approximately 25 miles long, with a diameter ranging from 28 inches to 120 inches. The feeder has various reaches comprised of cast iron, welded steel, and reinforced concrete pipe. The Santa Monica Feeder delivers treated water from the Eagle Rock Control Facility in the city of Los Angeles to four member agency service connections before reaching its terminus in the city of Santa Monica. This project will assess the condition of the cast iron portion of the Santa Monica Feeder using emerging inspection technologies. The cast iron portion of the pipeline is eight miles in length and located between the Hollywood Tunnel North Portal to the Santa Monica Feeder terminus near the Santa Monica Service Connection SMN-01. This is the last section of cast iron pipe in Metropolitan's distribution system. The assessment is anticipated to include leak detection, pipe wall thickness inspection, and internal seal installation by contractor for joint repairs as needed. Following the condition assessment, a long-term plan will be prepared to monitor, and replace and/or rehabilitate the Santa Monica Feeder cast iron pipe. In anticipation of potential prolonged outages, various operational modes will be investigated and designed to maintain reliable flow to service connections. Also, hydraulic and structural analyses will be performed on the pipeline with design recommendations to address various operational conditions and scenarios such as, seismic events and pressure surge episodes.

Upper Feeder - Lining Replacement at the Santa Ana River Bridge

The Upper Feeder was constructed between 1933 and 1941 with a 116-inch-diameter steel pipe and lined with coal tar enamel liner (CTE). This portion of the Upper Feeder is located above ground and crosses the river bed via a bridge. Exposure to the sun subjects the pipeline to a thermal cycle that is continuous heating and cooling of the pipe material. Over the past seven years, staff have performed inspections on this segment of the Upper Feeder and determined that approximately 90% of the pipe's internal lining has failed. Mild to moderate pitting on the interior of the pipe indicate rust tuberculation and corrosion. This project will reline approximately 1,000 feet of the 116-inch diameter pipeline with an approved liner material.

Distribution System - Other Project Group**Chloramine Booster Station at Three Locations within the Treated Water Distribution Systems**

Metropolitan uses chloramines, formed by combining chlorine and ammonia, as a disinfectant in our distribution systems. Internal research has determined the most effective chloramine concentration to prevent microbial growth at low flow conditions. Addition of chlorine and liquid ammonium sulfate (LAS) in the treated water distribution systems will allow the total chlorine residual within the distribution system to be maintained at or above 1.8 mg/L, especially during low demand periods. LAS is recommended instead of aqueous ammonia because LAS has fewer regulatory requirements, as well as lower construction and operating costs. The project will determine the three optimum locations to install: (1) sodium hypochlorite and LAS tanks, (2) feed pumps and appurtenances, (3) piping, and (4) instrumentation and control systems to ensure the safety and reliability of the feed systems.

Cone Camp Intertie Bypass Rehabilitation

This project will rehabilitate the Cone Camp Intertie including the existing 24-inch bypass pipe around the 78-inch butterfly valve. Work may include replacement of the 24-inch bypass pipe and associated valves, and other features necessary to support the bypass operation. The Cone Camp Intertie was constructed in 2002 as a part of the Inland Feeder Highland Pipeline to allow the Inland Feeder to receive State Project Water (SPW) through San Bernardino Valley Municipal Water District (SBVMWD) Foothill Pipeline. At the intertie, a bypass pipeline is used to equalize pressure on both sides of the 78-inch butterfly shutoff valve prior to operating the valve. This bypass pipeline has been taken out of service due to pinhole leaks caused by microbiological corrosion due to stagnant water. Although normal operation of the Inland Feeder does not require the intertie, the intertie may be used to convey water for the Inland Feeder when Devil Canyon 2nd afterbay is offline. This is a new project for this budget cycle.

Diamond Valley Lake and Skinner Area Flow Meter Replacement

The flow meters at the Diamond Valley Lake (DVL) Inlet/Outlet Tower, DVL Connection Canal, DVL Secondary Inlet, Cabazon Radial Gate Facility, Lake Skinner Inlet, and DVL North and South siphons are critical to operation of Metropolitan's distribution network in the vicinity of DVL and the Skinner Plant. This project will either replace or refurbish these aging flow meters making them either new or like-new. This is a new project for this budget cycle.

Diamond Valley Lake Crane Rehabilitation

The scope of the project is to rehabilitate the 25-ton gantry crane at the Diamond Valley Lake Inlet/Outlet Tower. The project will also include a study to evaluate the possibility of increasing the crane capacity to enable it to be used as an alternative lifting device for the emergency drop gate in the event of a failure of the drop gate's normal hydraulic lifting system. This project will enhance infrastructure safety, security, and resiliency, and will enhance the reliability of water deliveries.

Diamond Valley Lake Oxygenation System

This project will construct a liquid oxygen (LOX) storage and feed system at Diamond Valley Lake to improve water quality, reduce impacts of cyanobacterial blooms, and maintain operational flexibility to ensure reliable and high-quality water deliveries under drought and emergency conditions. The LOX system will maintain oxygenated conditions in the deeper waters of DVL and prevent the formation of reduced compounds (sulfides, metals) that interfere with water treatment processes. This will allow for high-quality water to be released from the reservoir year-round. The system consists of: (1) a LOX tank; (2) evaporators to convert LOX to gas; (3) supply lines to deliver oxygen; (4) diffusers to mix the oxygen; and (5) a control system to regulate oxygen flow. Also, a cost benefit analysis will be performed during the early stage of the project to compare the life-cycle cost of purchasing LOX from a vendor versus installing a LOX generation facility at DVL.

Diamond Valley Lake Forebay Concrete Joint Seal Replacement

The concrete joint seals in the Diamond Valley Lake (DVL) Forebay have been in service for over 20 years and have far exceeded the typical service life of two to five years. Division of Safety of Dams (DSOD) had previously directed Metropolitan to address seal replacement at the DVL Spillway; that replacement was completed in 2018. Based on a Metropolitan inspection in July 2018, the Forebay seals are in similar condition to the Spillway seals. This project will remove deteriorated and de-bonded joint seals at the DVL Forebay (approximately 150,000 linear feet), and replace with a new, cost-effective and high-performance MWD-approved sealant.

East Lake Skinner Bypass & Bypass No. 2 Screening Structure Upgrade

The East Lake Skinner Bypass Slide Gates were built 54 years ago in 1967 and are in need of rehabilitation. The gates are binding during operation which is rendering them inoperable. In addition, the East Lake Skinner Bypass Afterbay Trash Rack needs to be replaced with a new stainless-steel rack to minimize the corrosion which caused the existing galvanized material to collapse under the weight of a severe algae bloom during bypass operations. The scope of work consists of reconditioning three of the East Lake Skinner Bypass Slide Gates, and to replace the East Lake Skinner Bypass Afterbay trash rack which is severely corroded and partially collapsed. In addition, this project will modify the East Lake Skinner Bypass Algae Screening Mechanisms Discharge Piping to bypass the Algae Shakers and upgrade the Lake Skinner Bypass No. 2 Forebay Trash Rack Lifting Mechanisms.

East Orange County Feeder No. 2 Seismic Retrofit at Diemer Water Treatment Plant

A recent assessment identified a slope near the south-western pad at the Diemer plant as having the potential to damage the East Orange County Feeder No. 2 pipeline during a significant earthquake. This structure requires further analysis to ensure that it meets Metropolitan's current structural standards and the facility is reliable in the event of seismic activity. This project will assess, design, and complete seismic retrofit construction near the south-western pad at the Diemer plant.

Garvey Reservoir Drainage & Erosion Control Improvements

Garvey Reservoir was constructed in 1954 as a component of the Middle Feeder system. The reservoir receives treated water from the Weymouth plant and has a maximum storage volume of 1,600 acre-feet. The reservoir is located within the city of Monterey Park on a hill that is surrounded on the west and south by residential properties that are lower in elevation. During significant storm events, surface runoff collects and flows downhill through improved drainage systems and natural drainage courses to Metropolitan's property boundaries. Connecting off-site drainage systems that were constructed by developers more than 52 years ago do not meet current minimum design standards and have deteriorated over time. Recognizing the mutual benefit of addressing runoff issues from the reservoir, Metropolitan entered into an agreement with the city of Monterey Park to implement drainage and erosion control improvements both within Metropolitan's property, and improvements to drainage in city streets. There are 11 geographically defined drainage zones at Garvey Reservoir to be mitigated. Zones 1 to 5 have been completed and zones 6, 7, 8, 10, and 11 are in construction. Improvements for drainage zone 9, the final drainage zone, are under discussion with the city.

Garvey Reservoir Sodium Hypochlorite Feed System Upgrades

Upgrades to the sodium hypochlorite feed system at Garvey Reservoir are needed to maintain treated water quality within the Central Pool portion of Metropolitan's distribution system. The existing hypochlorite system has exceeded its expected service life and has deteriorated over time, requiring frequent repairs. Failure of the chemical feed system would negatively affect water quality within the distribution system by not maintaining minimum chlorine residual. This project will replace the current hypochlorite system with new valves, piping, electrical systems, and instrumentation and updated controls that will allow both automated and remote control of the chemical feed system.

Lake Mathews Aboveground Storage Tank Replacement

The Lake Mathews existing diesel aboveground storage tank does not conform to current regulations and needs to be removed from service. In its present condition, the tank cannot be operated in a safe manner. The Lake Mathews Spill Prevention Countermeasure and Control Plan cannot be certified as long as the diesel aboveground storage tank remains in service. This project will replace the existing 10,000-gallon diesel fuel aboveground storage tank (AST) with its associated containment dike, venting, fill system, level monitoring, fuel dispensing system, catwalk, and continuous release detection system with a new 6,000-gallon AST system, and design and construct a roof over the storage tank containment and unloading area. This project will also install an eyewash station.

Lake Mathews Electrical Reliability

The existing electrical distribution system at Lake Mathews constructed during the 1930s needs to be upgraded for reliability. This system has been in service for over 77 years and serves the lake's outlet towers and junction shaft, hydroelectric plant, forebay, chlorination system, administrative offices, and maintenance and repair shops. The electrical distribution system is outdated, has experienced numerous overloads, and lacks capacity for planned additional equipment. The system needs to be upgraded to maintain reliability and meet future power demands. This project will evaluate and upgrade power distribution system, which may include use of alternate medium power distribution voltage (4.16 kV) in line with other Metropolitan facilities, underground and overhead power lines and condition of electrical poles, voltage stability for all facilities, the ability to isolate feeders to provide selective isolation and safer maintenance, and emergency generators capability to provide adequate backup. This project also plans to integrate the upgraded electrical system with Metropolitan's system-wide supervisory control and data acquisition system.

Lake Mathews Perimeter Fencing Upgrade

Lake Mathews is the terminus of the CRA. Water is stored in Lake Mathews Reservoir, withdrawn through the lake's main outlet towers into the forebay, and is then conveyed through the Upper Feeder and Lower Feeder to the Weymouth and Diemer plants, respectively. The existing chain link fencing along the approximately 15-mile perimeter of the Lake Mathews facility has deteriorated and is ineffective at preventing intrusions. The fencing can be easily cut, resulting in an increase in break-ins and illegal dumping through the fencing. This project will replace the existing five-foot tall chain link fencing with eight-foot tall, anti-cut, anti-climb security fencing, constructed of steel or wrought iron. This project will enhance infrastructure safety, security, and resiliency, and will improve security and emergency response.

Lake Mathews Sodium Hypochlorite Injection System

Update and redesign the Lake Mathews sodium hypochlorite injection system to relocate the injection point to a location that will minimize the impacts of chlorine injection on the forebay and appurtenant structures. The design will also consider effective Quagga Mussel control, enhancing safety and reliability of the injection system, and adherence to water quality goals and requirements. The project will develop options to replace the existing interim sodium hypochlorite system at the Lake Mathews Forebay with a system at Lake Mathews Outlet Tower No. 1 and Outlet Tower No. 2, and to provide continuous chemical injections from the towers through the Lake Mathews Forebay, Power Plant, and into the Upper and Lower Feeders.

Lake Skinner Oxygenation System

Lake Skinner is subject to seasonal thermal stratification when the lake water temperature prevents mixing of vertical layers resulting in anaerobic conditions and cyanobacteria blooms. These conditions in the lake can ultimately affect water treatment operations and the quality of the finished drinking water due to taste and odor compounds and sometimes cyanotoxins produced by the cyanobacteria. Lake Skinner currently has a compressor-based aeration system that pumps air to the bottom of the lake in an attempt to mix the water and prevent the thermal stratification but the system is undersized and has been at times, ineffective. This project will construct a hypolimnetic oxygenation system at Lake Skinner including an oxygen supply or liquid oxygen facilities, an anchored diffuser piping assembly in the lake, and associated electrical modifications to improve water quality conditions in Lake Skinner and ensure water supply reliability. This is a new project for this budget cycle.

Lake Skinner West Bypass Screening Structure Rehabilitation

The San Diego Canal West Bypass Screening Structure is located at the terminus of the San Diego Canal and is the starting point for water which bypasses Lake Skinner to downstream users. The bypass screening structure is fitted with an electrically powered revolving screen extending across the channel, which dips into the channel to intercept and collect algae mats and other floating debris. This system prevents algae mats and other debris from entering the treatment plant or member agency water systems via the bypass pipelines. The screening equipment was installed in the 1960s and has now been removed due to operational difficulties. The concrete support structure for the screening equipment constricts flow entering the bypass pipeline and canal must be operated near spill elevation in order to achieve the maximum flow of 280 cfs in the canal/pipeline under current conditions. This project will demolish the concrete support structure for the bypass screening structure to remove the flow constriction point and replace the deteriorated trash rack located upstream of the bypass pipeline entrance.

Live Oak Reservoir Bypass Pipeline Cathodic Protection

Constructed in 1973, the Live Oak Reservoir Bypass, Inlet, and Outlet Pipelines are dielectrically coated welded steel pipelines with a diameter of 97 inches and are approximately 0.6 miles long. The 24-inch dielectrically coated Desilting pipeline ties in to the Outlet pipeline, crosses the Bypass pipeline and is approximately 800 feet long. The Live Oak Reservoir Bypass connects the prestressed reaches of the Rialto Pipeline to the east and the west. The pipeline is one of the few reaches of welded steel pipe that is not yet cathodically protected. A failure of the Live Oak Reservoir Bypass would inhibit Metropolitan's ability to convey water through its system and potentially disrupt Metropolitan's ability to deliver water to several member agencies. The scope of work is to design and install a comprehensive cathodic protection system in the Live Oak Reservoir Bypass.

Lower Feeder Air Entrainment Improvement

When operated at flows higher than 300 cfs, air becomes entrained in the water traveling through the Lower Feeder due to large elevation drops within the conveyance system. When coagulant is added to this inflowing water in the rapid mixers at the Diemer plant, the result is clusters of floating foam mats on the water surface in the coagulation and sedimentation basins which causes operational, maintenance, and aesthetic concerns. Entrained air also increases filter run time. This project will reduce or eliminate entrained air through modifications and addition of components along the Lower Feeder including at the Corona and Temescal power plants, pressure control structures, pipelines, air stacks, and air release/vacuum valves. This is a new project for this budget cycle.

Lower Feeder Cathodic Protection System Rehabilitation

The existing cathodic protection systems for the Lower Feeder were installed in 1995. Recent surveys of the existing systems have indicated that they are no longer providing adequate protection due to gradual deterioration of their anodes. This project will rehabilitate or replace the equipment, such as impressed-current anode wells and rectifiers; and remove existing equipment as required by law. This is a new project for this budget cycle.

Middle Feeder North Drainage and Protection Restoration

The Middle Feeder North from Station 1067+00 to Station 1071+00 lies within both a Metropolitan fee parcel and easements between Graves Avenue and Mooney Drive in the unincorporated Los Angeles County community of South San Gabriel. A recent visual inspection and survey of the area determined that the current soil cover over the feeder has eroded to less than design minimums. This project will restore the design soil cover over Middle Feeder North conduit and improve drainage features to preclude this problem in the future. This is a new project for this budget cycle.

Orange County Feeder Cathodic Protection System Rehabilitation

The Orange County Feeder conveys treated water from the F. E. Weymouth Water Treatment Plant in La Verne to its terminus at service connection CM-1 in Newport Beach. The feeder is approximately 41 miles long and was installed in 1942. The feeder consists of approximately 21 miles of welded and un-bonded steel pipe, 19 miles of precast concrete pipe, and one mile of prestressed concrete cylinder pipe. Previously, cathodic protection could not be effectively applied to the subject reach; however, recent pipeline rehabilitation has made cathodic protection a viable option to prevent external corrosion and thus prevent future pipe leaks. The first three locations that were identified during the routine testing, which were no longer providing corrosion protection to the pipeline, have been replaced. This project will install a new cathodic protection system on the remaining portion of Orange County Feeder to protect approximately 11.2 miles of feeder. The scope of work includes design and installation.

Orange County Feeder Dewatering Improvements

The Orange County Feeder originates at the Weymouth plant in La Verne and extends south for 41 miles to its terminus in the City of Newport Beach. Operations staff struggles with dewatering the pipeline due to development-driven relocations and aging infrastructure. This project will perform the analyses, equipment and facility modifications, and documentation to facilitate future pipe dewatering operations. This is a new project for this budget cycle.

Palos Verdes Reservoir Sodium Hypochlorite Storage and Chemical Feed System and Security Upgrades

This project will replace the 12,000-gallon fiber-reinforced plastic (FRP) sodium hypochlorite (NaOCl) storage tank and appurtenant fittings at the Palos Verdes Reservoir (PVR). The existing FRP tank, manufactured in 1992, is well past its recommended service life of 6-10 years. The FRP tank will be replaced with two 6,000-gallon titanium tanks, which are designed to last 50-70 years and do not corrode in the presence of sodium hypochlorite. Further, modifications to the tank farm feed systems are required to meet revised minimum flow and dosage requirements recently directed by Water Quality and Member Agency demands. Lastly, security cameras will also be added around the PVR facility in order to provide increased security monitoring.

Prevention of CRA Water Migration to SPW at Weymouth Junction Structure

Recently, quagga mussel veligers were discovered at the USG-03 service connection necessitating coordination with local water agencies and implementation of a control and mitigation plan. The affected areas were flushed and chlorinated, groundwater recharge basins were desiccated, and no additional veligers were found. It was determined that Colorado River Water (CRW) was able to inadvertently migrate through the Weymouth Water Treatment Plant (WTP) Junction Structure's sectionalizing valves into the La Verne Pipeline and travel through the Glendora tunnel to service connection USG-03. This project will install pressure monitoring devices connected to nearby existing Remote Terminal Units at key locations along the La Verne Pipeline. Pressure ranges and set points for alarms will be determined in order to provide adequate time for operations and field staff to respond to abnormal conditions in the system to detect CRA water intrusion. This project would minimize the potential for CRW to enter unaffected facilities that normally move State Water Project (SWP). This is a new project for this budget cycle.

Rialto Pipeline Cathodic Protection System Rehabilitation

The existing cathodic protection systems for Rialto Pipeline were installed between 1988 and 1995. Recent surveys of the existing systems have indicated that they are no longer providing adequate protection due to gradual deterioration of their anodes. This project will rehabilitate or replace the equipment such as impressed-current anode wells and rectifiers; and remove existing equipment as required by law. This is a new project for this budget cycle.

Santa Ana River Discharge Pad - Upper Feeder

Severe storm events eroded the north slope of the Santa Ana River near the Upper Feeder crossing. This damage resulted in large voids in the riverbank to the footing supporting the bridge span and the foundation of the emergency discharge bunker valve. The damage was repaired, and a recommendation was made during the repair to construct a concrete pad to prevent a reoccurrence of this type of damage. This project will construct a concrete discharging pad to prevent erosion from storms and discharge from the bunker valve.

San Gabriel Tower and Spillway Improvements

The San Gabriel Tower (SGT), 86-foot-tall free-standing with a 24-foot by 14-foot rectangular base, was constructed in 1936, north of the city of Azusa. It sits at the base of the steep and weathered San Gabriel Mountains, between the west portal of Monrovia Tunnel No. 1 and the east portal of Monrovia Tunnel No. 2. The tower is surrounded by Angeles National Forest and is adjacent to Morris Reservoir. The function of the SGT is to regulate and isolate flows from the Weymouth plant via the Upper Feeder pipeline to the Eagle Rock Control Facility located in the city of Los Angeles. It is situated between two active faults, the Sawpit and the Sierra Madre faults, which are both capable of generating a magnitude 6.5 earthquake. While the tower was designed and constructed to the codes and standards in place during the 1930s, significant advancements have been made since that time in predicting the response and performance of structures as a result of seismic ground shaking. Planned upgrades to the San Gabriel Tower include: (1) reducing the height of the tower to increase its structural stability; (2) replacing the slide gates and actuators to restore isolation capability for the Upper Feeder; (3) improving access to the tower and spillway, including the river crossing; (4) repairing the spillway's concrete; (5) stabilizing the adjacent rocky slope; and (6) installing a barrier such as new fencing or protective screen to prevent animal entry into the spillway. This project will also evaluate and repair the Morris Dam connection, which includes large needle and isolation butterfly valves, and evaluate condition of the conical plug valve at groundwater replenishment connection USG-03 before deciding to upgrade to control valves or installation of a crane system that allows safe installation of the various orifice plates to control flow.

Santa Monica Feeder Cathodic Protection

The Santa Monica Feeder is a mortar coated welded steel pipeline with a diameter of 49-inches and is approximately 4.25 miles long. The pipeline is one of the few reaches of welded steel pipe that is not yet cathodically protected. A failure of the Santa Monica Feeder would inhibit Metropolitan's ability to convey water through its system and potentially disrupt Metropolitan's ability to deliver water to several member agencies. The scope of work is to design and install a comprehensive cathodic protection system in the Santa Monica Feeder.

Santiago Control Tower Seismic Improvements

The Santiago Control Tower acts as a control and diversion facility for water supplied to the Santiago Lateral pipeline, the Santiago Lateral Spillway Discharge Pipeline, and the Lower Feeder pipeline. This project will evaluate the Santiago Control Tower's ability to resist expected seismic forces based on the latest geotechnical and geological considerations and retrofit the tower. A detailed geotechnical analysis is required to determine the structure's interaction with surrounding soil and analyze the soil stability of the structure. The structure is located close proximity to the Whittier Fault on a raised area adjacent to a slope.

Skinner Bypass Pipelines Cathodic Protection

The Lake Skinner Bypass Pipeline # 1 (97-inch diameter), Lake Skinner Bypass Pipeline #3 (49-inch diameter), and Skinner Plant effluent Conduit # 1 (7-inch diameter) alignments have portions traversing inside and outside of the Skinner Treatment Plant property. The three pipelines are dielectrically coated steel pipelines. The original impressed current cathodic protection system was installed in 1980. The system was turned off as concerns emerged about exposing prestressed pipelines to cathodic protection. In addition, several modifications to the pipelines made the existing system unsuitable for the present pipeline configurations. The existing cathodic protection system requires full rehabilitation to adequately protect the pipeline from corrosion. A failure of the feeders would inhibit Metropolitan's ability to convey water through its system and potentially disrupt Metropolitan's ability to deliver water to several member agencies. The scope of work is to design and install a comprehensive cathodic protection system in the feeders.

Soto St. Facility - Security & HVAC Replacement

The Soto Street Facility serves as the main headquarters for staff and equipment that support the Western Region Unit (WRU) Conveyance and Distribution System. The WRU Incident Command Post, located in the Administration Building, also serves as the backup Emergency Operations Center for the Eagle Rock Operations Center. The Soto Street Facility currently has two layers of access control protection during business hours: a single card reader at the outer vehicle gate, and a single contracted security guard. During periodic foot patrols of the facility, the access gate is left unmanned. In addition, the alarm system is currently inoperable, and there are no access card readers on any of the exterior building doors, which remain unlocked during business hours. There have been recent multiple security events at this facility. Finally, the existing air handling unit that serves the Soto Street Administration Building has been in service since the 1960s, when the building had a different configuration. The current HVAC system does not provide adequate airflow to all parts of the building.

This project will improve the security of the Soto Street Facility by adding access card readers and security cameras, providing security lamination to glass doors and windows, providing a fenced secure outdoor storage yard, replacing the alarm system, and upgrading the HVAC system for the Administration Building.

Upper Feeder Blow Off Structure Replacement

Blow-off structures provide a means to completely drain a pipeline for emergencies, inspections, repairs, and general maintenance. The Upper Feeder Blow-Off Structure, located in the city of Sierra Madre, discharges the Upper Feeder directly into the Little Santa Anita Wash. The valves and piping in this structure have been in service for almost 80 years and have reached the end of their service life. One valve is stuck in the closed position, and another is experiencing leakage. In addition to a variety of different sizes and configurations of pipe within the structure, the structure itself does not comply with some of the safety and design features of more modern structures. This project will replace and enhance the Upper Feeder Blow-Off Structure in order to ensure reliable dewatering capability and comply with OSHA standards. The work includes but is not limited to replacement of manhole, access ladder, and various valves and valve stem extensions; and addition of various pipe couplings, various valves, pumps, pipes, and catwalk platforms.

Wadsworth Pumping Plant Stop Logs

The Wadsworth Pumping Plant was built with 12 pump/generation units. Units 1, 5, and 9 were decommissioned to allow DVL generation to be certified as "renewable energy" by the California Energy Commission. Hydroelectric plants are required to have a nameplate capacity of 30 MW or less to be certified. At 3.3MW per unit, the nine remaining units provide a generation capacity of 29.7MW. Generated energy must be certified renewable for electric utilities to meet the requirement that 33% of their energy come from renewable resources by 2020. The stop logs would provide a means to isolate the three decommissioned pumps from the DVL forebay keeping them out of the water and dry. Isolating the pumps from water contact reduces corrosion damage to the pumps and provides flexibility in the event pump/generation units need to be re-commissioned or repaired. This project will fabricate three sets of stop logs to isolate three decommissioned Wadsworth plant generation/pumping units from the forebay. Each set of stop logs consists of three stop log sections, for a total of nine sections of stop logs to isolate three pump units.

Wadsworth Pumping Plant Fire Protection System Upgrades

The Wadsworth Pumping Plant is located near Hemet at Metropolitan's Diamond Valley Lake (DVL). The pumping plant includes 12 vertical turbine pumps that are used to pump water into DVL or to generate electricity when water flows out of DVL into the forebay/San Diego Canal. Each pump/generator has a dedicated CO2 fire suppression system to prevent fires from spreading from one unit to another. However, the system is designed so that if the fire suppression system is inactive, the pump/generator will not operate. Some components of the current fire suppression system and control panels have been in service for almost 22 years and need to be replaced. In addition, the fire alarm system for the Wadsworth building is antiquated, and replacement parts are no longer available. This project will upgrade Wadsworth's fire suppression system by: (1) replacing the existing individual CO2 fire suppression systems for the operational vertical turbine pumps, and (2) upgrading the Wadsworth building fire alarm system.

West Orange County Feeder Cathodic Protection

The West Orange County Feeder (WOCF) was constructed in 1956, and is mortar and dielectrically coated welded steel pipeline with a diameter of 43-inches and 55-inches. The pipeline is approximately 13 miles long. The WOCF connects to the cathodically protected Orange County Feeder (OCF), prestressed and steel reaches of the Second Lower Feeder (SLF), and the cathodically protected Lower Feeder (LF). The pipeline is one of the few reaches of welded steel pipe that is not yet cathodically protected. A failure of the WOCF would inhibit Metropolitan's ability to convey water through its system and potentially disrupt Metropolitan's ability to deliver water. The scope of work is to design and install a comprehensive cathodic protection system in the WOCF.

Western Conveyance and Distribution Region - Blind Flange Structures Washdown Improvements

Currently, a substantial number of blind flange pipeline access and turn-out structures in the western conveyance and distribution region do not have an accessible and reliable water connection for washdown of piping, valves, and equipment during preventive maintenance. This project will modify or enhance structures that contain blind flanges to provide washdown capabilities. This is a new project for this budget cycle.

District Housing and Property Improvements Program

Fiscal Year 2022/23 Estimate: \$12.0 million

Fiscal Year 2023/24 Estimate: \$15.7 million

Program Information: The District Housing & Property Improvements Program is comprised of projects to refurbish or upgrade workforce housing at Metropolitan to enhance living conditions to attract and retain skilled employees.

Accomplishments for FY 2020/21 and FY 2021/22

- New projects initiated:
 - CRA Kitchen and Lodging Improvements
- Major milestones achieved:
 - CRA Kitchen and Lodging Improvements – conceptual study and preliminary design completed
 - District Housing Property Improvements – assessments, conceptual and relocation studies, and preliminary design completed
 - Employee Village Enhancement - master planning, study and preliminary design for Gene, Iron Mountain, Eagle Mountain, and Hinds Pumping Plants completed

Objectives for FYs 2022/23 and 2023/24

Project	Total Project Estimate	Estimated Construction Completion	Major Milestones
CRA Kitchen and Lodging Improvements	\$ 19,000,000	2027	Begin construction at Eagle and Iron Mountain pumping plants
District Housing Improvements	\$ 72,000,000	2027	Begin construction at Gene, Iron Mountain, Eagle Mountain, and Hinds pumping plants
Employee Village Enhancement	\$ 44,000,000	2027	Begin construction at Gene, Iron Mountain, Eagle Mountain, and Hinds pumping plants

Housing & Property Improvements Project Group

CRA Kitchen and Lodging Improvements

Eagle Mountain and Iron Mountain Pumping Plants have kitchens and guest lodges that are used by staff during shutdowns and construction projects, and during extended periods of condition assessments and design of rehabilitation work. These facilities will be used frequently over the next decade as the planned rehabilitation of the 45 main CRA pumps moves forward.

The kitchen at Iron Mountain Pumping Plant has been in service for decades and while still functioning, its equipment is deteriorated and obsolete. The kitchen at Eagle Mountain Pumping Plant does not currently meet San Bernardino County Health Services' requirements for large-scale food storage, refrigeration, or handling. As a result, it has been removed from service. The 10-room guest lodge at Eagle Mountain Pumping Plant and the 16-room guest lodge at Iron Mountain Pumping Plant have both deteriorated after more than 42 years of service and require frequent short-term repairs.

An initial assessment discovered that replacement of these facilities would be more economical since renovation would require significant seismic, electrical, plumbing, and roofing upgrades to meet current codes. This project will replace the kitchen and lodge facilities with new buildings with higher capacity in preparation of increasing work to upkeep the facilities out in the desert to maintain the CRA conveyance system reliability.

District Housing Improvements

Metropolitan owns 99 houses throughout the five CRA pumping plants and rents to employees involved in operation and maintenance of the CRA. A pilot renovation of 11 houses was completed in 2019 and construction of ten new houses was completed in 2018. In the same year, the Board authorized an assessment to determine whether the best course forward was to replace or renovate the remaining 78 houses. The assessment revealed that replacement of the houses was the best option. In addition, a recent housing analysis determined that only 75 of 78 remaining houses need to be replaced at four of the five pumping plants along with construction of two maintenance and two storage buildings, one each at Eagle Mountain and Iron Mountain Pumping Plants, to support the long-term corrective and preventative maintenance activities after the houses have been replaced.

Employee Village Enhancement

Metropolitan owns houses throughout the five CRA pumping plants and rents to employees involved in operation and maintenance of the CRA. In addition, due to the remote location of the pumping plants, each of the pumping plants has an employee village to provide a sense of community and offer the residents a space away from the work areas. Amenities such as swimming pool and tennis courts are also part of these villages.

These villages and their current amenities are deteriorating due to the age and exposure to the harsh desert environment. This project will replace and enhance the village amenities at four CRA pumping plants (Hinds, Eagle Mountain, Iron Mountain, and Gene) that would focus on building a vibrant, healthy, and sustainable community for Metropolitan's staff.

Minor Capital Projects Program

Fiscal Year 2022/23 Estimate: \$8.7 million

Fiscal Year 2023/24 Estimate: \$8.0 million

Program Information: The Minor Capital Projects (Minor Cap) Program is comprised of projects, with an estimated cost of less than \$400,000, that require rapid response to address unanticipated failures, safety or regulatory compliance concerns, or to take advantage of shutdown opportunities. The Minor Cap Program authorizes the General Manager to execute projects that meet defined criteria without seeking additional Board approval.

Accomplishments for FY 2020/21 and FY 2021/22

- New projects initiated thru December 2021:
 - Forty-two projects were initiated
- Major milestones achieved thru December 2021:
 - Thirty-five projects were completed

Objectives for FYs 2022/23 and 2023/24

Project	Total Project Estimate	Estimated Construction Completion	Major Milestones
Various projects costing less than the Board approved maximum project cost * *Prior to Fiscal Year 2018/19 - \$250,000 Currently - \$400,000	\$56,000,000 for projects in open and new Minor Cap Appropriations	2027	Complete all projects within 3 years of initiation

Prestressed Concrete Cylinder Pipe (PCCP) Rehabilitation Program

Fiscal Year 2022/23 Estimate: \$51.2 million

Fiscal Year 2023/24 Estimate: \$53.2 million

Program Information: The PCCP Rehabilitation Program is composed of projects to refurbish or upgrade Metropolitan's PCCP feeders to maintain water deliveries without unplanned shutdowns.

Accomplishments for FY 2020/21 and FY 2021/22

- New projects initiated:
 - Allen-McColloch Pipeline PCCP 2021 Relining
- Major milestones achieved:
 - Completed construction
 - Allen-McColloch Pipeline PCCP 2021 Relining
 - Second Lower Feeder Reach 2
 - Second Lower Feeder Reach 8
 - Completed design
 - Allen-McColloch Pipeline PCCP 2021 Relining
 - Second Lower Feeder Reach 3A
 - Second Lower Feeder Reach 8

Objectives for FYs 2022/23 and 2023/24

Project	Total Project Estimate	Estimated Construction Completion	Major Milestones
Electromagnetic Inspections of PCCP Lines	\$ 10,000,000	Ongoing	Continue inspections in conjunction with pipeline shutdowns
Second Lower Feeder PCCP Rehabilitation - Reach 3A	\$ 26,000,000	2023	Complete construction
Second Lower Feeder PCCP Rehabilitation - Reach 3B	\$ 67,000,000	2024	Begin construction
Sepulveda Feeder PCCP Rehabilitation – Reach 1	\$ 130,000,000	2025	Complete preliminary and final design

Allen McColloch Pipeline Project Group

Allen-McColloch Pipeline PCCP Rehabilitation

The planned rehabilitation work involves lining the existing PCCP segments with steel liner pipe designed as a stand-alone pipeline which can accommodate full internal and external pressures on the line. The project includes restoring the Allen McColloch Pipeline to “As Like New Conditions” as possible. This would include relocation of all air release and vacuum valves (AR/VV) that have not already been relocated above ground and evaluating and possible replacement of sectionalizing, service connection turnout, pumpwell, AR/VV, shutoff, and blowoff valves, etc. In addition, the project includes procurement of any needed permanent or temporary right of way and evaluation and possible replacement or modification of all pressure control structures, master meters, and meter structures.

Calabasas Feeder Project Group

Calabasas Feeder PCCP Rehabilitation

The planned rehabilitation work involves lining the existing PCCP segments with steel liner pipe designed as a stand-alone pipeline which can accommodate full internal and external pressures on the line. The project includes restoring the Calabasas Feeder to “As Like New Conditions” as possible. This would include relocation of all air release and vacuum valves (AR/VV) that have not already been relocated above ground and evaluating and possible replacement of sectionalizing, service connection turnout, pumpwell, AR/VV, shutoff, and blowoff valves, etc. In addition, the project includes procurement of any needed permanent or temporary right of way and evaluation and possible replacement or modification of all pressure control structures, master meters, and meter structures.

Rialto Feeder Project Group

Rialto Pipeline PCCP Rehabilitation

The planned rehabilitation work involves lining the existing PCCP segments with steel liner pipe designed as a stand-alone pipeline which can accommodate full internal and external pressures on the line. The project includes restoring the Rialto Pipeline to “As Like New Conditions” as possible. This would include relocation of all air release and vacuum valves (AR/VV) that have not already been relocated above ground and evaluating and possible replacement of sectionalizing, service connection turnout, pumpwell, AR/VV, shutoff, and blowoff valves, etc. In addition, the project includes procurement of any needed permanent or temporary right of way and evaluation and possible replacement or modification of all pressure control structures, master meters, and meter structures.

Second Lower Feeder Project Group

PCCP Rehabilitation Valve and Equipment Storage Building

For the PCCP Program, staff procures large-diameter isolation valves and other long-lead, critical equipment and material in advance of the start of construction. Advanced procurement helps to prevent potential manufacturing or logistical delays from impacting future construction contracts. These contracts are typically scheduled with pipeline shutdowns that are coordinated with member agencies and local cities years in advance. Procuring valves in advance also ensures that the valves are available in the event of material shortages or to address an unanticipated repair. Suitable facilities are needed to store and maintain the large equipment as they will be delivered to the region over the next two to three years. This project will construct an approximately 18,200 square-foot pre-engineered metal building with a reinforced concrete slab foundation and motorized roll-up doors to protect Metropolitan's assets, enhance operational flexibility, and reduce risk of project delays for the PCCP Program.

Second Lower Feeder PCCP Rehabilitation

The planned rehabilitation work involves lining the existing PCCP segments with steel liner pipe designed as a stand-alone pipeline which can accommodate full internal and external pressures on the line. The project includes restoring the Second Lower Feeder to "As Like New Conditions" as possible. This would include relocation of all air release and vacuum valves (AR/VV) that have not already been relocated above ground and evaluating, installation of new isolation valve structures, construction of bypasses, and possible replacement of sectionalizing, service connection turnout, pumpwell, AR/VV, shutoff, and blowoff valves, etc. In addition, the project includes procurement of any needed permanent or temporary right of way and evaluation and possible replacement or modification of all pressure control structures, master meters, and meter structures.

Second Lower Feeder Rehabilitation Reach 3 Acoustic Fiber Optic PCCP Monitoring System

Prestressed concrete cylinder pipe (PCCP) is well-known in the waterworks industry to be at risk of sudden failure from loss of strength due to the breaking of pre-stressed wires. The Second Lower Feeder is included in Metropolitan's list of five PCCP pipelines slated for rehabilitation. Rehabilitation is scheduled to occur over several years to reduce the duration that a portion of the pipeline is out of service, and the work is prioritized based on the condition of the pipe. Shutdown procedures for inspections, such as complete dewatering of Second Lower Feeder, have become increasingly difficult because of operational constraints. This project will design, install, start-up, an innovative monitoring system for wire breaks using an acoustic fiber optic PCCP monitoring system on approximately 5 miles of Second Lower Feeder thereby eliminating the need for staffed pipe inspections. The fiber optic cable system is sensitive to sound that will detect wire breaks. The cable extends to a data acquisition computer that continuously "listens" for the distinct sound of wires breaking. This is a new project for this budget cycle.

Sepulveda Feeder Project Group

Sepulveda Feeder PCCP Rehabilitation

The planned rehabilitation work involves lining the existing PCCP segments with steel liner pipe designed as a stand-alone pipeline which can accommodate full internal and external pressures on the line. The project includes restoring the Sepulveda Feeder to "As Like New Conditions" as possible. This would include relocation of all air release and vacuum valves (AR/VV) that have not already been relocated above ground and evaluating and possible replacement of sectionalizing, service connection turnout, pumpwell, AR/VV, shutoff, and blowoff valves, etc. In addition, the project includes procurement of any needed permanent or temporary right of way and evaluation and possible replacement or modification of all pressure control structures, master meters, and meter structures.

PCCP - Other Project Group

Electromagnetic Inspections of PCCP Lines

All PCCP lines within the distribution system are inspected every three to seven years. The frequency is based on the condition and history of repairs for each feeder. Three cycles of electromagnetic testing have been completed to date on Metropolitan's PCCP feeders. This project will perform the fourth cycle of inspections over the next eight years. Planned activities for the inspections include: scheduling and coordination of shutdowns; conducting the electromagnetic inspections; conducting internal visual inspections; shutting down and dewatering the feeders and returning them to service; analyzing the inspection results; and preparing comprehensive inspection reports.

Foothill Feeder Acoustic Fiber Optic PCCP Monitoring System

Prestressed concrete cylinder pipe (PCCP) is well-known in the waterworks industry to be at risk of sudden failure from loss of strength due to the breaking of pre-stressed wires. Currently, staff must dewater the Foothill Feeder in order to inspect the pipeline's condition manually. The proposed project installs an innovative acoustic fiber optic system that will provide continuous condition monitoring over approximately 11 miles of the Foothill Feeder without having to dewater and enter the pipeline, along with other associated monitoring work. This is a new project for this budget cycle.

West Valley Feeder No 1 PCCP Rehabilitation

An electromagnetic inspection conducted in April 2021 identified an increase in wire breaks since the previous 2014 inspection of the 54-inch Prestressed Concrete Cylinder Pipe (PCCP) portion of the West Valley Feeder No. 1. The planned rehabilitation work involves lining the existing PCCP segments with steel liner pipe designed as a stand-alone pipeline which can accommodate full internal and external pressures on the line and replacing any identified damaged lining in non-PCCP segments. The project includes restoring the West Valley Feeder No. 1 from approximately Station 1277+27.68 to the De Soto Avenue Sectionalizing Structure at Station 1290+16.70 to "as like new condition." This is a new project for this budget cycle.

Regional Recycled Water Program

Fiscal Year 2022/23 Estimate: \$ 3.9 million

Fiscal Year 2023/24 Estimate: \$16.0 million

Program Information: The Regional Recycled Water Program includes the design and construction of the Advanced Water Treatment Demonstration Plant, which represents the initial step in development of a potential regional recycled water system for recharge of groundwater basins within Southern California. The biennial budget separately includes \$15 million per year for RRWP planning and design costs.

Accomplishments for FY 2020/21 and FY 2021/22

- Major milestones achieved:
 - Demonstration Plant Direct Potable Reuse Modifications – design initiated

Objectives for FYs 2022/23 and 2023/24

Project	Total Project Estimate	Estimated Construction Completion	Major Milestones
Demonstration Plant Direct Potable Reuse Modifications	\$ 18,000,000	2025	Complete preliminary and final design

Regional Recycled Water - All Project Group

Demonstration Plant Direct Potable Reuse Modifications

Metropolitan's Advanced Water Treatment Plant (AWT) at the Joint Water Pollution Control Plant (JWPCP) in Carson was designed to demonstrate testing of potential treatment processes for Indirect Potable Reuse (IPR) applications. This project will expand Metropolitan's existing process train to accommodate testing of potential Direct Potable Reuse (DPR) treatment options for regulatory acceptance of a DPR treatment train for full-scale implementation, as part of the Regional Recycled Water Program (RRWP). Additional treatment processes will be implemented for chemical use, pathogen inactivation, and testing in accordance with the latest DPR framework provided by the California Division of Drinking Water.

Right-of-Way and Infrastructure Protection Program

Fiscal Year 2022/23 Estimate: \$7.8 million

Fiscal Year 2023/24 Estimate: \$3.8 million

Program Information: The Right-of-Way Infrastructure Protection Program (RWIPP) is comprised of projects to refurbish or upgrade above-ground facilities and right-of-way along Metropolitan's pipelines in order to address access limitations, erosion-related issues, and security needs.

Accomplishments for FY 2020/21 and FY 2021/22

- Major milestones achieved:
 - Completed preliminary design:
 - Los Angeles Region – Stage 1 Improvements
 - Orange County Region – Stage 3 Improvements
 - Completed final design:
 - Orange County Region - Stage 1 Improvements
 - Western San Bernardino Region – Stage 1 Improvements
 - Completed construction
 - Orange County Region - Stage 1 Improvements

Objectives for FYs 2022/23 and 2023/24

Project	Total Project Estimate	Estimated Construction Completion	Major Milestones
Right-of-Way Infrastructure Protection Program - Western San Bernardino County Operating Region (Stage 1)	\$ 6,700,000	2023	Complete construction
Right-of-Way Infrastructure Protection Program – Los Angeles County Operating Region	\$ 9,300,000	2025	Begin construction of Stage 1

Los Angeles Region Project Group

Right-of-Way & Infrastructure Protection - Los Angeles County Region

This project identifies and addresses right-of-way and security issues; identifies and executes needed improvements within the Los Angeles County Operating Region; prepares environmental documentation; acquires regional programmatic environmental permits; and monitors and reports to permitting agencies for ten years following completion of construction. In order to expeditiously complete this project, sites within this region are grouped and prioritized and staged for construction depending on the site requirements.

Orange County Region Project Group

Right-of-Way & Infrastructure Protection - Orange County Region

This project identifies and addresses right-of-way, access, and security issues; identifies and executes needed improvements within the Orange County Operating Region; prepares environmental documentation; acquires regional programmatic environmental permits; and monitors and reports to permitting agencies for ten years following completion of construction. In order to expeditiously complete this project, sites within this region are grouped and prioritized and staged for construction depending on the site requirements.

Riverside/San Diego Region Project Group

Right-of-Way & Infrastructure Protection Program - Riverside and San Diego County Region

This project identifies and addresses right-of-way, access, and security issues; identifies and executes needed improvements within the Riverside and San Diego County Operating Region; prepares environmental documentation; acquires regional programmatic environmental permits; and monitors and reports to permitting agencies for ten years following completion of construction. In order to expeditiously complete this project, sites within this region are grouped and prioritized and staged for construction depending on the site requirements.

Western San Bernardino Region Project Group

Right-of-Way & Infrastructure Protection Program - Western San Bernardino County Region

This project identifies and addresses right-of-way, access, and security issues; identifies and executes needed improvements within the Western San Bernardino County Operating Region; prepares environmental documentation; acquires regional programmatic environmental permits; and monitors and reports to permitting agencies for ten years following completion of construction. In order to expeditiously complete this project, sites within this region are grouped and prioritized and staged for construction depending on the site requirements.

RWIPP - Other Project Group

Right-of-Way & Infrastructure Protection Program - Colorado River Aqueduct

The Right-of-Way Infrastructure Protection Program (RWIPP) identifies, prioritizes, and executes site improvements throughout Metropolitan's service area. This project encompasses site improvements along the CRA and addresses access limitations, erosion-related improvement work, and security needs along the surface of the CRA's rights-of-way. Under the initial stage of the program, site improvements needed along the CRA will be identified, a comprehensive regional compliance and permitting program will be developed, and a programmatic environmental document will be prepared to secure environmental approval for multiple projects along the CRA rather than pursuing individual approvals on a project-by-project basis. This project will add the CRA to the RWIPP, which already includes the Orange County, Western San Bernardino, Riverside/San Diego, and Los Angeles operating regions.

Right-of-Way & Infrastructure Protection Program - Property Acquisition

The scope of this project includes procurement of right-of-way or property to support access or needed repairs to pipelines and facilities. Activities include developing conceptual solutions, layout drawings, and final design criteria of needed improvements; preparing pre-appraisal documentation for acquisition of easements and right-of-way; conducting field surveys and topographic mapping; ordering and reviewing title reports and supporting recorded documents; initiating consultations with permitting agencies for required permits; preparing legal descriptions, exhibit maps, and other exhibits as needed for acquisition planning, permits, and real estate negotiations; completing right-of-way mapping and preparing Record of Survey maps to be filed with the county of origin; and setting monuments and witness posts.

System Flexibility/Supply Reliability Program

Fiscal Year 2022/23 Estimate: \$31.6 million

Fiscal Year 2023/24 Estimate: \$40.6 million

Program Information: The System Flexibility/Supply Reliability Program is comprised of projects to increase the capacity and flexibility of Metropolitan's water supply and delivery infrastructure to meet service demands. Projects under this program address climate change affecting water supply, regional drought, and alternative water sources for areas dependent on State Project Water.

Accomplishments for FY 2020/21 and FY 2021/22

- New projects initiated:
 - Delta Properties Infrastructure Improvements
 - Inland Feeder - Citrus Reservoir and Pump Station Intertie
 - Inland Feeder - Rialto Pipeline Intertie
 - New Westside Pump Stations
 - Wadsworth Pump Discharge to Eastside Pipeline Bypass
- Major milestones achieved:
 - Completed construction:
 - Greg Avenue Pump Station Rehabilitation
 - Delta Properties Infrastructure Improvements - Completed installation of first eight flow meters
 - Completed design
 - Perris Valley Pipeline - Tunnels

Objectives for FYs 2022/23 and 2023/24

Project	Total Project Estimate	Estimated Construction Completion	Major Milestones
Delta Islands Pump Station Rehabilitation	\$ 5,600,000	2024	Complete design
Delta Properties Infrastructure Improvements	\$ 960,000	2024	Complete construction
Delta Smelt and Native Species Preservation Wetlands	\$ 2,700,000	2024	Complete design and construction
Inland Feeder – Citrus Reservoir and Pump Station Intertie	\$ 23,700,000	2026	Complete design
Inland Feeder – Rialto Pipeline Intertie	\$ 2,200,000	2023	Complete construction
Perris Valley Pipeline - Tunnels	\$ 79,000,000	2025	Begin construction
Wadsworth Pump Discharge to Eastside Pipeline Bypass	\$ 11,400,000	2023	Complete construction

System Flexibility/ Supply Reliability - All Project Group

Delta Islands Pump Station Rehabilitation

In 2016, Metropolitan purchased four islands/tracts (about 20,000 acres) in the central Delta: Bacon and Bouldin Islands, and Holland and Webb tracts islands. Collectively, these lands represent a crucial part of the Delta for multiple potential values that are consistent with the State's co-equal goals of ecosystem restoration and water supply reliability for California. As part of this purchase, each property has an existing infrastructure that contains a system of individual siphons that bring diverted river water onto the property irrigation canals that conveys excess water by gravity to pump stations to be pumped off the property to prevent flooding. This project will rehabilitate and upgrade aging pump stations to increase system reliability and minimize the service disruption that could result in loss of revenue if tenant operations are impacted. This is a new project for this budget cycle.

Delta Properties Infrastructure Improvements

California State Senate Bill (SB 88) requires monitoring and reporting of certain diversions within the Delta. Metropolitan's Delta properties will need to comply. This project will investigate existing diversion points, identify permanent flow meter locations, coordinate with the Delta Watermaster, and install approximately 88 or more meters with telemetry and support equipment. First eight flow meters were installed during FY 2020/21. Next set of 25 flow meters are planned to be installed during FY 2021/22, and rest of the flow meters are planned to be installed during the following two years.

Delta Smelt and Native Species Preservation Project

The Delta Smelt is a small, euryhaline fish species endemic to the San Francisco Estuary. Since the 1980s, the Delta Smelt population has exhibited a decline in abundance leading to it being listed as endangered under the California Endangered Species Act, which may potentially create additional regulatory operational constraints on water exports for state and federal water contractors. Metropolitan will work with multiple state and federal government agencies and researchers from UC Davis to advance research objectives through multiple collaborative study efforts. This project will utilize natural pond habitats located on tracts of land within the Delta to construct tule marsh wetlands, supplementation ponds, and associated hydraulic water conveyance systems including irrigation ditches and potential groundwater wells to address issues and questions including methods for successful reintroduction. This project also includes an evaluation to determine which of Metropolitan's Delta Islands would be the most suitable location for the project. Other goals related to this project could involve use of floating peat wetlands, setting back the existing levee, and reintroduction of tidal energy gradients. This is a new project for this budget cycle.

Etiwanda Pump Station

This project will construct a pump station to enable Metropolitan to pump CRA water from the Upper Feeder to the Rialto Pipeline in case of a disruption of supplies from the East Branch due to severe drought or earthquake. This project will include construction of new interconnecting pipeline, new suction and discharge manifolds, valves, electrical power and control facilities, and other features necessary to support the pump station. The Etiwanda Pipeline extends in a north-south direction for approximately 6.5 miles and connects the Rialto Pipeline with the Upper Feeder to provide the feeder with State Project Water (SPW). The Etiwanda Reservoir and Hydroelectric Plant (HEP) were constructed to generate power as the water is conveyed. This is a new project for this budget cycle.

Groundwater Well Rehabilitation and Treatment

This project will take groundwater wells owned and operated by Metropolitan's member agencies or their sub-agencies and rehabilitate them and/or to construct new groundwater wells to increase local groundwater production in Metropolitan's service area. Local groundwater supplies within Metropolitan's service area are currently underutilized due to contamination, political constraints, or cost concerns. This project will also add water treatment systems where needed to treat contaminated groundwater. Addition of the treatment systems will be primarily focused for State Project Water (SWP) dependent areas. This project will improve resiliency against severe drought or earthquake and reduce dependency on imported water supplies. This is a new project for this budget cycle.

Hayfield Groundwater Storage and Extraction

This project will improve the spreading basin and construct a well field extraction and conveyance system to withdraw stored CRA water and discharge it back into the CRA at the Hinds Pumping Plant. The initial stage of the project will focus on installing a limited conveyance system capable of extracting the 100,000 acre-ft stored in the Hayfield Groundwater Basin. This stage will include a groundwater well installation, pump and motor, and approximately 1,500 feet of small diameter pipe. The Hayfield basin is located south of the Julian Hinds Pumping Plant, adjacent to the CRA. The project will improve drought resilience and enhance reliability of CRA operation. This is a new project for this budget cycle.

Inland Feeder-Citrus Reservoir and Pump Station Intertie

This project will construct an intertie between the Inland Feeder and a San Bernardino Valley Municipal Water District (SBVMWD) and Department of Water Resources (DWR) pump station. The intertie will include pipelines, valve vaults with valves, electrical and control systems, and other features necessary to support the intertie operation. Construction of an intertie between the Inland Feeder and a SBVMWD and DWR pump station would enable Metropolitan to deliver water from DVL to the Rialto Pipeline service area. After completion of this project along with completion of Inland Feeder-Rialto Pipeline Intertie and Wadsworth Pump Discharge Eastside Pipeline Bypass, up to 160 cfs will be able to be delivered from Diamond Valley Lake to the Rialto Pipeline. This project will improve resiliency against severe drought or earthquake by providing the Rialto Pipeline region a second source of water besides State Water Project (SWP) supplies.

Inland Feeder-Rialto Pipeline Intertie

This project will construct an intertie pipeline between the Inland Feeder and the Rialto Pipeline south of Department of Water Resources (DWR) Devil Canyon. The intertie will be approximately seven feet in diameter and 200 feet long, and will include a large diameter valve, meter, and valve and meter structures, and other features necessary to support the intertie operation. Currently flows from the Inland Feeder must pass through higher elevation DWR facilities which reduces flow and expends more energy. An intertie will allow delivery of up to 60 cfs of water from San Bernardino Valley Municipal Water District (SBVMWD) and DWR via a water exchange program. After completion of this project along with completion of Wadsworth Pump Discharge Eastside Pipeline Bypass and Inland Feeder-Citrus Reservoir and Pump Station Intertie, up to 160 cfs will be able to be delivered from Diamond Valley Lake to the Rialto Pipeline. This project will improve resiliency against severe drought or earthquake by providing the Rialto Pipeline region a second source of water besides State Water Project (SWP) supplies.

La Verne Pipeline & Weymouth Plant Intertie and Upper Feeder Modification

This project will provide an alternate source of supplies for groundwater replenishment at Service Connection USG-03. USG-3 is a replenishment connection located at the end of the Glendora Tunnel and is typically fed by the Rialto Feeder/Live Oak Reservoir, which is untreated State Project Water (SPW). In times of low SPW supplies, an alternative connection from CRA supplies will allow continued delivery of supplies. This project may include an intertie between the Weymouth plant and the La Verne Pipeline, and modification of a blow-off and/or air release & air vacuum valve on Upper Feeder near Azusa Canyon, and other features necessary to provide an alternate source of supplies at USG-3. This project will improve resiliency against severe drought or earthquake. This is a new project for this budget cycle.

Lake Perris Seepage Water Conveyance Pipeline

Metropolitan and Department of Water Resources (DWR) have partnered to design and construct facilities to capture and convey Lake Perris leakage water to the CRA. DWR will design and construct a seepage collection wellfield near the foot of the Lake Perris Dam, and this project will design and construct a conveyance pipeline extending from the DWR wellfield to the CRA.

New Westside Pump Stations

This project will construct a new or expand existing pump stations to convey approximately 100 cfs of CRA water into areas reliant on State Project Water (SPW). This may involve constructing two new pump stations, one at Venice PCS and one at Sepulveda Canyon PCS or expanding pumping capacity at the Greg Avenue Pump Station or some other facilities. Project elements will include pipelines, vertical or horizontal pumps, motors, interconnection piping to the Sepulveda Feeder; valve control structures; mechanical equipment for surge control; electrical modifications; and a small building at each site. This project will improve resiliency against severe drought and seismic events in the west side of Metropolitan's service area by mitigating the reduction in State Water Project (SWP) supplies.

Perris Control Facility & Hydroelectric Plant Upgrades

The Lake Perris Control Facility (LPCF) includes a pressure control structure, pump back system with four electric and two diesel pumps, and a hydroelectric plant. This facility controls flows from delivered from the Department of Water Resources Silverwood Reservoir located at Devil's Canyon, and Lake Perris to the Lakeview Pipeline. To improve Mills Plant reliability, water from Diamond Valley Lake and Inland Feeder can be delivered to Mills plant by gravity flow but would require some modifications to the Lake Perris Control Facility's pressure control structure and HEP. The project will upgrade the LPCF systems to handle the maximum head of 1934 feet (from the Inland Feeder) by upgrading components of the pressure control structure and replacement of the hydroelectric plant.

Perris Valley Pipeline – Tunnels

The objective of the Perris Valley Pipeline is to supply additional water deliveries from Mills plant to EMWD and WMWD per their request. Construction of this 6.5-mile-long pipeline was initiated in 2007, to be implemented under two contracts: the North Reach consisting of 2.7 miles of pipeline and two service connections (WR-24 and EM-23), and the South Reach consisting of 3.8 miles of pipeline and two additional service connections (WR-35 and EM-24). In 2009, the North Reach was completed and placed in service. In 2010, 3.3 miles of the South Reach were completed. The Perris Valley Pipeline Interstate 215 Crossing project will complete a remaining half-mile-long section approximately midway along the South Reach and enable placing the South Reach in service. This project consists of construction of an approximate 1,700-foot-long tunnel and tie-ins to the previously constructed reaches.

Rialto Pipeline and Mills Plant Pump Station

Several service connections within Metropolitan's service area rely on State Water Project water supplies to deliver water. One such area is along the Rialto Pipeline. This project will enable backup water supply deliveries from the Colorado River Aqueduct (CRA) or Diamond Valley Lake (DVL) to these areas. It will allow more operational flexibility by enabling DVL or CRA water to be delivered to the Rialto Pipeline as well as the Mills plant, and will also enhance reliability in a seismic event or during planned shutdowns. This new pump station at PC-1 control structure, which will include pumps, valves, suction and discharge manifolds, interconnection pipelines, and electrical power and control facilities, may be constructed to also serve as a power generation facility. After completion of this project along with the Wadsworth Pump Discharge to Eastside Pipeline Bypass and the Inland Feeder-Rialto Pipeline Intertie, water from both the CRA and from DVL can be delivered to both the Rialto Pipeline and to the Mills plant. The Pump Station will meet the future demands of both Mills and Rialto Pipeline service areas. This is a new project for this budget cycle.

Service Area Interconnection Enhancement

This project will construct new or enhance existing water delivery and treatment infrastructure between Metropolitan and its member agency systems and between the member agency and sub-agency systems to reduce SWP reliant areas and provide increased flexibility for future long-term shutdowns. This infrastructure may include but are not limited to service connections, pipelines, pump stations, and treatment facilities. This project will improve resiliency against severe droughts or earthquakes. This is a new project for this budget cycle.

Wadsworth Pump Discharge to Eastside Pipeline Bypass

This project will construct a bypass pipeline connecting the Wadsworth Pumping Plant discharge pipeline to the Eastside Pipeline to allow continuous pumping from the Diamond Valley Lake (DVL) forebay to supply DVL water to the Mills plant and the Rialto Pipeline via PC-1 Pump Station in case of a supply disruption from the State Water Project's (SWP) East Branch due to severe drought or earthquake. The bypass will be approximately seven feet in diameter and 700 feet long and will include a large diameter valve with a valve structure, and other features necessary to support the bypass operation. In addition, a surge tank system will be installed to protect the Inland Feeder from pressure surges. After completion of this project along with completion of Inland Feeder-Rialto Pipeline Intertie and Inland Feeder-Citrus Reservoir and Pump Station Intertie, up to 160 cfs will be able to be delivered from Diamond Valley Lake to the Rialto Pipeline. The Wadsworth Pumping Plant is located near Hemet at DVL. The pumping plant includes 12 vertical turbine pumps that are used to pump water into DVL or to generate electricity when water flows out of DVL into the forebay/San Diego Canal.

System Reliability Program

Fiscal Year 2022/23 Estimate: \$48.5 million

Fiscal Year 2023/24 Estimate: \$37.7 million

Program Information: The System Reliability Program is comprised of projects to improve or modify facilities located throughout Metropolitan's service area in order to utilize new processes and/or technologies and improve facility safety and overall reliability. These include projects related to Metropolitan's Supervisory Control and Data Acquisition (SCADA) system and other Information Technology projects.

Accomplishments for FY 2020/21 and FY 2021/22

New projects initiated:

- Applications-Servers Upgrade from Old Windows OS
- Arc Flash Software Model Development
- Enterprise GIS Disaster Recovery
- Etiwanda Test Facility
- Headquarters Building Physical Security Improvements - Stage 2
- HQ HVAC System Equipment Upgrades – Phase 1
- Information Technology Service Management System
- Two-Way Radio System Upgrade
- Weymouth Area Paving

Major milestones achieved:

- Business Systems Disaster Recovery Upgrade – deployment completed
- Control System Upgrade – Phases 1 & 2 - completed
- Data Center Modernization Upgrade Phase I – backup data center completed
- Information Technology Service Management System – deployment completed
- Information Technology System – Communication Infrastructure Reliability Upgrade – deployment completed
- IT Network Reliability Upgrades – deployment completed
- La Verne Shops Improvements – Equipment Installation and Building Completion – design completed
- Lake Mathews Facility Wastewater System Replacement – construction started
- Lake Mathews IT Disaster Recovery Facility Upgrades – deployment completed
- Maximo Upgrade – deployment completed
- MWD HQ Boardroom Technology Upgrade – deployment completed
- Skinner Area Paving– construction started
- Water Ordering and Energy Scheduling System – deployment completed

Objectives for FYs 2022/23 and 2023/24

Project	Total Project Estimate	Estimated Construction Completion	Major Milestones
AMR System RTUs and Radio Modem Upgrade Project	\$ 13,000,000	2023	Complete deployment
Applications-Servers Upgrade from Old Windows OS	\$ 2,800,000	2024	Complete deployment
Control System Upgrade - Phase 4	\$ 6,400,000	2024	Begin Phase 4
Data Center Backup Infrastructure Upgrade	\$ 1,600,000	2022	Complete deployment
Data Center Modernization Upgrade	\$ 8,800,000	2022	Complete Phase 2 deployment
Desert Microwave Tower Site Upgrades	\$ 8,100,000	2024	Complete design and begin construction
Enterprise Data Analytics	\$ 3,300,000	2022	Complete deployment of pilot
Enterprise GIS Disaster Recovery	\$ 300,000	2022	Complete deployment
Fuel Management System Upgrade	\$ 1,300,000	2022	Complete deployment
La Verne Shops Improvements - Equipment Installation and Building Completion	\$ 14,000,000	2023	Complete construction
Maximo Mobile Upgrade	\$ 500,000	2022	Complete deployment
Security Operation Center	\$ 4,500,000	2022	Complete construction
Two-Way Radio System Upgrade	\$ 7,700,000	2022	Complete deployment of pilot
Headquarters Building Improvements	\$ 78,600,000	2022	Complete construction
WiFi Upgrade	\$ 5,300,000	2022	Complete deployment at Headquarters

IT/SCADA - Infrastructure Project Group

AMR System RTUs and Radio Modem Upgrade

The Automatic Meter Reading (AMR) system is a critical component for transmitting meter information to allow for billing of member agency water deliveries and analysis of official meter instrumentation. The current system was mostly installed between 2008 and 2009. Portions of the AMR System must be updated because of equipment obsolescence and diminishing vendor support, as they are approaching their end of life. This project is planned to be completed in three phases. The first phase consists of a pilot study to evaluate various communication technologies, field test each of the selected communication technologies, and installation of 900 MHz radio modems and master radio station near Garvey Reservoir. The second phase consists of replacement of the remaining radio modems and radio master stations. The third phase consists of replacement of the AMR Remote Terminal Units (RTUs), operator interface terminals, digital displays, configuration laptops, battery chargers for Uninterruptible Power Supply (UPS), associated networking equipment and servers, and other appurtenances to complete the upgrades. It is anticipated that the Control System Upgrade Conceptual Design project (Phase 2 of the Control System Upgrade) will recommend that the technology used in the AMR system be made consistent with the technology used in the SCADA (Supervisory Control and Data Acquisition) system. Thus, the third phase (AMR RTUs) will be started after the Control System Upgrade Phase 4 (final design) is initiated.

Applications-Servers Upgrade from Old Windows OS

A significant number of Metropolitan's systems, including a number of critical enterprise-level business and water applications, are currently running on outdated Microsoft Windows platforms (e.g., Windows 2003, 2007, and 2008). These platforms are either already no longer being supported or will shortly cease to be supported by the Microsoft Corporation. Microsoft's support includes software updates and security-related patches to fix technical issues and mitigate potential new security risks. Losing these software and security updates will increase cyber-security risks for the unsupported platforms. This project will upgrade all older application environments to Windows 2016. Phase 1 of the project will identify and document required changes, and will group applications into four deployment waves. Phase 2 will deploy the upgrades on each of the four groups identified in Phase 1.

Arc Flash Software Model Development

An arc flash is the light and heat produced from an electric arc supplied with enough electrical energy to cause substantial damage, harm, fire, or injury. Arc flash risk analysis is required per National Fire Protection Association (NFPA), National Electrical Code (NEC), and Occupational Safety and Health Administration (OSHA) standards. Metropolitan currently uses a generic tabular approach to quantify the arc flash hazard; this approach is no longer in compliance with the latest NFPA 70E standards. Comprehensive modeling that considers the effects of the surrounding equipment and accurately identifies the arc flash hazards is now required. This project will develop software models for Metropolitan facilities that are susceptible to arc flash hazards. The models will provide complete and consistent information that will identify equipment improvements to improve safety and to meet regulatory compliance. This project will also install arc flash labels for all equipment required to be labeled per the NFPA standards.

Asset Monitoring and Management System

This project will establish the foundation for leveraging data already maintained by Metropolitan (under multiple different software platforms) into a common framework in order to efficiently conduct future infrastructure reliability projects and assessments across Metropolitan. This project is needed to support a common condition monitoring framework across Engineering Services (ESG) and Water System Operations (WSO) groups, as well as to support condition-based maintenance initiatives as part of General Manager's initiatives and WSO's business plan.

This project includes building software tools to access and aggregate ESG, WSO, and other asset-related data, such as data from finance, to facilitate infrastructure reliability investigations on one class of assets (revenue meters). Eventually, the software tools developed as a part of this project will be used for future condition assessments in ESG and WSO.

Asset Monitoring System Stage 1 Conveyance and Distribution

Currently, asset condition and performance data are maintained in multiple data systems. At times, data is redundant, not consistent, or missing resulting in delays in decision making and increased uncertainty. This project will create an integrated dashboard interface inter-connected with existing disparate data systems and utilize geographic information system (GIS) functionality to visualize key information related to asset health, condition, performance, location, and other key data in the conveyance and distribution system. Subsequent stages will address treatment plants, reservoirs, power transmission lines, support facilities, communication sites, fleet, real property, and advanced water purification. This is a new project for this budget cycle.

CIP Budgeting System Improvements

The Capital Investment Plan (CIP) process has been in place for over 20 years and since inception, the process has been largely manual. The scope of this project is to consolidate the CIP proposal, risk form, and cash flow form into one seamless single proposal form. This project will also create a new evaluation form, which will be designed to leverage the available historical evaluation data, new scores suggested by the proposal form, and risk/consequence data to provide a clearer reference of information when evaluating projects. This project will reduce staff time to generate proposals and required CIP documents, and also reduce the scoring efforts. This is a new project for this budget cycle.

Control System Upgrade

Metropolitan's control system spans the CRA, Metropolitan's five water treatment plants, and the entire conveyance and distribution system. The system-wide control system upgrade is planned to be implemented in a phased approach through the following projects to upgrade hardware, software, and a communications network. Currently, the phases are planned to consist of the following projects:

- Phase 1 - Preliminary investigations
- Phase 2 - Conceptual design of the new control system
- Phase 3 - Selection and demonstration testing
- Phase 4 - Final Design of Mills Area
- Phase 5 - Implementation Mills Area
- Phase 6 - Final Design of Skinner Area
- Phase 7 and later - Continued final design and installation/construction of the new control system in multiple staged contracts

Data Center Backup Infrastructure Upgrade

Critical business and water applications rely on backup processes to restore the applications as soon as possible in an emergency. As Metropolitan's data volume progressively increases, so does the duration of the processes to backup, restore, and recover operations. Metropolitan's current backup software was deployed 15 years ago and uses magnetic tape as the storage medium. This project will replace the backup infrastructure with newer and faster technology and will redesign the backup/restore processes and procedures using the latest components of the backup software.

Data Center Modernization Upgrade

The purpose of this project is to assess, redesign, and upgrade the MWD Headquarters (HQ) and Lake Mathews data centers to provide sufficient computing power and modernize the data centers to meet current and future capacity, security, and reliability needs. This project will conduct a detail assessment, design, and relocate the HQ and Lake Mathews data centers to improve security and reliability.

Desert Microwave Tower Site Upgrades

This two-phase project will improve the reliability, performance, and capacity to Metropolitan's microwave radio wide-area-networks (WANs). Phase 1 will address the most critical components that need to be replaced or upgraded in the Desert Region microwave tower sites. Phase 2 will upgrade the remainder of the sites throughout Southern California. Lessons learned from the Diamond Valley Lake (DVL) microwave proof-of-concept will be used in this project. The microwave network uses wireless transmission over radio frequency energy in the 6-18 Giga Hertz range.

Distribution System Online Analyzers Replacement

Online analyzers continuously monitor water quality in the treated water distribution system and help ensure that safe reliable water reaches our member agencies. They provide prompt indication of water quality issues and an early warning to allow actions to be taken to minimize impacts. The existing online analyzers are almost 20 years old and have exceeded their typical service life. They are outdated, no longer sold or supported by vendors, and replacement parts are becoming increasingly difficult to obtain. At approximately 23 locations, this project will (depending on the location): decommission existing analyzers; install chlorine, turbidity, UV and total ammonia analyzers; install conductivity and pH probes; and install prefabricated sheds. This is a new project for this budget cycle.

Engineering Information System Upgrade

The goal of this project is to upgrade ProjectWise (Engineering's Information System) to the latest version, install and configure additional ProjectWise modules, and integrate ProjectWise with other Metropolitan systems such as DocuSign, Outlook, SharePoint, and Deliverables Management to implement additional functionalities in ProjectWise. The intent is to streamline the workflow in Engineering design and improve access to information and documents in ProjectWise.

Enterprise Asset Planning System

Currently, short-term asset renewals are addressed by staff submitting Capital Investment Plan (CIP) proposals that identify upcoming needs to maintain a reliable system. This project will acquire a software application and implement a comprehensive solution to forecast long-term asset lifecycle costs. The resulting decision support tool will support the strategic planning for renewal of Metropolitan assets based on condition, performance, outage constraints, staff resource limitations, planned budget, shutdown schedules, relative value, and risk. This is a new project for this budget cycle.

Enterprise Data Analytics

Building an Enterprise Data Warehouse & Analytics to answer both operational and strategic questions facing Metropolitan. The Data Warehouse will be built of individual data marts modeling a specific business area providing integrated reporting through Extract/Transform/Load (ETL) procedures and common dimensions. This Enterprise Data Warehouse will contain both business and operational data. It will be designed to combine these two data types in order to provide a financial dimension to operational data. By linking data like EBS (Financial), SCADA, GIS and Water Supply/Demand, staff can model different scenarios to answer questions and to discover trends and anomalies previously not visible due to isolated reporting.

Enterprise GIS Disaster Recovery

This project will add the Enterprise GIS (EGIS) infrastructure to the Metropolitan IT Disaster Recovery Facility (DRF) in Riverside County. This includes the purchase, installation, and configuration of new hardware and software to meet Business Impact Analysis (BIA) study requirements for the EGIS infrastructure. The current recovery time for EGIS infrastructure is estimated at greater than a week. The BIA Recovery Time Objective (RTO) for the EGIS infrastructure is less than 72 hours, meaning that the EGIS infrastructure should be functional within 72 hours after an outage. This project will reduce the RTO for the EGIS infrastructure from 72 hours to 1 hour, so that EGIS data could potentially be used to assist in emergency operations.

Fiber Installation at Iron Mountain, Eagle Mountain, and Hinds Pumping Plants

Metropolitan currently relies on microwave radio equipment to provide a voice and data communication backbone for the business network, the Supervisory Control and Data Acquisition (SCADA) network, Automated Meter Reading (AMR), and two-way radio network. Information Technology Group's strategic vision is for more reliable fiber optic cables to become the primary communications path connecting all desert sites. This project will connect Iron Mountain, Eagle Mountain, and Hinds Pumping Plants to the public telecommunications network using fiber optic cable thereby enhancing reliability and increasing bandwidth of communications for desert facilities. The fiber optic would follow the paths of existing power transmission lines and terminate in the areas near switchyards and will require repeater stations. A separate project to install a fiber optic line from Gene Pumping Plant to Parker Dam is scheduled for completion in 2023. This is a new project for this budget cycle.

Fuel Management System Upgrade

This project's objective is to upgrade the twelve-year-old Fuel Management System (FMS), which is no longer supported by the manufacturer. The FMS provides essential management controls over fuel inventories, dispensing, and security. It identifies and authorizes the dispensing of fuel and records fuel transactions and fuel tank data in a centralized database. This project will replace the necessary hardware and software to upgrade the FMS and to integrate it with Metropolitan's Computerized Maintenance Management System (CMMS), Maximo.

Gene Communication System Upgrade

Metropolitan's microwave radio wide-area network (WAN) was constructed in the late 1990s and is approaching the end of its useful service life. The network is comprised of 72 transmission tower sites located throughout Southern California, including 24 which support the CRA. It transmits telephone, voice, data, and video communication between all Metropolitan facilities, utilizing point-to-point microwave transmission. While microwave transmission is highly effective, it is limited to line-of-sight propagation; thus, it cannot pass through mountains or other similar obstacles.

Gene Pumping Plant relies on a microwave tower at Black Metal Mountain and does not have a redundant site to support the plant if the system at Black Metal Mountain were to fail. Furthermore, the desert region now requires high-capacity carrier-grade communication links to provide reliable data, voice, and video transmission to support the need of new IT and supervisory control and data acquisition system (SCADA) infrastructures. The type of information that rely on this network are real-time data from the supervisory control and data acquisition system, automated meter reading system, security cameras and teleprotection, and system alarms to Metropolitan's control facilities, and provides access at remote sites to the email, geographical information system, Oracle financial, timekeeping, and PeopleSoft applications. This project will install approximately 22 poles and two miles of fiber optic cable from Parker Dam to Gene Pumping Plant administration building to connect to high-quality, high-speed data system to improve a variety of technological challenges at the desert facilities.

Hydraulic Model Enhancements

Metropolitan uses its current state-of-the industry hydraulic model daily in support of operational and facility planning requests. While the model has significant hydraulic simulation capabilities, this project proposes to enhance the software to better address water quality analyses, hydroelectric power plant power production estimating, hydraulic surge transient analysis, flood simulations, and other studies. The proposed enhancements also include storing this information on the cloud for improved data access. This is a new project for this budget cycle.

Hydraulic Modeling Analysis Toolkit and Water Quality Calibration

Metropolitan's Engineering Services Group completed development of a system-wide hydraulic model in January 2017 after a multi-year development effort. Even while model development was still underway, many uses for the hydraulic model were identified. This project includes developing tools to support hydraulic model analysis to increase efficiency and enhance productivity while using the hydraulic model for analysis. The project also includes development and calibration of water quality modeling capabilities.

Maximo Mobile Interface Software

Metropolitan uses Maximo software to schedule, plan, and execute maintenance work. Currently, Maximo web-based software is not designed for mobile use and desktop or laptop computers are used to generate work orders as the primary method to distribute and plan work for field staff. This project will install and configure a mobile software system that will allow field employees to interact with the Maximo Computer Maintenance Management System from iPad mobile devices. The new system will maximize the value of the new mobile devices, increase the options and opportunity to implement a proactive data driven maintenance strategy, improve response time for corrective actions, and improve timely access to information such as manuals, construction plans, and work plans. This is a new project for this budget cycle.

Maximo Mobile Upgrade

The goal of this project is to replace existing mobile devices used in WSO with latest tablet technology. The project will enable the use of capabilities of the existing mobile software system that are not available on the existing hardware devices. The project includes an initial pilot evaluation with a purchase of 30 units to evaluate different models and test features. The overall goal will be to purchase several hundred devices following the completion of the pilot evaluation. The new devices will eliminate or reduce the need for desktop computers at field sites and vastly increase the functionality of the existing Maximo mobile devices.

Replacement of Network Switches at MWD Headquarters Building

Network switches are the backbone of the Information Technology (IT) network and connect all IT systems and infrastructure components. There are currently 12 network switches that were installed at Metropolitan Headquarters in 2014 which have reached end of their life cycle and are going out of support. Replacement of these network switches is needed to mitigate risks presented by old and out of support switches. This project will consist of multiple deployments of 12 new network switches at Metropolitan Headquarters. This is a new project for this budget cycle.

Security Operations Center

This is the second phase of the Cyber Security Upgrades project. The first phase concluded that additional cyber projects were needed to mitigate evolving threats. This phase will assess and remediate exposures and cyber security threats throughout Metropolitan with special emphasis on the business and SCADA networks. Maintaining a secure computing infrastructure requires application of ongoing cyber countermeasures to protect against new cyber threats that are identified on a continual basis. The scope of this project includes engaging a security consultant to perform an independent assessment of Metropolitan's IT infrastructure and environment to identify potential vulnerabilities and deploy effective solutions to strengthen our cyber security.

Security Operations Center - Cyber Security Upgrade Phase 2

Cyber security remains a high priority and is a key part of the Information Technology Strategic Plan. Cyber criminals, including cyber terrorists from rogue nations, are launching increasingly sophisticated threats targeting critical infrastructure agencies such as water utilities. This project will assess and remediate exposures and cyber threats throughout Metropolitan with special emphasis on the business and Supervisory Control and Data Acquisition (SCADA) networks. The proposed security measures will enhance incident response times, protect against social engineering attacks, enhance SCADA security, and protect the rapidly growing network of Metropolitan's connected objects including SCADA sensors and telemetry data. This is a new project for this budget cycle.

Standby Generator Relocation at Six WAN Sites

Metropolitan's Wide Area Network (WAN) provides a critical communication and data link between facilities across the distribution system. The Standby generators at six WAN sites must be relocated for consistency with the current fire codes and to enhance safety. These generators are needed to provide backup power in the event of loss of primary power. The planned improvements will reduce the risk of damage to communication equipment and the buildings in the event of a fuel leak. Metropolitan forces will relocate the standby generators at six WAN sites to reduce the risk of fire damage to Metropolitan's communication systems. The standby generators will be moved to new locations in separate outdoor enclosures, consistent with current fire codes.

Two-Way Radio System Upgrade

Metropolitan's current Two-Way Radio system is approaching the end of its service life, and both vendor and after-market support will cease in the next few years. The existing Two-Way Radio system is Metropolitan's essential communication system for public/employee safety, and for communications when Metropolitan performs tasks involving member agencies. This project will upgrade or replace specific components of the Two-Way Radio system, reusing the majority of the infrastructure; replace some unsupported radios; and will provide improvements to address poor reception at some locations. The upgraded Two-Way Radio system will include features anticipated to provide higher capacity, higher levels of cybersecurity, additional management and monitoring features, and multi-level resiliency.

Water Quality Laboratory Instrumentation Modernization and Data Acquisition Automation

Metropolitan's La Verne Water Quality Laboratory houses a significant number of analytical and water sampling instruments that support many of Metropolitan's business functions, including demonstrating regulatory compliance with drinking water standards and water treatment optimization. Historically, Metropolitan has approached replacement of obsolete instrumentation through individual purchases. This strategy has limited the rate of upgrades or replacement. In addition, many of the laboratory's instruments include vendor-provided dedicated computer workstations, loaded with software that is sometimes maintained by the vendor, and sometimes by Metropolitan's IT staff. This has resulted in cybersecurity vulnerability, as well as multiple non-standard computer images, operating systems, and software versions. Finally, the diversity of instrumentation in the laboratory has made it difficult to acquire data from the various instrumentation systems. This project will upgrade laboratory instrumentation to accommodate cybersecurity issues, prevent obsolescence of laboratory instrumentation, and allow integration of data acquisition efforts.

Western Region Microwave Tower Sites Upgrade Project

The western region microwave network consists of 52 sites with microwave radios that provide a voice and data communication backbone for the business network, the Supervisory Control and Data Acquisition (SCADA) network, Automated Meter Reading (AMR), and the two-way radio network. A majority of Metropolitan's current microwave radios are over twelve years old and have reached the end of their service lives, are no longer supported by the manufacturer, and replacement parts and software updates are no longer available leaving microwave infrastructure vulnerable to equipment failure. Also, inspection of the electrical grounding systems has revealed deficiencies in grounding requirements of some sites and, due to regulatory changes, some propane generators may require upgrades. This project will decrease the frequency of microwave system troubleshooting and repair activities and increase in network service reliability. The scope is to procure microwave radio equipment and associated antennas with waveguides; design microwave network and system infrastructure; install equipment on towers and inside buildings; design and install battery backup systems; rectify any grounding issues; and review the condition and level of code compliance of the propane generator systems and upgrade as necessary. This is a new project for this budget cycle.

WiFi Upgrade

This WiFi Upgrade project will improve the reliability, performance, and capacity to Metropolitan's wireless access point (WAP) local-area-networks (LANs) at Headquarters and various field facilities. It will also provide a secure, reliable and robust WiFi System to support increasing business demands and reliance on Metropolitan's wireless infrastructure. The scope for this project includes (1) migration and implementation design plan, (2) removal of obsolete access points and controllers, (3) installation of cable in building ceiling for access points, (4) installation of new access points, and (5) configuration and installation of new controllers.

Operations Support Project Group**Apprentice Training Center Facility**

The current apprentice training center (ATC) has come to the end of its useful life and lacks the needed space for break rooms and training without reconfigurations. As a result, some training modules are outsourced to other vocational training colleges and programs. This project will refurbish and make modifications to the former Diamond Valley Lake (DVL) Visitor Center building to enable its use as Metropolitan's apprentice training center facility. The former visitor center building was completed in 2008 and shares several building components with the adjacent Western Science Center Museum. The project will address the need for additional space dedicated to individual apprentice training center functions such as break rooms, classrooms, restrooms with added capacity and ample space for library and storage areas. The project will also address the aging and obsolete building systems that are currently shared with the adjacent Western Science Center Museum. To meet Metropolitan building standards, upgrades will be made to security, access, architectural, mechanical, electrical, plumbing systems, and other building features and equipment. Completion of this project will provide the necessary facilities for apprentice training well into the future for the development of the workforce that will operate and maintain Metropolitan's conveyance, distribution, and treatment systems. This is a new project for this budget cycle.

CRA Aircraft Facility Improvements

Metropolitan owns and operates several airstrips along the Colorado River Aqueduct (CRA) that are deteriorating with age. There is also no designated landing area for helicopters or an enclosed area to store aircraft. Currently, planes must be taken offsite for hangar storage in Lake Havasu. The project will design and construct various improvements to runway pavement and landing communication systems at the four aircraft facilities located near the CRA Pumping Plants (Gene, Iron Mountain, Eagle Mountain, and Hinds). This includes (1) rehabilitation of the existing asphalt paved runway, (2) rehabilitate the existing asphalt paved access road leading to the runway and construct new asphalt paved access road to replace the existing access road without asphalt pavement, (3) replacement of the existing incandescent bulb lighting along the runways at Iron Mountain and Eagle Mountain with energy efficient Light Emitting Diode (LED) bulbs, (4) installation of a weather reporting station at Eagle Mountain and Hinds Pumping Plants, (5) construction of a new helipad at Eagle Mountain Pumping Plant and, (6) construction of a new aircraft hangar and parking area at the runway facility near Gene Pumping Plant. This is a new project for this budget cycle.

CRA Pumping Plant Access Road Rehabilitation

The Colorado River Aqueduct (CRA) pumping plant access roads must accommodate heavy traffic loads for deliveries of chemicals, materials, equipment, and staff. The existing asphalt roads are distressed and show numerous areas of longitudinal and alligator cracking. The harsh desert climate conditions have caused the pavement to age and become distressed more quickly. These roads are the sole means of access to the pumping plants, making reliable use of the roads critical to allow equipment, chemical, and material deliveries, ingress for first responders, and general access. This project will rehabilitate approximately 11 miles of the existing access roads leading to the Intake, Iron Mountain, Eagle Mountain, and Hinds Pumping Plants using a combination of pavement overlay and pavement replacement with new aggregate base subgrade. This project will also include pavement markings. This is a new project for this budget cycle.

District-wide Fall Protection Improvements

Working at elevated areas within 6-feet of an edge that have 6-feet falling height, requires fall protection per California Occupational Safety and Health Administration (Cal-OSHA) regulations. The current procedures require that when employees need to enter a rooftop area to service equipment, they must develop and implement a specific plan for safe access; complete a job safety hazard checklist to address all fall hazards; and utilize safety belts, lanyards, or other approved fall protection systems as required. This project will construct guardrail and skylight fall protection on building rooftops, and other types of fall abatement projection for other serviceable areas on facilities with fall protection deficiencies at the District's five Colorado River Aqueduct pumping plants, five water treatment plants, and other miscellaneous facilities throughout the service area per Cal-OSHA Title 8 requirements. Engineered controls such as guardrails and skylight screens will provide the highest level of protection ensuring safety, limiting District liability, improving staff productivity, and ensuring compliance with Cal-OSHA requirements. This is a new project for this budget cycle.

District-wide Zero and Near-Zero Emissions Fleet Infrastructure

Identifying new ways to reduce greenhouse gas (GHG) emissions and reduce Metropolitan's carbon footprint is essential to the implantation of Metropolitan's Climate Action Plan (CAP). This project will design and construct infrastructure to meet mandated Zero Emission (ZE) and Near-Zero Emission (NZE) state and local regulations and comply with California Environmental Quality Act (CEQA) GHG reductions identified in CAP. This project would be implemented in phases, starting with development of a comprehensive transition plan to a ZE and NZE fleet, implementation of transition plan that includes interim and long-term infrastructure design, installation of recommended infrastructure (e.g., charging and/or dispensing stations), and installation of infrastructure related to solar and/or battery energy storage and other sustainability opportunities. The fleet includes passenger vehicles; light-, medium-, and heavy-duty on-road vehicles, off-road construction vehicles/equipment; forklifts; and employee and rideshare vehicles.

Eagle Rock Security Upgrade

The Eagle Rock Operations Control Center (OCC) was built in 1995 in the City of Pasadena. The OCC coordinates and controls Metropolitan's water conveyance and distribution system throughout its entire service area. As the main hub of this system, the OCC is pivotal for the management of water deliveries through Metropolitan facilities. The site currently consists of (1) a two-story building that houses the OCC, the Emergency Operations Center, and several staff offices, (2) a two-story older structure that holds the Business Incident Command Post, Security Water Center, several offices, and a Control Systems shop, and (3) several concrete structures used for transporting water. A vulnerability assessment of the OCC site was conducted in 2017. This assessment identified several security issues of concern as a result of trespassing onto the property. A security assessment identified the site's use by hikers in the area, site accessibility by individuals who have established homeless encampments in the area, and illegal dumping. Proposed site improvements include replacement of the main and lower entrance gates, and existing intercom system at the gates; and installation of additional security cameras, lighting fixtures, flood lights with motion detectors, fencing, gates around the perimeter of building, signage, new electrical and communication conduits, and other related security features.

HVAC System Assessments & Upgrades - Field Facilities

Metropolitan's facilities include nearly 700 structures with over 2,000 pieces of heating, ventilation, and air conditioning (HVAC) equipment. Approximately 80% of the HVAC equipment used by Metropolitan supports process systems that are required to treat or distribute water, and for regulatory compliance. The majority of Metropolitan's HVAC equipment is over 32 years old, requiring more corrective maintenance to remain operational, and consuming more electricity than newer, more energy efficient units. This project consists of a five-year, phased replacement of outdated HVAC infrastructure with certified energy efficient equipment, and will address regulatory changes in EPA guidelines, which are phasing out the refrigerants currently used in most of MWD's HVAC systems. The project will also (1) modernize HVAC controllers into a cohesive building automation network to allow Metropolitan staff to more efficiently respond to HVAC interruptions, more quickly troubleshoot problems, provide early detection of problems before catastrophic failures, and ensure optimal performance of the HVAC systems; and (2) upgrade existing or install new air filtration systems with high efficiency particulate air (HEPA) filtration and germicidal equipment such as UV disinfection to occupied buildings to provide enhanced protection from airborne viral and bacterial particulates.

La Verne Shops Improvements

The La Verne Shops are located on the grounds of the Weymouth plant and have been in service since 1941. The shops were expanded in the 1960s, and were expanded again in the 1980s to support a major rehabilitation of the pumps along the CRA.

A shop modernization program was started in 2002, and included building expansions and upgrades, and shop equipment replacement or refurbishment. Most of the shop equipment is 27 to 37 years old, with a few pieces close to 47 years old, and a 20-year-plan to replace and refurbish the shop equipment has been developed. The building expansions and upgrades included expanding the existing shop buildings, upgrading portions of the existing buildings, and replacing and refurbishing shop equipment. The first four stages of this project are complete, which included building expansion and refurbishment/replacement of most of the equipment.

The fifth and final stage focuses on the procurement and installation of new fabrication and machine shop equipment, including a hydraulic shear, hydraulic press brake, waterjet cutting system, horizontal band saw, and vertical machining center. This new equipment will replace existing equipment that is up to 35 years old and is not viable to refurbish. This last stage will also include refurbishment of various remaining existing machines; safety upgrades to roof ladders and walkways; and installation of new electrical circuit, unit power center for an uninterruptible power supply, ductbanks for various utilities, shop heaters, air compressors, various utilities, and other appurtenances to support the shop operations.

La Verne Field Engineering Building Replacement

This project provides a new Field Engineering Building to replace the existing one, which does not meet Metropolitan's current seismic building standards, and is limited in function due to HVAC deficiencies and work space constraints. The Field Engineering Building, located at Metropolitan's La Verne Facility, was designed and built over 52 years ago in accordance with building codes current at that time.

This project will include a detailed value engineering study to confirm the recommended approach to construct a new building in lieu of retrofits to the existing structure. This project will also include a comprehensive siting study to ensure that the proposed footprint of the new building does not interfere with the current and future requirements of Metropolitan's La Verne Facility. This project will enhance infrastructure safety, security, and resiliency.

La Verne Support Buildings Seismic Improvements

As part of Metropolitan's seismic upgrade program, a rapid evaluation was conducted and identified seismic deficiencies in Weymouth Softener Buildings Nos. 1, 2, and 3, Weymouth Central Stores Storage/Paint Shop - Building 32/32A, and the Weymouth General Storage Building - Building No. 33. This project will evaluate future uses of these structures, construct improvements to address these deficiencies, as well as, should it provide value to the District, improve non-structural features in each building such as roofing, insulation, and other building characteristics. This is a new project for this budget cycle.

Lake Mathews, Garvey and CUF Support Facilities Seismic Upgrade

As part of Metropolitan's seismic upgrade program, a rapid evaluation was conducted and identified seismic deficiencies in the Garvey microwave station; the Lake Mathews Hazardous Materials Building, meter shop, auto shop, and heavy equipment shop; the Chlorine Unloading Facility Main Office; and other buildings at these locations. This project will construct improvements to address these deficiencies, as well as, should it provide value to the District, improve non-structural features in each building such as roofing, insulation, and other building characteristics. This is a new project for this budget cycle.

Lake Mathews Facility Wastewater System Replacement

The wastewater system at Lake Mathews has been in operation for nearly 82 years and is no longer reliable. Despite receiving regular maintenance, the system is exhibiting signs of failure including plumbing and septic tank backups, clogged leach fields, and slow-draining collection pipes. On-site treatment of the wastewater via septic tanks will be discontinued, and new collector lines will be connected to the local sewer system that was installed in the early 2000s. Western Municipal Water District has a nearby sewer main that includes a connection point specifically installed for Metropolitan's future use. This connection can accept wastewater by gravity from the entire on-site system. This project will remove the on-site wastewater system and construct wastewater system that ties into the Western Municipal Water District's sewer line to reduce the risk of costly unplanned repairs and to maintain system reliability.

Etiwanda Test Facility

Metropolitan had previously used its Yorba Linda Facility to evaluate and equipment, test operational concepts and qualify equipment. The water used for testing was obtained from the Santiago Lateral and discharged into the Santa Ana River. Environmental constraints on the discharge of water made the facility's use impractical, and the test facility was shutdown. This project constructs a new test facility at Etiwanda Reservoir in order to test new emerging technologies, emerging regulations related to metering, and to validate non-standard service connections. Specifically, a new facility would allow staff to test equipment such as valves, meters, coatings, and other treatment and distribution devices; conduct expedited test to maintain a pre-approved equipment list for low bid procurement; simulate problematic flow meter installations and low flow conditions; and test the accuracy of existing flow meter installations.

New La Verne Warehouse

The Central Stores Warehouse at La Verne is Metropolitan's main warehouse for storing materials, supplies and equipment used by field personnel to support Metropolitan's operations. It is comprised of four main buildings (Buildings 30, 31, 32A, and 33). A recently completed seismic evaluation found that the buildings may be damaged from a maximum credible earthquake. The cost to retrofit the all four buildings is cost prohibitive. In addition, the buildings lack the storage space necessary to house Metropolitan's materials, supplies and equipment. The buildings also are not suitable to safely store adequate supplies of medical grade supplies and essential commodities for emergency preparedness such as for pandemics. Furthermore, they lack equipment to handle large assets like the large diameter specialty valves. This project will construct a new warehouse, which will provide approximately 55,000 square feet of indoor floor space with approximately 30,000 square feet of outdoor storage yard covered under canopies. This project will also demolish Buildings 30 and 31 and restore and seismically retrofit the Buildings 32A and 33 to meet the current building code. The new warehouse and retrofitted buildings will support Metropolitan's ongoing operations and maintenance, capital construction efforts, and emergency preparedness.

System-wide Paving & Roof Replacements

Similar to infrastructure throughout Metropolitan, pavements and roofs deteriorate over time due to wear and tear from use, weathering and precipitation. The planned pavement and roofing rehabilitation projects will encompass water treatment plants, pumping plants, various maintenance facilities and access roads within Metropolitan's service areas. These projects will also improve the subgrade and drainage systems as required.

This project will allow various paving and roof replacements throughout Metropolitan's facilities to be authorized by the General Manager similar to the Minor Capital Projects Program. Establishing a project to fund a limited amount of paving and roof replacement on an annual basis will allow these needed replacement projects to proceed expeditiously.

Water Quality Laboratory Building Seismic & HVAC Upgrades

This project addresses seismic upgrades, building expansion, and other building improvements for the Water Quality Laboratory. The Water Quality Lab was constructed in accordance with the building codes at the time of construction and is treated as an essential facility. However, industry knowledge of earthquakes and seismic design has greatly improved over the years, leading to the development of more stringent, modern seismic codes for this type of facility. To minimize the risk of damage to the plant during a major earthquake, seismic upgrades are recommended. Also, new regulatory requirements associated with Quagga Mussels, per- and polyfluoroalkyl substances (PFAS), and other water quality concerns will be addressed.

In addition to the seismic upgrades, a building expansion and functional layout improvements such as laboratory and office space reconfiguration, lab equipment replacements, accessibility improvements, HVAC and roof replacements, and other related building improvements necessary to renovate the building to support Metropolitan to meet current and future water quality regulations.

System Reliability - Security and Other Project Group**Coyote Creek PCS HEP Perimeter Security Upgrade**

The Coyote Creek Pressure Control Structure (PCS) and Hydroelectric Plant (HEP) facility falls under North American Electric Reliability Corporation (NERC) and Federal Energy Regulatory Commission (FERC) oversight and must adhere to critical infrastructure regulations set by these agencies. The current perimeter security fencing and security measures at this site do not meet the NERC/FERC security standards. This project will replace all perimeter fencing and both entry gates, relocate the rear vehicle gate to the front of the driveway at Lambert Road, and install multiple network security detection systems to detect and deter unauthorized individuals from accessing the site. This is a new project for this budget cycle.

Diamond Valley Lake Network Security Detection Systems

In 2018, a serial arsonist set 11 fires in the Diamond Valley Lake (DVL) area. This project will install multiple network detection security systems around DVL to cover areas with historically high security incidents. The network detection security system will utilize ground-based radar and thermal imaging as necessary to monitor for trespassing, criminal activity, security incidents, illegal dumping, fire, and medical emergencies. This is a new project for this budget cycle.

Eastern Region Security Camera Replacement

The existing camera system that serves the Eastern Region of Metropolitan's distribution system requires frequent maintenance, is obsolete and is not integrated with the current enterprise system, and its coverage is incomplete. This project will replace the existing camera system with new enhanced camera system and install other security related equipment in this region to enhance the theft and trespassing detection and deterrence, lower maintenance costs, and better leverage the available bandwidth and data storage capabilities to provide better video feeds and recordings. This is a new project for this budget cycle.

Etiwanda Reservoir Security Upgrades

Etiwanda Reservoir has experienced incidents of trespassing and illegal dumping. This project will replace the gate near residences with a high security gate that is cut and climb resistant and install multiple network security detection systems to detect and deter unauthorized individuals from accessing the site. This is a new project for this budget cycle.

Headquarters Building Automation System Upgrades

The building automation system controls all lighting, carbon monoxide monitoring system, HVAC, and associated mechanical equipment in Metropolitan's Headquarters Building. The system is required to operate the building in an energy efficient manner, consistent with Title 24 energy efficiency standards. In the event of a building automation system failure, thermal control within the data center would be lost and garage exhaust fans within the parking garage would become inoperable, resulting in damage to critical facilities and unsafe conditions, respectively. The existing building automation system is obsolete and is no longer supported by the manufacturer.

This project will replace the existing building automation system with a new nonproprietary system and will support integration of the new fire and smoke control systems that will be installed under the Headquarters improvements project.

Headquarters Building Interior and Exterior Lighting and Control System Upgrade

The existing fluorescent lighting fixtures in the Metropolitan Headquarters building are 23 years old and past their service lives. As the fixtures and components continue to age, the risk of fire hazard will increase and in July 2019, a fire incident occurred on the first floor due to the deterioration of fixture components. This project will replace and upgrade interior and exterior lighting with new energy efficient light emitting diode (LED) fixtures controlled by a new lighting control system which allows for programmable on/off, dimming, daylight harvesting, and occupancy sensing. This project will bring the building lighting up to the current California Title 24 building standards and may qualify for Los Angeles Department of Water and Power's Commercial Lighting Incentive Program. This is a new project for this budget cycle.

Headquarters Chiller Plant Upgrade

Metropolitan's Headquarters' original central plant cooling equipment was installed in 1997 when the building was constructed. This equipment provides the comfort cooling requirements for the Metropolitan Headquarters Building. Chillers and cooling tower equipment typically has a lifespan of 10 to 25 years and the existing equipment in the building is no exception. Costs to maintain the aging, obsolete, and inefficient equipment continue to increase. This project will replace the central plant cooling equipment with new chillers, cooling towers and related mechanical, electronic and electrical systems that meet today's energy efficiency and seismic standards. This is a new project for this budget cycle.

Headquarters Facility Replacement of Modular Furniture

The service life of office modular furniture is about 20 years and the existing furniture in Metropolitan Headquarters Building predates the building since it was originally purchased and used when Metropolitan worked out of Cal Plaza. Additionally, the furniture supplier has discontinued this line of products. This project includes space planning, which will develop new furniture standards and guidelines that address changing organizational needs; replacement of obsolete modular furniture; installation of new common use space/privacy rooms/meeting rooms/storage; additional enclosed offices; associated power, communication and network installations in walls, ceilings, and floors; and other work to comply with safety codes. This is a new project for this budget cycle.

Headquarters Improvements

Analysis has confirmed that the Headquarters Building does not meet current building code criteria for an Essential Facility. While the building remains safe to occupy, seismic strengthening to meet updated code levels is recommended in order for operations and business functions to continue following a major earthquake. This upgrade will increase the Headquarters Building's level of seismic performance and safety to that of an existing state-owned building and will reduce the risk of significant damage and resulting business interruption due to a major earthquake.

Construction of the seismic upgrades poses logistical challenges associated with the major retrofit of a high-rise building while the facility remains operational. During the anticipated three-year duration of construction, two to three floors of the high-rise tower will be vacated sequentially to allow a contractor to execute the repairs. Metropolitan staff will be relocated in stages to the five-story wing of the building.

Seismic upgrade work provides an opportunity to complete improvements to specific building systems in a cost-effective manner, while the floors are unoccupied and building finishes are removed. The Headquarters Building is over 20 years old, and some of its features need to be upgraded or replaced. These features include the fire/life safety systems including existing fire sprinkler piping at the parking garage, some of the kitchen equipment and ceiling/wall finishes, HVAC system equipment including cooling towers, air handler units, chillers, air disinfection systems, and associated mechanical, electrical, and control systems, restroom facilities on several floors, and video rooms and video production equipment.

Headquarters Security Improvements

The comprehensive security upgrades for Metropolitan's Union Station Headquarters have been prioritized and staged to minimize rework and impacts to operations. The Stage 1 work is complete, which enhanced perimeter windows and doors by providing needed blast protection. The Stage 2 work, currently in construction, provides security system upgrades inside the building with entry validation, surveillance and intrusion protection, and additional security features in the main entry rotunda area, board room, executive dining lounge, and security control room. Stage 3 is in design phase and will enhance perimeter security along the exterior of the building and courtyard including bollards and gates.

Hinds Pumping Plant Perimeter Security Upgrades

Existing portions of the current perimeter fencing at Hinds Pumping Plant are deteriorated and do not deter intruders. The inability to properly monitor the area has resulted in incidents of theft and illegal dumping. This project will install a complete and continuous anti-cut anti-climb perimeter fence and multiple network security detection systems at Hinds Pumping Plant to detect and deter unauthorized individuals from accessing the site. This is a new project for this budget cycle.

Lake Mathews Network Security Detection Systems

Existing portions of the current perimeter fencing at the Lake Mathews facility are deteriorated and do not prevent intruders. The inability to properly monitor the area has resulted in incidents of theft and illegal dumping. This project will install multiple network detection security systems around Lake Mathews to cover areas with historically high security incidents. The network detection security system will utilize ground-based radar and thermal imaging to monitor for trespassing, criminal activity, security incidents, illegal dumping, fire, and medical emergencies. This is a new project for this budget cycle.

Perris PCS Perimeter Security Upgrades

The current fencing at the Perris Pressure Control Structure (PCS) is inadequate, evidenced by a recent intrusion. This project will replace all perimeter fencing with a high security fence that is cut and climb resistant with a 3-strand barbed wire top guard, and install multiple network security detection systems with the intent to lower the District's exposure to theft, arson, and vandalism. This is a new project for this budget cycle.

Power Switch Yard Protection

Several of Metropolitan's switch yard facilities fall under North American Electric Reliability Corporation (NERC) and Federal Energy Regulatory Commission (FERC) oversight and must adhere to infrastructure regulations set by these agencies. This project will install ballistic barriers and chain link roofs at all power switch yards throughout the District to protect equipment from projectiles and drone attacks. This is a new project for this budget cycle.

Security System Upgrade

The electronic security system is the backbone of Metropolitan's physical security system. Studies indicate that replacement of the 17-year-old system is not yet required; however, incremental upgrades are needed to extend the life of the system. Work includes hardware and software upgrades to network controllers, computer servers, card readers, and the video management system.

Valley View PCS HEP Perimeter Security Upgrades

The Valley View Pressure Control Structure (PCS) and Hydroelectric Plant (HEP) facility falls under North American Electric Reliability Corporation (NERC) and Federal Energy Regulatory Commission (FERC) oversight and must adhere to critical infrastructure regulations set by these agencies. Upgrades to perimeter security fencing and security measures are needed to comply with NERC/FERC security standards. This project will replace fencing and gates to meet security standards and will install multiple network security detection systems to detect and deter unauthorized individuals from accessing the site. This is a new project for this budget cycle.

Wadsworth/DVL Control & Protection System Upgrade

This project is the final phase of the Wadsworth Pumping Plant/DVL control system upgrade and includes replacement of the entire Diamond Valley Lake (DVL) control and communications systems, the protection relay system, UPS, vibration monitoring system, and pump/turbine drive controls.

West Portal Perimeter Security Upgrade

The West Portal site of the San Jacinto Tunnel does not have a continuous perimeter fence. The location is susceptible to intruders. This project will install a complete and continuous anti-cut anti-climb perimeter fence with barbed wire top guard at West Portal to meet security standards and will install multiple network security detection systems to detect and deter unauthorized individuals from accessing the site. This is a new project for this budget cycle.

Western Region Security Camera Replacement

The existing camera system that serves the Western Region of Metropolitan's distribution system requires frequent maintenance, is obsolete, is not integrated with the current enterprise system, and its coverage is incomplete. This project will replace the existing camera system with new enhanced camera system and install other security related equipment in this region to enhance the theft and trespassing detection and deterrence, lower maintenance costs, and better leverage the available bandwidth and data storage capabilities to provide better video feeds and recordings. This is a new project for this budget cycle.

Treatment Plant Reliability Program

Fiscal Year 2022/23 Estimate: \$24.9 million

Fiscal Year 2023/24 Estimate: \$17.2 million

Program Information: *The Treatment Plant Reliability Program is comprised of projects to replace or refurbish facilities and components of Metropolitan's five water treatment plants in order to continue to reliably meet treated water demands.*

Accomplishments for FY 2020/21 and FY 2021/22

Diemer Plant

New Projects Initiated:

- Diemer Electrical Improvements
- Diemer Filter Rehabilitation
- Diemer Power and Distribution Panel Upgrades

Major Milestones Achieved:

- Diemer Basin Rehabilitation - construction of the west basins completed
- Diemer Filter Building Seismic Upgrades - construction of seismic upgrades for the west filter building completed
- Diemer Filter Valve Replacement - construction of valve replacement for the west filters completed
- Diemer Water Sampling System Improvements - construction completed

Jensen Plant

New Projects Initiated:

- Jensen Control Room HVAC
- Jensen New Caustic Soda Tank Farm at the Combined Filter Effluent
- Jensen Reservoir Bypass Gate Refurbishment

Major Milestones Achieved:

- Jensen Modules 2 and 3 Flocculator Rehabilitation – construction completed
- Jensen Ozone PSU and Critical Component Upgrade – design completed
- Jensen Electrical Upgrades - Stage 2 – construction completed

Mills Plant

New Projects Initiated:

- Mills Ozone PLC Control and Communication Equipment Upgrade
- Mills Electrical Upgrades – Stage 2

Major Milestones Achieved:

- Mills Electrical Upgrades – construction of Stage 1 completed
- Mills Electrical Upgrades – construction of Stage 2 started
- Mills Ozone PLC Control and Communication Equipment Upgrade – procurement contract awarded

Skinner Plant

New Projects Initiated:

- Skinner Fluoride Tank Replacement

Major Milestones Achieved:

- Skinner Survey Building Roof Replacement – construction completed
- Skinner Ozone PLC Upgrade – installation completed

Weymouth Plant

New Projects Initiated

- None

Major Milestones Achieved:

- Weymouth Basins 5-8 and Inlet Channel Refurbishment – final design completed
- Weymouth Chlorination System Upgrades – construction completed
- Weymouth Domestic Water System Improvements – construction completed
- Weymouth Water Quality Instrumentation Improvements – construction completed

Objectives for FYs 2022/23 and 2023/24

Project	Total Project Estimate	Estimated Construction Completion	Major Milestones
Diemer Chemical Feed Systems Improvements	\$ 11,300,000	2026	Complete design
Diemer Filter Rehabilitation	\$ 49,700,000	2026	Complete design
Jensen Electrical Upgrades - Stages 1 & 2	\$ 54,000,000	2022	Complete Stage 2 construction
Jensen Ozone PSU and Critical Component Upgrade	\$ 14,300,000	2023	Complete construction
Jensen Site Security Upgrade	\$ 2,100,000	2024	Complete construction
Mills Electrical Upgrades - Stage 2	\$ 14,500,000	2024	Complete construction of Stage 2
Mills Fluorosilicic Acid Tank Replacement	\$ 2,500,000	2024	Complete construction
Mills Perimeter Security and Erosion Control Improvements	\$ 5,800,000	2024	Complete construction
Skinner Fluorosilicic Acid Tank Replacement	\$ 1,600,000	2024	Complete construction
Skinner Ozone Contactor Roof Elastomeric Coating	\$ 2,300,000	2023	Complete construction
Skinner Sulfuric Acid Transfer Line Rehabilitation	\$ 1,400,000	2025	Complete design
Weymouth Basin 5-8 and Inlet Channel Refurbishment	\$ 65,000,000	2024	Begin construction
Weymouth Filter Valve Replacement	\$ 24,400,000	2024	Begin construction
Weymouth Hazardous Waste Staging and Containment	\$ 2,600,000	2023	Complete construction

Diemer Project Group

Diemer Administration Building HVAC Replacement

The existing HVAC system in the Diemer plant's Administration Building consists of two 20-ton, chilled and hot water coiled air-handling units, which maintain multi-zone work-space environments on both floors. The 57-year-old units are beyond their expected operating life and have caused issues with regular maintenance activities. This project will replace the existing HVAC units with new energy efficient units and upgrade the temperature control system for the building. The project will also replace chiller, boiler, compressor, and make ductwork modifications. Seismic anchorage of the equipment will be incorporated to meet the current building code.

Diemer Chemical Feed System Improvements

The chemical feed equipment for ammonia, alum/ferric chloride, sodium hydroxide, fluorosilicic acid, liquid polymer, and dry polymer at the Diemer plant has aged and its reliability has deteriorated over the years. Most equipment is over 22 years old and has experienced failures. Some of the repair parts are no longer manufactured and are difficult to obtain. Loss of chemical feed or inadequate feeding capacity could disrupt plant operations. In addition, design criteria for some of the chemicals have changed and the existing equipment is unable to cover the required range for chemical feed. This project will replace the worn-out feed equipment and optimize the system design to improve system reliability and to protect treated water quality.

A canopy over the caustic soda tank farm and a new fluoride tank farm is needed to improve operations at the Diemer plant. Heat tracing around caustic feed lines is required to feed 50% caustic soda during the winter months. However, rainwater trapped within the chemical containment area could submerge the heat tracing wires. A canopy will minimize rainwater accumulation within the containment area and eliminate electrical hazards. The plant's fluoride tanks have reached the end of their service life and lack access for inspection and maintenance. This project will install a canopy over the existing caustic soda feed equipment; and replace the two fluoride storage tanks, associated feed equipment, and the roof over the fluoride tank farm.

Diemer Power and Distribution Panel Upgrades

Power and distribution panels that were installed during the original Diemer plant construction, are more than 57 years old. These panels, circuit breakers, and feeder conductors (wires that feed the panels) have exceeded their normal life span and have deteriorated. This project will upgrade the aged electrical equipment to meet the current electrical code and enhance the plant's reliability. The improvements will allow the electrical equipment to be taken out of service for preventive maintenance, replacement, and testing in a safe working condition.

Diemer Erosion Control Improvements

The Diemer plant is located on the top of a hill in the city of Yorba Linda and consists of numerous fill slopes. Due to the large water-bearing structures at the Diemer plant, some of these slopes are within the State of California Department of Water Resources Division of Safety of Dams (DSOD)'s jurisdiction. Some slopes within the Diemer plant have eroded and are in need of rehabilitation. This project will provide site improvements for grading, drainage, and erosion/sediment control to erosion-damaged slopes at the plant site.

Diemer Filter Rehabilitation

The Diemer plant has 48 independent filter units that are normally operated from the main control room, although they also have the capability to be operated locally if needed. Over the life of the Diemer plant, staff has performed regular maintenance on the filters to support reliable plant operation. However, as regulations and source water conditions have changed, filter performance reliability has decreased. Metropolitan's Water Quality recently developed recommendations for the rehabilitation of all Weymouth filters, including reconfiguration of underdrains, media, troughs and surface wash systems. Due to the similarities between the filters at Diemer and Weymouth, staff recommends implementing the same filter modifications at the Diemer plant.

This project will rehabilitate all of the Diemer plant's filters to improve their performance and enhance treatment plant reliability. The planned rehabilitation work includes replacing the filter media with optimized size and depth specifications; replacing the surface wash system with larger piping and improved flow configuration; replacing the underdrains; modifying flow distribution flumes; and raising and replacing the existing troughs to accommodate a higher depth of filter media.

Diemer Ozone Network Upgrade

Ozone is the primary disinfectant at Metropolitan's water treatment plants. At the Diemer plant, the programmable logic controllers (PLCs), which control the ozone process, have exceeded their service lives; are discontinued; and the existing firmware has security flaws. This project will replace the PLC processors, upgrade the network modules to ethernet, modify the existing fiber optic cable infrastructure to support the new district standard ethernet, and other appurtenances necessary to complete the upgrade. The existing PLC configuration will be migrated to the new processors and the operations manual will be updated to reflect the associated changes. This is a new project for this budget cycle.

Diemer Washwater Reclamation Facilities Reliability Improvement

Approximately 40 percent of Diemer plant's existing Washwater Reclamation Plant (WWRP) is constructed on long slender piles and earthen fill, which form a level surface at the top of a slope. Seismic rehabilitation is required to ensure reliability of the WWRP facility. In addition, submerged WWRP equipment is continually subjected to abrasive and corrosive operating conditions caused by the solids in the used filter backwash water. The WWRP's two identical treatment trains share a common influent channel and both must be removed from service during maintenance. This project will retrofit the WWRP with reliability improvements, including a new coal grit removal facility and new headworks to allow independent shut-down of each individual process trains. Seismic stabilization will be accomplished by replacing the existing sedimentation basins with smaller footprint inclined plate settlers to reduce the footprint and move the process away from the seismically vulnerable fill portion of the pad. The project also includes modifications to the existing chemical feed system, sludge line, and utilities at the west slope.

Diemer Water Sampling System Improvements

The existing sample lines at the Diemer plant do not meet the 10-minute turnover rate requirement from sample point to laboratory sample taps due to long sample lines and pressure limit for the existing polypropylene tubing used to transport the samples. This project will upgrade the existing sample lines and all sample pumps to allow higher operational pressure to shorten the transport time. In addition, new chlorine analyzers, turbidimeters, and pH analyzers will be installed closer to the sample locations to eliminate variable analytical results caused by algae growth, solids deposition, temperature variation, and excessive detention time in the sample lines. These local analyzers will reduce distances from sample point to analyzer to better represent actual conditions in the process stream.

Jensen Project Group**Jensen Bull Creek Repair**

The Bull Creek channel located on the east side of the Jensen plant has suffered significant erosion from continued stormwater flow during the past wet seasons. This project will rehabilitate approximately 800 feet of the Bull Creek channel to prevent erosion through the use of biological and engineered solutions. The work includes: installation of rip rap and slurry backfill along the channel; repairing damaged concrete liner on the channel sides, restoration of the broken apron next to the railroad bridge, and revegetation of native species to keep sediments in place and reduce erosion. In addition, a catch basin and other stormwater management infrastructure will be constructed along the San Fernando service road to the Jensen plant, to mitigate excessive erosion on the north bank of the Bull Creek.

Jensen Chemical Feed Improvements

This project will improve several chemical feed systems at the Jensen plant, including replacing two fluorosilicic acid (fluoride) tanks, rehabilitation of sulfuric acid tanks, construction of a new caustic soda tank farm near the filtered water line, and containment upgrades for the liquid polymer system.

The Jensen plant relies on two 9,000-gallon cross-linked high-density polyethylene (HDPE) tanks for the storage of fluorosilicic acid. Internal inspections have identified cracks in the two fluorosilicic acid tanks. This project will replace the fluoride tanks with tanks of the same capacity and improved mechanical properties to provide an expected service life of 20 years.

A recent internal inspection of one of two sulfuric acid tanks at the Jensen plant identified corrosion in the tank wall material and welds. Reconfiguration of the transfer piping and basket strainer is needed to minimize clogging and facilitate chemical transfer between the tanks. This project will rehabilitate Jensen's two sulfuric acid storage tanks, apply new protective coating to the sulfuric acid tank farm, and complete minor modifications to the sulfuric acid feed system piping within the acid tank farm.

The Jensen plant's existing caustic soda tank farm was installed in 1970, and needs to be replaced. Caustic soda is used to increase the pH for corrosion control. The caustic soda dosage varies based on source water quality and the amount of other chemicals (e.g. sulfuric acid and alum) applied during the treatment process. Currently at the Jensen plant, sulfuric acid is added to suppress the pH and control bromate formation and then caustic soda is added to reduce corrosion in the distribution system. This project allows the Jensen plant to meet current water quality design criteria for bromate control with the addition of ammonia and chlorine added upstream of the ozone contactor. This approach would significantly reduce the plant's usage of both sulfuric acid and caustic and reduce overall chemical costs. With the ammonia-chlorine process to control bromate, caustic soda would only need to be added to the filtered water. This allows the new caustic soda tank farm to be sized, designed, and built specifically for adding caustic soda to the filtered water. This project will replace the existing tank farm with a new facility located near the filtered water line.

In addition, the liquid polymer unloading facility does not have a permanent spill containment system. This project will provide a permanent single concrete unloading facility for both chlorine neutralizing caustic soda and liquid polymer chemicals, equipped with a new sump and discharge piping to provide secondary containment. In addition, the ferric chloride handling facility and the Liquid Polymer Building will be removed.

Jensen Chlorine Caustic Scrubber Tanks Replacement

Similar to the other four water treatment plants, the Jensen plant uses caustic scrubbers to neutralize chlorine gas in the event of an accidental leak in the chlorine containment building. The existing scrubber systems are experiencing corrosion and the best option for rehabilitation of this safety system is replacement of the scrubber tanks. This project replaces the caustic scrubber tanks and associated equipment. This is a new project for this budget cycle.

Jensen Control Room HVAC

The Jensen plant was placed into service in 1972. During recent wildfire events, it was observed that existing HVAC systems do not meet the objective of reliably maintaining air quality in the control rooms that must be staffed at all times. This project will provide improved air quality in the Jensen control rooms to ensure that the plant can be reliably operated during periods of poor outdoor air quality. This project will: (1) install dedicated high-efficiency heating, ventilating, and air conditioning (HVAC) system for the main plant control room in the administration building and the secondary plant control room in the ozone generator building, and (2) seal the two control rooms from other portions of the building to reduce smoke or other air quality contaminants from entering the control room.

Jensen Electrical Upgrades

The Jensen plant's electrical system was designed to meet then-current electrical codes when the plant was constructed over 42 years ago. The aging electrical equipment has deteriorated through long-term continuous use, lacks redundancy, and is difficult to maintain and repair. Much of the equipment is underrated by current standards and does not have adequate short-circuit interrupting capability, which results in an elevated risk of unplanned outages and equipment damage. This project will replace aging equipment and provide needed redundancy for critical components of the plant's electrical system. To expedite completion of the most critical electrical upgrades while minimizing impacts to plant operations, the upgrade work has been prioritized and staged. The Stage 1 work improved the medium voltage switchgear on the western portion of the plant and provided electrical infrastructure for the Jensen Solar Power Plant. Stage 2 improvements are underway to upgrade UPC-7, UPC-9, and their associated motor control centers to support critical process equipment such as the washwater pumps, service water pumps, washwater return pumps, filters, thickeners, sludge pumps, and ammonia facilities. Stage 3 improvements will upgrade the remaining components of the electrical system on the eastern portion of the plant, including geotechnical seismic analysis of the east side of the plant to determine areas of seismic vulnerability.

Jensen Entrance Improvements

Both main Jensen plant gates at San Fernando and Balboa entrances need to be redesigned to improve security and traffic flow consistent with Metropolitan's other Treatment Plants. This project will enhance security of the Jensen plant's entrances. Project scope includes replacement of security gates; installation of traffic control devices to improve security at the entrance points of the Jensen plant; and installation of fire-resistant plants and irrigation along the west side of the plant.

Jensen Hazardous Waste Containment Facility

The Jensen plant currently stores its hazardous waste in a storage area that was repurposed from a general equipment storage area. The existing site has inadequate storage space for the facilities' needs. In addition, the waste containment area roof covering does not provide adequate protection from the rain and sun. This project will replace and relocate the Jensen plant Hazardous Waste Consolidation Site (commonly known as 90-day storage).

Jensen Module 1 and Washwater Pump Rehabilitation

Washwater pumps are used to pump water from the combined filter effluent to the washwater tanks. The tank water is then used to back wash filters. If washwater pumps are unavailable, the plant cannot perform filter backwashes that are necessary to maintain operation of the filtration process. Jensen's Module No. 1 washwater (WW) lift pumps were installed with the original plant construction and have been in service for 52 years. Inspection and testing has revealed significant corrosion in the pumps' housings, and diminished pump output. The pumps have reached the end of their useful life and should be rehabilitated. This project will rehabilitate the Module No. 1 vertical turbine washwater lift pumps, modify the piping for the Module No. 1 service water and washwater lift pumps, and will replace the open motors with closed motors.

Jensen Modules 2 and 3 Traveling Bridge and Basin Rehabilitation

This project will rehabilitate Modules Nos. 2 and 3 traveling bridges and sedimentation basins at the Jensen plant to enhance solids removal efficiency. Planned work includes replacing the existing traveling bridge end-truck structure, drive system, rails, and racks; replacing suction pumps and flexible hoses; retrofitting the suction piping; replacing sludge line piping, rehabilitating/replacing launder gates and launders; upgrading the bridge control system and power supply; replacing the 48-existing basin inlet gate actuators; recoating bridge trusses; replacing basin guardrails; and installing improvements to prevent bird nesting within the basin.

Jensen Ozone PSU and Critical Component Upgrade

Ozone is used as the primary disinfectant at Metropolitan's treatment plants. However, the critical systems associated with ozone generation have deteriorated or have become obsolete after 17 years of operation and need to be upgraded. This project will upgrade the units that provide power to the Jensen plant's ozone generators and will replace outdated components of other critical systems associated with the plant's ozone generation, which have reached the end of their service life, and are no longer supported by the original equipment manufacturer. The systems to be upgraded include the following areas: (1) power supply unit (PSU); (2) nitrogen supply system; (3) ozone destruct units; (4) dissolved ozone; (5) cooling water loop; (6) ozone generator dielectrics; (7) liquid oxygen vaporizers; and (8) other components of the ozone system. This project also will make modifications to re-purpose one existing PSU chiller as a backup HVAC chiller.

Jensen Raw Water Emergency Bypass

The Jensen plant is located within proximity of a number of faults, which are capable of generating large earthquakes. In the event of a large earthquake that can cause extensive damages to the plant and disables the water treatment capability, the plant does not have an emergency raw water bypass to deliver raw water under a boil water order in such a need were to occur. This project will improve resiliency against severe earthquake and enhance operational flexibility by constructing a raw water emergency bypass for the Jensen plant.

Jensen Reservoir Bypass Gate Refurbishment

The Jensen plant's existing reservoir bypass gates were installed in 1972 and allow the reservoirs to be isolated in case of water quality issues. The bypass gates are corroded and are currently inoperable because portions of the bronze bearings are degraded and missing. This project will enhance infrastructure security, and resiliency, and will improve the reliability of water deliveries by replacing the reservoir bypass gates.

Jensen Site Security Upgrade

The outdated Jensen plant's security system needs an upgrade to minimize risk of an intrusion. The existing camera system is undersized and aged. Planned upgrade includes installation of additional card readers and motion-activated lights in sensitive areas; replacement of existing aging security cameras with high resolution cameras; addition of new cameras, motion detection devices, and public announcement speakers to monitor the perimeter of the plant and deter intruders; replacement of security signage to meet current code; security upgrades of first floor windows; addition of horizontal structural support to strengthen the existing gates; and addition of new defensive barrier plants and trees to screen the west side of the Jensen plant.

Jensen Solids Handling System Upgrades

Efficient recovery of water from residual solids is critical for the operation and efficiency of the Jensen plant, the current system consisting of solids thickeners on the Jensen site, and solids lagoons located at the adjacent Los Angeles Department of Water and Power (LADWP) site.

The solids thickeners play a key role in the recovery of water from the residual solids. During thickener operation, operators rotate valves daily to divert flow of residual solids to different thickeners. These valves leak and are difficult to access. This project will reconfigure Solids Pump Station No. 2 to allow better access to the valves; and upgrade the solids splitter vault to facilitate remote operation.

Metropolitan has an ongoing lagoon use agreement with LADWP, which allows for Metropolitan's use of four of the lagoons located at the Los Angeles Aqueduct Filtration Plant (LAAFP) to process solids generated and conveyed from the Jensen plant. Under this agreement, two of the lagoons can be used until October 1, 2062, and the other two until October 1, 2022. To reliably support the Jensen plant operation and provide operational flexibility during unfavorable source-water quality or higher water demand, it was recently determined that construction of two new lagoons to replace the two existing lagoons that must be returned to LADWP is not sufficient. This project will design and construct a new mechanical solids handling facility at the Jensen plant instead of constructing two new lagoons to replace the ones that must be returned to LADWP. This new mechanical facility will be sized to handle all of Jensen plant's solids handling needs when treating as much as 500 mgd.

San Fernando Road Rail Crossing Rehabilitation

The Jensen plant receives water treatment chemical supply by rail. Metropolitan's chlorine vendor is transitioning to heavier chemical railcars which require heavier gauge rails to meet Federal Railroad Administration regulations for hazardous chemical transportation requirements. This project will rehabilitate the deteriorated railroad crossing at San Fernando Road, upgrade the strength of the rails and turnout, add concrete crossing panels to handle heavy truck traffic, replace damaged asphalt, and install crossing arms and signage. This is a new project for this budget cycle.

Mills Project Group**Mills Basin Solids Removal Improvements**

Currently, the Mills plant removes solids from each sedimentation basin using a bridge-mounted siphon system and discharges the solids to the retention basins. However, the siphon flow cannot be adequately controlled. As a result, excessive amounts of water are often siphoned to the retention basins, causing increased solids drying time and reduced retention basin capacity. This project will upgrade the traveling bridges' solids removal equipment and controls to improve the solids removal process at the Mills plant's Modules Nos. 3 and 4. The new equipment and controls will allow the plant to optimize its solids removal process by simultaneously reducing the amount of water removed from the basin and reducing excessive solids build-up in the basins.

Mills Electrical Upgrades

The electrical system at the Mills plant has deteriorated through long-term use, is difficult to maintain and repair, and needs improved backup capability. Failure of a single electrical device could impact the treatment process. The electrical upgrades at the Mills plant will be completed in three stages. Stage 1 upgrades addressed the highest priority work, including replacement of obsolete circuit breakers, expansion of the electrical building for UPC-9, installation of new air conditioning system, installation of MCCs and distribution of power feed to chemical feeds systems, washwater return pumps, modules 3 and 4 filter surface wash pumps, and improvement of power reliability for key process equipment. Stage 2 upgrades will add a second incoming 12 kV service from Riverside Public Utilities and upgrade the plant's main switchgear and standby generator switchgear. Stage 3 upgrades will install climate control systems and doors at two electrical buildings, modify electrical manholes, replace digital metering modules for all motor control centers, and add fiber optic cabling.

Mills Fluorosilicic Acid Tank Replacement

The Mills plant relies on two 6,250-gallon cross-linked high-density polyethylene (HDPE) tanks for the storage of fluorosilicic acid. These tanks have a recommended service life of 10 years and have been in service since 2007. Recent inspections have identified leakage at the bolted connections of both tanks. This project will replace the fluorosilicic acid storage tanks with capacity of 7,900-gallon and improved mechanical properties to provide an expected service life of 20 years. The project will also replace coating in the containment area as necessary.

Mills Modules 3 and 4 Flash Mix Chemical Containment Upgrades

The existing flash mix areas at Mills Plant Modules 3 and 4 contain chemical feed equipment for ammonia, polymer, caustic, alum, sodium hypochlorite and chlorine. The equipment is contained within a low concrete curb. To reduce the risk of chemical releases, improved containment is needed. This project will replace the chemical piping in the area with double-walled piping with a leak detection system; replace flow meters, valves, actuators, and control panels, and install flow meter display units in a weatherproof enclosure outside of the containment areas.

Mills Ozone PLC Control and Communication Equipment Upgrade

The Mills plant ozonation equipment utilizes a type of Programmable Logic Controller (PLC) that was introduced to the commercial market in 1988. Computer hardware from that era is now outdated, and the PLC manufacturer has announced that it will no longer produce or support this equipment. Inventories of spare parts will no longer be maintained once exhausted. Failure of a PLC and/or its communication module could cause a disruption in the ozone control system. This project will replace the equipment and modify the software to operate with the new equipment for the Mills ozone control system. The upgraded system will feature Metropolitan-standardized PLCs in an open-architecture approach that staff will be able to maintain and upgrade in the future.

Mills Perimeter Security and Erosion Control Improvements

The Mills plant has approximately 14,500 linear feet of perimeter fencing that is primarily a chain link with a height of six to eight feet. The fencing and several of the entry gates are deteriorating and may be vulnerable to security breaches. In addition, stormwater runoff has eroded an area on the southern boundary of the plant. This project will replace 7,700 feet of the existing fence with security fencing along the plant's southern, northern and western boundaries, replace existing guard shack and motorized sliding gate at the Barton Street entrance with motorized double swing gate with associated controls, replace three existing secondary gates with taller security gates with security cameras, and install one security camera at each of the sliding gates. Grading and erosion control improvements, such as installation of v-ditches and flow re-direction, will also be performed to prevent sediment from leaving the site. All improvements will be consistent with Mills plant's architectural design guidelines, and with Metropolitan's approach to facility security.

Mills Raw Water Emergency Bypass

The Mills plant is located within proximity of a number of faults, which are capable of generating large earthquakes. In the event of a large earthquake that can cause extensive damages to the plant and disables the water treatment capability, the plant does not have an emergency raw water bypass to deliver raw water under a boil water order in such a need were to occur. This project will improve resiliency against severe earthquake and enhance operational flexibility by constructing a raw water emergency bypass for the Mills plant.

Skinner Project Group**Skinner Finished Water Reservoir Slide Gates Rehabilitation**

The three operational slide gates (Inlet, Outlet, and Bypass) that control the inlet and outlet flows from the Skinner Finished Water Reservoir have been exposed to a corrosive and wet environment since 1991. Visual inspections identified leaking gates and continuing deterioration of the slide gates' exterior coatings. These gates have been in service for 28 years and have not been recoated. This project will rehabilitate the three Skinner Finished Water Reservoir slide gates. The gates will be removed from the gate frames, thoroughly inspected for carbon steel material loss, blasted and recoated to extend their service life. The existing gate frames will be replaced with new frames and other installation components (i.e., guides, wedge blocks, and seals). In addition, the rejection structure will be modified to separate the stormwater and rejection water pipelines and prevent potential stormwater from flowing into the finished water reservoir.

Skinner Fire Protection System Expansion

The installation of a new Battery Energy Storage System (BESS) at the Skinner plant requires improvements to the plant's fire protection system. This project constructs a new fire hydrant, water pipes, and other improvements to provide a permanent fire protection water source for the Skinner's solar facility and BESS to comply with the fire codes. This is a new project for this budget cycle.

Skinner Fluorosilicic Acid Tank Replacement

Fluorosilicic acid tanks will be removed and replaced with two 8,200-gallon above-ground (Fluoride) tanks at the Skinner Plant. New extrusion-molded linear HOPE tanks will be installed. To minimize changes in the tank farm, the new tanks will match the dimensions and capacity of the existing tanks. Scope will include modification to the tank farm to provide access during construction and associated piping work to connect the new storage tanks to the existing chemically compatible PVDF tank farm piping. The new tanks will be mounted on the existing tank pads.

Skinner Module 7 Filter Inlet Valve Gearbox Replacement

Replace existing sixteen (16) units of discontinued and failing filter inlet valve gearboxes on Module 7 East and West Filter basins with new gearboxes to maintain a reliable filter operation at Skinner Plant. Removal of existing gearboxes and installation of new units will be undertaken by Skinner District Forces with the assistance of Engineering. Scheduling of the equipment replacement will be in accordance with Skinner Plant's water treatment operational requirements and with the water demand and supply conditions within the Skinner service area. Minor field adjustments will be done to align the existing actuators and vertical valve extension stems with the new valve and gearbox assemblies at the bottom of the filter influent channel.

Skinner Ozone Contactor Roof Elastomeric Coating

Leakage through cracks in Skinner plant's ozone roof deck was found in 2010. Cracks in the concrete roof deck can allow rain and nuisance water to be drawn down into the contactors which then mixes with the freshly ozonated water, creating a potential cross-connection. The water and air penetrating through the existing concrete roof decks exposes the rebar and structural steel in the decks, creating the potential of eventual structural failure to the roof decks. In addition, in order to keep the constant vacuum in the contactors, the Ozone Destruct Units have to work excessively which consumes additional electricity and affects the Destruct Units reliability and long-term life span. This project will abrasive blast, apply primer, and coat 61,000 square-feet of the Ozone Contactor Building concrete roof deck with an elastomeric coating to reduce potential structural damage and operational impact.

Skinner Ozone Contactors 1-2 and Influent Channel Concrete Refurbishment

Ozone gas and ozonated water are extremely corrosive oxidizers and can penetrate concrete walls to cause significant corrosion of structural steel and equipment. This project will inject chemical grout into the existing concrete walls of the Skinner Ozone Contactor Nos. 1 and 2 and the influent channel, in order to prevent ozone gas and ozonated water from penetrating the concrete walls.

Skinner Ozone Generator PLC Control & Communication Equipment Upgrade

The Skinner plant ozonation equipment utilizes a type of Programmable Logic Controller (PLC) that was introduced to the commercial market in 1988. Computer hardware from that era is now outdated, and the PLC manufacturer has announced that it will no longer produce or support this equipment. In addition, inventories of spare parts will no longer be maintained once exhausted. Failure of a PLC and/or its communication module could cause a disruption in the ozone control system. This project will replace the equipment and modify the software to operate with the new equipment for the Skinner ozone control system. The upgraded system will feature Metropolitan-standardized PLC's in a new code format to enable future maintenance and modifications as may be operationally necessary.

Skinner Plant 1 - Concrete Joint Sealant Replacement

Concrete joint sealant throughout Skinner Plant 1 is cracked, delaminating, degraded, or missing as it has exceeded its service life. The degradation has allowed vegetation growth and moisture, sediment, and other outside contaminants to enter and penetrate into the concrete joints. This project will remove severely degraded concrete joint sealant throughout Plant 1, prepare and primer the existing joints, and replace with new concrete joint sealant.

Skinner Raw Water Emergency Bypass

The Skinner plant is located within proximity of a number of faults, which are capable of generating large earthquakes. In the event of a large earthquake that can cause extensive damages to the plant and disables the water treatment capability, the plant does not have an emergency raw water bypass to deliver raw water under a boil water order in such a need were to occur. This project will improve resiliency against severe earthquake and enhance operational flexibility by constructing a raw water emergency bypass for the Skinner plant.

Skinner Sulfuric Acid Transfer Line Rehabilitation

The sulfuric acid transfer system at the Skinner plant is used to move chemical between tanks and is also used to homogenize the chemical within individual tanks. This critical water treatment system recently experienced a leak in a transfer pipeline. This project will replace degraded transfer and recirculation pipes with pipe made from more appropriate material, and includes adding pressure relief valves and alarms, and other appurtenant work to improve the safety and reliability of the sulfuric acid transfer system. This is a new project for this budget cycle.

Skinner WTP Service Building 1 Rehabilitation

Service Building 1 Rehabilitation will replace the sanitation facilities and roofing system and improve the staff work/meeting/lunch areas of the building. The scope includes the following: replace the roofing system; replace/upgrade all MEP and HVAC systems (mechanical; electrical; plumbing, heating, and air conditioning) to current building codes; upgrade IT requirements; comply with ADA requirements; improve employees shared facilities and offices (bathroom, locker rooms, break rooms, meeting rooms, cubicles); and abate all hazardous materials. Option to replace the building will be considered during the early phases of this project.

Weymouth Project Group**Oxidation Demonstration Plant Rehabilitation**

Constructed in 1992, the 5.5 MGD Oxidation Demonstration Plant (ODP) provides a 1:100 demonstration-scale test facility of Metropolitan's full-scale plants. This demonstration scale testing capability is needed to ensure that Metropolitan continues to meet all current and future drinking water regulations. Currently, much of ODP's infrastructure has reached the end of its service life, which adversely affects the facility's continued safe and reliable operation. Among other associated improvements, the project will remove obsolete equipment; install new ozone generators, a new liquid oxygen (LOX) storage tank, and associated equipment; install variable frequency drives (VFDs) for the backwash pumps; rehabilitate secondary containment system for all chemicals used at the plant; and upgrade other electrical, mechanical, and control systems to make the plant operation more efficient, reliable, and safe. This is a new project for this budget cycle.

Weymouth Administration and Control Building Seismic Upgrades

The Weymouth Administration Building has been in service since 1941 and houses the plant's control room and administrative staff. The building needs to be seismically upgraded to current standards since this building is over 77 years old and is a critical facility to the operation of the water treatment plant. The project includes reinforcement of the walls for the plant's filter outlet channel and abandoned inlet channel.

In conjunction with the seismic upgrades, the California Building Code (CBC) requires the installation of a fire sprinkler system and accessibility improvements. Electrical, mechanical, and plumbing components impacted by the upgrades will also be reconfigured and modernized. The Weymouth plant's water quality sampling laboratory and office space will also be updated and optimized where required. The existing laboratory has been in continuous service for nearly 32 years.

Weymouth Basins 1 & 2 Rehabilitation

Basins Nos. 1 & 2 were built in 1939 as part of the original Weymouth plant construction. Each basin has a treatment capacity of 57.5 million gallons per day. These basins were originally designed to treat Colorado River Water (CRW). With the addition of State Project Water (SPW), the plant periodically requires higher coagulant dosages than CRW. As a result, the basins operated at a higher solids loading rate than the rate for which the basins were originally designed. This situation has dramatically increased run time on the basins' circular sludge rakes, which remove sludge from the basins. As originally designed, the sludge rakes only operated 1 to 2 hours every 4-7 days. Under current conditions, the sludge rakes are operated 6 to 12 hours each day which results in more frequent maintenance. These basins also have had issues with low solids-settling rates within the basins and high particle loading to the filters, or short-circuiting. The project includes the rehabilitation of the flocculation basins, settling basins, sludge collection equipment, baffling, and edge weirs.

Weymouth Basins 5 - 8 and Inlet Channel Refurbishment

The basin inlet channels deliver water to each of the Weymouth plant's eight flocculation/sedimentation basins. The inlet channel serving Basins Nos. 1-4 is a concrete box culvert constructed in 1940, while the inlet channel serving Basins Nos. 5-8 was constructed in 1962. A structural assessment of the basin inlet channels has found that they should be upgraded to reduce the risk of damage from a major seismic event. Inspections have also identified that wooden baffle walls have deteriorated after repeated wet and dry cycles and have shown a propensity to support algae and microbial growth.

For the inlet channel serving Basins Nos. 1-4, this project will strengthen the conduit and will reconfigure the channel to provide additional flexibility. For the Basins Nos. 5-8 refurbishment, the project includes repairing the steel guides; replacing the drive and paddle shaft assemblies; replacing the baffle boards, supports, and paddle wheel boards in the flocculation section. The project also includes filling the interior corners of each cell with sloping concrete fillets to direct residual solids into the path of the rotating scrapers; refurbishing the structural members of the catwalks; replacing the sedimentation basin sludge collector rakes, drives, and pumps; replacing launders, launder isolation gates, and drains; installing utilities, handrails, and other work necessary to complete the basin refurbishment. Replacement of inlet channel gates for Basins 1 through 8 and inlet channel seismic structural upgrades for Basins 5 through 8 are also part of this project.

Weymouth Chlorine Delivery Railroad Tracks Replacement

The Weymouth plant receives chlorine deliveries via rail cars. The railroad spur to the Weymouth plant was originally installed in the 1930s to transport material and equipment for the construction of the Weymouth plant. This project will replace the track dedicated to the Weymouth plant, improve traffic control and intersections as necessary, and install new rail car scales. This is a new project for this budget cycle.

Weymouth Chlorine Maintenance Shop Expansion

With the completion of the Weymouth Chlorine System Upgrades project, the amount of equipment to maintain has increased resulting in insufficient space in the existing shop to perform necessary maintenance and accommodate storage of equipment and spare parts. Storage cabinets and electrical panels have been added where desks and workspace were located. Also, due to the space limitations, spare equipment is currently stored in the two storage bays which poses the potential of the equipment being compromised in the event of a leak. This project will expand the existing Chlorine Maintenance Shop including a room addition to ensure adequate working space and storage exist to address these space, storage, and maintenance needs to reliably maintain the chlorine equipment for the expanded chlorine process. This is a new project for this budget cycle.

Weymouth Dry Polymer System Upgrade

Cationic polymers are used as a coagulant aid for the washwater reclamation plant, and nonionic polymers are needed to meet filter performance regulations when treating high State Project Water (SPW) blends. Depending on the quality of the source water, both dry polymers may need to be applied simultaneously. However, the current dry polymer system only has one mixing train available. Since these feed systems share a common polymer mixer, it is difficult to operate both systems at the same time. Additionally, the existing dry polymer mixer uses a type of batch mixer that can only make a single batch at a time and frequently clogs. The mixer is housed in a metal structure that does not meet current seismic codes although it was constructed to meet the codes at that the time of construction.

The project will construct a new dry polymer mixing facility to replace the existing facility. The scope of the project includes construction of a new building designed to meet current seismic standards, installation of a dry polymer mixing system to allow simultaneous mixing and feeding of cationic and nonionic polymers, independently; and construction of a covered containment area to house feed equipment and new polymer storage tanks.

Weymouth Filter Valve Replacement

The original filter valves in Building No. 1 were installed in two stages in 1941 and 1949, and were replaced in the early 1970s with similar valves. These valves are not consistent with modern American Water Works Association (AWWA) standards. The filter valves in Building No. 2 were installed during the second plant expansion in 1962 and are similar in dimension to the valves in Building No. 1. The existing filter valve bodies exhibit corrosion, the rubber seats are worn, and many valves leak after 47 to 57 years of continuous operation. In addition, the frequency of repairs to the actuators is increasing, and spare parts are difficult to obtain. This project will replace all filter valves and actuators in both Filter Building Nos. 1 and 2 with Metropolitan furnished AWWA-standard valves and current industry-standard actuators. This project will also replace or refurbish appurtenant equipment which is ancillary to the reliable operation of the filter valves, such as flow meters, underdrain valves, electrical and control systems, pipes, and other equipment.

Weymouth Hazardous Waste Staging and Containment

The existing hazardous waste storage area requires a number of upgrades to enhance compliance with current codes and to provide enhanced safety measures, such as providing spill containment, eyewashes and safety shower, a canopy, leak detection, and sump. These utilities are all available at the existing sulfuric acid tank farm, which is no longer utilized. As the existing hazardous waste storage area does not provide containment to capture spills or leaks there is potential for hazardous waste to runoff to the storm drain system as well as exposure to plant personnel.

This project will relocate the existing Hazardous Waste Staging and Containment Facility to the existing sulfuric acid tank farm in order to account for deficiencies at the existing facility. The existing sulfuric acid tank farm, located approximately 100 feet from the existing hazardous waste area, is a 30' x 30' containment area with a roof, sump, SCADA controls, eyewash station, power, and potable water that can be cost effectively utilized to relocate the hazardous waste facility.

Weymouth Solids Handling Rehabilitation

Residual solids generated during the water treatment process are sent to the gravity thickeners to separate water from the solids before being sent to belt presses in the solids handling facility for further dewatering. Dewatered solids are then pumped to elevated hoppers for storage prior to offsite disposal. Mechanical equipment at the solids handling facility has experienced frequent failures, and the facility itself requires full-time staffing to operate. Regular failures occur with the system's bridge breakers, which break apart dewatered solids so that they can be pumped to the hoppers. The facility also experiences frequent issues with the hoppers. After the belt presses dewater the solids, polymer solution is added to the discharge side of the cake pumps to facilitate pumping. This produces a cake-like material that often sticks to the hoppers' mechanical components and impedes opening and closing of the hopper gates. Rehabilitation of the solids handling facility is necessary to maintain its long-term function, reduce maintenance and operational labor costs, and reduce chemical costs.

This project will identify and implement the most feasible rehabilitation of the facility and to evaluate the capacity of the facility's decant lines. Options for rehabilitation include: (1) eliminating the existing cake pumps and installing a conveyor belt system to transfer the dewatered solids to the hopper system without the addition of liquid polymer; (2) transferring solids to a separate storage area where the solids are held prior to being hauled offsite. This project will also evaluate modifications within the building that would facilitate future equipment repairs and replacement; and (3) constructing sludge lagoons that would replace the belt press facility as the main solids handling facility to process residual solids.

Weymouth Wastewater Pumpback Improvements

When ozone is used as the plant's primary disinfectant, the ozone generators will produce the amount of ozone needed based on flow into the plant. The plant inlet flow can experience fluctuations when the washwater return pumps that send flow back to the head of the plant, cycle on and off. Ideally, the flow to the ozone contactors would be consistent. However, the existing pump station has a small forebay as compared to the capacity of the washwater pumps. The forebay receives flow from both the Washwater Reclamation Plant and the Oxidation Demonstration Plant (ODP) clearwell. Significant changes in flow from these two facilities may increase fluctuation in ozone dose requirements.

This project will evaluate options to improve minimizing fluctuations in the treated washwater flow returned to the plant inlet and implement the most effective and feasible option. Options for improvements include: (1) construction of a new stand-alone pumpback structure with adequate buffering instead of making improvements to the existing washwater pumpback structure; and (2) modifying the ODP clearwell pumps with variable speed pumps; upgrading washwater pump station pump program to moderate changes in pump speed; reconfiguring the ODP clearwell pumps so that one pump is dedicated for backwash, one pump is dedicated for pumpback, and one pump as a spare for either of the two pumps; and other improvements identified during early stages of the project

Weymouth Wheeler Gates Security Improvements

Construction vehicles and chemical delivery trucks access the Weymouth plant through the Wheeler entrance gate. This project will provide safety and security improvements to the Weymouth plant's Wheeler gate, including construction of a new guard enclosure; improved lighting, security cameras, and communication features; crash rated gates at vehicle and train entrances; perimeter wall and fencing along Wheeler Avenue; two traffic lanes at the entrance and exit; chemical delivery staging and containment area; and vehicle rejection turn-about outside the plant entrance gate.

Treatment - General Project Group

CUF Dechlorination System Upgrade

The chlorine unloading facility (CUF) is used to transfer liquid chlorine from rail cars to cargo trailers for delivery to Metropolitan facilities. The goal of this project is to enhance compliance with discharge regulations and allow the transfer of liquid chlorine from rail cars to cargo trailers to occur over a wide range of operating conditions. This project will evaluate available technologies; perform a pilot study, if needed, to determine the most feasible technology; and will explore methods and technologies of neutralizing chlorine in order to improve chlorine transloading ability throughout the year. This project will upgrade the existing system that neutralizes chlorine at CUF.

Water Quality Program

Fiscal Year 2022/23 Estimate: \$0

Fiscal Year 2023/24 Estimate: \$0.8 million

Program Information: The Water Quality Program is comprised of projects to add new facilities to ensure compliance with water quality regulations for treated water, located at Metropolitan's treatment plants and throughout the distribution system.

Accomplishments for FY 2020/21 and FY 2021/22

- New projects initiated:
 - None
- Major milestones achieved:
 - Weymouth Hypochlorite Feed Facilities – Completed project
 - Weymouth ORP - Ozonation Facilities Construction, and Completion Activities – Completed project

Objectives for FYs 2022/23 and 2023/24

Project	Total Project Estimate	Estimated Construction Completion	Major Milestones
Mills Enhanced Bromate Control	\$ 5,700,000		Complete final design

Water Quality - All Project Group

Mills Enhanced Bromate Control Facilities

The Mills plant is currently using a temporary system built for bromate reduction. This system has been running successfully and has proven the effective use of chloramines in bromate control and the reduced operational costs over a wider range of influent water quality conditions. This project will replace the temporary feed, metering, monitoring, and injection (chlorine and ammonia) system with a permanent system which will incorporate new doubled walled piping, double wall containment, new flow metering, new chlorinators, new analyzers, and new ammonia feed tank. The full implementation of this project will significantly reduce the current operational costs of bromate control as well as provide greater control of bromate formation over a wide range of influent water quality conditions. The project also includes replacement of two existing chlorinators with new units for lower chlorine dosage control flexibility.

GLOSSARY OF TERMS

20 x 2020 — 2009 Water Conservation Act goal of twenty percent reduction in per capita regional water use by 2020.

ACE — Association of Confidential Employees; an employee bargaining unit at Metropolitan.

Accrual — An accounting method that records revenues when earned and expenses when incurred regardless of the timing of when the cash is actually paid or received.

Acre-Foot — A unit of measure equivalent to 325,851.4 gallons of water and weighs approximately 62.4 pounds, which meets the needs of two average families in and around the home for one year.

ACWA — Association of California Water Agencies.

AFSCME — American Federation of State, County, and Municipal Employees, Local 1902.

Appropriation — Money set aside for a specific purpose. The designation of the use to which a fund of money is to be applied.

Bay Delta — An environmentally sensitive area of the Sacramento/San Joaquin River Delta through and from which water flows to reach portions of California from the San Francisco Bay Area to San Diego. Moving water across the delta during the high-demand summer months is becoming more difficult as additional water is set aside to mitigate for environmental impacts.

Budget — A report of all anticipated expenditures and required reserves and the source of moneys to be used to meet such expenditures and provide such reserves.

Budgeted Position — A staff position approved by the Board of Directors for the fiscal year.

Capital Investment Plan (CIP) — Metropolitan's CIP is designed to refurbish existing facilities needed to ensure a reliable distribution system, expand treatment facilities to meet current and future water quality regulations, and expand storage and conveyance facilities to meet current and future storage requirements.

Capital Project — A project that results in a new asset (e.g., a facility, betterment, replacement, equipment, etc.) that has a total cost of at least \$50,000 and a useful life of at least five years. Computer software can be capitalized if it costs \$250,000 or more and has a useful life of at least three years.

The California Environmental Quality Act (CEQA) — A statute that requires state and local agencies to identify the significant environmental impacts of their actions, and to avoid or mitigate those impacts, if feasible.

Colorado River Aqueduct (CRA) — The 242-mile-long water conveyance system built by Metropolitan to carry water from the Colorado River to its Southern California service area.

Conservation Program — A program where Metropolitan provides financial assistance for the development of conservation programs at the local level (e.g. energy efficient washing machines, low flush toilets, etc.).

CUWCC — California Urban Water Conservation Council, a non-profit 501c3 formed as a partnership of water suppliers, environmental groups, and others interested in conserving California's greatest natural resource, water.

Debt Service — The annual cost of repaying outstanding debt.

Delta Conveyance — The Department of Water Resources (DWR) is pursuing a new environmental review and planning process for a single tunnel project to modernize the State Water Project's Bay-Delta conveyance. The formal environmental review process is expected to begin with a Notice of Preparation under CEQA anticipated to be issued by DWR in the late 2019 timeframe. Planning, environmental review and conceptual design work by DWR for a proposed single tunnel project is expected to take approximately 18 to 36 months. A single tunnel project to be proposed under the new planning effort and environmental review process to be undertaken by DWR may be designed and configured differently than previously analyzed single tunnel alternatives. Information regarding the Delta conveyance project is located on Metropolitan's website at <https://www.mwdh2o.com/planning-for-tomorrow/securing-our-imported-supplies/delta-conveyance/>

Department of Water Resources (DWR) — A department within the California Resources Agency which is responsible for the state's management and regulation of water usage.

Distribution System — Refers to the network of pipelines and canals used for the conveyance of water from Metropolitan's terminal reservoirs to member agency service connections.

DVL — Diamond Valley Lake. A reservoir built by Metropolitan with a capacity of 800,000 AF.

EIR — Environmental Impact Report.

EMS — Energy Management System.

Endangered Species Act (ESA) — An act of the federal government enacted in 1973 that provides for the conservation of species that are endangered or threatened and the conservation of the ecosystems on which they depend. A species is considered endangered if it is in danger of extinction throughout all or a significant portion of its range. A species is considered threatened if it is likely to become an endangered species within the foreseeable future.

Enterprise Fund — To account for operations that are financed and operated where the intent is that the costs (expenses, including depreciation) of providing goods or services to the general public on a continuing basis be financed or recovered primarily through user charges.

Ethics Program — State law (SB 60) mandates that Metropolitan maintain a program to address and seek to avoid potential ethical abuses relating to business relationships, solicitation and/or receipt of campaign contributions, and public notice and approval procedures for contracts of \$50K or more. This program includes on-going training for board members and employees regarding ethics in the workplace.

FERC — Federal Energy Regulatory Commission.

Fund — A self-balancing set of accounts recording cash and other financial resources, together with all related liabilities and residual equities or balances, and changes therein, which are segregated for the purpose of carrying on specific activities or attaining certain objective in accordance with special regulations, restrictions, or limitations.

Fund Balance — Created from excess revenues over expenditures. This can be a combination of collections/revenues being higher than budget and actual expenditures being lower than budget.

IID/Metropolitan Conservation Agreement — Water conservation agreement with the Imperial Irrigation District (IID) that allows for the development of certain water conservation capital structures by Metropolitan in the Imperial Valley. Metropolitan, in turn, gets the quantity of water conserved during the term of this agreement, four years during construction, and 35 years after completion. It encompasses both the operating and maintenance, in direct, and capital cost of developing and implementing the program. This agreement is renewable.

IRWMP — Integrated Regional Water Management Plan.

Integrated Resources Plan (IRP) — An open and participatory planning process that takes a broad view of all water resource options available to the region and searches for the right combination of investments to achieve water supply objectives in a cost-conscious and environmentally responsible manner.

KPIs — Key Performance Indicators

Local Resources Program (LRP) — A program in which Metropolitan provides financial assistance to its member agencies for the development of local groundwater recycling and groundwater recovery projects.

MAPA — Management and Professional Employees Association, Local 1001.

Member Agency — Refers to any of the 26 cities or public water agencies that comprise the Metropolitan Water District and whose representatives constitute the Board of Directors of Metropolitan.

MAF (million acre-feet) — A unit measure of water.

Minute 319 — Agreement that amends the 1944 Treaty between Mexico and the United States by establishing new rules in sharing Colorado River water and provides immediate plans to address current challenges. Parties to the agreement include Metropolitan Water District of Southern California, Southern Nevada Water Authority, Central Arizona Water Conservation District. Minute 319 allows Mexico to store water in Lake Mead as Intentionally Created Mexican Apportionment for future delivery and environmental flows. Stored water will be exchanged among the parties to the agreement.

MOU (Memorandum of Understanding) — Legal agreements entered into between Metropolitan and any of the four employee bargaining units that dictate terms and conditions of employment.

Operating Equipment — Any portable equipment costing \$5,000 or more and having a useful life of five years or more.

Operations Maintenance Power & Recovery (OMP&R) — A component of the State Water Contract that is billed to the contracting agencies to maintain the system.

OPEB — Other Post Employment Benefits.

ORP — Oxidation Retrofit Program.

Ozone — It is an unstable form of oxygen composed of three-atom molecules that break down readily to normal oxygen and nascent oxygen. The latter is a powerful oxidizing agent and has germicidal action. Ozone is usually produced with on-site generators by passing high-voltage electricity through dry atmospheric air or pure oxygen between stationary electrodes. This process converts a small percentage of the oxygen in the air into ozone. It is usually injected into the water to be treated in a highly baffled mixing chamber.

PAYGO — The practice of funding construction expenditures from current operating revenues in lieu of using debt proceeds.

PVID — Palo Verde Irrigation District.

Palo Verde Land Management and Water Supply Program — Calls for the development of a flexible water supply of between 25,000 and 111,000 acre-feet per year for 35 years through a land management and crop rotation program to be implemented by participating farmers in the Palo Verde Valley. The maximum water supply that could be developed would be about 3.63 million acre-feet during the 35-year term while the minimum water supply required to be developed would be 1.76 million acre-feet.

Performance Measure — An indicator of progress toward completing an initiative, achieving a goal, or implementing a strategy. Performance measures are quantifiable and tracked over time. Measures can indicate

problem areas that need attention or be a guide for continual performance improvement through specific initiatives and actions.

PCCP — Pre-stressed Concrete Cylinder Pipe.

Power Recovery — Energy generated from the operation of sixteen Metropolitan-owned hydroelectric generating facilities. The term "recovery" derives from the capture of potentially wasted electrical energy from Metropolitan's water distribution system.

Quagga Mussel — A destructive non-native species of mussel from the Ukraine region that could clog pipes and water line.

Quantification Settlement Agreement (QSA) - The Quantification Settlement Agreement (QSA) and related agreements, executed by Coachella Valley Water District (CVWD), Imperial Irrigation District (IID), Metropolitan, and other parties in October 2003, establishes Colorado River water use limits for IID and CVWD, and provides for specific acquisitions of conserved water and water supply and delivery arrangements for up to 110 years. The QSA and related agreements provide a framework for Metropolitan to enter into other cooperative Colorado River supply programs and set aside several disputes among California's Colorado River water agencies.

Regional Recycled Water Program (RRWP) — The first phase was the construction of an advanced water treatment demonstration facility that takes treated wastewater and purifies it through various advanced treatment technologies to produce a safe, high-quality water source; the project was a partnership between Metropolitan and the Sanitation Districts of Los Angeles County and was completed in August 2019. The RRWP will have the flexibility to be expanded in the future to implement Direct Potable Reuse ("DPR") through raw water augmentation at the two Metropolitan treatment plants. The State Water Resources Control Board Division of Drinking Water is in the process of developing a framework for the regulation of DPR in California, and the current anticipated date for promulgation is 2023. Information regarding the RRWP is located on Metropolitan's website at <https://www.mwdh2o.com/planning-for-tomorrow/building-local-supplies/regional-recycled-water-program/>

Replacement and Refurbishment (R&R) — Capital projects that invest in Metropolitan's aging infrastructure by restoring them to optimal operating status.

Reserves — Funds set aside to comply with bond covenants, working capital policy, or other board policies as part of a prudent financial strategy.

Revenue Remainder Fund — See Financial Policies for description.

SCADA — Supervisory Control and Data Acquisition; automated systems that are used to monitor, operate, and control Metropolitan's water conveyance, treatment, and distribution systems.

Senate Bill 60 (SB 60) — This bill requires Metropolitan to place increased emphasis on sustainable, environmentally sound, and cost-effective water conservation, recycling, and groundwater storage and replenishment measures and, commencing February 1, 2001, to prepare and submit to the Legislature a prescribed annual report relating to water conservation.

State Water Contract (SWC) — State Water Contracts are the basis for all SWP construction and ongoing operations, as well as the basis for the contractors' participation in the SWP. As the largest of the now 29 contractors, Metropolitan is entitled to slightly less than half of all SWP supplies. Water supplies from the SWP are conveyed to Metropolitan via the SWP's 444-mile California Aqueduct, which was made possible pursuant to Metropolitan's State Water Contract.

State Water Project (SWP) — The SWP is the largest state-built, user-financed water supply and transportation project in the country. The SWP serves urban and agricultural agencies from the San Francisco Bay area to Southern California. Its facilities were constructed with several general types of financing, the repayment of which is made by the 29 agencies and districts that participate in the SWP through long-term contracts (the State

Water Contractors). The State Water Contractors also pay for the operations, maintenance, power, and replacement costs of the SWP.

System Overview Study — An analysis of Metropolitan’s current delivery and treatment capacities versus projected needs during the planning horizon. The System Overview Study, coupled with the Integrated Area Study, analyzes various portfolios of projects that could be used to meet future demand and then develops a potential CIP. Finally, the System Overview Study analyzes the potential impact to rates from the proposed facilities.

TAF (thousand acre–feet) — A unit of measure of water.

Total Dissolved Solids (TDS) — Refers to the total organic carbon concentration in water. Measurement of TDS removal is used as a surrogate for disinfection by-product precursor removal.

Treatment Plants — Facilities used by Metropolitan for the treatment of water to remove contaminants or total dissolved solids thus ensuring that such water is potable before it is distributed to member agencies.

U.S. Department of the Interior, Bureau of Reclamation (USBR) — Largest wholesaler of water and second largest supplier of hydroelectric power in the American West. Promotes water conservation, recycling, and reuse.

Vacancy Factor — A calculated reduction to the O&M labor budget that attempts to account for vacancies that occur within organizations throughout the year. Budgeted labor dollars assume that budgeted positions will be filled for the entire fiscal year (2,080 hours). However, positions routinely become vacant throughout Metropolitan for part of the year as staff transfer to other positions or leave employment in the company and time elapses during the recruitment period to refill the vacated positions.

WRSF — Water Rate Stabilization Fund. See Financial Policies for description.

WRM — Water Resource Management (group); an organization within Metropolitan that focuses on water resource planning and management, including conservation.

WSF — Water Stewardship Fund. See Financial Policies for description.

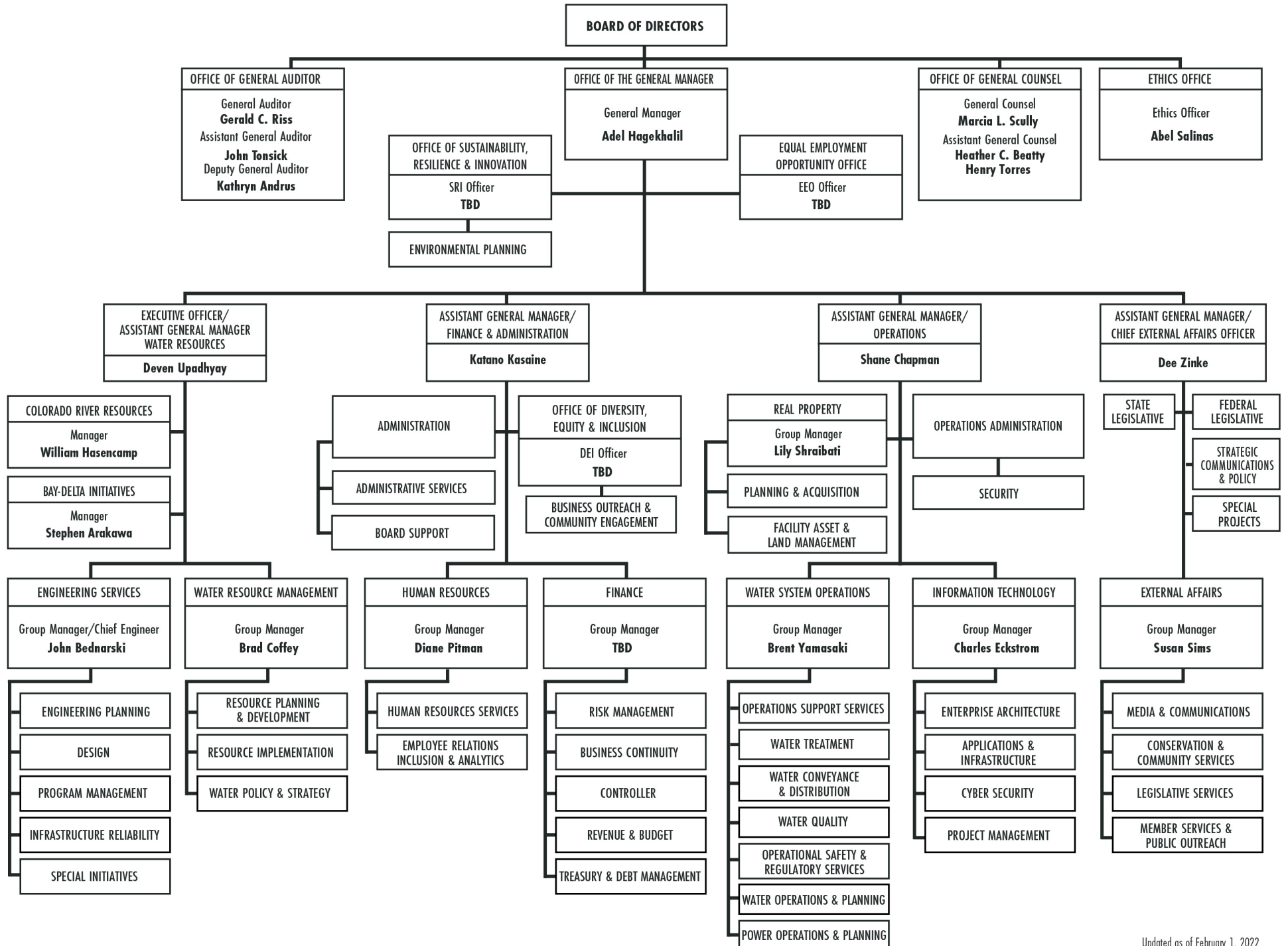
Water Supply Allocation Plan (WSAP) — This plan is intended to be implemented during periods of regional water shortages to promote conservation of scarce water supplies. The WSAP was created to approach limiting supplies in a manner that is regionally fair and minimizes impacts by establishing accurate and fair baselines for each of Metropolitan’s 26 member agencies.

Water Supply Programs — Water transfer and storage programs that supplement Colorado River and State Water Project supplies.

Water Surplus Drought Management Plan (WSDM Plan) — This plan directs Metropolitan’s resource operations to help attain the region’s reliability goal. The WSDM Plan recognizes the interdependence of surplus and shortage actions and is a coordinated plan that utilizes all available resources to maximize supply reliability. The overall objective is to ensure that shortage allocation of Metropolitan’s imported water supplies is minimized.

Working Capital — A measure of both a company’s efficiency and its short-term financial health. The working capital ratio is calculated as: Working Capital = Current Assets - Current Liabilities.

WSO — Water System Operations (group); an organization within Metropolitan responsible for operating and maintaining Metropolitan’s water conveyance, treatment, and distribution system and its appurtenant systems.



*Option 1 – Proposed Budget 8% / 8%

Metropolitan Water District of Southern California

FISCAL YEARS 2022/23 and 2023/24 COST OF SERVICE REPORT FOR PROPOSED WATER RATES AND CHARGES



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EXECUTIVE SUMMARY

Metropolitan's current rate design was adopted by its Board of Directors on October 16, 2001 following a lengthy and open process. Metropolitan is required to adopt rates and charges that are reasonable, and cost of service is one reasonable method. In 2001, Metropolitan chose to adopt a cost of service rate structure that it found reasonable for recovering the costs of providing full-service water service (treated and untreated) and wheeling service to its 26 member agencies, as previously defined in Metropolitan's Administrative Code Section 4405. The rate structure is designed in accordance with the Rate Structure Action Plan of December 12, 2000; the Composite Rate Structure framework of April 11, 2000; the Strategic Plan Policy Principles of December 14, 1999; and the Strategic Plan Steering Committee Guidelines of January 6, 2000. The Board adopted the rate structure on October 16, 2001. On August 18, 2020, the Board of Directors repealed the Administrative Code sections that established the wheeling service it previously made available to its member agencies (short-term wheeling service under one year) and the pre-set wheeling rate for that wheeling service. As a result of the Board's action, short-term wheeling to member agencies is now determined on a case by case basis and is set by contract, as has been done for wheeling service for member agencies lasting more than one year and wheeling for third parties. Additionally, on November 23, 2021, the Board took an action to direct staff to incorporate all demand management costs in Metropolitan's supply rate elements for future rates and charges proposals, eliminating the Water Stewardship Rate element.

This report describes the updated rate structure in detail including the cost of service process that supports the proposed rates and charges for calendar years 2023 and 2024, which are based on the Proposed Biennial Budget for Fiscal Years 2022/23 and 2023/24 prepared for the Board and committee meetings scheduled in February 2022 (the "Biennial Budget") through April 2022.

The rate structure supports the strategic planning vision that Metropolitan is a regional provider of services, encourages the development of additional local supplies by member agencies through programs such as recycling, encourages conservation, and accommodates a water transfer market. Through its regional services, Metropolitan ensures a baseline of reliability and quality for imported water deliveries in its service area. Metropolitan's rate structure recognizes the foregoing and other unique aspects of Metropolitan's services, governance structure, and operational circumstances. Although there are general tenants that are important in cost of service industry guidelines, all guidelines recognize that customization of cost of service is necessary to reflect the service being provided. Accordingly, Metropolitan's cost of service and the rate structure developed therefrom is in line with industry guidelines and Metropolitan's unique operational circumstances.

Objectives

In accordance with the Strategic Plan Policy Principles adopted in 1999, the rate structure is designed to accomplish the following:

Accountability. Define the linkage among costs, charges, and benefits through a cost of service approach consistent with industry guidelines.

Regional Provider. Ensure that regional services are provided to meet the existing and growth needs of member agencies.

Equity. Ensure that users, including member agencies and other entities, pay the same rates and charges for like classes of services and provide fair and reasonable allocation of costs through rates and charges.

Environmental Responsibility. Encourage wise environmental stewardship and effective demand management by funding conservation and recycling projects and programs and using pricing¹ to encourage investments in conservation, recycling, and other economical local supplies.

Choice and Competition. Offer choices for services to member agencies and accommodate the development of a water transfer market.

Water Quality. Support source quality improvements and water treatment systems that are required to ensure safe drinking water and the feasibility of water recycling and groundwater management programs.

Financial Integrity. Establish a financial commitment from the member agencies that provides financial security for Metropolitan and does not transfer undue risk to member agencies, individually or as a whole.

¹ Metropolitan's rates reflect the cost of providing its services and the impact of those costs may have an impact on member agencies' conservation and local resource development. Metropolitan invests in demand management, by providing incentives to those conserving and developing local resource projects that reduce the price of those projects for the participants. Those demand management investments lower system costs and reduce the need for Metropolitan to import additional supplies into the service area.

DISTRICT OVERVIEW

This Report provides an overview of Metropolitan generally, its governance structure, operational characteristics, and the services it provides to its member agencies. The District Overview provides context for the cost of service process applied, which result in the proposed rates and charges.

District Profile

The Metropolitan Water District of Southern California (Metropolitan) is a metropolitan water district created in 1928 under authority of the Metropolitan Water District Act (California Statutes 1927, Chapter 429, as reenacted in 1969 as Chapter 209, as amended (the Act)). Metropolitan has 26 member public agencies and its primary purpose is to provide its members with a reliable wholesale water supply service for domestic and municipal uses. To do so, Metropolitan imports water from the Colorado River and Northern California. Metropolitan also helps its member agencies develop increased water conservation, recycling, storage, and other local resource programs.

Metropolitan is authorized to develop, store, and distribute water for domestic and municipal purposes and other beneficial uses if excess water is available, and may provide, generate, and deliver electric power within or outside the state for the purpose of developing, storing, and distributing water. All powers, privileges and duties vested in or imposed upon Metropolitan are exercised and performed by and through its Board of Directors. Metropolitan is governed by a 38-member Board of Directors representing the 26 member agencies. Metropolitan directors are selected by their respective member agencies and some of those directors also serve on the governing body of their member agency. Board and committee meetings are open to the public and are broadcast on the Internet through Metropolitan's website, www.mwdh2o.com. Although the Board and its committees have met virtually since the start of the COVID-19 pandemic, Metropolitan has made participation, observation, viewing, and listening options available to the public for all meetings. A schedule of Board and committee meetings, as well as current and archived Board materials, is available at the same website.

Metropolitan was established to obtain an allotment of Colorado River water and to construct and operate the 242-mile Colorado River Aqueduct (CRA), which runs from an intake at Lake Havasu on the California-Arizona border, to an endpoint at Metropolitan's Lake Mathews reservoir in Riverside County. Metropolitan owns and operates an extensive portfolio of capital facilities including the CRA, 16 hydroelectric facilities, nine reservoirs, 830 miles of large-scale pipes, and five water treatment plants.

In 1960, Metropolitan, followed by other public agencies, signed a long-term contract with the state Department of Water Resources (DWR) to participate in the State Water Project (SWP). The SWP is the largest state-built, user-financed water supply and transportation project in the country. Its facilities were constructed with several general types of financing, the repayment of which is made by the 29 agencies and districts that participate in the SWP through long-term contracts (the State Water Contractors). The State Water Contractors also pay for the operations, maintenance, power, and replacement (OMP&R) costs of the SWP, as the State Water Contracts are the basis for all SWP construction and ongoing operations. DWR manages and operates the SWP. As the largest of the now 29 contractors, Metropolitan is allocated slightly less than half of all SWP supplies. Water supplies from the SWP are conveyed to Metropolitan via the SWP's 444-mile California Aqueduct, which was made possible pursuant to Metropolitan's State Water Contract. The SWP serves urban and agricultural agencies from the San Francisco Bay area to Southern California.

To secure additional supplies, Metropolitan also has groundwater banking partnerships and water transfer arrangements within and outside of its service area. Metropolitan also provides financial incentives to its member agencies for local investments in demand management programs and projects. An increasing

FYs 2022/23 and 2023/24 Cost of Service Report 8

percentage of Southern California's water supply comes from these conservation programs and local resources projects, including water recycling and recovered groundwater.

To pay for its costs, the Act authorizes Metropolitan to: levy property taxes within its service area; establish water rates; collect charges for water standby and service availability; incur general obligation bonded indebtedness and issue revenue bonds, notes and short-term revenue certificates; execute contracts; and exercise the power of eminent domain for the purpose of acquiring property. In addition, Metropolitan's Board is authorized to establish terms and conditions under which additional areas may be annexed to Metropolitan's service area.

District Mission

The mission of Metropolitan is to provide its 5,200-square-mile service area with an adequate and reliable supply of high-quality water to meet present and future needs in an environmentally and economically responsible way.

Metropolitan Service Area

Metropolitan's service area comprises approximately 5,200 square miles and includes portions of the six counties of Los Angeles, Orange, Riverside, San Bernardino, San Diego and Ventura. When Metropolitan began delivering water in 1941, its service area consisted of approximately 625 square miles. Its service area has increased by 4,500 square miles since that time. The expansion was primarily the result of annexation of the service areas of additional member agencies. Metropolitan has historically provided between 40 and 60 percent of the water used annually within its service area.

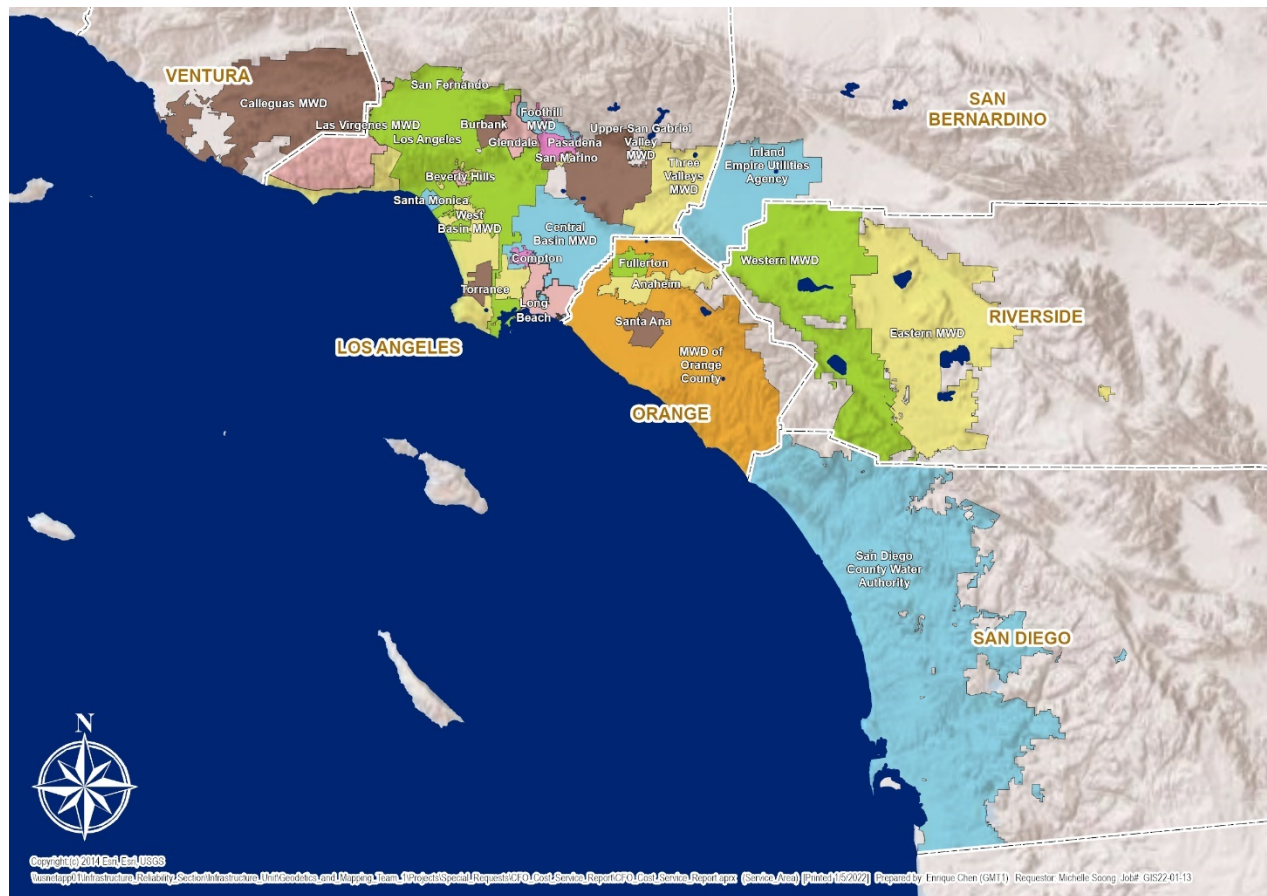
The area served by Metropolitan represents the most densely populated and heavily industrialized portions of Southern California. Metropolitan estimates that approximately 19 million people lived in Metropolitan's service area in 2020, based on official estimates from the California Department of Finance and on population distribution estimates from the Southern California Association of Governments (SCAG) and the San Diego Association of Governments (SANDAG). Recent population projections prepared by SCAG in 2020 and by SANDAG in 2019, which will be used as base data for Metropolitan's 2020 Integrated Water Resources Plan, show expected population growth of approximately 17 percent in Metropolitan's service area between 2010 and 2035, which is slightly lower than the approximately 18 percent population growth rate projected by SCAG in 2012 and SANDAG in 2013 (which projections were used as base data for Metropolitan's prior 2015 Integrated Water Resources Plan update).

The economy of Metropolitan's service area is exceptionally diverse. In 2019, the economy of the six counties which contain Metropolitan's service area had a gross domestic product larger than all but twelve nations of the world. The Six County Area economy ranked between South Korea (\$1.642 trillion) and Spain (\$1.394 trillion), with an estimated gross domestic product (GDP) of \$1.596 trillion. The Six County Area's gross domestic product in 2019 was larger than all states except California, Texas, and New York.

The climate in Metropolitan's service area ranges from moderate temperatures throughout the year in the coastal areas to hot and dry summers in the inland areas. Annual rainfall in an average year has historically been approximately 13 to 15 inches along the coastal area, up to 20 inches in foothill areas and less than 10 inches inland.

Service Area Map

Figure 1 below shows the area served by Metropolitan. It includes parts of the six counties that comprise Southern California (Six County Area) consisting of Los Angeles, Orange, Riverside, San Bernardino, San Diego, and Ventura counties. Although these counties comprise Metropolitan's service area, Metropolitan's territory does not encompass all the area within each of the six counties.

Figure 1: Map of Metropolitan's Service Area

Organization Structure

Board of Directors

Metropolitan is governed by the customers that use its system and service, its member public agencies, through a 38-member Board of Directors. Each member public agency is entitled to have at least one representative on the Board, plus an additional representative for each full five percent of the total assessed valuation of property in Metropolitan's service area that is within the member public agency. Accordingly, the Board may, from time to time, have more than 38 directors. There are also limits on reductions in the number of directors. Changes in relative assessed valuation do not terminate any director's term and as a result of California Assembly Bill 1220 (Garcia) enacted in 2019, "A member public agency shall not have fewer than the number of representatives the member public agency had as of January 1, 2019."

The Board includes business, professional and civic leaders. Directors serve on the Board without compensation from Metropolitan. Voting is based on assessed valuation, with each member agency being entitled to cast one vote for each \$10 million or major fractional part of \$10 million of assessed valuation of property within the member agency, as shown by the assessment records of the county in which the member agency is located. The Board administers its policies through the Metropolitan Water District Administrative Code (the Administrative Code), which the Board adopted in 1977. The Board periodically amends the Administrative Code to reflect new policies or changes in existing policies that occur from time to time.

Metropolitan's day-to-day management is under the direction of its General Manager, who serves at the pleasure of the Board, as do Metropolitan's General Counsel, General Auditor, and Ethics Officer. Metropolitan's organization chart is shown in Figure 2; Table 1 provides a listing of Metropolitan's Senior Management.

Figure 2: Metropolitan Organization Chart

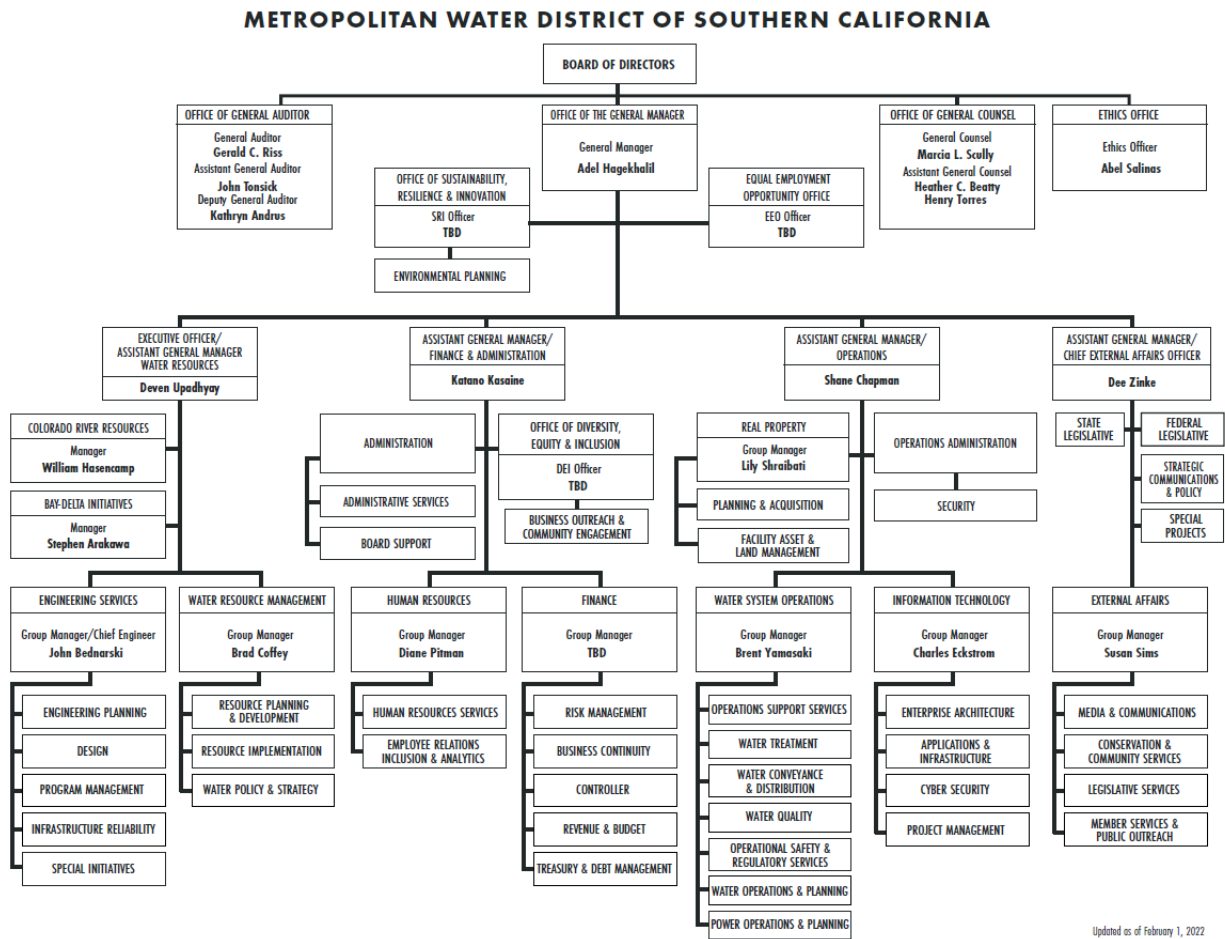


Table 1: Metropolitan Senior Management

Adel Hagekhalil	General Manager
Marcia Scully	General Counsel
Gerald Riss	General Auditor
Abel Salinas	Ethics Officer
Deven Upadhyay	Executive Officer and Assistant General Manager/Water Resources
Katano Kasaine	Assistant General Manager/Finance & Administration
Dee Zinke	Assistant General Manager/Chief External Affairs Officer
Shane Chapman	Assistant General Manager/Operations
Rosa Castro	Board Administrator

Member Agencies

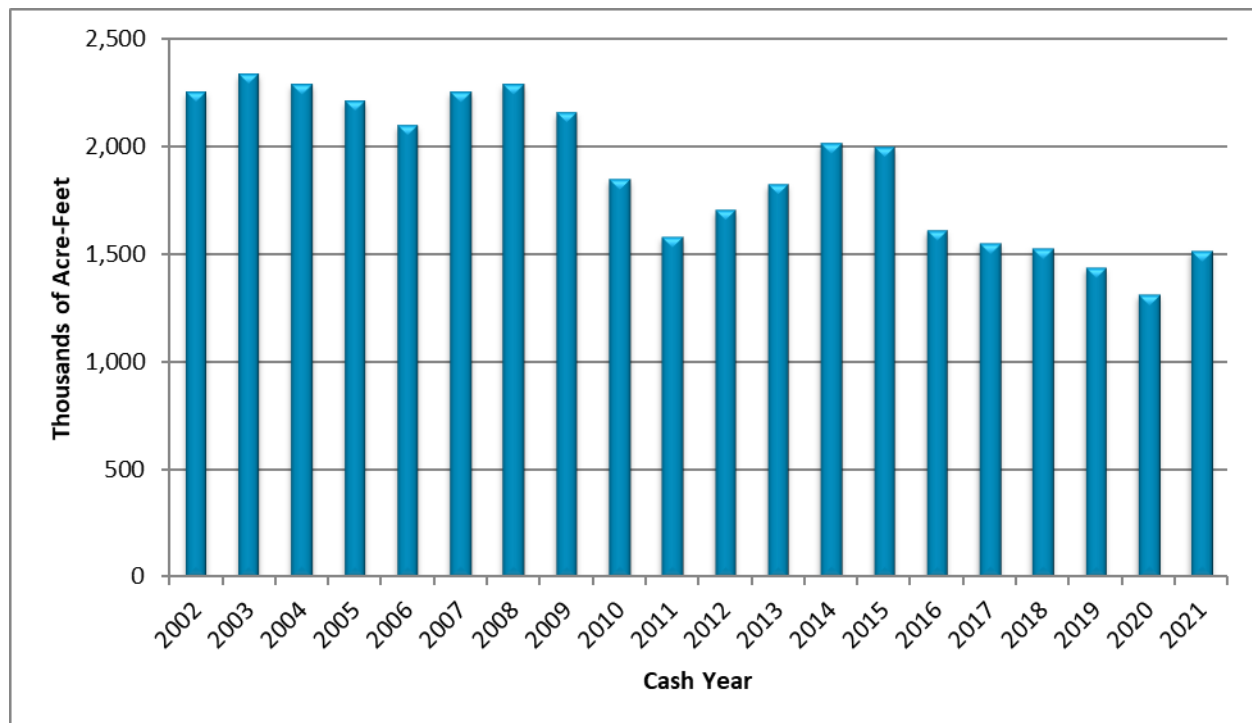
Table 2 lists the 26 member agencies of Metropolitan which include 11 municipal water districts, 14 cities and one county water authority.

Table 2: Metropolitan Member Agencies

Municipal Water Districts	Cities	County Water Authority
Calleguas	Anaheim	San Diego
Central Basin	Beverly Hills	
Eastern	Burbank	
Foothill	Compton	
Inland Empire Utilities Agency	Fullerton	
Upper San Gabriel Valley	Glendale	
Western of Riverside County	Long Beach	
Las Virgenes	Los Angeles	
Orange County	Pasadena	
Three Valleys	San Fernando	
West Basin	San Marino	
	Santa Ana	
	Santa Monica	
	Torrance	

Metropolitan's Water Transactions with Member Agencies

Due to Metropolitan's role as a voluntary cooperative of, and supplemental wholesale supplier to, member agencies with varying degrees of reliance on Metropolitan, and other factors described below, water transactions are highly variable and unpredictable from year to year. In the past 20 years, water transactions have been as high as 2.3 million acre-feet (MAF) in Cash Year 2003 and as low as 1.3 MAF in Cash Year 2020, as shown in Figure 3. Figure 3 includes total member agencies transactions by cash year, which includes water sales, exchanges, and wheeling. Variation occurs for many reasons. The demand for supplemental supplies is dependent on water use at the retail consumer level and the amount of local water supplies available to member agencies. Consumer demand and locally supplied water vary from year to year, resulting in variability in Metropolitan's water transactions. Both economic growth and recessions can also lead to increases and decreases in demand. Weather also affects demands. Wet cool weather not only increases the availability of local supplies, it also decreases retail demands. Conversely, hot and dry weather results in significant increases in retail demand. Member agencies also rely on Metropolitan during times of operational emergencies. Examples include: power outages, when member agencies need gravity-fed supplies to replace energy-dependent operations; water quality issues, such as when contaminants in groundwater force member agencies to shut down wells; and fires, when member agencies rely on Metropolitan for increased flows.

Figure 3: Historic Water Transactions Cash Year 2002 -2021¹

¹ Occur period Water Transactions. Includes transactions for services provided to member agencies.

Table 3 identifies the amounts paid by member agency, including fixed charges and volumetric rates, as well as the volume of water transactions by Metropolitan member agencies for FY 2021. Water transactions include sales, exchanges, and wheeling.

Table 3: Metropolitan Water Transactions with Member Agencies, Year Ended June 30, 2021(Accrual Basis, Dollars in Thousands) ^{1, 2}

Agency	Revenues				Water Transactions	
	Fixed Charges (\$ thousands)	Volumetric Charges (\$ thousands)	Total (\$ thousands)	Percent of Total	AF	Percent of Total
Anaheim	\$ 1,344	\$ 41,292	\$ 42,636	2.87%	41,964	2.67%
Beverly Hills	1,196	10,675	11,871	0.80%	9,784	0.62%
Burbank	853	8,760	9,613	0.65%	9,920	0.63%
Calleguas	8,046	103,711	111,757	7.51%	95,365	6.06%
Central Basin	836	27,263	28,099	1.89%	25,527	1.62%
Compton	61	2	63	0.00%	2	0.00%
Eastern	7,830	89,647	97,476	6.55%	91,462	5.81%
Foothill	645	10,598	11,243	0.76%	9,733	0.62%
Fullerton	486	7,552	8,038	0.54%	6,947	0.44%
Glendale	1,348	17,719	19,067	1.28%	16,183	1.03%
Inland Empire	4,521	44,465	48,986	3.29%	71,347	4.53%
Las Virgenes	1,842	23,056	24,897	1.67%	21,153	1.34%
Long Beach	2,379	24,043	26,422	1.78%	22,399	1.42%
Los Angeles	28,159	271,083	299,242	20.11%	316,537	20.11%
MWDOC	15,423	137,769	153,192	10.30%	140,558	8.93%
Pasadena	1,644	23,314	24,958	1.68%	21,297	1.35%
San Diego CWA	19,952	197,949	217,901	14.64%	335,760	21.33%
San Fernando	3	-3	0	0.00%	-	0.00%
San Marino	108	796	903	0.06%	738	0.05%
Santa Ana	734	8,423	9,157	0.62%	7,738	0.49%
Santa Monica	707	6,113	6,820	0.46%	5,603	0.36%
Three Valleys	5,078	62,301	67,379	4.53%	66,540	4.23%
Torrance	1,294	14,195	15,489	1.04%	14,341	0.91%
Upper San Gabriel	492	46,902	47,393	3.19%	60,036	3.81%
West Basin	12,177	118,108	130,285	8.76%	108,250	6.88%
Western MWD	4,404	70,673	75,077	5.05%	74,783	4.75%
Total	\$ 121,561	\$ 1,366,404	\$ 1,487,965	100.00%	1,573,965	100.00%

¹ Water Transactions include sales, exchanges, and wheeling.² Water Transactions as billed.

Due to differences in local supply resources and demand characteristics, usage profiles differ significantly among the member agencies. Table 4 summarizes the usage characteristics of the member agencies for the ten calendar years ended 2020. As can be seen from this table, individual agency purchases vary substantially from year to year, and the Metropolitan system accommodates usage behavior that varies widely among member agencies. The table shows that Metropolitan's transactions can vary as much as ± 30 percent from average. This range of variability is not typical for a retail water utility, but Metropolitan is a wholesale supplemental supplier with varying demands placed on it by its member agencies. Additionally, Metropolitan maintains its service available to all member agencies, regardless of each agencies' usage patterns.

Table 4: Member Agency Water Usage ProfilesCalendar Years 2011-2020 ^{1, 2, 3}

Agency	Average (AF)	Maximum (AF)	Minimum (AF)	Peak Day (CFS)
Anaheim	19,504	38,582	13,267	84.1
Beverly Hills	10,634	12,102	9,498	32.7
Burbank	15,690	19,815	7,747	22.6
Calleguas	100,699	133,688	87,759	240.8
Central Basin	42,659	73,685	17,546	79.2
Compton	420	1,597	-	6.9
Eastern	102,891	113,109	83,878	267.4
Foothill	8,270	9,532	7,218	19.9
Fullerton	7,515	10,339	5,057	27.4
Glendale	17,480	20,941	14,487	49.0
Inland Empire	81,713	103,526	63,287	153.9
Las Virgenes	20,807	24,639	17,815	46.1
Long Beach	33,225	45,221	25,953	80.4
Los Angeles	267,855	444,526	106,380	782.5
MWDOC	304,336	361,491	161,758	443.1
Pasadena	18,754	21,103	16,501	52.5
San Diego	443,762	600,211	323,909	1,138.2
San Fernando	31	108	-	4.9
San Marino	972	1,601	309	7.5
Santa Ana	10,452	16,675	4,747	21.7
Santa Monica	4,757	6,629	2,989	22.7
Three Valleys	67,162	73,500	55,988	178.6
Torrance	18,021	28,013	15,209	39.1
Upper San Gabriel	39,359	61,263	17,416	79.1
West Basin	144,806	156,213	119,443	230.2
Western	93,279	114,317	83,498	198.6
Total	1,875,053	2,492,428	1,261,658	4,309.3

¹ Water Transactions include sales, exchanges, and wheeling.² Occur period Water Transactions.³ Peak Day from May 1 through September 30, excluding replenishment.

Based on the variability of supplemental wholesale water transactions and unpredictability of future hydrologic conditions, transaction projections are based on long-term average forecasts consistent with Metropolitan's 2020 Integrated Resources Plan update analysis.

Metropolitan's Water Resources and Facilities

Metropolitan's total water system has been built over time to meet the widely differing needs of its member agencies and the sources of water available to Metropolitan. Some agencies have no local water resources and rely on Metropolitan for 100 percent of their annual water needs. Other agencies have adequate local surface supplies and storage and/or groundwater basins that provide them with the majority of their water supplies during wet and average years. However, during dry periods these agencies rely on Metropolitan to

make up any shortfalls in local water supplies. All members rely on the entirety of the system reliability during any emergency or shortage period. Therefore, Metropolitan operates its system to attempt to ensure the availability of its services to all its member agencies throughout the entire year. Challenges arise in managing water available from the SWP, the Colorado River, and water supply projects of Metropolitan.

Metropolitan's water delivery system is comprised of three integrated conveyance and delivery components:

- SWP;
- CRA; and
- Distribution System.

The California Aqueduct of the SWP and the CRA convey imported water into the Metropolitan service area. This water is then delivered to Metropolitan's member agencies via a regional network of canals, pipelines, and appurtenant facilities, which constitute the Distribution System. Supply, treatment, and storage facilities augment the Distribution System.

Water Conveyance System

For purposes of this report, components of the conveyance system are considered to include only those major trunk facilities that transport water from primary supply sources to either regional storage facilities or feeder lines linked to the primary conveyance facilities. All other water transport facilities, including pipelines, feeders, laterals, canals and aqueducts are considered part of the distribution facilities. Distribution facilities can be further identified in that they generally have at least one connection to a member agency's local distribution system. Existing regional conveyance facilities include both the SWP and CRA facilities. SWP facilities transport water from the Sacramento-San Joaquin Delta southward through a series of pumps, aqueducts, siphons, and tunnels that comprise the California Aqueduct. Conveyance facilities in or near Metropolitan's service area include the East Branch and West Branch of the California Aqueduct, the San Bernardino Tunnel, the Devil Canyon Power Plant, and the Santa Ana Valley Pipeline, which constitute the terminus of the reaches of the SWP facilities used and allocable to Metropolitan under its State Water Contract. The characteristics of the California Aqueduct are described more fully under the "State Water Project" heading below. Metropolitan operates the CRA. The CRA transports water from the Colorado River approximately 242 miles to its terminus at Lake Mathews in Riverside County. The characteristics of the CRA are more fully described under the "Colorado River Aqueduct" heading below. A summary of conveyance facilities is presented in Table 5.

Table 5: Components of Metropolitan's Water Conveyance System

Facility Name	Design Capacity (cfs)
East Branch SWP to Devil Canyon (a)	1,500
West Branch SWP (a)	1,490
Santa Ana Valley Pipeline SWP (a)	420
Colorado River Aqueduct	1,605
Inland Feeder	1,000

(a) The availability of additional capacity is dependent on coordination of Metropolitan's needs and the needs of other SWP Contractors

Metropolitan's conveyance facilities deliver available water to meet regional supplemental water demands either through direct deliveries or through deliveries to storage for later use. The two most important factors considered in evaluating water conveyance needs are:

- Availability of water supplies; and
- Supplemental water demands, including both:
 - Consumptive demands; and
 - Deliveries to storage during water surplus periods.

Additional factors that are considered in modeling operational needs and planning for additional water conveyance facilities include:

- Water quality blend requirements,
- System reliability in an emergency or unusual supply year; and
- System flexibility under other-than-normal operating conditions.

Conveyance system planning and operational needs are evaluated using both 1) computer simulation models, which indicate how much imported water is available during a given year, and 2) a distribution system mass balance model, which indicates system capacity constraints. These models use available imported supplies based on historical hydrology, and then map these supplies over projected supplemental water demands on a monthly basis. Modeling results are analyzed to determine if shortages occur because of conveyance constraints or water supply constraints under various wet, dry, and normal conditions. The need for additional conveyance facilities is governed by the most restrictive of the conveyance constraints.

State Water Project (SWP)²

One of Metropolitan's two major sources of water is the SWP, which is managed and operated by DWR, and is an integral part of Metropolitan's conveyance system. The SWP is the largest state-built, multipurpose, user-financed water project in the country. It was designed and built primarily to deliver water, but also provides flood control, generates power for pumping, is used for recreation, and enhances habitat for fish and wildlife. The SWP provides irrigation water for 750,000 acres of farmland, primarily in the San Joaquin Valley, and provides municipal and industrial water for approximately 27 million of California's estimated 39.5 million residents.

The SWP consists of a complex system of dams, reservoirs, power plants, pumping plants, canals and aqueducts to deliver water. SWP water consists of water from rainfall and snowmelt runoff that is captured and stored in SWP conservation facilities and then delivered through SWP transportation facilities to water agencies and districts located throughout the Upper Feather River, Bay Area, Central Valley, Central Coast, and Southern California. Metropolitan receives water from the SWP through the California Aqueduct, which is 444 miles long, and at four delivery points near the northern and eastern boundaries of Metropolitan's service area. The SWP facilities are shown in Figure 4.

The capacity of the SWP to deliver water decreases with distance from the Banks Pumping Plant, located in the Sacramento-San Joaquin Delta, as water is delivered to Contractors through the South Bay Aqueduct and the Coastal Branch Aqueduct, and to turnouts in the San Joaquin Valley and Southern California. The design pumping capacity at Banks Pumping Plant is 10,670 cubic feet-per-second (cfs) but only 4,480 cfs at the Edmonston Pumping Plant, located at the base of the Tehachapi Mountains.

In addition to the delivery of SWP water, the SWP is also used to convey transfers of SWP water and non-SWP water. SWP operations are closely coordinated and integrated with the federal Central Valley Project (CVP) and the San Luis Reservoir and San Luis Canal section of the California Aqueduct are shared SWP/CVP facilities. The SWP is also connected to other water sources upstream of the Sacramento-San Joaquin Delta, and along the California Aqueduct as it passes through Central Valley.

² For historical and current information regarding the SWP, refer to Bulletin 132, published periodically by DWR since 1963. The most recently published Bulletin is Bulletin 132-18 dated January 2021 and titled "Management of the California State Water Project". Appendices to the Bulletin are also updated separately. Both are available at: <https://water.ca.gov/Programs/State-Water-Project/Management/Bulletin-132>.

This map illustrates the California Aqueduct system, showing the path of the aqueduct from the Sacramento-San Joaquin Delta to the Central Valley. Key features include:

- Delta Region:** Thermalito Diversion Dam Powerplant, Thermalito Forebay, Robie Thermalito Pumping-Generating Plant, Thermalito Afterbay, Hyatt Powerplant, Antelope Lake, Lake Oroville, Frenchman Lake, Lake Davis, Lake Feather R., Middle Feather R., San Joaquin R., Feather R., and the Sacramento-San Joaquin Delta.
- North Bay Region:** Barker Slough Pumping Plant, Cordelia Pumping Plant, North Bay Aqueduct, Clifton Court Forebay, Skinner Fish Facility, Banks Pumping Plant, Bethany Reservoir, South Bay Pumping Plant, South Bay Aqueduct, Lake del Valle, Del Valle Pumping Plant, O'Neill Pumping Plant, O'Neill Forebay, San Luis Reservoir, Los Banos Reservoir, Little Panoche Reservoir, Gianelli Pumping-Generating Plant, and Dos Amigos Pumping Plant.
- Central Valley Region:** Badger Hill Pumping Plant, Devil's Den Pumping Plant, Bluestone Pumping Plant, Polonio Pass Pumping Plant, Las Perillas Pumping Plant, California Aqueduct, Buena Vista Pumping Plant, Oso Pumping Plant, Quail Lake, West Branch Aqueduct, Warme Powerplant, Pyramid Lake, Castaic Pumping-Generating Plant (LADWP), Elderberry Forebay, Teerink Pumping Plant, Chrisman Pumping Plant, Edmonston Pumping Plant, Alamo Powerplant, East Branch Aqueduct, Pearlblossom Pumping Plant, Mojave Siphon Powerplant, Devil Canyon Powerplant, East Branch Extension, Greenspot Pump Station, Crafton Hills Pump Station, Crafton Hills Reservoir, Lake Perris, and Cherry Valley Pump Station.

State Water Contractors participate in the SWP through responsibility for costs of the SWP in exchange for delivery of water conserved and stored by the SWP, an allocated portion of that total supply, and other participation rights. Each year, DWR determines the percentage of the total contracted amount it estimates

will be available to the State Water Contractors (the DWR allocation). Under a 100 percent allocation, Metropolitan would receive 1,911,500 acre-feet of SWP water. Late each year, DWR announces an initial allocation estimate for the upcoming year but may revise the estimate throughout the year if warranted by developing precipitation and water supply conditions. State Water Contractors are obligated to pay all costs of the SWP, except for those attributable to recreation, flood control, and other costs not associated with water deliveries to the State Water Contractors, regardless of the annual allocation determined by DWR. In addition to SWP water, Metropolitan also obtains water from water transfers, groundwater banking and exchange programs delivered through the California Aqueduct. From calendar years 2004 through 2020 the amount of water received by Metropolitan from the SWP, including water from water transfer, groundwater banking and exchange programs delivered through the California Aqueduct (described under “Water Transfer, Storage and Exchange Programs” below), varied from a low of 593,000 acre-feet in calendar year 2015 to a high of 1,800,000 acre-feet in 2004. In calendar year 2020, DWR’s allocation to State Water Contractors was 20 percent of contracted amounts, or 382,200 acre-feet, for Metropolitan. In calendar year 2021, DWR’s allocation to State Water Contractors was 5 percent of contracted amounts, or 95,550 acre-feet, for Metropolitan.

On December 1, 2020, DWR announced an initial calendar year 2020 allocation of 10 percent. On March 23, 2021, DWR decreased the allocation to 5 percent. Decreased hydrologic conditions, including below-average precipitation in the month of January and February, led to the decrease to 5 percent. For calendar year 2021, DWR’s initial allocation was announced on December 1, 2021 and was 0 percent of contracted amounts. This is the first year in DWR’s history of setting an initial allocation of 0 percent. As a result of improved runoff conditions, on January 20, 2022 DWR increased the allocation to 15 percent. On March 18, DWR decreased the allocation to 5 percent due to a historically dry January and February.

In addition to the allocation percentage set by DWR, the availability of SWP water to its contractors depends on the ability of the system to convey the water to each contractor. Regulatory constraints have reduced the ability of the SWP to divert water from the Bay-Delta, and subsidence has reduced the capacity to convey water to the service area of contractors south of the Bay-Delta.

In addition to being a source of water for diversion into the SWP, the Bay-Delta is also the source of water for local agricultural, municipal and industrial needs, and, in addition, supports significant resident and anadromous fish and wildlife resources and important recreational uses of water. Both the SWP’s upstream reservoir operations and its Bay-Delta diversions can at times affect these other uses of Bay-Delta water directly, or indirectly, through impacts on Bay-Delta water quality.

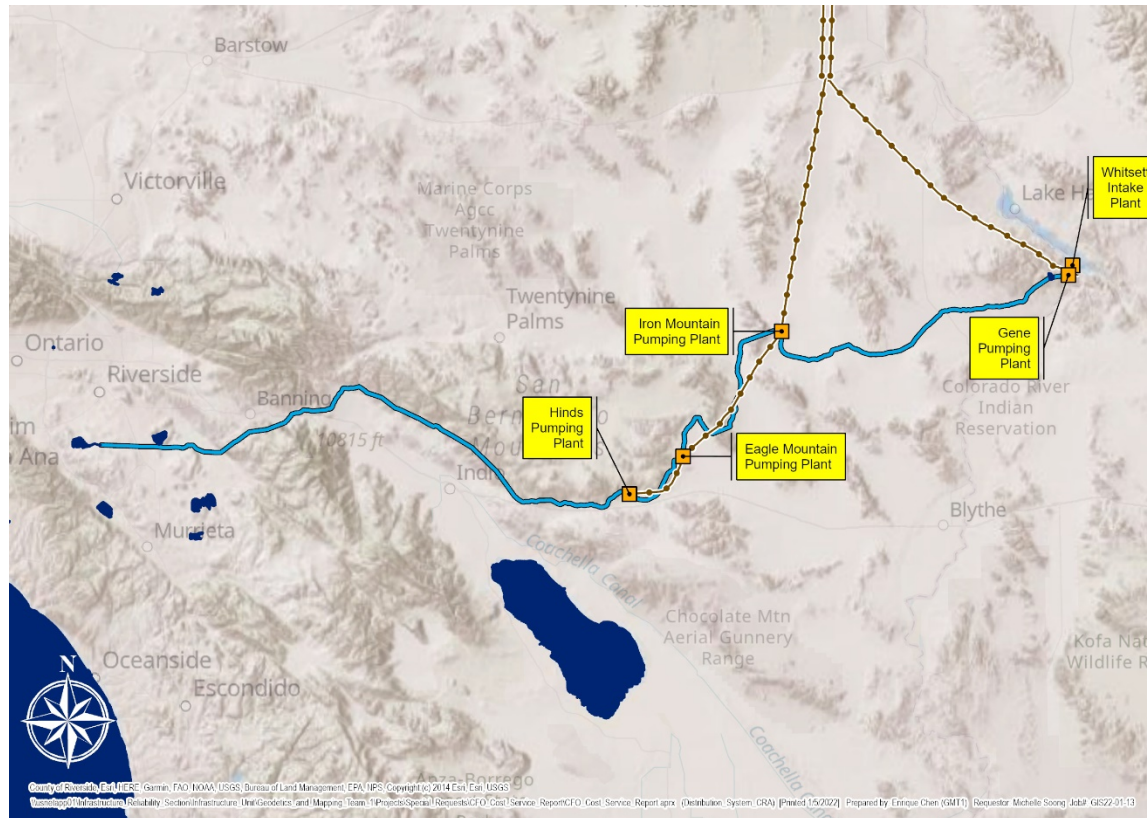
Colorado River Aqueduct (CRA)

The other major source of water for Metropolitan is the Colorado River through the CRA. Metropolitan was established to obtain an allotment of Colorado River water, and its first mission was to construct and operate the CRA. The CRA consists of 5 pumping plants, 450 miles of high voltage power lines, 1 electric switching station, 4 regulating reservoirs, and 242 miles of aqueducts, siphons, canals, conduits and pipelines terminating at Lake Mathews in Riverside County.

The Colorado River was Metropolitan’s original source of water after Metropolitan’s establishment in 1928. Metropolitan has a legal entitlement to receive water from the Colorado River under a permanent service contract with the Secretary of the Interior. Water from the Colorado River and its tributaries is also available to other users in California, as well as users in the states of Arizona, Colorado, Nevada, New Mexico, Utah, and Wyoming (the Colorado River Basin States), resulting in both competition and the need for cooperation among these holders of Colorado River entitlements. In addition, under a 1944 treaty, Mexico has an allotment of 1.5 MAF of Colorado River water annually except in the event of extraordinary drought or serious accident to the delivery system in the United States, in which event the water allotted to Mexico would be curtailed. Mexico also can schedule delivery of an additional 200,000 acre-feet of Colorado River water per year if water is available in excess of the requirements in the United States and the 1.5 MAF allotted to Mexico.

The CRA, which is directly owned and operated by Metropolitan, transports water from the Colorado River approximately 242 miles to its terminus at Lake Mathews in Riverside County. The CRA is shown in Figure 5. Up to 1.25 MAF of water per year may be conveyed through the CRA to Metropolitan's service area, subject to availability of Colorado River water for delivery to Metropolitan as described below.

Figure 5: Colorado River Aqueduct



California is apportioned the use of 4.4 MAF of water from the Colorado River each year plus one-half of any surplus that may be available for use collectively in Arizona, California and Nevada. Under the 1931 priority system that has formed the basis for the distribution of Colorado River water made available to California, Metropolitan holds the fourth priority right to 550,000 acre-feet per year. This is the last priority within California's basic apportionment. In addition, Metropolitan holds the fifth priority right to 662,000 acre-feet of water, which is in excess of California's basic apportionment. Until 2003, Metropolitan had been able to take full advantage of its fifth priority right as a result of the availability of surplus water and water apportioned to Arizona and Nevada that was not needed by those states. However, during the 1990s, Arizona and Nevada increased their use of water from the Colorado River and by 2002 no unused apportionment was available for California. In addition, a severe drought in the Colorado River Basin reduced storage in system reservoirs, ending the availability of surplus deliveries to Metropolitan. As a result, California has been limited to 4.4 MAF since 2003. Prior to 2003, Metropolitan could divert over 1.25 MAF in any year, but since that time, Metropolitan's net diversions of Colorado River water have ranged from a low of 537,607 acre-feet in 2019 to a high of approximately 1,179,000 acre-feet in 2015. Metropolitan has taken steps to augment its share of Colorado River water through agreements with other agencies that have rights to use such water.

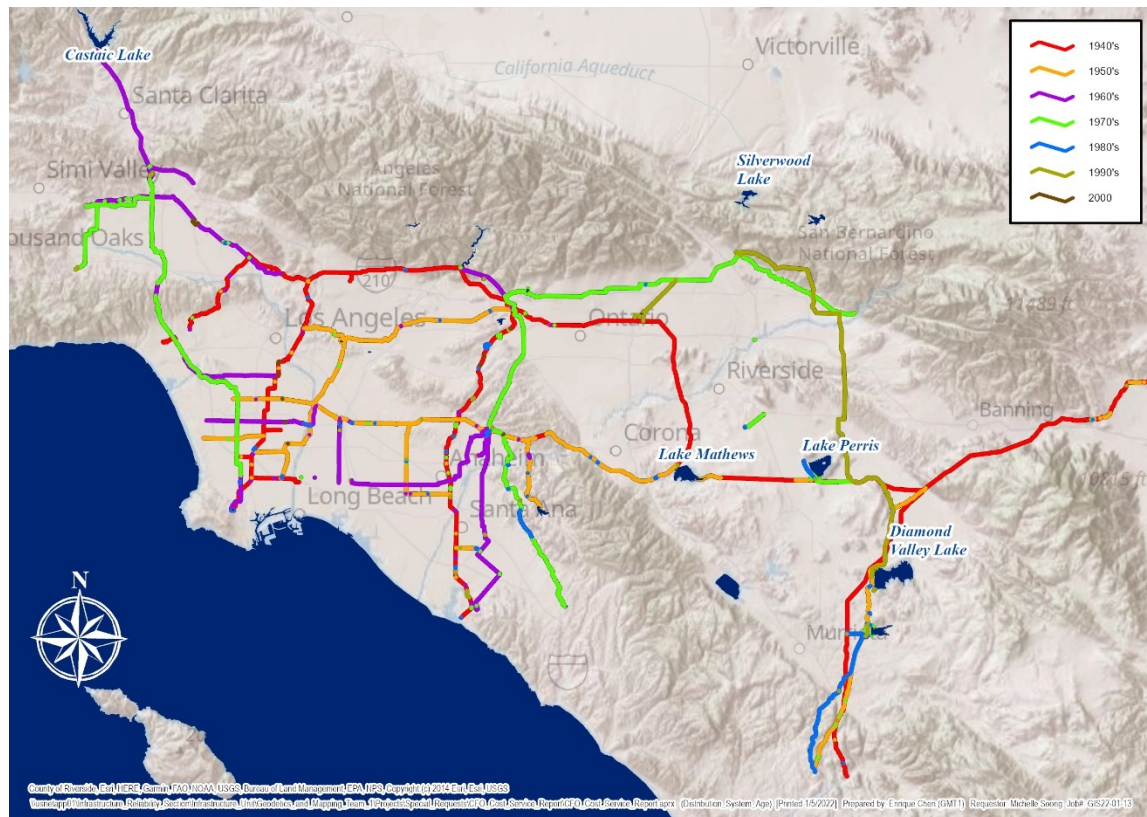
The Quantification Settlement Agreement (QSA) and related agreements, executed by Coachella Valley Water District (CVWD), Imperial Irrigation District (IID), Metropolitan, and other parties in October 2003, establishes Colorado River water use limits for IID and CVWD, and provides for specific acquisitions of conserved water and water supply and delivery arrangements for up to 110 years. The QSA and related

agreements provide a framework for Metropolitan to enter into other cooperative Colorado River supply programs and set aside several disputes among California's Colorado River water agencies.

Specific programs under the QSA and related agreements include lining portions of the All-American and Coachella Canals, which conserve approximately 96,000 acre-feet annually. Included under the QSA is an allocation agreement, in which Metropolitan assigned about 80,000 acre-feet of conserved canal lining water per year to the San Diego County Water Authority (SDCWA) for 110 years. Also included is an exchange agreement with SDCWA, under which SDCWA makes available to Metropolitan at Lake Havasu the conserved canal lining water and conserved transfer water from IID, and in exchange Metropolitan delivers a like quantity of water to SDCWA in its service area. Additionally, included under the QSA is the delivery and exchange agreement between Metropolitan and CVWD that provides for Metropolitan, when requested, to deliver annually up to 35,000 acre-feet of Metropolitan's SWP contractual water to CVWD by exchange with Metropolitan's available Colorado River supplies. Metropolitan and CVWD also share in 105,000 acre-feet annually of water conserved by IID, with Metropolitan receiving no less than 85,000 acre-feet. In 2021, the transfer of water conserved annually by IID to SDCWA was 205,000 acre-feet. With full implementation of the programs identified in the QSA, at times when California is limited to its basic apportionment of 4.4 MAF per year, Metropolitan expects to be able to annually divert to its service area approximately 900,000 acre-feet of Colorado River water plus water from other water augmentation programs it develops, including the Palo Verde Irrigation District (PVID) program, which provides up to approximately 133,000 acre-feet of water per year.

Distribution System

All water transport facilities not specifically identified as part of the regional conveyance system are considered part of the distribution facilities (Distribution System). While conveyance and aqueduct system components are regional in nature and do not link directly to local agency distribution systems, Distribution System facilities do ultimately connect to local agency systems. As a result, these facilities rely on conveyance and aqueduct facilities to import water from regional supply sources. The Distribution System is a complex network of facilities which routes water from the SWP and CRA to storage reservoirs and treatment plants within Metropolitan's member agencies and also to the member agencies. Beginning at the terminal delivery points of the CRA and SWP, Metropolitan's Distribution System includes approximately 775 miles of pipelines, feeders, and canals. The Distribution System includes components dating from the 1930's up to the present day, as shown in Figure 6. Distribution System operations are coordinated from the Operations Control Center in Eagle Rock. The control center plans, schedules, and balances daily water operations in response to member agency demands and the operational limits of the system as a whole. Metropolitan's storage and treatment facilities augment the Distribution System. Metropolitan operates and maintains separate untreated and treated distribution facilities.

Figure 6: Metropolitan's Distribution System

¹ Figure includes Colorado River Aqueduct and Inland Feeder which are part of the Conveyance and Aqueduct Facilities.

Storage Facilities

Existing imported water storage available to the region consists of Metropolitan's raw water reservoirs, a share of the SWP's raw water reservoirs in and near the service area, and the portion of the groundwater basins used for conjunctive-use storage. Figure 7 shows the geographical location of Metropolitan's major storage facilities. Table 6 lists surface water storage facilities owned and operated by Metropolitan. With some limitations, these reservoirs can be used to help meet the region's water storage requirements. Total storage capacity currently available to Metropolitan in these existing reservoirs is about 1,041,830 acre-feet.

Metropolitan's water storage is divided into three categories: emergency, regulatory, and drought carryover storage. Emergency storage capacity is intended to provide the Metropolitan service area with a supply of water in the event of a major regional catastrophe isolating Southern California from its imported water supplies. Regulatory storage requirements are based on historical reservoir cycling and known cycling targets intended to meet the delivery schedules of the member agencies. Drought carryover storage is intended to prevent water shortages during dry years and is evaluated using computer simulation models, incorporating historic hydrologic data, projections of future demand, and information on currently available storage levels.

Figure 7: Metropolitan's Major Distribution System Storage Facilities**Table 6: Capacity of Metropolitan's Distribution System Storage Facilities**

Storage Facilities	Capacity (Acre-feet)
Etiwanda Reservoir	447
Garvey Reservoir	1,610
Orange County Reservoir	Out of Service
Palos Verdes Reservoir	695
Live Oak Reservoir	2,500
Lake Mathews	182,000
Lake Skinner	44,000
Diamond Valley Lake	810,000
Total Storage Capacity	1,041,252

In addition to the storage facilities shown above, DWR owns and operates five major reservoirs in or near Metropolitan's service area as part of the SWP. Castaic Lake, Elderberry Forebay, and Pyramid Lake are located on the West Branch of the California Aqueduct. Silverwood Lake and Lake Perris are on the East Branch of the California Aqueduct. The total storage capacity of these five reservoirs is approximately 733,900 AF. When cost allocation factors from DWR Bulletin 132 Appendix B, Table B-2 are applied to the operational storage capacities, storage available to Metropolitan in these five DWR reservoirs is approximately 644,000 AF. Within these reservoirs, up to 220,000 acre-feet of additional storage is provided for by the State Water Contract. During an emergency or drought, Metropolitan may access more or less than

644,000 AF, based on the availability at the reservoirs and need of all State Water Contractors with access to the reservoirs.

Under a conjunctive-use groundwater program, groundwater basins are used to store imported supplies during years when water is abundant. The stored water is then used during shortages and emergencies, reducing demand on imported supplies. Consequently, groundwater conjunctive use enables member agencies to better capture surplus surface flows Metropolitan receives from the SWP and the CRA and reduces demand that would otherwise be placed on Metropolitan's system during dry periods.

Treatment Plants

In addition to raw water supply, Metropolitan provides treated water to supplement the potable water needs of its member agencies. Table 7 identifies Metropolitan's water treatment plants and related design capacities.

Metropolitan's Water Treatment Plants

Table 7: Water Treatment Plants

Water Treatment Plants	Design Capacity (cfs)
Diemer Filtration Plant	803
Jensen Filtration Plant	1,163
Mills Filtration Plant	341
Skinner Filtration Plant	543
Weymouth Filtration Plant	803
Total	3,652

Metropolitan's water treatment plants are listed in Table 7 and shown geographically in Figure 8. More than 60 percent of Metropolitan's demand for supplemental treated water is located in a region of the service area referred to as the "Central Pool". Agencies located partially or entirely within the Central Pool include Los Angeles, Orange, and Ventura Counties. Three existing Metropolitan treatment plants serve the Central Pool's treated water needs:

- The Jensen plant in Granada Hills;
- The Weymouth plant in La Verne; and
- The Diemer plant in Yorba Linda.

While some areas of the Central Pool receive treated water from one plant, the three plants together also jointly produce water for a common area of the Central Pool referred to as the "Common Pool". The Mills plant and the Skinner plant do not produce water for the Common Pool but serve areas in the eastern part of Metropolitan's service area.

Palmdale

Victorville

California Aqueduct

Santa Clarita

Simi Valley

Thousand Oaks

Los Angeles

Long Beach

Santa Ana

Corona

Riverside

Banning

Murietta

San Bernardino National Forest

Joseph P. Jensen Water Treatment Plant

F.E. Weymouth Water Treatment Plant

Robert B. Diemer Water Treatment Plant

Henry J. Mills Water Treatment Plant

Robert A. Skinner Water Treatment Plant

North Arrow

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Watershed Analysis and Planning, Southern California Infrastructure, Water, and Energy Team, Citizens Special Request for Data Service Report of Los Angeles Report (2014) (Distribution System Treatment) (Printed 15/2022) (Prepared by Enrique Chen (GMT)) (Requestor: Michelle Song) (Job: GIS22-01)

Table 8 shows Metropolitan's treated and untreated water transactions by member agency for Cash Year 2021. Approximately 50 percent of Metropolitan's water transactions in Cash Year 2021 were treated.

Table 8: Treated and Untreated Water Transactions by Member Agency, Cash Year 2021

Acre-Feet^{1, 2}

Agency	Treated (AF)	Untreated (AF)	Total (AF)
Anaheim	28,847	14,177	43,024
Beverly Hills	9,709	-	9,709
Burbank	4,796	5,472	10,268
Calleguas	93,372	-	93,372
Central Basin	24,449	-	24,449
Compton	2	-	2
Eastern	64,690	26,344	91,034
Foothill	9,289	-	9,289
Fullerton	6,652	-	6,652
Glendale	16,136	-	16,136
Inland Empire	-	68,651	68,651
Las Virgenes	21,097	-	21,097
Long Beach	22,906	-	22,906
Los Angeles	75,715	211,520	287,235
MWDOC	107,910	29,374	137,284
Pasadena	19,654	-	19,654
San Diego	29,810	294,288	324,097
San Fernando	-	-	-
San Marino	1,365	-	1,365
Santa Ana	8,254	-	8,254
Santa Monica	5,571	-	5,571
Three Valleys	35,140	28,814	63,954
Torrance	14,489	-	14,489
Upper San Gabriel	4,378	54,895	59,273
West Basin	109,127	-	109,127
Western	43,744	28,895	72,639
Total	757,103	762,429	1,519,531

¹ Water Transactions include sales, exchanges, and wheeling.

² Water Transactions are based on occur period.

Hydroelectric Facilities

Metropolitan's Distribution System has 16 small hydroelectric plants located throughout the service area. The plants are located in Los Angeles, Orange, Riverside, and San Diego Counties as shown in Figure 9. The combined generating capacity of these plants and the generating capacity at Diamond Valley Lake (DVL) are approximately 130 megawatts. Depending upon annual water deliveries, projected annual income for the next several years is expected to range between \$11 million and \$13 million.

DEVELOPMENTS

Today, Metropolitan finds that its challenges and goals are evolving. The Board of Directors in the 1990s was deeply concerned with member agencies relying too much on importing supplies from Northern California and the Colorado River. Programs to regionalize conservation efforts and to incentivize new local supplies such as the LRP were developed. This approach was developed through regional long-term planning via Metropolitan's Integrated Water Resources Plan (IRP) initiated in 1996.

Today, there is a shifting water landscape. Population growth and water demands, in large part due to tremendous strides in water use efficiency, are far less than once predicted. Metropolitan's water transactions, which include sales, exchanges, and wheeling, in fiscal year 2019 were the lowest in nearly 40 years. A new generation of larger local supply projects are in the planning stages.

Delivery of imported supplies will always be a foundation to meet ongoing regional demands, even with climate change, and importantly so will storage of imported water for droughts and emergencies. Given fluctuations in the availability of water resources, maintaining and enhancing system flexibility is a priority for Metropolitan. The evolving mix of Southern California's future water portfolio is still to be determined and will be impacted by future policies and decisions made by Metropolitan's Board.

Delta Conveyance

Within the region's water portfolio, supplies from the SWP remain an essential baseline water source for Southern California. Water from Northern California delivered through the SWP has provided key supplies in wet years to manage against dry years, and it is the only imported supply that can physically reach significant portions of Metropolitan's service area. This water source faces uncertainties due to climate change and the Delta's badly outdated delivery system; these problems are compounded by a declining ecosystem and 1,100-mile levee systems that are increasingly vulnerable.

California WaterFix was a comprehensive science-based solution proposed by the state to modernize critical water delivery infrastructure of the SWP. The California WaterFix proposed construction of new water intakes in the north Delta and two 40-foot diameter tunnels under the Delta terminating at a forebay in the south Delta. This would have fulfilled the requirement of the 2009 Delta Reform Act to contribute toward meeting the coequal goals of more reliably delivering water for California and protecting, restoring and enhancing the Delta ecosystem.

On April 29, 2019, Governor Newsom issued an executive order directing State agencies to develop a comprehensive statewide strategy to build a climate-resilient water system that included consideration of a single-tunnel Delta conveyance facility instead of the approved two-tunnel WaterFix project. In light of this order, DWR and the State Water Contractors deleted the WaterFix cost provisions from the current amendment process leaving only the water management provisions and embarked on a new public process to further negotiate proposed amendments related to cost allocation for a potential new Bay-Delta conveyance project. **As a result, the costs of any such new project are yet unknown and Metropolitan's projected up to \$10.8 billion costs for California WaterFix are no longer included in its current or future budgeting or projections.**

Consistent with the Governor's direction, the formal environmental review process for a proposed single tunnel Delta Conveyance Project commenced with the issuance by DWR of a Notice of Preparation under CEQA on January 15, 2020. Planning, environmental review and conceptual design work by DWR is expected to be completed in the 2023-2024 timeframe. The Proposed Biennial Budget includes Metropolitan's planned contribution of \$99.0 million for Delta conveyance project planning activities. This contribution follows Board policy that staff work with the State to find solutions to improve Delta conveyance. The focus over the

next two years will be supporting the DWR as it seeks permits for a Delta conveyance project; participating in the Delta Conveyance Design and Construction Authority; and continuing to put forward sound scientific research to help inform and improve Delta management decisions. If staff determines that Metropolitan's appropriate contribution toward planning activities should exceed the budgeted amount, the General Manager will request authorization from the Board for additional funding. Additionally, the Board will separately consider Metropolitan's participation in a new Delta conveyance project once that proposed project is finalized by DWR. Information regarding the Delta conveyance project is located on Metropolitan's website at <https://www.mwdh2o.com/planning-for-tomorrow/securing-our-imported-supplies/delta-conveyance/>.

Regional Recycled Water Program

The Regional Recycled Water Program (RRWP), is a partnership between Metropolitan and the Sanitation Districts of Los Angeles County. In November 2020, Metropolitan's Board voted to proceed with the Environmental Planning Phase of the Program. This work will prepare the documentation needed for future Board approval of the Program Environmental Impact Report. As it has since its completion in 2019, the RRWP's demonstration facility will produce approximately 500,000 gallons per day and will continue to be operated to generate information needed for regulatory approval and to increase the efficiency of the treatment processes that may be used in a potential full-scale recycled water facility. The potential full-scale project, viewed as a potential third source of water for Metropolitan, would provide a reliable, drought-proof, climate-resilient, local supply for indirect potable reuse (IPR) through groundwater basin recharge, direct potable reuse (DPR) through raw water augmentation at Metropolitan's treatment plants, and direct industrial use. If approved, the full-scale project will produce 150 million gallons per day (mgd), or approximately 168,000 acre-feet (AF) per year (AFY), of purified water.

Construction of the 0.5 mgd advanced water treatment demonstration plant was approved in 2017 and was completed in August 2019. Testing and operation of the plant began in October 2019 to confirm treatment costs and provide the basis for regulatory approval of the proposed treatment process and technical recommendations concerning design, operation, and optimization of the full-scale RRWP. The initial phase of testing is scheduled for completion in 2021 with future testing phases planned that will form the basis for the design, operation and optimization of, and will inform Metropolitan's Board decision whether to move forward with, a full-scaled advanced water treatment facility. **The Board has not yet committed to a full-scale project; however, the planning costs for the backbone system of the RRWP is included in the Biennial Budget in the order of approximately \$20 million over the biennial period.** Metropolitan has secured partners in the Southern Nevada Water Authority and Central Arizona Project who have each committed to pay a portion of the planning costs of the project and executed Memorandum of Understandings with Metropolitan to document their commitment to the program's success. Information regarding the RRWP is located on Metropolitan's website at <https://www.mwdh2o.com/planning-for-tomorrow/building-local-supplies/regional-recycled-water-program/>.

2020 IRP Update

The IRP is a plan for providing reliable and affordable water to Southern California for the next 25 years, from its inception in 1996 and then from regular updates, most recently in 2015. It broadly identifies and aligns regional and local needs, priorities, resources and opportunities, both in the scale of actions and in their timing. The emphasis is on its broad collaborative approach to planning.

Each IRP sets important targets for actions such as developing local supply, water use efficiency, or average-year expectations from the Colorado River and the SWP. It does not signal that Metropolitan will build or pay for any specific initiative or project to meet those targets, nor does it assume any particular local supply project will be funded or constructed. The IRP is a method for setting targets and reassessing them approximately every five years along with the Urban Water Management Plan.

Metropolitan is preparing to finalize the 2020 IRP Update in early 2022 and initiate the IRP Implementation Plan shortly thereafter. During this update Metropolitan's Board will be faced with deciding the vision for Metropolitan's second century – to provide service at reduced levels of demand and provide resilient operations through variable hydrology. This vision will help drive the direction of the 2020 IRP Update as well as many other decisions.

Rate Structure Review

Since its creation Metropolitan has shifted from receiving the bulk of its revenues from a single source, ad valorem property taxes, to a mix of fixed charges and volumetric rates. This shift took place over decades for numerous reasons, including the availability of water to deliver to Metropolitan's member agencies. Currently about 80 percent of Metropolitan's revenues come from the volumetric rates and the remaining 20 percent comes from fixed sources such as the fixed charges, ad valorem property taxes, and miscellaneous revenue sources including interest income, hydroelectric power sales, leases and grant funding.

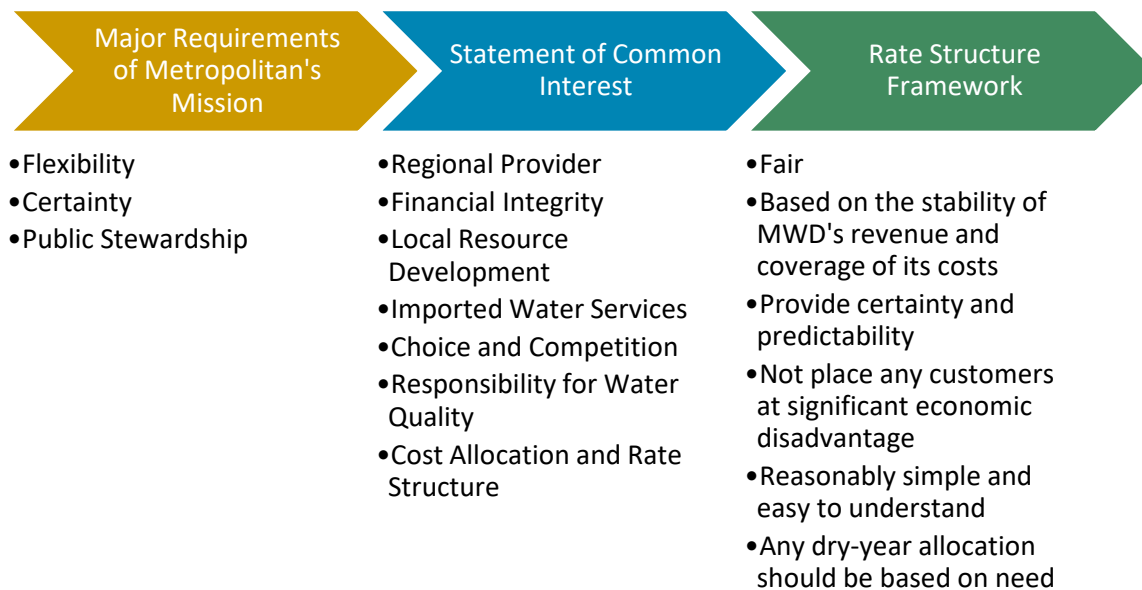
Member agencies' purchases and use of Metropolitan's system have always varied for many reasons, with member agencies able to call on Metropolitan's services at various levels from year to year. Because Metropolitan's deliveries to its member agencies have generally remained consistent on a long-term basis (as opposed to year-to-year), the volumetric revenue base has provided consistent necessary revenue for Metropolitan. **However, if through the IRP process and strategic planning, the Board determines that reliance on Metropolitan will be less consistent, then the current rate structure may not be consistent with that role.** Any changes to the rate structure should seek to maintain a structure that is sustainable for the long-term and remains equitable to Metropolitan's member agencies throughout the service area.

RATE STRUCTURE

Framework

The Rate Structure Framework evolved through a comprehensive strategic planning process initiated in 1998. As depicted in the following figure, the first step of the process was to identify the “Major Requirements of Metropolitan’s Mission,” which was reflected in the Strategic Plan Policy Principles. The Statement of Common Interests formed the basis of Metropolitan’s strategic plan to address these mission requirements. One of the most important common interests was “Cost Allocation and Rate Structure.” In determining the most appropriate Cost of Service (COS) and rate structure, a set of pricing objectives, or guiding rate principles, was developed. These guiding rate principles defined Metropolitan’s Rate Structure Framework by which various COS and rate-setting methodologies could be evaluated.

Development of the Rate Structure Framework



The strategic planning process which established the foundation of the Rate Structure Framework is discussed below.

Major Requirements of Metropolitan’s Mission

As one of the first steps in the strategic planning process in 1998, the Board developed a list of three mission requirements in its Metropolitan vision statement – flexibility, certainty, and public stewardship, which it described as:

- **Flexibility.** Metropolitan is aware of the legislative and economic pressures which make flexibility in providing water services for a changing demand and in a competitive water market paramount. Fair compensation for wheeling through Metropolitan’s conveyance systems is an essential element of Southern California’s developing market.

- **Certainty.** The certainty that Metropolitan's water supply is reliable, and that the COS is appropriate is of utmost importance to member agencies and their retailers who are endeavoring to provide not only water, but value to the residents in their service area.
- **Public Stewardship.** As public stewards of much of Southern California's water supply, Metropolitan and its member agencies are responsible for making certain that the water is provided in a cost-effective and environmentally sound manner.

Statement of Common Interests

From the strategic planning mission requirements, the Board developed a list of seven areas of common interest that formed the major focus elements of the Metropolitan strategic plan, described as:

- **Regional provider.** This area includes the concerns of protecting regional infrastructure and providing service during drought periods. Regional water must be provided to meet the needs of the member agencies, and water supplies must be equitably allocated during drought periods based on the Water Surplus and Drought Management Plan principles.
- **Financial integrity.** It is a common interest of the members for Metropolitan to assure the financial integrity of the agency in all aspects of its operations.
- **Local resource development.** Metropolitan supports local resources development by working in partnership with its member agencies and by providing member agencies with financial incentives for water conservation and for local projects.
- **Imported water service.** Metropolitan is responsible for providing imported water to meet the committed needs of its member agencies.
- **Choice and competition.** After Metropolitan provides imported water for the member agencies' committed demands, a member agency can choose the most cost-effective additional water supplies for its customers. These choices include either Metropolitan, local resource development, market transfers, or some combination of these secondary options. Metropolitan and its member agencies can decide how to provide these additional supplies collaboratively while balancing local, imported, and market opportunities with affordability.
- **Responsibility for water quality.** Metropolitan must advocate for source water quality and implement in-basin water quality for the imported water it supplies. This is necessary to guarantee compliance with primary drinking water standards and to meet the water quality requirements for water recycling and ground water replenishment.
- **Cost allocation and rate structure.** The framework for a revised rate structure will be established to address allocation of costs, financial commitment, unbundling of services, and fair compensation for services including wheeling, peaking, growth, and others.

Rate Structure Framework

A major element of common interest was "*Cost Allocation and Rate Structure.*" In addressing this element, a set of pricing objectives, or guiding rate principles, had to be developed to evaluate alternative COS and rate setting approaches, or methodologies. As a result, the Board adopted a set of rate principles which was defined as the *Rate Structure Framework*. The Rate Structure Framework provided the principles for the Strategic Planning Steering Committee to develop a preferred rate structure. The Rate Structure Framework includes the following principles:

- The rate structure should be *fair*;
- It should be based on the *stability* of Metropolitan's revenue and coverage of its costs;
- It should provide certainty and predictability;

- It should not place any customers at *significant economic disadvantage*;
- It should be reasonably *simple and easy to understand*; and
- Any dry-year allocation should be *based on need*.

The 2001 COS and rate structure was adopted by the Board to address the Rate Structure Framework. That COS process and rate structure remain today, with the exception of recent modifications by the Board. First, in August 2020, the Board repealed the pre-set wheeling rate for short-term wheeling service to member agencies. As a result, charges for short-term wheeling to member agencies is now subject to contractual negotiations on a case-by-case basis, as has been the case with long-term wheeling arrangements for member agencies, all wheeling for third parties, and all exchange transactions. In December 2019, the Board directed staff (1) to incorporate the 2019/20 fiscal-year-end balance of the Water Stewardship Fund to fund all demand management costs in the proposed FYs 2020/21 and 2021/22 Biennial Budget; and (2) to not incorporate the Water Stewardship Rate, or any other rate or charge to recover demand management costs, with the proposed rate and charges for CYs 2021 and 2022. In November 2021, the Board directed staff to allocate all demand management costs to Metropolitan's supply rate elements, and no Water Stewardship Rate or other demand management recovery charge is included in the rate structure after 2022.

Rate Structure Design

The elements of the rate structure are summarized in Table 9 below, along with the current amounts for rates and charges effective in the current calendar year 2022:

Table 9: Rate Elements, Calendar Year 2022

Rate Design Elements	Functional Costs Recovered	Type of Charge	Rate or charge effective January 1, 2022
Tier 1 Supply Rate	Supply, Drought Storage	Volumetric (\$/af)	\$243
Tier 2 Supply Rate	Tier 1 Supply costs, plus cost of transfers from north of the Delta	Volumetric (\$/af)	\$285
System Access Rate	Conveyance/Distribution (Average Capacity), portion of Regulatory/Emergency Storage	Volumetric (\$/af)	\$389
Water Stewardship Rate (incorporated in Supply Rates after 2022)	Demand Management	Volumetric (\$/af)	\$-
System Power Rate	Power on CRA and SWP	Volumetric (\$/af)	\$167
Treatment Surcharge	Treatment	Volumetric (\$/af)	\$344
Capacity Charge	Peak Distribution Capacity, portion of Regulatory Storage	Fixed (\$/cfs)	\$12,200
Readiness-to-Serve Charge	Available Conv. & Dist. Capacity, Emergency Storage	Fixed (\$M)	\$140

Supply Rates

Purpose

The rate structure recovers supply costs through a two-tiered price structure. The amount of water a member agency may purchase at a lower Tier 1 Supply Rate (water sales within a member agency's Tier 1 maximum) is established by either a purchase order agreement or calculated as 60 percent of its Revised Base Firm Demand.

Tier 1 Supply Rate

The Tier 1 Supply Rate is a volumetric rate charged on Metropolitan's water sales that are within a member agency's Tier 1 maximum. The Tier 1 Supply Rate supports a regional integrated approach through the uniform, postage stamp rate. The Tier 1 Supply Rate is calculated as the amount of the total revenue requirement functionalized as supply divided by the estimated amount of Tier 1 water sales. Per Board direction in December 2021, all demand management costs are now functionalized as supply and collected on the Tier 1 and Tier 2 supply rates. All projected water sales for CY 2023 and 2024 are project to be Tier 1 sales.

The Supply Rate includes the costs of supply programs and demand management.

Tier 2 Supply Rate

The Tier 2 Supply Rate is a volumetric rate that reflects the costs of Tier 1 and Metropolitan's cost of purchasing water transfers north of the Delta. The Tier 2 Supply Rate is charged on Metropolitan water sales that exceed a member agency's Tier 1 maximum. The higher costs reflected in the Tier 2 Supply Rate encourages the member agencies and their customers to maintain existing local supplies and develop cost-effective local supply resources and conservation. Per Board direction in December 2021, all demand management costs are now functionalized as supply and collected on the Tier 1 and Tier 2 supply rates. No Tier 2 water sales are projected for CY 2023 and 2024.

Implementation

Because the Tier 1 maximum is set at a total member agency level and not at a meter level, all system water delivered will be billed at the Tier 1 Supply Rate. Any water delivered that exceeds the Tier 1 maximum will be billed an additional amount equivalent to the difference between the Tier 2 and Tier 1 Supply Rates.

For member agencies without purchase orders and member agencies with purchase orders that accrue a cumulative Tier 2 obligation at the end of year five of the purchase order, the Tier 2 Supply Rate will be applied in the month where the Tier 1 maximum is surpassed on all applicable deliveries. Otherwise, any obligation to pay the Tier 2 Supply Rate will be calculated over the ten-year period, consistent with the calculation of any purchase order commitment obligation.

System Access Rate (SAR)

Purpose

The SAR recovers the costs of Conveyance, Distribution, and Storage that is used on an average annual basis through a uniform, volumetric rate. All member agencies pay the SAR for the conveyance and distribution capacity associated with deliveries of full-service water.

Implementation

The SAR is charged for each acre-foot of water transported by Metropolitan to its member agencies and delivered as a full-service water transaction.

System Power Rate (SPR)

Purpose

The SPR recovers the costs of energy required to pump water to Southern California through the SWP and CRA. The cost of power is recovered through a uniform, volumetric rate.

Implementation

The SPR is applied to all deliveries of Metropolitan water to member agencies.

Treatment Surcharge

Purpose

The Treatment Surcharge recovers all costs of providing treatment capacity and operations through a uniform, volumetric rate per acre-foot of treated water transactions.

Implementation

The Treatment Surcharge is charged on all treated water transactions.

Capacity Charge

Purpose

The Capacity Charge recovers the costs incurred to provide peak capacity within the Distribution System. The Capacity Charge also provides a price signal to encourage agencies to reduce peak demands on the Distribution System and to shift demands that occur during the May 1 through September 30 period into the October 1 through April 30 period, resulting in more efficient utilization of Metropolitan's existing infrastructure and deferring capacity expansion costs.

Implementation

Each member agency will pay the Capacity Charge per cubic feet per second (cfs) based on a three-year trailing peak (maximum) day demand, measured in cfs. Each member agency's peak day is likely to occur on different days; therefore, this measure approximates peak week demands on Metropolitan.

Readiness-To-Serve Charge (RTS)

Purpose

The RTS recovers the cost of the portion of system that is available to provide emergency service and available capacity during outages and hydrologic variability.

Implementation

The RTS is a fixed charge that is allocated among the member agencies based on a ten-fiscal-year rolling average of firm demands. Water transfers and exchanges are included for purposes of calculating the ten-year rolling average³. The Standby Charge is collected at the request of some member agencies that have elected to use the charge as a direct offset to the member agency's RTS obligation.

³ The SDCWA exchange water transactions are excluded from the calculation of the ten-year rolling average per the terms of the parties' exchange agreement.

Purchase Order Option

Purpose

The current rate structure allows member agencies to choose to purchase water from Metropolitan by means of a Purchase Order. Purchase Orders are voluntary agreements that determine the amount of water that a member agency can purchase at the Tier 1 Supply Rate. They allow member agencies to purchase a greater amount of water at the lower Tier 1 Supply Rate than would otherwise be authorized by the Administrative Code. In exchange for the higher Tier 1 Maximum, the member agency commits to purchase a specific amount of water (based on past purchase levels) over the term of the agreement. Such agreements allow member agencies to manage costs and provide Metropolitan with a measure of secure revenue.

In November 2014, the Metropolitan Board approved new Purchase Orders effective January 1, 2015 through December 31, 2024 (the "Purchase Order Term"). Twenty-one of the twenty-six-member agencies have Purchase Orders, which commit the member agencies to purchase a minimum amount of supply from Metropolitan (the "Purchase Order Commitment").

The key terms of the Purchase Orders include:

- A ten-year term, effective January 1, 2015 through December 31, 2024;
- A higher Tier 1 limit based on the Base Period Demand, determined by the member agency's choice between (1) the Revised Base Firm Demand, which is the highest fiscal year purchases during the 13-year period of fiscal year 1989/90 through fiscal year 2001/02, or (2) the highest year purchases in the most recent 12-year period of fiscal year 2002/03 through 2013/14. The demand base is unique for each member agency, reflecting the use of Metropolitan's system water over time;
- An overall purchase commitment by the member agency equal to the Demand Base period chosen, multiplied by ten to reflect the ten-year Purchase Order term. Those agencies choosing the more recent 12-year period may have a higher Tier 1 Maximum and commitment. The commitment is also unique for each member agency.
- The opportunity to reset the Base Period Demand using a five-year rolling average;
- Any obligation to pay the Tier 2 Supply Rate will be calculated over the ten-year period, consistent with the calculation of any Purchase Order commitment obligation; and
- An appeals process for agencies with unmet purchase commitments that will allow each acre-foot of unmet commitment to be reduced by the amount of production from a local resource project that commences operation on or after January 1, 2014.

Member agencies that do not have Purchase Orders in effect are subject to Tier 2 Supply Rates for amounts exceeding 60 percent of their base amount (equal to the member agency's highest fiscal year demand between 1989/90 and 2001/02) annually.

Implementation

Purchase Order Commitments are unique for each member agency. The commitment is calculated based on the demand base chosen (the "Base Period Demand") and multiplied by ten to reflect the ten-year Purchase Order Term. If a member agency opted to use the Revised Base Firm Demand, which is the highest fiscal year purchases during the original 13-year period of fiscal year 1989/90 through fiscal year 2001/02 for their Purchase Order, their Commitment is 60 percent of the 2003 Initial Base Firm Demand, the same as the previous Amended and Restated Purchase Order agreement, multiplied by ten. If a member agency opted to use the more recent 12-year period of fiscal year 2002/03 through fiscal year 2013/14 for their Purchase Order, their Commitment is 60 percent of the highest year in the period of fiscal year 2002/03 through fiscal year 2013/14, multiplied by ten. The Purchase Order Commitment is fixed for the Purchase Order Term.

At the end of the Purchase Order Term, if the member agency has not purchased enough firm supply to meet its Purchase Order Commitment, it will be billed for the remaining balance of the Purchase Order Commitment at the average of the Tier 1 Supply Rate in effect during the Term. This payment may be prorated with interest evenly over the next 12 invoices.

If a member agency fulfills its Purchase Order Commitment prior to the end of the Purchase Order Term, then the member agency has met its obligation under the Purchase Order. The member agency may continue to purchase up to 90 percent of its cumulative Base Period Demand over the Term at the Tier 1 Supply Rate for the duration of the Purchase Order Term.

Firm water purchases made under the terms of the Purchase Order agreements are subject to reduction in accordance with the shortage allocation provisions of the Water Surplus and Drought Management Plan (WSDM Plan) implemented through the Water Supply Allocation Plan (WSAP). In the event that Metropolitan's Board or General Manager determines to reduce, interrupt or suspend deliveries of water, any outstanding balance of the Purchase Order Commitment at the end of the Term will be reduced by the "Purchase Order Commitment—Annual Average" for each and every fiscal or calendar year that a reduction, interruption or suspension occurred. The original Purchase Order Commitment was reduced by 10 percent due to the WSAP implantation in FY 2015/16.

The following water transactions will be counted toward the Purchase Order Commitment:

- Full-service sales (Tier 1 or Tier 2 Supply Rates) of treated or untreated water
- Conjunctive Use sales
- Cyclic sales.

The current bundled full-service costs are shown in Table 10.

Table 10: Bundled Full-Service Costs⁴

Rate Type	Type of Charge	Rate or charge effective January 1, 2022
Tier 1 Full-Service Untreated Cost	Volumetric (\$/af)	\$799
Tier 2 Full-Service Untreated Cost	Volumetric (\$/af)	\$841
Tier 1 Full-Service Treated Cost	Volumetric (\$/af)	\$1,143
Tier 2 Full-Service Treated Cost	Volumetric (\$/af)	\$1,185

The Tier 1 Full-Service Untreated Cost consists of the following rate elements: The Tier 1 Supply Rate, the System Access Rate, the System Power Rate, and the Water Stewardship Rate (currently set at \$0).

The Tier 2 Full-Service Untreated Cost consists of the following rate elements: The Tier 2 Supply Rate, the System Access Rate, the System Power Rate, and the Water Stewardship Rate (currently set at \$0).

The Tier 1 Full-Service Treated Cost consists of the following rate elements: The Tier 1 Supply Rate, the System Access Rate, the System Power Rate, the Water Stewardship Rate (currently set at \$0), and the Treatment Surcharge.

The Tier 2 Full-Service Treated Cost consists of the following rate elements: The Tier 2 Supply Rate, the System Access Rate, the System Power Rate, the Water Stewardship Rate (currently set at \$0), and the Treatment Surcharge.

⁴ Nineteen of Metropolitan's member agencies have invoices prepared using bundled rates; seven of Metropolitan's member agencies have invoices prepared using the unbundled rate elements.

COST OF SERVICE

A cost of service (COS) report contains analysis of costs using a methodology to equitably allocate the revenue requirements of a utility between the various users of service. Costs of operating a utility are not accounted for on a specific user or service basis. Many costs are incurred for the joint benefit of all users, while other costs may benefit only the users of certain services. Metropolitan uses the COS methodology to functionalize, allocate and distribute costs to services provided. The unbundled rate structure is used to collect revenue based on the services provided to different member agencies and contractual arrangements. Metropolitan provides full-service water (treated and untreated) to its member agencies. Exchanges, wheeling, and other arrangements are provided on a contractual basis.

AWWA Guidelines

The American Water Works Association (AWWA) is the professional association which, among other functions, identifies water industry standards for financial management and rate-setting practices. AWWA publishes a document on these topics in its Manual of Water Supply Practices series, which is the AWWA's M1, Principles of Water Rates, Fees, and Charges, Seventh Edition.

AWWA manual M1 Seventh Edition delineates a number of guidelines and principles that are intended to be observed in the broad development of cost of service and rate setting steps⁵. The COS process reflects the M1 Seventh Edition guidelines and principles, which were carefully considered in the conceptual design of the Metropolitan COS. Major AWWA guidelines and principles considered in the proposed COS approach are outlined below.

- One of the most effective methods used to accommodate the impact of rapidly increasing costs on rate design is the use of a "forward looking" or prospective rate period. This procedure is frequently used by government-owned utilities in determining cost of service. Metropolitan's COS follows this approach by incorporating budget data for upcoming fiscal years, using projected debt service and State Water Contract payment obligation data, and applying annual escalation factors to operations and maintenance costs.
- The purpose of performing functional assignment of costs is to express the utility's cost of service in terms that make it possible to allocate and then distribute costs to services in accordance with the costs of serving each class of customer, or in Metropolitan's case, each function type. In keeping with AWWA recommendations, the functional assignment and commodity/demand allocation modules of the COS allow identification of functional cost components at a level that allows the unbundling of Metropolitan's rates.
- The cash-needs approach, which develops the revenue requirements for a utility based on total estimated cash expenditures for a time period, is one of two methodologies endorsed by AWWA principles and is frequently used by government-owned utilities. The COS's revenue requirements module is consistent with this approach.
- In areas where seasonal usage patterns impose significant demands and ultimately costs on the utility, consideration may be given to separate charges for such use. System costs associated with accommodating seasonal use may be recovered either through rates applied to separate metering for

⁵ The majority of the M1 Seventh Edition is written for utilities providing retail service or combined retail and wholesale service. The distinction in practices for wholesale-only utilities is indirect; care must be taken to be attuned to these distinctions such that the guidelines are not incorrectly applied or misrepresented.

such services or through charges applied based on seasonal use. This principle is consistent with the conceptual design of the COS's allocation module.

General principles for establishing charges state that:

- Beneficiaries of a service should pay for that service.
- The level of service charges should be related to the cost of providing the service.
- The price of services may be used to change user behavior and demand for the good or service.⁶

The proposed COS process is consistent with these principles.

AWWA's M1 Seventh Edition provides rate-setting objectives as a basis for evaluating water utility rate designs. These objectives have all been considered in the development of the proposed COS process and resulting rates, fees and charges for service⁷.

- Effectiveness in yielding total revenue requirements (full cost recovery).
- Revenue stability and predictability.
- Stability and predictability of the rates themselves from unexpected or adverse changes.
- Promotion of efficient resource use (conservation and efficient use).
- Fairness in the apportionment of total costs of service among the different ratepayers.
- Avoidance of undue discrimination (subsidies) within the rates.
- Dynamic efficiency in responding to changing supply and demand patterns.
- Freedom from controversies as to proper interpretation of the rates.
- Simple and easy to understand.
- Simple to administer.
- Legal and defensible.

It should be noted that there are circumstances in which some of these objectives can be in conflict with each other. For example, competing objectives could be conservation and revenue stability. To incentivize conservation, a utility might develop a rate structure that was 100 percent volumetric. To provide revenue stability, the same utility might develop a rate structure that was 100 percent fixed. Because of such conflict potential, all AWWA pricing objectives must be carefully balanced when selecting a preferred COS and rate setting approach.

Cost of Service

Prior to discussing the specific rates and charges that make up the rate structure, it is important to understand the cost of service process that supports the rates and charges. The AWWA M1 Seventh Edition sets out the steps in the COS process as: (1) identify which costs should be recovered through rates and charges (the revenue requirement); (2) organize costs into operational functions (functionalize); (3) allocate operational function costs on the basis for which the cost was incurred (allocate); and (4) distribute costs to rate elements (distribute). The process acronym is FAD: functionalize, allocate, distribute. The balance of

⁶ Metropolitan's rates reflect the cost of providing its services and the impact of those costs may have an impact on member agencies' conservation and local resource development. Metropolitan invests in demand management, by providing incentives to those conserving and developing local resource projects that reduce the price of those projects for the participants. Those demand management investments lower system costs and reduce the need for Metropolitan to import additional supplies into the service area.

⁷ Manual of Water Supply Practices, M1, Principles of Water Rates, Fees and Charges, American Water Works Association, Seventh Edition, pg.4

this report uses this nomenclature, while tailoring the process to Metropolitan's unique service obligations and member agency needs.

The purpose of sorting Metropolitan's costs in a manner that reflects the type of function (e.g., supply vs. conveyance), the characteristics of the cost (e.g., fixed or variable) and the reason why the cost was incurred (e.g., to meet peak or average demand) is to create logical cost of service "building blocks". The building blocks can then be arranged to design rates and charges with a reasonable nexus between costs and benefits.

Cost of Service Process

The general cost of service process involves the basic steps outlined below.

Step 1 - Development of Revenue Requirements

In the revenue requirement step, the costs that Metropolitan must recover through rates and charges, after consideration of revenue offsets (such as property tax revenue, interest income, and miscellaneous income), are identified. The cash-needs approach, an accepted industry practice for government-owned utilities, has historically been used in identifying Metropolitan's revenue requirements⁸. Although the utility approach would be acceptable under AWWA guidelines, the cash-needs approach was applied for the purposes of this study. All of Metropolitan's costs fall under the broad categories of either Departmental Costs or General District Requirements. Departmental Costs include budgeted items identified with specific departments within Metropolitan. General District Requirements primarily consist of requirements associated with the CRA, SWP, Supply Programs, Demand Management Programs, and capital financing costs. General District Requirements also include reserve fund transfers required by bond covenants and Metropolitan's Administrative Code. Under the cash needs approach, revenue requirements include operating costs and annual requirements for meeting financed capital items (debt service and funding of the CIP from operating revenues).

Step 2 - Functionalization of Costs

To allow for the development of rates that properly reflect the costs of providing different service types (full-service (treated and untreated), revenue requirements should be categorized based on the operational functions associated with each cost. In the functional assignment step, revenue requirements are assigned to different categories based on the operational functions associated with each cost. The functional categories are identified in such a way as to allow the development of logical assignment bases. The functional categories used in this cost of service process include:

- Supply
- Conveyance and Aqueduct
- Storage
- Treatment
- Distribution
- Demand Management
- Administrative and General
- Hydroelectric

These functional assignments reflect the unique functions that Metropolitan undertakes and is consistent with the Strategic Plan Policy Principles. In order to provide more finite functional assignment, many of these functional categories are subdivided into more detailed sub-functions in the COS process. For example, costs

⁸ The primary difference between the two methods is how capital-related costs are approached. The cash-needs approach uses debt service on bonds and capital funded from rates; the utility approach uses depreciation and a return on Rate Base or Investment.

for the Supply and Conveyance and Aqueduct (C&A) functions are further subdivided into the sub-functions SWP, CRA, and Other. Similarly, costs in the Storage function are broken down into the sub-functions Emergency Storage, Drought Carryover Storage, and Regulatory Storage.

Step 3 - Allocation of Costs

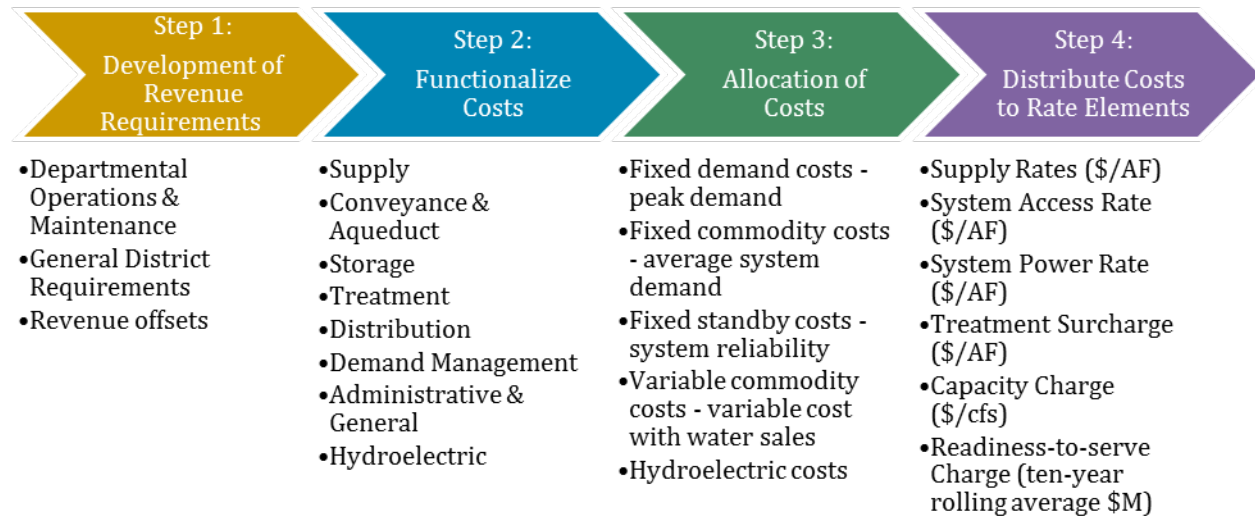
In the cost allocation step, functionalized costs are separated into categories according to their causes and behavioral characteristics. Proper cost allocation is critical in developing a rate structure that recovers costs in a manner consistent with the causes and behaviors of those costs. Under AWWA guidelines, cost allocation may be done using either the Base/Extra-Capacity approach or the Commodity/Demand approach. In the simplest sense, these approaches offer alternative means of distinguishing between utility costs incurred to meet average or base demands and costs incurred to meet peak demands. The Commodity/Demand approach was selected because it: (1) is best suited for systems where design criteria are focused on peaking patterns within a long-term time frame, such as peak month and peak week, (2) it works well in situations where complex cost relationships exist in the service area and attempting to allocate costs to peak day and peak hour functions would be complicated and often impractical, and (3) it allows for the development of the most appropriate COS classification bases because of the way Metropolitan's financial and operational data is organized. The Commodity/Demand approach was modified for its application to Metropolitan's rate structure by adding a separate cost allocation for costs related to Metropolitan's standby function. Analysis of system operating data indicated that a modified Commodity/Demand approach was most appropriate for developing Metropolitan's cost of service allocation bases.

Step 4 - Distribution to Rate Elements

The distribution of costs to the rate design elements depends on the purpose for which the cost was incurred and the manner in which the member agencies use the Metropolitan system. For example, costs incurred to meet average system demands are typically recovered by dollar per acre-foot rates and are distributed based on the volume of water purchased by each agency. Rates that are levied on the amount or volume of water delivered are commonly referred to as volumetric rates as the customer's costs vary with the volume of water purchased. Costs incurred to meet peak distribution demands (referred to in this report as demand costs) are recovered through a peaking charge (the Capacity Charge) and are distributed to agencies based on their peak summer demand behavior. Costs incurred to provide system reliability in the event of an emergency, major outage or hydrologic variability (referred to in this report as standby costs) are recovered through a Readiness-To-Serve Charge. Differentiating between costs for average, peak, and standby is just one example of how the COS process allows for the design of rates and charges to achieve overall customer equity and efficiency.

With regards to treatment-related costs, all costs, whether for average, peak, or standby, are recovered by dollar per acre-foot rates and are distributed based on the volume of treated water purchased. The following figure summarizes the Metropolitan COS process.

Cost of Service Process



Revenue Requirements

The estimated revenue requirements presented in this report are for FY 2022/23 and 2023/24. Throughout the report, the fiscal years are used as the “test years” to demonstrate the application of the COS process. Schedule 1 and Schedule 2 summarize the FY 2022/23 and FY 2023/24 revenue requirements, respectively, by the major budget line items used in Metropolitan’s budgeting process.

Current estimates indicate Metropolitan’s annual expenditures (including capital financing costs, but not construction outlays financed with bond proceeds) will total approximately \$1.94 billion in FY 2022/23 and \$2.02 billion in FY 2023/24. These expenditures support sales of 1.59 MAF in FY 2022/23 and 1.54 MAF in FY 2023/24 and assume a 15 percent SWP allocation in CY 2022, 40 percent SWP allocation in CY 2023, and 50 percent SWP allocation in CY 2024 with CRA diversions of 1.01 MAF in FY 2022/23 and 0.92 MAF in FY 2023/24.

The rates and charges do not have to cover the entire amount of estimated expenditures. Metropolitan generates a significant amount of revenue from interest income, hydroelectric power sales and miscellaneous income. These internally generated revenues are referred to as revenue offsets and are expected to generate about \$72 million in FY 2022/23 and \$57 million in FY 2023/24. It is expected that Metropolitan will also generate about \$163 million in ad valorem property tax revenues (assuming that ad valorem tax rates are maintained at 0.0035 percent of assessed valuation) in FY 2022/23 and \$168 million in FY 2023/24. Property tax revenues are used to pay for a portion of Metropolitan’s general obligation bond debt service, a portion of Metropolitan’s obligation to pay for debt service on bonds issued to fund the SWP, and other SWP costs. The total revenue offsets are estimated to be about \$235 million in FY 2022/23 and \$226 million in FY 2023/24. Therefore, the revenue required from rates and charges is the difference between the total estimated expenditures (costs) and the revenue offsets, or \$1.71 billion in FY 2022/23 and \$1.80 billion in FY 2023/24. Given an effective date of January 1, 2023 and January 1, 2024, respectively, the rates and charges recommended in this report, combined with rates and charges effective through December 31, 2022 will generate a total of \$1.68 billion in FY 2022/23 and \$1.78 billion in FY 2023/24.

All of Metropolitan's costs fall under the broad categories of Departmental Costs or General District Requirements. Departmental Costs include budgeted items identified with specific organizational groups. General District Requirements consist of requirements associated with the CRA, SWP, Supply Programs, Demand Management Programs, and capital financing costs associated with the Capital Investment Plan (CIP). General District Requirements also include reserve fund transfers required by bond covenants and Metropolitan's Administrative Code.

Schedule 1: Revenue Requirements (by budget line item), FY 2022/23

	Fiscal Year Ending 2023	% of Revenue Requirements (1)
Departmental Operations & Maintenance		
Office of General Manager	\$ 9,957,842	0.5%
Water Systems Operations	278,733,635	12.8%
Water Resources Management	24,988,740	1.1%
Engineering Services	49,013,044	2.2%
Bay Delta Initiatives	12,055,551	0.6%
Business Technology	82,298,910	3.8%
Real Property	29,365,077	1.3%
Human Resources	15,654,418	0.7%
Office of the Chief Financial Officer	28,941,344	1.3%
External Affairs	27,650,213	1.3%
General Counsel	15,833,730	0.7%
General Auditor	4,599,034	0.2%
Ethics Office	2,106,637	0.1%
Sustainability, Resilience & Innovation	9,952,336	0.5%
Diversity, Equity & Inclusion	1,426,735	0.1%
Equal Employment Opportunity	1,975,822	0.1%
Total	594,553,066	27.2%
General District Requirements		
State Water Contract*	681,709,121	31.2%
Colorado River Aqueduct Power Costs	105,857,041	4.8%
Supply Programs (cash funded portion)	66,659,522	3.1%
Demand Management (cash funded portion)	50,815,317	2.3%
Capital Financing	423,023,470	19.4%
Other Operating Costs	14,394,884	0.7%
Increase/(Decrease) in Required Reserves	11,000,000	0.5%
Total	1,353,459,356	62.0%
Revenue Offsets	(235,096,190)	10.8%
Net Revenue Requirements	1,712,916,232	100.0%
(1) Given as a percentage of the absolute values of total dollars apportioned * Includes Delta Conveyance planning costs net of California WaterFix refund Totals may not foot due to rounding		

Schedule 2: Revenue Requirements (by budget line item), FY 2023/24

	Fiscal Year Ending 2024	% of Revenue Requirements (1)
Departmental Operations & Maintenance		
Office of General Manager	\$ 10,247,595	0.5%
Water Systems Operations	286,332,441	12.7%
Water Resources Management	25,647,792	1.1%
Engineering Services	47,623,932	2.1%
Bay Delta Initiatives	12,415,696	0.6%
Business Technology	85,928,077	3.8%
Real Property	29,386,669	1.3%
Human Resources	15,919,677	0.7%
Office of the Chief Financial Officer	25,693,953	1.1%
External Affairs	28,148,429	1.2%
General Counsel	15,716,806	0.7%
General Auditor	4,737,939	0.2%
Ethics Office	2,156,213	0.1%
Sustainability, Resilience & Innovation	9,342,510	0.4%
Diversity, Equity & Inclusion	1,483,649	0.1%
Equal Employment Opportunity	2,070,834	0.1%
Total	602,852,212	26.8%
General District Requirements		
State Water Contract*	761,239,991	33.8%
Colorado River Aqueduct Power Costs	85,626,149	3.8%
Supply Programs (cash funded portion)	64,100,985	2.8%
Demand Management (cash funded portion)	54,886,221	2.4%
Capital Financing	436,025,242	19.4%
Other Operating Costs	13,836,761	0.6%
Increase/(Decrease) in Required Reserves	7,900,000	0.4%
Total	1,423,615,349	63.2%
Revenue Offsets	(225,717,914)	10.0%
Net Revenue Requirements	1,800,749,647	100.0%
(1) Given as a percentage of the absolute values of total dollars apportioned * Includes Delta Conveyance planning costs net of California WaterFix refund Totals may not foot due to rounding		

Departmental Costs

Departmental costs consist of salary and benefits, chemicals, power, outside services, materials and supplies, association dues, insurance expenses, leases, and property taxes budgeted by the General Manager's Department, as well as the General Counsel, General Auditor, and Ethics Officer.

The proposed FY 2022/23 O&M budget includes \$608.9 million for labor and benefits, water treatment chemicals, power, and solids handling, materials and supplies, professional services, and operating equipment purchases. This is \$29.0 million, or 5.0 percent, higher than the FY 2021/22 budget of \$579.9 million due primarily to negotiated labor, benefits, and outside services cost increases. Variable treatment costs are also higher due to higher chemical prices. The total authorized personnel complement for the FY 2022/23 budget is 1,974 authorized positions, including 47 district temporary full-time equivalents (FTEs), and reflects an increase of 30 full-time positions from the FY 2021/22 budget. Total funded positions are 1,974 FTEs.

The proposed FY 2023/24 O&M budget is \$616.7 million, an increase of \$7.8 million, or 1.3 percent, compared to the FY 2022/23 budget. This increase is primarily due to negotiated labor, benefits, and outside services cost increases, and slight increase in chemical prices. The total authorized personnel complement for FY 2023/24 is increased by 2 positions to 1,976 authorized positions including 49 district temporary full-time equivalents (FTEs). Total funded positions are 1,976 FTEs.

The Departmental Budget is described in detail in the Biennial Budget document.

General District Revenue Requirements

General District Requirements include costs for the SWP, CRA power, Supply Programs, Demand Management Programs, and the Capital Financing costs. Each of these areas is described in the following.

State Water Project

Metropolitan participates in the State Water Project (SWP), which is managed and operated by the California Department of Water Resources (DWR) and is an integral part of Metropolitan's conveyance system, through its State Water Contract. All costs of the SWP capital expenditures and costs of the operations, maintenance, power and replacement (OMPR) associated with water conservation (supply) and transportation (delivery) are paid by the 29 State Water Contractors. Metropolitan recovers the costs associated with the SWP through ad valorem property taxes, the Tier 1 Supply Rate, System Access Rate, the System Power Rate, and the Readiness-to-Serve Charge.

All State Water Contractors are obligated to pay all costs incurred by DWR to operate the SWP for water supply delivery, as part of their contractual participation in the project. Articles 22 through 26 of the State Water Contract provide that all costs DWR might incur to conserve and transport water to Metropolitan will be recovered from Metropolitan. Metropolitan is responsible for paying the costs of the system necessary to conserve and transport SWP water regardless of whether Metropolitan receives any water at all. Only the Transportation Variable, which recovers power costs for pumping through SWP transportation facilities to Metropolitan, varies depending on the amount of water delivered to Metropolitan. In the event Metropolitan does not pay DWR, DWR can require Metropolitan to recover its SWP costs through property taxes. DWR has no recourse to go to the State General Fund to pay SWP costs. DWR has no exposure whatsoever for any revenue shortfall, cost changes, or the cost impacts of operational limitations; these risks are solely the Contractors' risks.

Annually, the DWR reviews and redetermines the water supply and financial aspects of the SWP as required by the State Water Contract. The annual review and redetermination results in the annual Statement of Charges to the Contractors for each calendar year. The information that supports the Statement of Charges is published by the DWR as Appendix B to the appropriate Bulletin 132 (i.e., the Statement of Charges for Calendar Year 2022 is supported by Appendix B to Bulletin 132-21). DWR does not charge rates for water service. It does not develop a revenue requirement and then develop rates based on projected billing determinants for a calendar year. Rather, DWR apportions its costs to the Contractors based on their proportionate share of conservation (supply) costs (the Delta Water Charge) and transportation (delivery) costs (the Transportation Charge). DWR reconciles actual costs for each year and either collects more funds from the Contractors if actual costs exceeded estimated costs or provides a credit/refund if actual costs were lower than estimated costs.

The Biennial Budget includes Metropolitan's planned contribution for Delta conveyance project planning activities of \$99.0 million. The expenditures for the SWP are described in detail in the Biennial Budget document.

Colorado River Aqueduct

Metropolitan owns, operates, and manages the CRA. Metropolitan is responsible for operating, maintaining, rehabilitating, and repairing the CRA, and is responsible for obtaining and scheduling energy resources adequate to power pumps at the CRA's five pumping stations.

The CRA costs for delivery and supply are reflected in the Departmental costs and in the costs of the appropriate operational functions. The expenditures for CRA power are described in detail in the Biennial Budget document.

In fiscal years 2022/23 and 2023/24, it is projected Metropolitan will receive annual CRA water diversions of approximately 1.01 MAF and 0.92 MAF respectively. The budgeted power costs for the CRA are \$105.9 million in FY 2022/23 and \$85.6 million in FY 2023/24.

Supply Programs: SWP

Since inception, the SWC provided Contractors the ability to use the SWP to convey non-SWP water under certain circumstances. Specifically, Article 18(c)(2) of the original SWC addresses situations where there is a shortage in the supply of water made available under the SWC and states, "[T]he District, at its option, shall have the right to use any of the project transportation facilities which by reason of such permanent shortage in the supply of project water to be made available to the District are not required for delivery of project water to the District, to transport water procured by it from any other source: [p]rovided, [t]hat such use shall be within the limits of the capacities provided in the project transportation facilities for service to the District under this contract". However, Article 18(c)(2) only applied in the event a permanent shortage was declared by DWR and it was unclear on how costs would be charged for using SWP facilities to transport nonproject water. In 1994, the Contractors and DWR negotiated the Monterey Amendment to the SWC, including Article 55, which made explicit that the Contractors' rights to use the portion of the SWP conveyance system necessary to deliver water to them (their "Reaches") also includes the right to convey non-SWP water at no additional cost as long as capacity exists. Power for the conveyance of non-SWP water is charged at the SWP melded power rate. The Monterey Amendment also expanded the ability to carry over SWP water in SWP storage facilities, allowed participating Contractors to borrow water from terminal reservoirs, and allowed Contractors to store water in groundwater storage facilities outside a Contractor's service area for later use. These amendments, approved by Metropolitan's Board in 1995, secured the means for individual Contractors to increase supply reliability through water transfers, and storage outside their service areas.

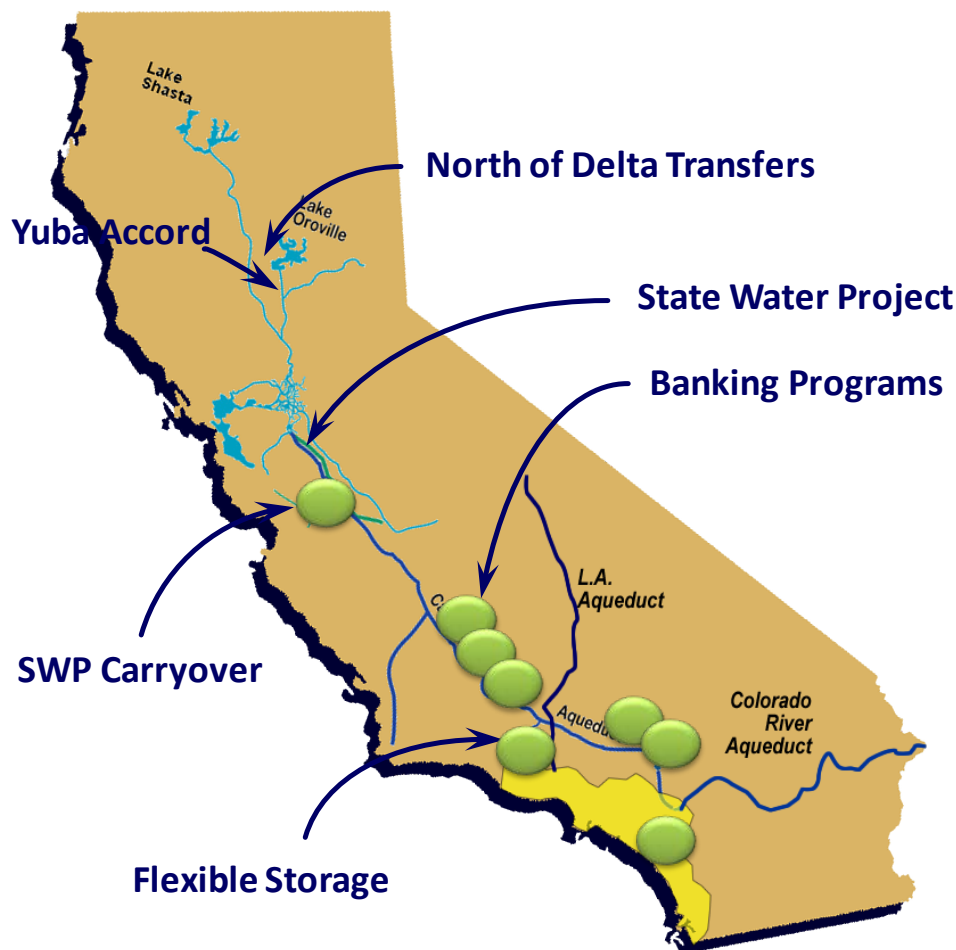
Since adoption of the 1996 Integrated Resources Plan (1996 IRP) and subsequent updates, Metropolitan has developed and actively managed a portfolio of supplies to convey through the California Aqueduct, as shown in Figure 10. The geographical locations of the projects are indicated by the green dots; Metropolitan's service area is designated by the yellow highlighted area. Metropolitan submits delivery schedules to DWR for these supplies and alters these schedules throughout the year based on changes in the availability of SWP and Colorado River water. The portfolio of supplies that Metropolitan has developed to be conveyed through the SWP since adoption of the Monterey Amendments and the 1996 IRP extend from north of the Delta to Southern California.

Since the Monterey Amendments, Metropolitan has secured one-year water transfer supplies through Metropolitan-only purchases, buyer coalition-purchases, and Governor Drought Water Banks. The most recent years that Metropolitan secured these one-year transactions were 2015, and 2021. Metropolitan opted not to pursue these transactions in 2018 or 2020. Most of the sellers were Sacramento Valley water users who are not Contractors. Other Contractors obtained one-year water transfers during this timeframe as well. There were no single-year transfer programs in, 2016-2017, or 2019 because of favorable water supply conditions and lack of capacity to move transfer supplies through the Delta.

In addition to the above one-year water transfers, Metropolitan purchases long-term water transfer supplies through the Yuba Accord. The Yuba Accord has provided water to enhance SWP and CVP water supply reliability by offsetting Delta export reductions and providing dry year water supplies for participating SWP

and CVP contractors. This water is Yuba River water developed by Yuba County Water Agency (YCWA) making reservoir releases or by YCWA's member units substituting groundwater for their surface water supplies; it is not SWP water.

Figure 10: California Aqueduct Portfolio of Supplies

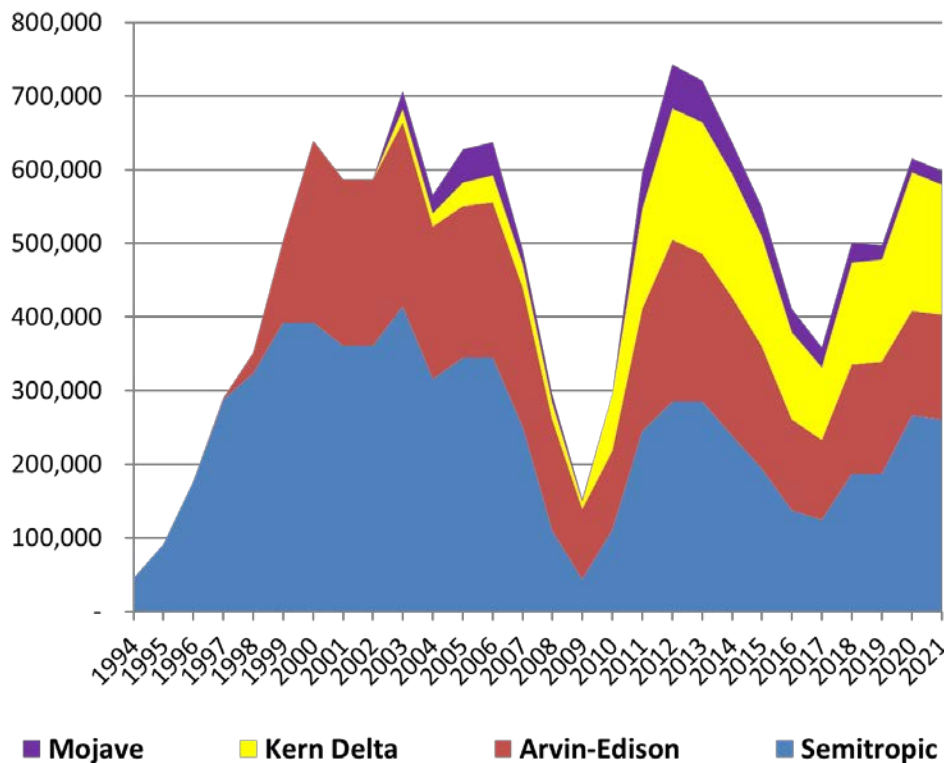


In addition to one-year transfers, and the Yuba Accord water, Metropolitan has developed groundwater storage agreements that allow Metropolitan to store available supplies in the Central Valley for return later. Metropolitan enters into point of delivery agreements with DWR to deliver water supplies from the SWP facilities to these storage programs. Metropolitan enters into agreements for introduction of local supplies to return these water supplies to the SWP system for delivery to Metropolitan's service area. Metropolitan's storage activities are shown in Figure 11. The figure shows how the programs function to store supplies during surplus conditions and return supplies during a drought. The storage programs have demonstrated that they can provide a significant amount of water when needed.

- **Arvin-Edison Storage Program:** under the agreement, Arvin-Edison Water Storage District stores water on behalf of Metropolitan. Up to 350,000 acre-feet can be stored; Arvin-Edison is obligated to return up to 75,000 acre-feet of stored water in any year to Metropolitan, upon request. The water is returned by direct groundwater pump-in and exchange of SWP supplies. A 2017 State Water Resources Control Board (SWRCB) regulation setting a Maximum Contaminant Level (MCL) for TCP has temporarily suspended use of this program due to the levels detected in the program groundwater wells. In November 2021, a change in the point-of-delivery was initiated to allow Metropolitan access to its stored water through an operational exchange of Friant Division CVP water supplies with SWP supplies in San Luis Reservoir.
- **Semitropic Storage Program:** under the agreement, Metropolitan stores water in the groundwater basin underlying land within the Semitropic Water Storage District. The maximum storage capacity

is 350,000 acre-feet. Currently, the minimum annual yield to Metropolitan is 38,200 acre-feet, and the maximum annual yield is 229,700 acre-feet depending on the available unused capacity and the SWP allocation. The water is returned by direct groundwater pump-in and exchange of SWP supplies.

- Kern Delta Storage Program: under the agreement, Kern Delta Water District provides groundwater banking and exchange transfer to allow Metropolitan to store up to 250,000 acre-feet of SWP water in wet years and take up to 50,000 acre-feet annually during droughts. The water is returned by direct groundwater pump-in or by exchange of surface water supplies.
- Mojave Storage Program: under the agreement, Mojave Water Agency provides groundwater banking and exchange transfers to allow Metropolitan to store up to 390,000 acre-feet for later return. The agreement allows Metropolitan to annually withdraw Mojave Water Agency's SWP contractual amounts, after accounting for local needs. The Mojave storage program returns water only by exchange of surface water supplies.
- Antelope Valley East Kern (AVEK) Storage Program: under the Storage Program, Metropolitan, at its discretion, could store up to 30,000 acre-feet of its SWP Table A amount or other supplies in the Antelope Valley Groundwater Basin in an account designated for Metropolitan. The water is returned by exchange of SWP supplies or direct groundwater pump-in.
- Antelope Valley-East Kern (AVEK) High Desert Water Bank Program: under this agreement, AVEK provides storage for up to 70,000 acre-feet per year of its unused SWP Table A amount to Metropolitan or other supplies for later return. The maximum storage capacity for Metropolitan supplies would be 280,000 acre-feet. The program is designed to return up to 70,000 acre-feet per year by direct pump-in to the East Branch of the California Aqueduct. Water can also be returned by exchange of SWP supplies when available.
- Sites Reservoir: under a participation agreement, Metropolitan is contributing to planning activities for a proposed reservoir project of approximately 1.3 to 1.5 million acre-feet being analyzed by the Sites Reservoir Authority, to be located in Colusa County. Water stored for the proposed project would be diverted from the Sacramento River. The maximum storage capacity for Metropolitan supplies would be 31,700 acre-feet. As proposed, the program would be designed to return up to 50,000 acre-feet per year on average to Metropolitan by direct pump-in to the Sacramento River. Metropolitan's agreement to participate in funding of this phase of project development activities does not commit Metropolitan to participate in any actual reservoir project that may be undertaken in the future.

Figure 11: SWP Groundwater Storage Programs, acre-feet

Metropolitan has developed exchanges and transfers with other Contractors to enhance supply flexibility. Some of these agencies have extensive groundwater supplies and are willing to exchange their SWP supplies.

- San Gabriel Valley Water District: under this agreement, Metropolitan delivers treated water to a San Gabriel Valley Water District (SGVMWD) subagency in exchange for twice as much untreated SWP supplies delivered into the Main San Gabriel groundwater basin. The groundwater basin supplies water to both Metropolitan and SGVMWD subagencies. Each year Metropolitan purchases 5,000 acre-feet minus the unbalanced exchange amount. By mutual agreement Metropolitan may purchase more than the 5,000 acre-feet per year should SGVMWD have additional supplies available. This program has the potential to increase Metropolitan's reliability by providing 115,000 acre-feet through 2035.
- Desert Water Agency/Coachella Valley Water District Advance Delivery Program: under this program, Metropolitan delivers Colorado River water to the Desert Water Agency (DWA) and Coachella Valley Water District (CVWD) in advance of the exchange for their SWP Contract Table A allocations. In addition to their Table A supplies, the agencies can take delivery of SWP supplies available under Article 21 and the Turn-back Pool Program, and non-SWP supplies separately acquired by each agency. These non-SWP supplies have included Yuba Accord water, drought water bank water, and San Joaquin Valley water. By delivering enough water in advance to cover Metropolitan's exchange obligations, Metropolitan is able to receive DWA and CVWD's available SWP supplies in years in which Metropolitan's supplies are insufficient without having to deliver an equivalent amount of Colorado River water. In December 2019, the exchange agreements were amended to provide more flexibility and operational certainty for the parties involved. Additionally, under the amended agreement, Coachella and Desert in wet years pay a portion of Metropolitan's water storage management costs, up to a combined total of \$4 million per year.

Supply Programs: CRA

Since adoption of the 1996 IRP and subsequent updates, Metropolitan has developed and actively manages a portfolio of supplies to convey through the CRA. Metropolitan determines the delivery schedule of those resources throughout the year based on changes in the availability of SWP and of Colorado River water. Figure 12 shows the geographic location of the portfolio of additional CRA supplies, designated by the red dots, which Metropolitan has developed for diversion into the CRA since adoption of the 1996 IRP. These resources extend from Lake Mead to Southern California and provide supply to Metropolitan's service area, which is shown in the yellow highlighted area.

Figure 12: Colorado River Aqueduct Portfolio of Supplies



- **Bard Fallowing:** Approved by the MWD Board in December 2019, the Bard Water District (Bard) Seasonal Fallowing Program (Program) incentivizes farmers to fallow land irrigated with Colorado River water for the spring and summer months in order to reduce water consumption Bard and augment Metropolitan's Colorado River supplies. Metropolitan estimates a water savings of 2.2 acre-feet per irrigable acre. Metropolitan benefits from the reduced water consumption as the saved water will remain in the Colorado River and be made available for diversion.
- **Imperial Irrigation District/Metropolitan Conservation Program:** Under a 1988 Conservation Agreement, Metropolitan has funded water efficiency improvements within the Imperial Irrigation District's (IID) service area in return for the right to divert the water conserved by those investments. Metropolitan provided funding for IID to construct and operate a number of conservation projects that have conserved up to 109,460 acre-feet of water per year that is then

available to Metropolitan. Execution of the Quantification Settlement Agreement (QSA) and related agreements resulted in changes in the availability of water under the program. As a result of a 2014 IID-Metropolitan letter agreement, the amount of water conserved by IID has been quantified at 105,000 acre-feet per year beginning in 2016. Metropolitan is guaranteed at least 85,000 acre-feet per year, with the remainder of the conserved water being made available to the Coachella Valley Water District (CVWD), if needed under the 1989 Approval Agreement as amended. However, in a recent clarifying agreement, CVWD has agreed to limit its call to 15,000 acre-feet per year through 2026, yielding 90,000 acre-feet annually from the program for Metropolitan, with Metropolitan delivering the remaining 15,000 AF to CVWD at Whitewater.

- N-Drip Irrigation: Metropolitan has agreed to jointly fund a pilot project in Arizona to test the efficacy of a novel drip irrigation technology produced by an Israeli company called N-Drip. The key component of the technology is a drip emitter that resists clogging under relatively low water pressure, which allows for drip irrigation systems without pumps or electricity, significantly reducing the cost of installation and operation. Other funding partners include the Central Arizona Water Conservation District (the project lead), the Southern Nevada Water Authority, the Central Utah Water Conservancy District, and Denver Water. The pilot is primarily a research project expected to yield minimal water savings for Metropolitan (at most, 400 AF in 2022). However, if the technology is widely adopted in the future, it could yield significant additional conservation savings that could increase Metropolitan's Colorado River supplies.
- Palo Verde Land Management, Crop Rotation, and Water Supply Program: Under this program, participating landowners in the PVID's valley service area are paid to reduce water use by not irrigating a portion of their land. A maximum of 35 percent of the participating lands within the Palo Verde Valley can be fallowed in any given year. This program saves up to 133,000 acre-feet of water in certain years, and a minimum of 33,000 acre-feet per year. The term of the program is 35 years. Fallowing began in 2005. In March 2009, Metropolitan and PVID entered into a supplemental emergency fallowing program within PVID that provided for the fallowing of additional acreage in 2009 and 2010. Since 2005, over 1.3 million acre-feet total of Colorado River water has been conserved. The volume of water that becomes available to Metropolitan is governed by the QSA and the Colorado River Water Delivery Agreement. Under these agreements:
 - Metropolitan must reduce its consumptive use of Colorado River water by that volume of consumptive use by PVID and holders of Priority 2 that is greater than 420,000 acre-feet in a calendar year, or
 - Metropolitan may increase its consumptive use of Colorado River water by that volume of consumptive use by PVID and holders of Priority 2 that is less than 420,000 acre-feet in a calendar year.

In both cases, each acre-foot of reduced consumptive use by PVID is an additional acre-foot that becomes available to Metropolitan.

- Quechan Forbearance: In 2005, Metropolitan entered into a settlement agreement in *Arizona v. California* with the Quechan Indian Tribe and other parties. The Tribe uses Colorado River water on the Fort Yuma Indian Reservation. Under the settlement agreement, the Tribe, in addition to the amounts of water decreed for the benefit of the Reservation in the 1964 decree in *Arizona v. California*, is entitled to (a) 20,000 acre-feet of diversions from the Colorado River, or (b) the amount necessary to supply the consumptive use required for irrigation of a specified number of acres, and for the satisfaction of related uses, whichever is less. Of the additional diversions, 13,000 acre-feet became available to the Tribe in 2006. Metropolitan agreed to provide annual incentive payments to the Tribe if the Tribe forbore diversion of the additional water, thereby allowing Metropolitan to divert it.
- Quechan Fallowing: Approved by the MWD Board in December 2021, the Metropolitan/Quechan Tribe Seasonal Fallowing Pilot Program (Pilot) incentivizes farmers to fallow land irrigated with Colorado River water for the spring and summer months in order to reduce water consumption in

the Quechan tribal land and augment Metropolitan's Colorado River supplies. Since the Quechan Tribe's water supplies have a higher priority than Metropolitan's on the Colorado River, Metropolitan benefits from the reduced water consumption as the saved water will remain in the Colorado River and be made available for diversion.

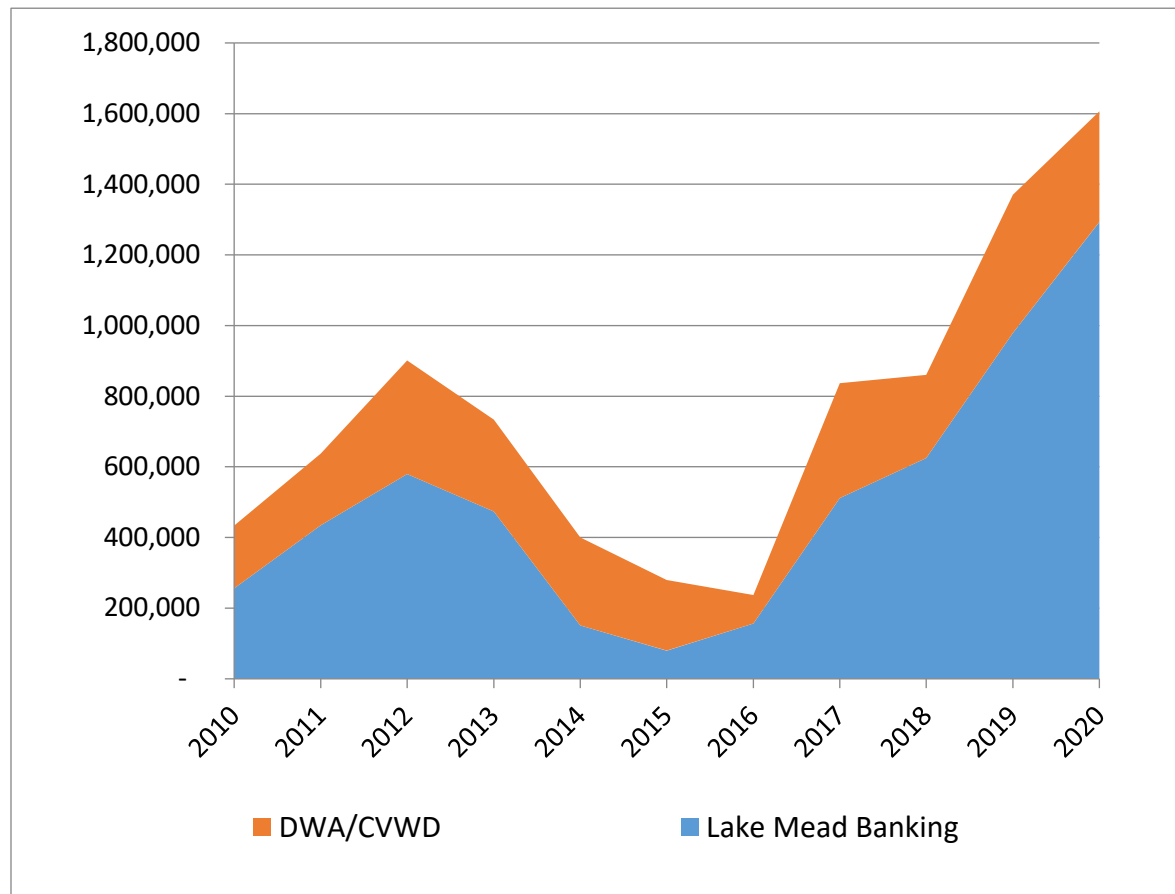
- Southern Nevada Water Authority and Metropolitan Storage and Interstate Release Agreement: Under this 2004 agreement and a related Operational Agreement, the Southern Nevada Water Authority (SNWA) may offer a portion of its Colorado River water supplies to Metropolitan when there is space available in the CRA to receive the water. SNWA may call for return of the water in a future year, in which Metropolitan would reduce its Colorado River water order to return this water to SNWA. In 2009, 2012, and 2015, Metropolitan, the Colorado River Commission of Nevada, and SNWA amended the related Operational Agreement dealing with volumes of water that may be stored or called at various times. The agreements can be terminated upon 90 days' notice following the return of the water stored by Metropolitan.
- Lower Colorado Water Supply Project: This project develops additional water supplies by pumping groundwater into the All-American Canal for delivery to IID. An equal volume of Colorado River water is then made available for other water users along the river. Under a contract among Metropolitan, the City of Needles, and the United States Bureau of Reclamation, Metropolitan receives any excess unused water developed by the project. Metropolitan makes payments to a trust fund to develop a replacement project or to desalt the groundwater should the groundwater become too saline for discharge into the All-American Canal.
- Exchange with the United States (San Luis Rey): 16,000 acre-feet from the All-American and Coachella Canal lining projects is allocated to the San Luis Rey Settlement Parties. The United States furnishes this water at Metropolitan's Colorado River Intake on Lake Havasu. Metropolitan takes possession of the water and by exchange delivers an equal volume of Metropolitan's blended supplies to SDCWA. By separate agreement, SDCWA conveys the water to the San Luis Rey Settlement Parties.
- California ICS Agreement: Under a 2007 agreement and its amendment, Metropolitan may store a portion of IID's excess conservation in Metropolitan's service area, subject to both annual creation and total accumulation limits. IID may call for return of the water in a future year, in which Metropolitan would reduce its Colorado River water order to return the water.
- Lake Mead Storage Program: In December 2007, Metropolitan entered into agreements to set forth the guidelines under which Intentionally Created Surplus (ICS) water is developed and stored in and delivered from Lake Mead. The amount of water stored in Lake Mead must be created through extraordinary conservation, system efficiency, or tributary conservation methods. ICS is available for delivery in a subsequent year, with Extraordinary Conservation ICS subject to a one-time deduction to benefit the river system and annual evaporation losses. Extraordinary conservation methods used by Metropolitan to date are: water saved by fallowing in the Palo Verde Valley, projects implemented with IID in its service area, the Lower Colorado Water Supply Project, All American and Coachella Canal water received under the San Luis Rey Indian Water Rights Settlement Agreement prior to the settlement parties receiving the water, groundwater desalination, groundwater recovery, water conserved from Metropolitan's Landscape Transformation Program, water conserved from implementation of indoor water conservation devices, and water recycling. "System Efficiency ICS" can be created through the development and funding of system efficiency projects that save water that would otherwise be lost from the Colorado River. Metropolitan has participated in two projects to create System Efficiency ICS, and two projects to create ICS by conservation in Mexico:
 - Yuma Desalting Pilot Project: Metropolitan contributed funds toward the 2010-2011 pilot run of the Yuma Desalting Plant in exchange for a portion of the desalinated water produced by the project. The Yuma Desalting Plant treated brackish agricultural drainage that flows into Mexico to the Ciénega de Santa Clara at the terminus of the Colorado River but does not count as deliveries to Mexico under the Mexican Water Treaty. Metropolitan's portion of the desalinated

water was 24,397 acre-feet and this water was stored in Lake Mead. Metropolitan can take delivery of up to the entire amount in any single year.

- Drop 2 (Warren H. Brock) Reservoir: Metropolitan contributed funds toward the U.S. Bureau of Reclamation's construction of an 8,000 acre-foot off-stream regulating reservoir near Drop 2 of the All-American Canal in Imperial County. This reservoir conserves about 55,000 acre-feet of water per year by capturing and storing otherwise non-storable flow. In return for its funding, Metropolitan received 100,000 acre-feet of water that was stored in Lake Mead and has the ability to take delivery of up to 25,000 acre-feet of water in any single year. Besides the additional water supply, the new reservoir adds to the flexibility of Colorado River operations.
- In November 2012, Metropolitan executed agreements in support of a program to augment Metropolitan's Colorado River supply between 2013 and 2017 through an international pilot project in Mexico. Metropolitan's total share of costs was \$5 million for 47,500 acre-feet of project supplies. The costs were paid and the conserved water was credited to Metropolitan's intentionally-created surplus water account. In December 2013, Metropolitan and IID executed an agreement under which IID paid half of Metropolitan's program costs, or \$2.5 million, in return for half of the project supplies, 23,750 acre-feet.
- In September 2017, Metropolitan executed agreements in support and continuation of a program to augment Metropolitan's Colorado River supply through international pilot projects in Mexico. Under the new set of agreements, Metropolitan's total share of costs are expected to be \$3.75 million for 27,275 acre-feet of project supplies. The costs will be paid in three parts in 2020, 2023, and 2026. Water was and will be received in the year of payment.
- Desert Water Agency/Coachella Valley Water District/Metropolitan Water Exchange and Advance Delivery Programs: Under these programs, Metropolitan delivers Colorado River water to the DWA and CVWD, in exchange for future deliveries by DWA and CVWD of an equal volume of their SWP supplies. By delivering enough water in advance to cover Metropolitan's exchange obligations, Metropolitan is able to receive DWA and CVWD's available SWP supplies in years in which Metropolitan's supplies are insufficient to deliver an equivalent amount of Colorado River water⁹.

Figure 13 shows the year-end balance in Metropolitan's Colorado River storage programs. The combined capacity of the Lake Mead Storage program and the DWA/CVWD advance delivery program is 2,300,000 acre-feet, plus the amount of water in storage in Lake Mead as a result of the Drop 2 Reservoir and Yuma Desalting Plant system efficiency projects.

⁹ DWA has a SWP Table A contract right of 55,750 acre-feet per year and CVWD has a SWP Table A contract right of 138,350 acre-feet per year, for a total of 194,100 acre-feet per year. In addition to their Table A supplies, DWA and CVWD, subject to Metropolitan's written consent may by exchange take delivery of SWP supplies available under Article 21 of their SWP Contracts, the Turn-back Pool Program, and non-SWP supplies they may acquire and convey through SWP facilities. Under the Metropolitan-CVWD Delivery and Exchange Agreement for 35,000 Acre-feet, up to 35,000 acre-feet of Metropolitan's SWP Table A supply can be requested annually by CVWD for delivery by exchange. Through the Second Amendment to this agreement, CVWD can request an additional 15,000 acre-feet annually from 2020 through 2026, for an additional transfer amount of 105,000 acre-feet.

Figure 13: Colorado River Storage Programs, acre-feet

In addition to the supply programs developed by Metropolitan, Metropolitan entered into an exchange agreement with the San Diego County Water Authority (SDCWA) in 1998, which was amended in 2003. The entire agreement, consideration exchanged between the parties, and obligations are found in the Amended and Restated Exchange Agreement and the related QSA Agreements. SDCWA acquires Colorado River water from two sources and exchanges up to 277,700 with Metropolitan for Metropolitan water deliveries. SDCWA makes available to Metropolitan Colorado water it purchases from IID that is conserved within IID and conserved water from the lining of the All-American and Coachella canals. In exchange, Metropolitan delivers its own blended water to SDCWA in even monthly installments.

Supply Programs Developed in Basin

Metropolitan has developed a number of local programs to work with its member agencies to increase storage in groundwater basins. Metropolitan has encouraged storage through its cyclic and conjunctive use storage programs. These programs allow Metropolitan to deliver water into a groundwater basin in advance of agency demands. Metropolitan has drawn on dry-year supply from nine contractual conjunctive use storage programs to address shortages from the State Water Project and the CRA.

- **Cyclic Storage Agreements:** Under these agreements, the pre-delivery of imported water is used for recharge into groundwater basins in excess of an agency's planned and budgeted deliveries making best use of available capacity in conveyance pipelines, use of storm channels for delivery to spreading basins, and use of spreading basins. This water is then purchased at a later time when the agency has a need for groundwater replenishment deliveries. Total program capacity is 525,000 AF.

- Conjunctive Use Agreements: Under these agreements, excess imported water can be stored, and then called for use by Metropolitan during dry, drought, or emergency conditions. During a dry period, Metropolitan has the option to call water stored in the groundwater basins pursuant to its contractual conjunctive use agreements. At the time of the call, the member agency pays Metropolitan the prevailing rate for that water. Nine conjunctive use projects provide about 210,000 acre-feet of groundwater storage and have a combined extraction capacity of about 70,000 acre-feet per year.
- Operational Shift Cost-Offset Program: Under these agreements, Metropolitan works with the member agencies to shift the points of delivery to meet demands wherever possible to preserve SWP storage during calendar years 2021 and 2022. Shifts are made at Metropolitan's request and in accordance with the member agencies' capabilities. Metropolitan provides these member agencies a credit of up to \$332/AF in CY 2021 and \$349/AF in CY 2022 to offset additional operational costs the member agencies may accrue from shifting delivery locations. OSCOP allows for improved availability of storage reserves to supplement supplies during dry years by maximizing current available resources from the Colorado River and SWP storage. This program helps reduce the need for purchasing more expensive transfer supplies and helps Metropolitan fully utilize its diverse portfolio to increase reliability for the entire region. This Program continues through end of CY 2022, which covers the first half of the first fiscal year of the proposed biennial budget.

The budget for the Supply Programs is \$105.1 million in FY 2022/23 and \$110.1 million in FY 2023/24. This includes expenditures of \$38.4 million in FY 2022/23 and \$46.0 million in FY 2023/24 for the AVEK High Desert Water Bank that are proposed to be bond funded. The expenditures for the Supply Programs are described in detail in the Biennial Budget document.

Demand Management Programs

Demand Management is an operational function Metropolitan undertakes to enable it to provide its full-service water to its member agencies, as well as to benefit Metropolitan's integrated system used for contractual arrangements such as wheeling and exchanges. Demand Management costs are Metropolitan's expenditures for funding local water resource development programs, water conservation programs, the Future Supply Actions Program, and the Stormwater Pilot Program. These Demand Management Programs incentivize the development of local water supplies and the conservation of water to reduce the need to import water to deliver to Metropolitan's member agencies. These programs are implemented below the delivery points between Metropolitan's and its member agencies' distribution systems and, as such, do not add any water to Metropolitan's supplies. Rather, the effect of these downstream programs is to produce a local supply of water for the local agencies and to reduce demands by member agencies for water imported through Metropolitan's system.

Metropolitan also pursues conservation and local water resource development because it has uniquely been directed to do so by the state Legislature. In 1999, then Governor Davis signed SB 60 (Hayden) into law. SB 60 amended the Metropolitan Water District Act to direct Metropolitan to increase conservation and local resource development. No other water utility in California, public or private, has been specifically identified by the state Legislature and directed to pursue water conservation and local water resource development.

Metropolitan's Demand Management programs also support the region's compliance with the requirements of SB X7-7. In 2009, the state Legislature passed SB X7-7, which was enacted to reduce urban per capita water use by 20 percent by December 31, 2020. Urban retail water suppliers are not eligible for state water grants or loans unless they comply with the water conservation requirements of the legislation. Demand Management programs helped the region achieve urban per capita water use reductions.

AB 1668 and SB 606 build on Governor Brown's efforts to make water conservation a way of life in California and create a new foundation for long-term improvements in water conservation and drought planning. These bills establish guidelines for efficient water use and a framework for the implementation and oversight of the new standards, which will set a new target for retail agencies in 2026. Metropolitan's Demand Management programs will also support Metropolitan's member agencies' ability to meet these guidelines and standards.

Demand Management costs also support the Strategic Plan Policy Principles approved by Metropolitan's Board on December 14, 1999. These principles represent the Board's vision that Metropolitan is a regional provider of wholesale water services. In this capacity, Metropolitan is the steward of regional infrastructure and the regional planner responsible for coordinated drought management and the collaborative development of additional supply reliability and necessary capacity expansion. Through these regional services, Metropolitan ensures a baseline level of reliability and quality for service in its service area.

Capital Financing Costs

Capital financing costs are Metropolitan's expenditures for Revenue Bond debt service, General Obligation bond debt service, debt administration costs, and the funding of capital expenditures from current operating revenues or Pay-As-You-Go (PAYGO).

Budgeted amounts for Capital Financing represent the expenditures for existing and future debt service, anticipated debt administration costs to support the debt portfolio, and PAYGO amounts to support the Capital Investment Plan (CIP). Metropolitan generally incurs long-term debt to finance projects or purchase assets which will have useful lives equal to or greater than the related debt. Revenue supported debt can be authorized by Metropolitan's Board of Directors.

- **Revenue Bond Debt Service:** Includes the annual principal and interest payments for Metropolitan's outstanding and estimated future Revenue Bond debt service costs. Revenue bonds are used to finance the majority of Metropolitan's CIP. Long-term interest rates are assumed to be 2.75 percent for new fixed rate bonds issued over the biennium.
- **G.O. Bond Debt Service:** Includes Metropolitan's currently outstanding General Obligation (GO) bond interest and principal payments. In the long-term, it is assumed that no additional GO debt is issued to finance the CIP.
- **Debt administration costs:** Includes liquidity, remarketing, and broker-dealer fees.
- **PAYGO:** For FY 2022/23 and 2023/24, 45 percent of Metropolitan's capital costs are assumed to be funded from current revenues. It is projected that \$135 million PAYGO funding will be available per year, which is revenue collected through the rates and charges for this purpose over the next two fiscal years.

Expenditures for Capital Financing are \$423 million in FY 2022/23 and \$436 million in FY 2023/24. The Capital Financing costs are described in more detail in the Biennial Budget document.

Required Reserves

Metropolitan's Administrative Code and provisions of the revenue bond covenants require that reserves be held in certain funds at certain times. Therefore, as costs increase, reserves also increase to meet the Administrative Code and revenue bond covenants requirements. This line item reflects current policy requiring O&M fund and minimum requirements for the Revenue Remainder Fund. The increase in Required Reserves is \$11.0 million in FY 2022/23 and \$7.9 million in FY 2023/24.

Functional Costs

Metropolitan undertakes several major operational functions in order to deliver full-service water to Metropolitan's member agencies. These include the supply itself, the conveyance capacity and energy used to move the supply, storage of water, distribution of supplies within Metropolitan's system, and treatment of these supplies. Metropolitan's rate structure recovers the majority of the costs of these functions through rates and charges.

The functional categories developed for Metropolitan's cost of service process are consistent with the AWWA rate setting guidelines. A standard chart of accounts for utilities is provided in the AWWA publication "Financial Management for Water Utilities: Principles of Finance, Accounting, and Management Controls".

Figure 5-2, page 46, lists Operation and Maintenance (O&M) Expense Accounts. As noted, these are Expense Accounts, which provide the means by which O&M and capital financing costs are functionalized for COS. Because all water utilities are not identical, the functional categories used in the COS reflect, as they should, Metropolitan's unique physical, financial, and institutional characteristics, as permitted under the AWWA guidelines. Metropolitan has modified these functional categories as follows:

Pumping: Metropolitan functionalizes its pumping costs for the SWP and the CRA to a Conveyance and Aqueduct subaccount.

Customer Accounts, Customer Service and Sales Promotion: These are not applicable as Metropolitan is not a retail utility.

Storage: Metropolitan provides significant emergency storage, dry-year supply and regulatory services, and functionalizes costs to Storage to reflect Metropolitan's unique physical and operational reliability services.

Demand Management: Metropolitan incurs expenditures to support its Demand Management program, as described throughout this document.

Hydroelectric: Metropolitan has developed recovery generation facilities throughout its distribution system and recovers the costs and revenues from this investment in its COS.

A key goal of functional assignment is to maximize the degree to which rates and charges reflect the costs of undertaking different types of operational functions. For functional assignment to be of maximum benefit, two criteria must be kept in mind when establishing functional categories.

- The categories should correlate rates and charges elements with the costs of the functions associated with those elements; and
- Each function should include reasonable allocation bases by which costs may be allocated.

Each of the functions developed for the cost of service process is described below.

Supply

This function includes costs for those SWP and CRA facilities and programs that relate to managing and developing supplies to meet the member agencies' demands.

Metropolitan has a contractual right to a proportionate share of the project water that DWR determines is available for allocation to the Contractors. This determination is made each year based on existing supplies in storage, forecasted hydrology, and other factors. Available project water is then allocated to the Contractors in proportion to the amounts set forth in Table A of their State Water Contracts (Table A Allocation). The costs of the SWP supply are paid pursuant to Metropolitan's State Water Contract.

DWR's Delta Water Charge recovers the Capital and Minimum Operation, Maintenance, Power and Replacement (OMP&R) costs for the facilities that DWR determines are Conservation costs, meaning they conserve water to supply to the Contractors. Metropolitan reviews DWR's determination for purposes of functionalization. The Delta Water Charge is based on Contractors' cumulative Table A Allocations, which is approximately 46 percent for Metropolitan, regardless of whether it receives any Table A water in a year.

Under its contract with the federal government, Metropolitan has a fourth priority to 550,000 acre-feet per year of Colorado River water, less certain use by higher priority holders and Indian tribes in California. Metropolitan also holds a fifth priority for an additional 662,000 acre-feet per year that exceeds California's 4.4-million-acre-foot normal year basic apportionment, 38,000 acre-feet under the sixth priority during the term of the Colorado River Water Delivery Agreement, and another 180,000 acre-feet per year when surplus flows are available. Metropolitan can obtain water under the fourth, fifth, and sixth priorities from:

- Water unused by the California holders of priorities 1 through 3;
- Water saved by extraordinary conservation and crop rotation programs; or,
- When the U.S. Secretary of the Interior makes available:

- Surplus water, Intentionally Created Surplus water, and/or
- Water apportioned to, but unused by, Arizona and Nevada.

In fiscal years 2022/23 and 2023/24 it is projected that Metropolitan will receive annual CRA water diversions of approximately 1.01 MAF and 0.92 MAF respectively.

The costs of the CRA supply portfolio developed by Metropolitan are paid by Metropolitan. The CRA supply portfolio is supported by Water Resource Management labor, materials and supplies, outside services and professional services. The CRA supply portfolio activities benefit from Water Resource Management support services and management supervision, as well as Administrative and General activities of Metropolitan.

Metropolitan's supply related costs include investments in the Conservation Agreement with the IID, the PVID Program, and other CRA supply programs previously described. SWP programs include the Kern Delta Program, Semitropic Water Storage Program, Yuba Accord Program, Arvin-Edison Water Storage Program, Mojave Storage Program, AVEK Storage and Water Bank Programs, and others as previously described. Costs for programs within Metropolitan's service area, such as Conjunctive Use Agreements and Cyclic Storage Agreements, are also included.

Metropolitan finances past, current and future capital improvements associated with the supply portfolio capital assets and capitalizes investments associated with IID/Metropolitan Conservation Program, the PVID Land Management, Crop Rotation, and Water Supply Program, the Kern Delta Storage Program, Semitropic Storage Program, the Arvin-Edison Storage Program, and the AVEK High Desert Water Bank Program as Participation Rights.

California EcoRestore

California EcoRestore represents the state's near-term effort to accelerate habitat restoration in the Delta. This effort parallels a Delta Conveyance project and is a separate effort to improve the long-term health of the Delta. To date, California EcoRestore efforts include tidal restoration, fish passage improvements in the Yolo Bypass, tidal marsh restoration efforts, and floodplain projects. State Water Contractors and Central Valley Contractors have an obligation to pay for an existing commitment for habitat restoration. Any future costs are a public benefit and not a cost of the SWP. Any costs incurred by the SWP under the existing habitat restoration commitment under existing operating permits are likely to be recovered through the Delta Water Charge in Metropolitan's SWP bills and functionalized to Supply.

Conveyance and Aqueduct

This function includes the capital, operations, maintenance, and overhead costs for SWP and CRA facilities that convey water to Metropolitan's internal distribution system. Variable power costs for the SWP and CRA are also considered to be Conveyance and Aqueduct costs but are separately reported under a "power" sub-function. Conveyance and Aqueduct facilities can be distinguished from Metropolitan's other facilities primarily by the fact that they do not typically include direct connections to the member agencies. For purposes of this analysis, the Inland Feeder Project functions as an extension of the SWP East Branch and is therefore considered a Conveyance and Aqueduct facility as well.

Conveyance and Aqueduct: SWP¹⁰

Since inception, the State Water Contract provided Contractors the ability to use the SWP to convey non-SWP water under certain circumstances. Specifically, Article 18(c)(2) of the original SWC addressed situations where there is a shortage in the supply of water made available under the contract and stated, "[T]he District, at its option, shall have the right to use any of the project transportation facilities which by reason of such permanent shortage in the supply of project water to be made available to the District are not required for delivery of project water to the District, to transport water procured by it from any other source: [p]rovided, [t]hat such use shall be within the limits of the capacities provided in the project transportation facilities for service to the District under this contract". However, Article 18(c)(2) only applied in the event a permanent shortage was declared by DWR and it was unclear how costs would be charged for using SWP facilities to transport non-project water. In 1994, the Contractors and DWR negotiated the Monterey Amendments to the State Water Contract, including Article 55, which made explicit the Contractors' rights to use the portion of the SWP conveyance system necessary to deliver water to them (their "reaches") also includes the right to convey non-SWP water at no additional cost as long as capacity exists. Power is charged at the SWP average power rate. The Monterey Amendments also expanded the ability to carryover SWP water in SWP storage facilities, allowed Contractors to store water in groundwater storage facilities outside a Contractor's service area for later use, and permitted certain Contractors to borrow water from terminal reservoirs. These amendments, approved by Metropolitan's Board in 1995, secured the means for individual Contractors to increase supply reliability through water transfers and storage outside their service areas.

The impact of the Monterey Amendments on SWP operations is shown in Tables 11 and 12 below, which are based on information supplied by DWR¹¹. In the nine calendar years ending in 2020, only 67.7 percent of the SWP deliveries to Metropolitan were Table A water delivered in the year it is paid for. Fully 32.3 percent of the deliveries were for non-Table A water. Non-SWP water comprised 8.6 percent of Metropolitan's deliveries from the SWP. For the other Contractors, 46.2 percent of the SWP deliveries were what one would consider "supply", or Table A water delivered in the year it is paid for; 53.8 percent of the deliveries are for non-Table A water. Non-SWP water transported by the other Contractors comprised 23.8 percent of their deliveries from the SWP. Non-Contractors using the SWP to wheel transfer supplies comprised 4.3 percent of all deliveries through the SWP. Fully 20.9 percent of the deliveries on the SWP were for non-SWP water.

¹⁰ For historical and current information regarding the SWP, refer to Bulletin 132, published periodically by DWR since 1963. The most recently published Bulletin is Bulletin 132-18, dated January 2021 and titled, "Management of the California State Water Project." Appendices to the Bulletin are also updated separately. Both are available at: <https://water.ca.gov/Programs/State-Water-Project/Management/Bulletin-132>.

¹¹ DWR, Water Deliveries Section, State Water Project Analysis Office, January 27, 2022.

Table 11: State Water Project Water Management Activities, CY 2010 through 2020, Acre-Feet

SWP Deliveries--Acre-feet											
Metropolitan				Other SWP Contractors				Non-SWC Agencies		Total Deliveries ⁴	
(a)	(b)	(c)	(d) = (a) + (b) + (c)	(e)	(f)	(g)	(h) = (e) + (f) + (g)	(i) = (d) + (h)	(j)	(k) = (i) + (j)	
Table A ¹	Other SWP ²	Non-SWP ³	Total MWD	Table A ¹	Other SWP ²	Non-SWP ³	Total Other SWC	Total SWC	Non-SWP ⁴		
2010	639,537	352,831	265,720	1,258,088	686,826	360,138	355,908	1,402,872	2,660,960	148,986	2,809,946
2011	857,794	590,003	145,907	1,593,704	1,218,697	601,769	182,579	2,003,045	3,596,749	61,739	3,658,488
2012	906,009	308,689	10,010	1,224,708	933,103	445,898	250,144	1,629,145	2,853,853	109,064	2,962,917
2013	613,271	145,147	113,469	871,887	472,427	392,367	371,733	1,236,527	2,108,414	130,642	2,239,056
2014	59,181	224,077	114,032	397,290	25,291	167,928	488,830	682,049	1,079,339	97,493	1,176,832
2015	379,296	37,459	148,149	564,904	253,861	176,621	380,150	810,632	1,375,536	57,810	1,433,346
2016	989,125	12,646	42,081	1,043,852	717,887	248,552	232,388	1,198,827	2,242,679	70,404	2,313,083
2017	1,084,494	453,261	37,521	1,575,276	1,146,288	712,860	291,728	2,150,876	3,726,152	83,270	3,809,422
2018	562,026	78,366	30,247	670,639	417,894	511,356	384,834	1,314,084	1,984,723	193,316	2,178,039
2019	1,012,458	322,158	10,975	1,345,591	914,657	568,778	219,533	1,702,968	3,048,559	131,516	3,180,075
2020	330,879	78,112	22,514	431,505	222,086	360,065	444,255	1,026,406	1,457,911	89,414	1,547,325
Total	7,434,070	2,602,749	940,625	10,977,444	7,009,017	4,546,332	3,602,082	15,157,431	26,134,875	1,173,654	27,308,529

¹ Table A delivered and not exchanged or transferred or stored² Other SWP = SWP Exchanges, Transfers, Carryover Storage, Flexible Storage, Article 21, Pool A/B, settlement³ Non-SWP = banking, non-SWP transfers and exchanges, Dry Year Purchase Program, local water, general conveyance water, operations exchange⁴ Deliveries made to non State Water Contractors. Does not include FSRA, include BBID and CVC. Del="Y", SWP="N"**Table 12: State Water Project Water Management Activities, CY 2010 through 2020, percentages**

SWP Deliveries--Percentages								
	= (a) / (d)	= ((b) + (c)) / (d)	= (c) / (d)	= (e) / (h) Other	= ((f) + (g)) / (h)	= (g) / (h)	= (j) / (k)	= ((c) + (g) + (j)) / (k)
MWD Table A	MWD Non-Table A	MWD Non-SWP	Contractors Table A	Other Contractors Non-Table A	Other Contractors Non-SWP	Non SWC to Total	Total non-SWP to Total	
2010	50.8%	49.2%	21.1%	49.0%	51.0%	25.4%	5.3%	27.4%
2011	53.8%	46.2%	9.2%	60.8%	39.2%	9.1%	1.7%	10.7%
2012	74.0%	26.0%	0.8%	57.3%	42.7%	15.4%	3.7%	12.5%
2013	70.3%	29.7%	13.0%	38.2%	61.8%	30.1%	5.8%	27.5%
2014	14.9%	85.1%	28.7%	3.7%	96.3%	71.7%	8.3%	59.5%
2015	67.1%	32.9%	26.2%	31.3%	68.7%	46.9%	4.0%	40.9%
2016	94.8%	5.2%	4.0%	59.9%	40.1%	19.4%	3.0%	14.9%
2017	68.8%	31.2%	2.4%	53.3%	46.7%	13.6%	2.2%	10.8%
2018	83.8%	16.2%	4.5%	31.8%	68.2%	29.3%	8.9%	27.9%
2019	75.2%	24.8%	0.8%	53.7%	46.3%	12.9%	4.1%	11.4%
2020	76.7%	23.3%	5.2%	21.6%	78.4%	43.3%	5.8%	35.9%
Total	67.7%	32.3%	8.6%	46.2%	53.8%	23.8%	4.3%	20.9%

The SWP has transformed from being solely a transporter of SWP water to a transporter of other water sources as well for Metropolitan, other State Water Contractors, and non-Contractors. The reason for this is quite simple: the SWP has allocated only about 50 percent on average of the water due to State Water Contractors. The State Water Contractors have a significant investment in the costs of operating, maintaining and financing the SWP, and have developed creative programs to develop additional supplies and improved supply reliability by using the SWP as a transportation system. Specifically, during times of shortage or low SWP supply allocations, Metropolitan uses the SWP facilities to transport non-SWP water, which is water it has acquired through use of non-SWP sources, to its service area. When Metropolitan conveys non-project water, it is using the SWP transportation facilities in transactions that have nothing to do with SWP water supply. The ability to move non-SWP water through the SWP facilities, either as a result of purchases of non-SWP water or withdrawals from banking programs, enhances Metropolitan's operational flexibility and contributes to regional system reliability from which all member agencies benefit.

In addition, Metropolitan has, from time to time, used its capacity in the SWP to wheel non-Metropolitan water to its member agencies. Examples include water delivered to Santa Margarita Water District (1,665.2 acre-feet net in 1998-2000) and Irvine Ranch Water District (1,000 acre-feet in 2015), sub-agencies of the Municipal Water District of Orange County, and for the San Diego County Water Authority (23,077 acre-feet in 2008 and 15,520 acre-feet net in 2009).

The costs of the SWP conveyance facilities are paid pursuant to Metropolitan's State Water Contract. DWR's Transportation Charge recovers the costs associated with the various aqueduct reaches that deliver project water to the Contractors. The Capital and fixed OMP&R portions of the SWP Transportation Charge recover costs from the Contractors based on the accumulation of allocated costs for each aqueduct reach to each Contractor. Unlike the Delta Water Charge, which is uniform for a unit of Table A water, the allocation of these portions of the Transportation Charge will vary based on the aqueduct segments needed to deliver water to a specific Contractor. The further a Contractor is from the Delta and the greater its capacity in the transportation facilities, the greater its allocation of the Capital and fixed OMP&R Transportation Charges. Payment of the Transportation Charge allocates Contractors the right to use their capacity in the SWP facilities for transportation of SWP or non-SWP water, on a space available basis, under the SWC. A Contractor that participates in the repayment of a particular reach, or segment of the SWP, has already paid the costs of using that reach for the conveyance of water supplies through the Transportation Charge. On average, Metropolitan pays approximately 57 percent of the total fixed transportation costs of the SWP.

Delta Conveyance

In May 2019, Governor Newsom announced actions to begin the environmental review process for a single-tunnel conveyance in the Delta (which has become known as the "Delta Conveyance Project"). At this time, the environmental review process of Delta Conveyance is underway. Metropolitan is working with the administration to advance the single-tunnel project.

DWR has not provided an analysis for how it proposes to categorize the capital financing and operating costs of the Delta Conveyance Project on State Water Contractor Statement of Charges. In fiscal year 2022/23, Metropolitan's planned contribution for Delta Conveyance Project planning activities are budgeted at \$34.5 million in fiscal year 2022/23 and \$64.5 million in fiscal year 2023/24, as explained above. Metropolitan has allocated these costs as transportation costs based on the intended function of the facility, which is to convey water from the Delta.

Conveyance and Aqueduct: CRA

The CRA has also transformed from being source dedicated to delivering only Metropolitan's entitlement of Colorado River water to a delivery system supporting many different supply sources. Specifically, Metropolitan uses the CRA to:

- transport water made available as a result of cooperative programs implemented through agreements with other water agencies, either in the year made available or in a subsequent year as intentionally-created surplus from Lake Mead storage to its service area;
- recharge water in a groundwater basin so that it can subsequently plan to recover it for delivery to Metropolitan's service area; and
- exchange water with and deliver water in advance to other water agencies.

When Metropolitan conveys water made available as a result of cooperative programs implemented through agreements with other water agencies, to recharge water and subsequently recover it, or to exchange water with or deliver water in advance to other agencies, it is by definition using the CRA as a transportation facility. The ability to convey such water through the CRA facilities enhances Metropolitan's operational flexibility and contributes to regional system reliability for the benefit of all member agencies. Metropolitan's total calendar year CRA water management activities from 2010 through 2020 are shown in Table 13.

Table 13: CRA Water Management Activities in Acre-Feet, CY 2010 through 2020

CRA Water Management Activities--Acre-Feet								
	(a)	(b)	(c)	(d)	(e)	(f)	(g) = (a) / (f)	= ((f) - (a)) / (f)
				Other, including	MWD			
	Priority 4 & 5	IID/MWD	PVID + Bard**	Storage (to)/from	Exchange w SDCWA	Total Net Diversion	Priority 4 & 5 to Total	Non Priority 4 and 5 to Total
2010	815,525	97,000	148,600	(113,571)	151,507	1,099,061	74.2%	25.8%
2011	485,178	99,940	122,200	(151,571)	143,243	698,990	69.4%	30.6%
2012	467,166	93,677	73,700	(85,285)	186,861	736,119	63.5%	36.5%
2013	545,087	98,307	32,750	156,315	180,256	1,012,715	53.8%	46.2%
2014	484,937	84,305	43,010	383,959	180,123	1,176,334	41.2%	58.8%
2015	616,685	101,105	94,477	187,311	179,347	1,178,925	52.3%	47.7%
2016	613,491	90,374	126,383	(11,503)	178,278	997,023	61.5%	38.5%
2017	590,021	105,000	121,689	(319,009)	179,326	677,027	87.1%	12.9%
2018	663,915	105,000	95,752	(183,305)	207,746	889,108	74.7%	25.3%
2019	610,573	105,000	44,477	(460,154)	237,711	537,607	113.6%	-13.6%
2020	721,720	105,000	49,933	(331,235)	270,200	815,618	88.5%	11.5%
Total	2,797,893	1,084,708	903,038	(136,659)	2,094,598	6,743,578	41.5%	58.5%

(a) Use by holders of Indian and Miscellaneous present perfected rights and use by holders of Priorities 1, 2, and 3b above 420,000 acre-feet absent the Metropolitan-PVID Land Management, Crop Rotation, and Water Supply Program have been deducted from the Priority 4 supply of 550,000 acre-feet.

In the 11 calendar years ending 2020, approximately 42 percent of the CRA diversions to Metropolitan represent Metropolitan's entitlements under the Seven Party Agreement system. The remaining 58 percent represents volumes of Colorado River water moved through other programs. Metropolitan periodically transports water for Tijuana, Mexico through the CRA. Recent amounts are 316 acre-feet in calendar year 2018, 706 acre-feet in 2019, and 1,502 acre-feet in 2020.

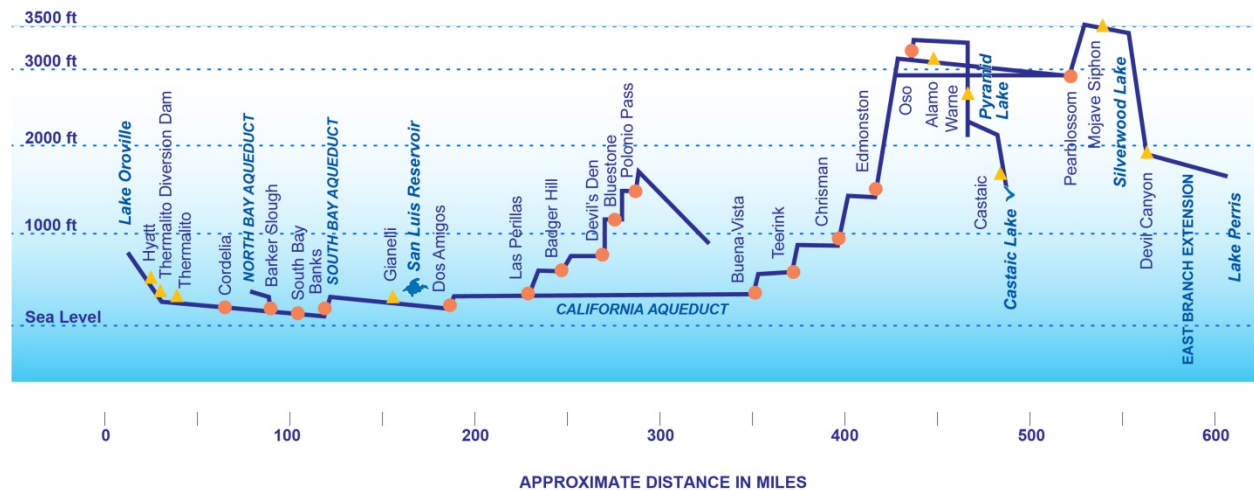
With regard to use as a transportation facility, the CRA differs from the SWP's California Aqueduct in that the capacity of the CRA is uniform through its entire length. The CRA was designed to move a relatively uniform volume of water through its entire length, and Metropolitan relies on the entire length to move water. There are no "reaches", or segments of the aqueduct, that are associated with deliveries to take-out points. The 4 regulating reservoirs are small, so water cannot be "batched" like the SWP, where pumps are cycled on and off to take advantage of cheaper time periods of the day to use electricity. Unlike the SWP, each CRA pump is uniformly sized at 225 cfs; none are variable speed pumps. This means the pumps are either operating at 225 cfs of capacity or are off at 0 cfs.

The costs of the CRA itself are paid by Metropolitan directly, as it operates the CRA. Metropolitan incurs capital and operations and maintenance expenditures to support the CRA activities. The costs of the CRA activities include labor, materials and supplies, outside services to provide repair and maintenance, and professional services. The CRA activities benefit from Water System Operations support services and management supervision, as well as Administrative and General activities of Metropolitan. Metropolitan finances past, current and future capital improvements on the CRA, and capitalizes those improvements as assets. The costs of Metropolitan's capital financing activities are apportioned to operational functions, such as conveyance and aqueduct.

Conveyance and Aqueduct: SWP Power

In addition to the charges for supply (the Delta Water Charge capital and OMP&R) and Transportation (Transportation Capital and OMP&R), DWR also charges for the power needed to deliver project water throughout the system. Two charges recover these power costs: the variable OMP&R portion of the Transportation Charge (Variable Charge) and the Off-Aqueduct Power Facilities (OAPF) charge. Because the State Water Contracts are cost recovery contracts, DWR invoices Contractors on an estimated basis for any calendar year, and then provides credits in later years once cost true-ups are finished.

Figure 14: Pumping Lift and Recovery Generation Facilities, SWP



The Variable Charge includes the annually estimated cost of purchased power including capacity and energy, cost of SWP power generation facilities, program costs to offset annual fish losses at the Banks Pumping Plant, purchased transmission services, and credits for sales of ancillary services and excess SWP system power sales. The various lifts and recovery generation facilities of the SWP are shown in Figure 14; the orange circles indicate pumps to lift water, and the yellow triangles indicate recovery generation facilities.

The Variable Charge is calculated on the basis of the energy required to pump an acre-foot of water to its take-out point multiplied by the system energy rate, less energy from the recovery generation plants. The system energy rate is a system-wide average rate calculated as the net cost of energy--total costs less revenues--divided by the net energy required to pump all water. That rate is applied to each acre-foot of water delivered to SWP customer based on the power required to pump the water to designated delivery points on the system. DWR can adjust the system energy rate as the calendar year progresses in order to reflect actual costs.

The OAPF charge recovers only ongoing environmental remediation costs of power generation facilities not on the aqueduct, namely Reid Gardner Unit 4, and is negligible at this time.

The SWP uses low-cost hydroelectric and recovery generation resources, but they only provide about 50 percent of the SWP energy needs in an average water year. The SWP relies on the wholesale market and contractual resources with exposure to market price volatility for as much as 30 to 35 percent of its needs, using other contractual resources to fill in the difference.

The SWP energy required to move water to Metropolitan is related to the transportation on the East Branch through Devil Canyon and on the West Branch through Castaic. Because Metropolitan moves the largest amount of water on the SWP and Metropolitan's delivery points on the East and West Branch are at or near the southern extreme of the SWP, Metropolitan pays approximately 70 percent of the SWP power costs. The cost of power per acre-foot to Metropolitan's delivery points on the East and West Branches are shown in Table 14.

Table 14: Cost of SWP Power for Metropolitan Terminal Delivery Points, \$ per Acre-Foot

	CY 2017 DWR	CY 2018 DWR	CY 2019 DWR	CY 2020 DWR	CY 2021 Estimated	CY 2022 Estimated	CY 2023 Estimated
East Branch	\$149.60	\$173.92	\$157.28	\$171.47	\$287.46	\$369.32	\$307.83
West Branch	\$148.70	\$161.50	\$144.89	\$167.40	\$274.45	\$395.45	\$329.61

The SWP energy costs are impacted by two factors. First, the annual hydrology, secondly the energy policies of the state of California. The SWP has invested heavily in hydroelectric power generation facilities. The unit cost of operating the power facilities declines as the amount of available water increases. The SWP is acquiring renewable resources, primarily solar to date, to meet its obligation to reduce greenhouse gas emissions. The SWP energy costs are also impacted by the increasing cost of using the California Independent System Operator's (CAISO) grid to deliver power from its generating sources and the wholesale power market to its pumping loads. The SWP does not own high voltage transmission facilities and must use the CAISO grid to move power. Finally, the SWP has an obligation to acquire and surrender emissions allowances for the generating facilities the SWP owns, primarily the Lodi Energy Center.

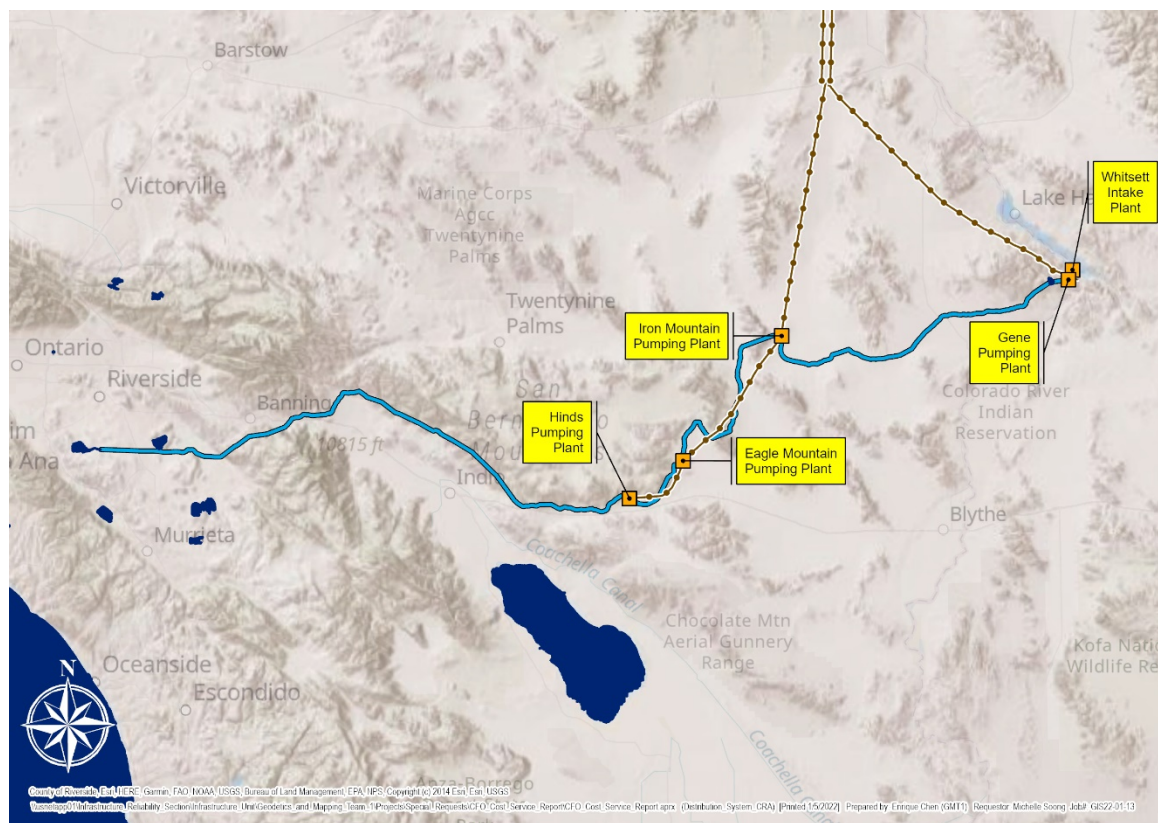
Conveyance and Aqueduct: CRA Power

Metropolitan operates five pumping plants on the CRA, which are shown in Figure 15. Water enters the aqueduct system from Lake Havasu at the Whitsett Intake Pumping Plant (Intake). It is then pumped to its highest elevation of 1,807 feet above sea level at the Hinds Pumping Plant (Hinds), which is about 126 miles west of Intake. Five pumping plants lift the water a total of 1,617 feet to the Hinds Pumping Plant. From Hinds, the water flows 116 miles by gravity to Lake Mathews.

Metropolitan currently has four basic sources of power available to meet CRA energy requirements: Hoover Power, Parker Power, wholesale purchases from inside and outside of the California Independent System Operator (CAISO). For wholesale power purchases within the CAISO, the standard index is South-of-Path 15 for southern California (SP15) to indicate CAISO power prices, whereas wholesale power purchases outside of CAISO utilize the MEAD bi-lateral index. MEAD substation is an import interconnection point for power into CAISO and can be utilized by Metropolitan to import power for the CRA from entities throughout the western United States. For budgeting purposes, it is assumed that Metropolitan buys supplemental power at forecasted SP15 rates.

Under a contract between the United States, Department of Energy, Western Area Power Administration, and Metropolitan, Metropolitan currently has a right to approximately 250 megawatts (MW) of capacity at the Hoover Dam power plant. Metropolitan has an annual firm energy entitlement of 1,291,227 megawatt-hours (MWh). The cost charged to Metropolitan for Hoover power is based on the revenue required by the U.S. Bureau of Reclamation to operate and maintain the power plant. This source of power has historically been at a lower cost than power purchased at market rates.

Metropolitan funded the total cost of construction of Parker Dam and incidental facilities, and 50 percent of the construction cost of the Parker Power plant. In consideration for this funding, Metropolitan is entitled in perpetuity to 50 percent of the capacity and energy of the four Parker generating units, which is approximately 54 MW of capacity. Parker power is also cost-based.

Figure 15: Metropolitan CRA Pumping Plants

Metropolitan's current basic power resource mix comprised of generation from Hoover and Parker dams is very cost effective but is not enough to provide power supply to pump Metropolitan's Colorado River water supplies in all years. For that reason, Metropolitan is required to purchase additional or supplemental power to transport Colorado River water supplies in some years. As a result, Metropolitan requires any party seeking to wheel non-Metropolitan water through its CRA to purchase, or arrange for Metropolitan to purchase, the power supplies required to pump that water. Any Colorado River water that is pumped through Metropolitan's CRA is diverted above Parker Dam and cannot generate energy for Metropolitan's use at the Parker Dam Power plant. To compensate for this loss, an additional 32 kilowatt-hours per acre-foot are required to make Metropolitan whole for undertaking to pump non-Metropolitan water through the CRA that would otherwise have flowed through the Parker Power plant. In total, 2,032 kilowatt-hours (or 2.032 MWh) of energy must be provided to Metropolitan to convey each acre-foot of non-Metropolitan water supplies through the CRA.

Supplemental power can be purchased to pump non-Metropolitan water through the CRA. The market rate for electric energy prices is regularly tracked and published for various regions in California. Metropolitan uses the CAISO Open Access Same-time Information System (OASIS) Day Ahead Locational Marginal Price as reflective of the supplemental power costs for electric energy used for its pumping plants on the CRA. The regional index applicable to energy sold for use on the CRA is designated as South-of-Path 15, or SP15, and is reflective of Southern California market energy prices.

Any party seeking to pump non-Metropolitan water through the CRA would have to purchase, or arrange for Metropolitan to purchase on its behalf, supplemental power. The market costs for purchases of power for the CRA are reflected in the CAISO OASIS Day Ahead Locational Marginal Price. Because Metropolitan utilizes the pumping capacity on the CRA for its own water supplies during off-peak hours to minimize its costs, the pumping of non-Metropolitan wheeled water would occur during on-peak hours and the on-peak price index published on the CAISO OASIS Day Ahead Locational Marginal Price is indicative of the price that would be paid to pump non-Metropolitan water.

Table 15: Cost of CRA Power Sources, \$ per Megawatt-hour (MWh)

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
Hoover ¹	\$17.86	\$18.46	\$18.33	\$17.64	\$15.76
Parker ¹	\$15.40	\$14.38	\$17.67	\$18.34	\$15.86
SP15, off-peak ²	\$26.48	\$28.27	\$38.52	\$27.29	\$35.73
SP15, on-peak ³	\$33.46	\$38.84	\$49.97	\$31.69	\$46.60
MEAD, off-peak ⁴	\$22.94	\$25.09	\$31.89	\$23.61	\$36.98
MEAD, on-peak ⁵	\$30.25	\$33.16	\$44.31	\$29.01	\$65.89

¹Information from Annual Reports for years 2017, 2018, 2019, 2020 and 2021

²SP15, off-peak is used to determine Metropolitan's off-peak energy costs. The costs were calculated by taking the annual average.

³SP15, on-peak is used to determine the market value of Metropolitan sales of excess energy, if any. SP15, on-peak is also used to determine the pumping costs associated with pumping non-Metropolitan water through the CRA system, unless otherwise provided by contract. The costs were calculated by taking the annual average.

⁴MEAD, off-peak is used to determine Metropolitan's off-peak supplemental energy costs imported at MEAD substation for power outside of the CAISO.

⁵MEAD, on-peak is used to determine Metropolitan's on-peak supplemental energy costs imported at MEAD substation for power outside of the CAISO.

The market value of Metropolitan's sales of excess energy, when not all power supply is needed for the CRA pumps, if any is valued at SP15 index for on and off-peak periods.

Metropolitan from time to time sells excess energy into the wholesale market and realizes revenues, which offset the total cost of energy as reflected in the System Power Rate. If Metropolitan were to deliver additional water through the CRA, these sales become a lost opportunity. The on-peak price index published on the CAISO OASIS Day Ahead Locational Marginal Price is indicative of the price that Metropolitan could realize by selling excess energy.

Table 16: South-of-Path 15 On-Peak Energy Prices (\$/MWh*)

	CY 2017	CY 2018	CY 2019	CY 2020	CY 2021
January	\$ 36.22	\$ 37.09	\$ 42.56	\$ 33.60	\$ 33.22
February	\$ 28.52	\$ 36.84	\$ 72.73	\$ 26.85	\$ 71.09
March	\$ 23.97	\$ 32.39	\$ 35.98	\$ 25.49	\$ 29.91
April	\$ 26.71	\$ 27.69	\$ 24.83	\$ 17.11	\$ 28.04
May	\$ 32.08	\$ 24.12	\$ 20.25	\$ 16.81	\$ 26.59
June	\$ 38.14	\$ 31.45	\$ 24.81	\$ 23.72	\$ 56.06
July	\$ 41.49	\$ 101.04	\$ 35.24	\$ 31.63	\$ 78.89
August	\$ 54.96	\$ 85.22	\$ 36.39	\$ 108.05	\$ 65.08
September	\$ 43.18	\$ 38.32	\$ 40.35	\$ 46.14	\$ 72.09
October	\$ 47.86	\$ 41.09	\$ 35.71	\$ 48.29	\$ 57.89
November	\$ 44.82	\$ 55.50	\$ 37.44	\$ 39.32	\$ 60.14
December	\$ 44.21	\$ 57.26	\$ 37.80	\$ 40.80	\$ 63.40

*MWh = megawatt-hour, or 1,000 kilowatt-hours

The budget assumes all supplement energy purchased at forecasted SP 15 rates.

Metropolitan has an obligation to acquire and surrender emissions allowances for fossil-fuel energy generated out-of-state and imported into California through its 230,000-volt transmission system. Alternatively, Metropolitan can purchase power in California, which already incorporates any necessary emissions allowances, but must pay to use the CAISO transmission network. Metropolitan has contracted with Arizona Electric Power Cooperative (AEPCCO) to provide energy management and scheduling services on a per Megawatt-hour basis. AEPCCO also provides operational services for Metropolitan's CRA transmission system, assuring compliance with federal reliability requirements. Finally, Metropolitan's CRA power system is within the Balancing Authority Area of the CAISO; Metropolitan incurs Grid Management Charges from the CAISO on a per Megawatt-hour basis and may realize a Resource Adequacy obligation depending on its pumping load and available firm resources.

Storage

Storage costs include the capital financing, operating, maintenance, and overhead costs for Diamond Valley Lake, Lake Mathews, Lake Skinner, and five smaller regulatory reservoirs within the Distribution System. Metropolitan's larger storage facilities are operated to provide: (1) emergency storage in the event of an earthquake or similar system outage; (2) drought storage that produces additional supplies during times of shortage; and (3) regulatory storage to balance system demands and supplies and provide for operating flexibility. To reasonably allocate the costs of storage capacity among member agencies, the storage function is categorized into sub-functions of emergency, drought, and regulatory storage.

Table 17: Functional Assignment of Metropolitan Storage Facilities

Storage Facilities	Functional Assignments		
	Emergency	Drought	Regulatory
Diamond Valley Lake	54%	33%	13%
Other Regulatory			100%
Lake Skinner	77%		23%
Lake Mathews	44%		56%
Semi-Tropic		100%	
Arvin-Edison		100%	
CRA Off-Stream		100%	
Groundwater Conjunctive Use		100%	

(a) DVL allocations are based on the 2019 Update of Metropolitan's Emergency Storage Objective, the 2010-2019 DVL Daily Average Available Storage, and the WSO Regulatory Storage White Paper.

(b) Lake Skinner and Lake Matthews allocation percentages are derived from the 2019 Update of Metropolitan's Emergency Storage Objective, and the WSO Regulatory Storage White Paper.

Treatment

This function includes capital financing, operating, maintenance, and overhead costs for Metropolitan's five treatment plants and is considered separately from other costs so that the treatment function may be priced separately.

Distribution

This function includes capital financing, operating, maintenance, and overhead costs for the Distribution System of feeders, canals, pipelines, laterals, and other appurtenant works. The Distribution System facilities are distinguished from Conveyance and Aqueduct facilities at the point of connection to the SWP, Lake Mathews (CRA), and other major turnouts along the CRA facilities. Examples include the Rialto Pipeline; the Etiwanda Pipeline; the Foothill Feeder; the Sepulveda Feeder; the Santa Monica Feeder; the Upper, Middle, and Lower Feeders; and the San Diego Pipelines No. 1, No. 2, No. 3, No. 4, and No. 5.

Demand Management

A separate demand management function has been used to clearly identify the cost of Metropolitan's programs designed to reduce the need to import water, such as conservation, incentives for local resource projects like recycling and desalination, the Future Supply Action Program, and the Stormwater Pilot Program. Demand management is an important part of Metropolitan's resource management efforts. Metropolitan's incentives in these areas contribute to savings for all users of the system in terms of lower capital costs that would otherwise have been required to expand and maintain the system.

Metropolitan increased the emphasis on Demand Management programs after the devastating drought of the early 1990's. Metropolitan's 1996 Integrated Resources Plan identified the Preferred Resource Mix as the resource plan that achieved the region's reliability goal of providing the full capability to meet all retail-level demands during foreseeable hydrologic events, represented the least-cost sustainable resources plan, met the region's water quality objectives, was balanced and diversified and minimized risks, and was flexible, allowing for adjustments should future conditions change.

The Preferred Resource Mix included locally developed water supplies and conservation and recognized that regional participation was important to achieve their development. Additional imported supplies frequently have relatively lower development costs but can create a large cost commitment for regional infrastructure to transport and store those imported supplies. On the other hand, local projects, like those designed to recycle water or increase groundwater production, may have higher development costs but require little or no additional infrastructure to distribute water supplies to customers. This trade-off between relatively lower-cost imported supplies requiring large regional infrastructure investments and relatively higher-cost local supply development requiring less additional local infrastructure was an important consideration in the development of the Preferred Resource Mix. A strategy of aggressively investing in imported water supply would lead to higher costs for the region because of the larger investments required in infrastructure.

Metropolitan's 1996 Integrated Resource Plan included an analysis of future demand scenarios and their effect on infrastructure requirements. A comparison of capital infrastructure costs with and without Demand Management Programs showed a difference of around \$2 billion. In other words, the ability to meet demand through local Demand Management Programs resulted in an anticipated \$2 billion in capital cost savings. A sensitivity analysis further showed that a 5 percent increase or decrease in demand had a correlative effect on when Metropolitan would need to incur capital infrastructure costs. Since then, Metropolitan has seen the benefits materialize. Metropolitan has been able to defer the need to build additional infrastructure such as the Central Pool Augmentation Project tunnel and pipeline, completion of San Diego Pipeline No. 6, the West Valley Interconnection, and the completion of the SWP East Branch expansion. Overall, the decrease in demand resulting from these projects is estimated to defer the need for projects between four and twenty-five years at a savings of approximately \$3 billion in 2019 dollars.

Since 1996, the Integrated Resources Plan has been updated three times, in 2004, 2010, and 2015, with a fourth update for 2020 in process, reaffirming long-term sustainability of the region's water supply through implementation of conservation and local resource development. Based on the 1996 IRP and its updates, Metropolitan determined Demand Management Programs decrease and avoid operating and capital maintenance and improvement costs, such as costs for repair of and construction of additional or expanded water conveyance, distribution, and storage facilities. Investments in demand side management programs like conservation, water recycling, and groundwater recovery help defer the need for additional conveyance, distribution, and storage facilities. The programs also free up capacity in Metropolitan's system to convey both Metropolitan water, and water from other non-Metropolitan sources.

Metropolitan allocated demand management costs to the transportation operational functions since the unbundling of its rate structure in 2001, which was implemented in January 2003. The functionalization of the costs was supported by the 1996 Integrated Resources Plan's (IRP) 25-year capital and resource planning, which expired this year. SDCWA challenged that allocation in court beginning in June 2010, alleging the Water Stewardship Rate could not be collected as part of Metropolitan's pre-set wheeling rate or the transportation rates charged under the SDCWA-Metropolitan Exchange Agreement. On June 21, 2017, the Court of Appeal entered a decision. The appellate court ruled Metropolitan may collect State Water Project transportation costs as part of Metropolitan's System Access Rate and System Power Rate in the wheeling rate and the Exchange Agreement price. However, the appellate court found the administrative record before it for the rates in calendar years (CYs) 2011 through 2014 did not support Metropolitan's inclusion of the Water Stewardship Rate in the wheeling rate or the transportation rates charged under the Exchange Agreement, but the opinion did not address the allocation in subsequent years based on a different record.

On September 21, 2021, the Court of Appeal issued a new appellate decision in which it interpreted its 2017 appellate decision. The Court of Appeal clarified that its 2017 decision regarding the Water Stewardship Rate was not limited to 2011-2014, and that it prohibits the inclusion of the Water Stewardship Rate in transportation rates charged under Metropolitan's wheeling rate and in the price term of the SDCWA-Metropolitan Exchange Agreement from 2015 forward. Accordingly, staff removed all Demand Management Cost Recovery Alternatives that include transportation rate elements for the Board Workshop on November 8, 2021. On November 23, 2021, the Metropolitan Board of Directors directed staff to incorporate 100 percent of demand management costs into the Supply rate elements the proposals for rates and charges.

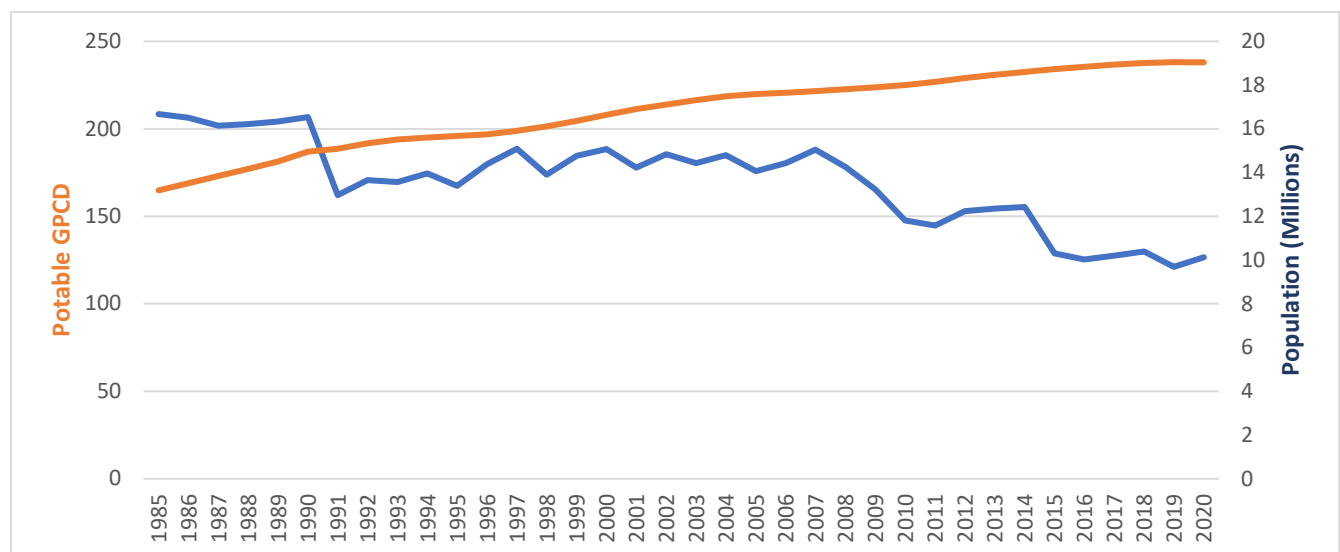
Accordingly, all demand management costs are functionalized as supply and collected on the Tier 1 and Tier 2 supply rates. However, because there are no projected Tier 2 transactions in the biennium, the demand managements costs are allocated entirely to Tier 1.

Demand Management: SB-60

In September 1999, Governor Gray Davis signed SB 60 (Hayden) into law. SB 60 amended the Metropolitan Water District Act to direct Metropolitan to increase “sustainable, environmentally sound, and cost-effective water conservation, recycling, and groundwater storage and replenishment measures.” SB 60 also requires Metropolitan to hold an annual public hearing to review its urban water management plan for adequacy in achieving an increased emphasis on cost-effective conservation and local water resource development, and to invite knowledgeable persons from the water conservation and sustainability fields to these hearings. Finally, Metropolitan is required to annually prepare and submit to the Legislature a report on its progress in achieving the goals of SB 60. SB 60 specifically indicated that no reimbursement was required by legislation because Metropolitan, as a local agency, has the authority to levy service charges, fees or assessments sufficient to pay for the program or level of service mandated by SB 60. No other water utility in California, public or private, has been specifically identified by the state Legislature and directed to pursue water conservation and local water resource development.

In fiscal year 2020/21 alone, Metropolitan’s service area achieved 1.7 million acre-feet of water savings from conservation, recycled water and groundwater recovery programs. Figure 16 below compares population in millions on the right axis and gallons per capita daily (GPCD) water use on the left axis. While the population has increased to approximately 19 million in 2020, GPCD water use has decreased to approximately 127 GPCD. These reductions derived from programs for which Metropolitan paid incentives, as well as code-based conservation achieved through legislation, building and plumbing codes and ordinances, and reduced consumption resulting from changes in water pricing. Cumulatively, since 1982 Metropolitan has invested \$1.5 billion and Metropolitan’s service area has achieved 7.6 million acre-feet of water savings. These water savings reduce per capita water demands, allowing Metropolitan to serve a growing population with existing supplies and without constructing additional facilities to import water.

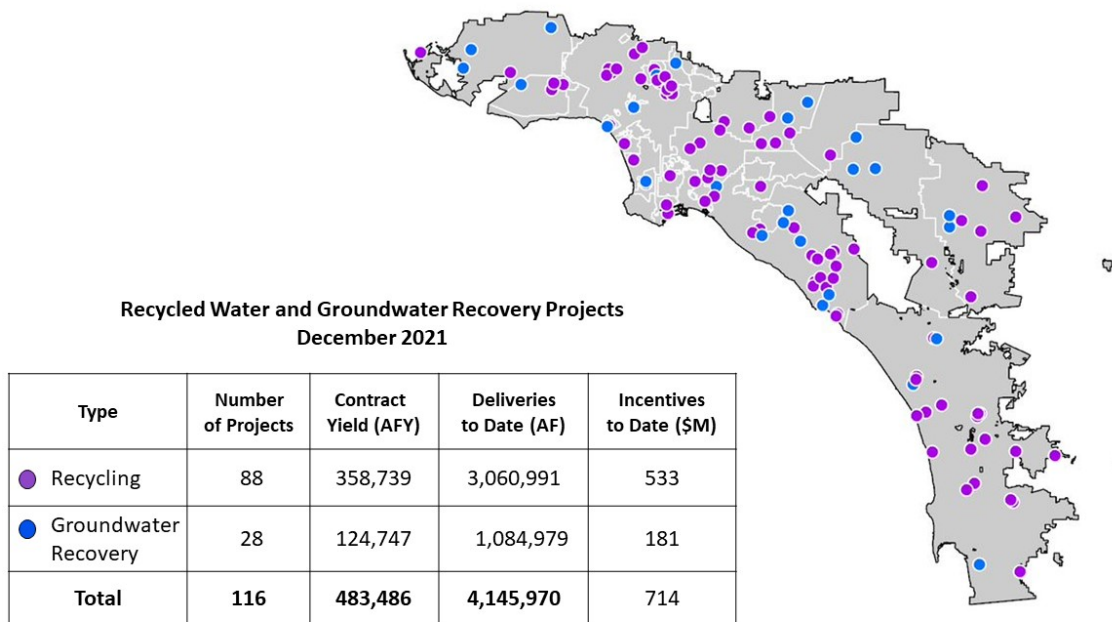
Figure 16: Population and Per Capita Daily Water Use



Metropolitan's Conservation Credits Program provides incentives to residents and businesses for use of water-efficient products and qualified water-saving activities. Rebates have been provided to residential customers for turf removal and purchasing of high-efficiency clothes washers and toilets. Rebates are also provided to businesses and institutions for water-saving devices. In fiscal year 2020/21, the Conservation Credits Program achieved 1.1 million acre-feet of saved water through new and existing conservation initiatives funded with incentives and maintained through plumbing codes. Cumulatively, through fiscal year 2020/21 the Conservation Credits Program has achieved 3.5 million acre-feet of water savings.

Metropolitan provides financial incentives through its Local Resources Program for the development and use of recycled water and recovered groundwater for the participants. The Local Resources Program consists of 88 recycling projects and 28 groundwater recovery projects located throughout Metropolitan's service area, of which 116 projects are in operation, as shown in Figure 17. From the Local Resources Program's inception in 1982 through FY 2020/21, Metropolitan has paid out about \$528 million in incentives to produce about 3.0 million acre-feet of recycled water. Metropolitan also provided approximately \$181 million to produce 1,099,000 acre-feet of recovered degraded groundwater for municipal use.

Figure 17: Local Resources Program Projects



Demand Management: SB X7-7, AB 1668, and SB 606

SB X7-7 mandated a new requirement to lower urban per capita water use 20 percent by December 31, 2020. Enacted by the state Legislature and signed into law by Governor Schwarzenegger as part of a historic package of water reforms in November 2009, the "20x2020" plan gave local communities flexibility in meeting this target while accounting for previous efforts in conservation and recycling. The Legislature found that reducing water use through conservation and regional water resources management would result in protecting and restoring fish and wildlife habitats, reducing dependence on water through the Delta, and providing significant energy and environmental benefits. Metropolitan coordinated closely with its member agencies to achieve these targets both at a retail agency level in compliance with legislative requirements, and as a region, in achieving a true 20 percent reduction in per-capita water use.

AB 1668 and SB 606 build on Governor Brown's efforts to make water conservation a way of life in California and create a new foundation for long-term improvements in water conservation and drought planning. These bills establish guidelines for efficient water use and a framework for the implementation and oversight of the new standards, which must be in place by 2022. The two bills strengthen the state's water resiliency in the face of future droughts with provisions that include:

- Establishing water use objectives and long-term standards for efficient water use that apply to urban retail water suppliers; comprised of indoor residential water use, outdoor residential water use, commercial, industrial and institutional (CII) irrigation with dedicated meters, water loss, and other unique local uses.
- Providing incentives for water suppliers to recycle water.
- Identifying small water suppliers and rural communities that may be at risk of drought and water shortage vulnerability and provide recommendations for drought planning.
- Requiring both urban and agricultural water suppliers to set annual water budgets and prepare for drought.

Metropolitan coordinates closely with its member agencies to achieve these provisions both at a retail agency level in compliance with legislative requirements and as a region.

Administrative and General (A&G)

These costs occur in each of the Groups' departmental budgets and reflect overhead costs that cannot be directly functionalized. The COS process allocates A&G costs to the operational functions based on the labor costs of non-A&G dollars allocated to each function.

Hydroelectric

Hydroelectric costs include the capital financing, operating, maintenance, and overhead costs incurred to operate the 16 small hydroelectric plants located throughout the water distribution system.

Functional Assignment Bases

The functional assignment bases are used to assign costs that make up the Revenue Requirement into the various operational functions. The primary functional assignment bases used in the COS process are listed below.

- Direct assignment
- Net Book Value plus Work-In-Progress
- Prorating in proportion to other allocations
- Manager analysis
- Prior year results

Schedule 3 summarizes the total dollar amounts assigned, including the absolute value of Revenue Offsets (rather than showing Revenue Offsets as a reduction to costs), using each of the above types of assignment bases, for FY 2022/23 and FY 2023/24. It assigns both total Revenue Requirements before Revenue Offsets and Revenue Offsets by summing the items before assigning dollars to the primary functional assignment bases. To ensure the correct amount has been assigned, the Revenue Requirement is restated at the bottom portion of each fiscal year chart.

Schedule 3: Summary of Functional Assignments by Type of Assignment Basis, FY 2022/23 and FY 2023/24

Primary Functional Assignment Bases	Estimated for FY 2023	% of Assigned Dollars
Direct Assignment	\$ 1,256,796,287	57.6%
Net Book Value	472,036,515	21.6%
Pro-Rating	112,514,397	5.2%
Manager Analysis	167,363,929	7.7%
Prior-Year Results	107,737,962	4.9%
Other	66,659,522	3.1%
Total Dollars Assigned	\$ 2,183,108,612	100.0%
Portion of Above Assignment Relating to:		
Revenue Requirements before Offsets	1,948,012,422	
Revenue Offsets	235,096,190	
Total Dollars Assigned	\$ 2,183,108,612	
Net Revenue Requirements		
Revenue Requirements before Offsets	1,948,012,422	
Revenue Offsets	(235,096,190)	
Net Revenue Requirements	\$ 1,712,916,232	

Totals may not foot due to rounding

Primary Functional Assignment Bases	Estimated for FY 2024	% of Assigned Dollars
Direct Assignment	\$ 1,304,110,179	57.9%
Net Book Value	483,649,174	21.5%
Pro-Rating	118,613,056	5.3%
Manager Analysis	172,096,269	7.6%
Prior-Year Results	109,615,811	4.9%
Other	64,100,985	2.8%
Total Dollars Assigned	\$ 2,252,185,475	100.0%
Portion of Above Assignment Relating to:		
Revenue Requirements before Offsets	2,026,467,561	
Revenue Offsets	225,717,914	
Total Dollars Assigned	\$ 2,252,185,475	
Net Revenue Requirements		
Revenue Requirements before Offsets	2,026,467,561	
Revenue Offsets	(225,717,914)	
Net Revenue Requirements	\$ 1,800,749,647	

Totals may not foot due to rounding

Each of the primary assignment bases is discussed in detail in the remainder of this section. Discussion of each assignment basis includes examples of costs assigned using that particular basis.

(a) Direct assignment

Direct assignment makes use of a clear and direct connection between a revenue requirement and the function being served by that revenue requirement. Directly assigned costs typically include: purely administrative costs; and certain distribution and conveyance departmental costs. Examples of costs that are directly assigned to specific functional categories are given below.

- Water Conveyance and Distribution, Desert Region Unit departmental O&M costs are directly assigned to Conveyance and Aqueduct, CRA.
- Transportation Capital and OMP&R charges for State Water Contract are directly assigned to Conveyance and Aqueduct SWP.

(b) Net Book Value Plus Work-In-Progress

Capital financing costs, including debt service and funding replacements and refurbishments from operating revenues, comprise about 22 percent in FY 2022/23 and 22 percent in FY 2023/24 of Metropolitan's annual revenue requirements. One approach would be to assign payments on each debt issue in direct proportion to specific project expenditures made using bond proceeds and assign PAYGO expenditures in a similar fashion. However, this approach would result in a high degree of volatility in relative capital cost assignments from year to year.

The approach used in this analysis is one widely used in water industry cost of service studies. Debt-related costs and PAYGO are allocated on the basis of the net book values of fixed assets plus work in progress for assets under construction within each functional category. This approach produces capital cost assignments that are consistent with the functional distribution of assets. Also, since the assignment basis is tied to fixed asset records rather than debt payment records, the resulting assignments are more reflective of the true useful lives of assets. Use of net book values as an assignment basis provides an improved matching of functional costs with asset lives. A listing of fixed asset net book values summarized by asset function is shown in Schedule 4 for FY 2022/23 and FY 2023/24.

Schedule 4: Net Book Value and Work in Progress Assignment Base, FY 2022/23 and FY 2023/24

Functional Categories	NBV for FY 2023	% of Total NBV
Source of Supply	\$ 354,980,855	4.0%
Conveyance & Aqueduct	1,947,472,918	21.7%
Storage	2,093,641,553	23.4%
Treatment	2,250,004,915	25.1%
Distribution	1,637,682,794	18.3%
Administrative & General	545,917,527	6.1%
Hydro-electric	134,462,445	1.5%
Total Fixed Assets Net Book Value	\$ 8,964,163,008	100.0%

Totals may not foot due to rounding

Functional Categories	NBV for FY 2024	% of Total NBV
Source of Supply	\$ 355,024,209	4.0%
Conveyance & Aqueduct	1,932,904,257	21.6%
Storage	2,073,708,957	23.2%
Treatment	2,228,514,685	24.9%
Distribution	1,666,619,997	18.6%
Administrative & General	558,022,939	6.2%
Hydro-electric	127,880,257	1.4%
Total Fixed Assets Net Book Value	\$ 8,942,675,301	100.0%

Totals may not foot due to rounding

In most instances, the cost of service process uses net book value plus work-in-progress to develop assignment bases for debt service costs and PAYGO. Examples of revenue requirements assignments using these net book value and work-in-progress assignments follow.

- Revenue Bond Debt Service: assigned using Net Book Value plus Work In Progress.
- Annual deposit of operating revenue to replacement and refurbishment fund: assigned using Net Book Value plus Work in Progress.

To calculate the relative percentage of fixed assets in each functional category, Metropolitan staff conducted a detailed analysis of historical accounting records and built a database of fixed asset accounts that contains records for all facilities currently in service and under construction. Each facility was sorted into the major operational function that best represented the facilities primary purpose and was then further categorized into the appropriate sub-functions described earlier.

(c) Pro-rating in proportion to other assignments

Utility COS studies frequently contain line items for which it would be difficult to identify an assignment basis specific to that line item. In these cases, the most logical assignment basis is often a pro-rata blend of assignment results calculated for other revenue requirements in the same departmental group, or general category. Reasonable pro-rata allocations are based on a logical nexus between a cost and the purpose which it serves. For example: Human Resources Section costs are allocated using all labor costs, since Human Resources spends its time and resources attending to the labor force.

(d) Manager analyses

The functional interrelationships of some organizational units are developed with extensive input from the organization's managers. In these cases, managers use their firsthand knowledge of the organization's internal operations to generate a functional analysis of departmental costs. For example, Fleet Services Unit costs are assigned to treatment, storage, conveyance, and distribution based on vehicle count by Section and Unit.

(e) Prior year results

If available, accounting data for the prior fiscal year by appropriation are used to functionalize Departmental O&M costs for several units or sections. Many of the appropriations parallel the operational functions used in the COS analysis. For example, Conveyance and Distribution Eastern and Western Units' costs are assigned to distribution, hydroelectric, and conveyance functions based on the prior year accounting data by appropriation.

A summary of the functional assignment results is shown in Schedules 5 through 8. Schedules 5 and 6 provide a breakdown of the revenue requirement for FY 2022/23 and FY 2023/24, respectively, into the major operational functions and sub-functions prior to the redistribution of administrative and general costs. Schedules 7 and 8 serve as a cross-reference summarizing how the budget line items are distributed among the operational functions for FY 2022/23 and FY 2023/24, respectively. The largest functional component of Metropolitan's revenue requirement is the Conveyance and Aqueduct function, which constitutes approximately 38.5 percent of the assigned revenue requirement in FY 2022/23 39.5 percent in FY 2023/24. Schedule 9 summarizes the budget line items distributed among the operational functions by sub-function for both FY 2022/23 and FY 2023/24.

Functional Assignment of Revenue Offsets

Revenue Offsets are assigned to the operational functions based on why these revenues were generated. For example, ad valorem property tax revenues are assigned to the General Obligation bonds debt service into Treatment and Distribution based on Net Book Values. The remaining property tax revenues are assigned proportionate to SWP costs. Hydroelectric sales revenues are assigned to the Hydroelectric function. Interest income is assigned to the operational functions proportional to Revenue Requirements. Miscellaneous revenues and fees are functionalized as Administrative and General, and thus are assigned to the operational functions proportional to Labor Costs.

Schedule 5: Revenue Requirement (by function), FY 2022/23

Functional Categories	Fiscal Year Ending 2023	% of Assigned Dollars (1)
Source of Supply		
CRA	\$ 56,756,070	3.3%
SWP	153,950,377	9.0%
Other Supply	32,809,186	1.9%
Total	243,515,634	14.2%
Conveyance & Aqueduct		
CRA		
CRA Power	114,015,857	6.7%
CRA All Other	68,563,143	4.0%
SWC		
SWC Power	155,016,934	9.0%
SWC All Other	251,449,970	14.7%
Other Conveyance & Aqueduct	71,500,164	4.2%
Total	660,546,068	38.5%
Storage		
Storage Costs Other Than Power		
Emergency	55,945,400	3.3%
Drought	53,135,768	3.1%
Regulatory	27,244,996	1.6%
Storage Power	(679,733)	0.0%
Total	135,646,431	8.0%
Treatment		
Jensen	52,631,539	3.1%
Weymouth	53,757,077	3.1%
Diemer	60,326,888	3.5%
Mills	30,522,374	1.8%
Skinner	51,447,958	3.0%
Total	248,685,836	14.5%
Distribution	197,712,180	11.5%
Demand Management	62,949,910	3.7%
Hydro-electric	516,898	0.0%
Administrative & General	163,343,274	9.5%
Total Functional Assignment:	\$ 1,712,916,232	100.0%
(1) Given as a percentage of the absolute values of total dollars Assigned. Totals may not foot due to rounding		

Schedule 6: Revenue Requirement (by function), FY 2023/24

Functional Categories	Fiscal Year Ending 2024	% of Assigned Dollars (1)
Source of Supply		
CRA	\$ 60,723,320	3.4%
SWP	158,721,145	8.8%
Other Supply	33,564,585	1.9%
Total	253,009,050	14.0%
Conveyance & Aqueduct		
CRA		
CRA Power	94,869,954	5.3%
CRA All Other	70,165,298	3.9%
SWC		
SWC Power	195,365,256	10.8%
SWC All Other	280,104,628	15.5%
Other Conveyance & Aqueduct	71,609,906	4.0%
Total	712,115,042	39.5%
Storage		
Storage Costs Other Than Power		
Emergency	56,146,188	3.1%
Drought	49,189,884	2.7%
Regulatory	27,732,280	1.5%
Storage Power	(545,067)	0.0%
Total	132,523,286	7.4%
Treatment		
Jensen	53,986,217	3.0%
Weymouth	55,212,675	3.1%
Diemer	62,027,160	3.4%
Mills	31,146,390	1.7%
Skinner	52,157,326	2.9%
Total	254,529,768	14.1%
Distribution	203,351,939	11.3%
Demand Management	68,209,542	3.8%
Hydro-electric	2,344,825	0.1%
Administrative & General	174,666,195	9.7%
Total Functional Assignment:	\$ 1,800,749,647	100.0%
(1) Given as a percentage of the absolute values of total dollars Assigned. Totals may not foot due to rounding		

Schedule 7: Operational function Revenue Requirements (by budget line item), FY 2022/23

Fiscal Year Ending 2023	Source of Supply	Conveyance & Aqueduct	Storage	Treatment	Distribution	Demand Management	Hydro Electric	Administrative & General	Total \$ Functionalized
Departmental Operations & Maintenance									
Office of General Manager	\$ 538,613	\$ 1,195,688	\$ 245,303	\$ 1,862,288	\$ 1,572,675	\$ 148,263	\$ 88,925	\$ 4,306,087	\$ 9,957,842
Water Systems Operations	14,498,575	47,221,374	2,342,311	111,574,663	91,592,399	-	5,181,374	6,322,939	278,733,635
Water Resources Management	17,556,220	56,546	-	-	466,643	6,869,749	-	39,582	24,988,740
Engineering Services	1,931,114	10,581,916	11,586,684	12,228,755	8,890,966	98,026	730,294	2,965,289	49,013,044
Bay Delta Initiatives	-	12,055,551	-	-	-	-	-	-	12,055,551
Business Technology	3,373,103	7,488,089	1,536,230	11,662,721	9,848,996	928,508	556,900	46,904,362	82,298,910
Real Property	1,820,635	9,573,015	2,378,571	-	3,600,158	-	-	11,992,697	29,365,077
Human Resources	1,074,050	2,384,328	489,160	3,713,597	3,136,078	295,652	177,326	4,384,226	15,654,418
Office of the Chief Financial Officer	-	-	-	-	-	-	-	28,941,344	28,941,344
External Affairs	-	-	-	-	-	2,888,626	-	24,761,586	27,650,213
General Counsel	-	-	-	-	-	-	-	15,833,730	15,833,730
General Auditor	-	-	-	-	-	-	-	4,599,034	4,599,034
Ethics Office	-	-	-	-	-	-	-	2,106,637	2,106,637
Sustainability, Resilience & Innovation	-	-	-	-	-	-	-	9,952,336	9,952,336
Diversity, Equity & Inclusion	-	-	-	-	-	-	-	1,426,735	1,426,735
Equal Employment Opportunity	-	-	-	-	-	-	-	1,975,822	1,975,822
Total Departmental O&M	40,792,309	90,556,508	18,578,260	141,042,024	119,107,915	11,228,825	6,734,820	166,512,406	594,553,066
General District Requirements									
State Water Contract*	190,552,288	491,156,833	-	-	-	-	-	-	681,709,121
Colorado River Aqueduct Power Costs	-	105,857,041	-	-	-	-	-	-	105,857,041
Supply Programs (cash funded portion)	48,447,861	-	18,211,661	-	-	-	-	-	66,659,522
Demand Management (cash funded portion)	-	-	-	-	-	50,815,317	-	-	50,815,317
Capital Financing	16,589,556	90,905,714	99,537,336	105,544,356	77,856,873	842,109	6,273,715	25,473,811	423,023,470
Other Operating Costs	987,634	2,192,488	449,803	3,414,806	2,883,754	271,864	163,059	4,031,477	14,394,884
Increase/(Decrease) in Required Reserves	-	-	-	-	-	-	-	11,000,000	11,000,000
Total General District Requirements	256,577,339	690,112,076	118,198,800	108,959,162	80,740,627	51,929,291	6,436,774	40,505,287	1,353,459,356
Revenue Offsets	(53,854,014)	(120,122,515)	(1,130,629)	(1,315,350)	(2,136,362)	(208,205)	(12,654,695)	(43,674,419)	(235,096,190)
Net Revenue Requirements	\$ 243,515,634	\$ 660,546,068	\$ 135,646,431	\$ 248,685,836	\$ 197,712,180	\$ 62,949,910	\$ 516,898	\$ 163,343,274	\$ 1,712,916,232

* Includes Delta Conveyance planning costs net of California WaterFix refund

Totals may not foot due to rounding

Schedule 8: Operational function Revenue Requirements (by budget line item), FY 2023/24

Fiscal Year Ending 2024	Source of Supply	Conveyance & Aqueduct	Storage	Treatment	Distribution	Demand Management	Hydro Electric	Administrative & General	Total \$ Functionalized
Departmental Operations & Maintenance									
Office of General Manager	\$ 555,236	\$ 1,238,743	\$ 245,672	\$ 1,953,823	\$ 1,626,633	\$ 157,123	\$ 91,647	\$ 4,378,719	\$ 10,247,595
Water Systems Operations	14,513,937	48,644,580	2,326,768	115,810,688	93,283,482	-	5,309,164	6,443,823	286,332,441
Water Resources Management	18,002,178	58,272	-	-	472,999	7,073,551	-	40,791	25,647,792
Engineering Services	1,895,432	10,139,135	11,324,971	11,691,675	8,791,378	180,971	671,497	2,928,872	47,623,932
Bay Delta Initiatives	-	12,415,696	-	-	-	-	-	-	12,415,696
Business Technology	3,557,752	7,937,417	1,574,180	12,519,394	10,422,881	1,006,789	587,238	48,322,425	85,928,077
Real Property	1,821,973	9,580,054	2,380,320	-	3,602,806	-	-	12,001,516	29,386,669
Human Resources	1,094,339	2,441,494	484,207	3,850,878	3,206,005	309,681	180,630	4,352,443	15,919,677
Office of the Chief Financial Officer	-	-	-	-	-	-	-	25,693,953	25,693,953
External Affairs	-	-	-	-	-	2,999,011	-	25,149,418	28,148,429
General Counsel	-	-	-	-	-	-	-	15,716,806	15,716,806
General Auditor	-	-	-	-	-	-	-	4,737,939	4,737,939
Ethics Office	-	-	-	-	-	-	-	2,156,213	2,156,213
Sustainability, Resilience & Innovation	-	-	-	-	-	-	-	9,342,510	9,342,510
Diversity, Equity & Inclusion	-	-	-	-	-	-	-	1,483,649	1,483,649
Equal Employment Opportunity	-	-	-	-	-	-	-	2,070,834	2,070,834
Total Departmental O&M	41,440,848	92,455,391	18,336,118	145,826,457	121,406,184	11,727,128	6,840,176	164,819,910	602,852,212
General District Requirements									
State Water Contract*	192,495,249	568,744,742	-	-	-	-	-	-	761,239,991
Colorado River Aqueduct Power Costs	-	85,626,149	-	-	-	-	-	-	85,626,149
Supply Programs (cash funded portion)	52,379,998	-	11,720,987	-	-	-	-	-	64,100,985
Demand Management (cash funded portion)	-	-	-	-	-	54,886,221	-	-	54,886,221
Capital Financing	17,275,568	92,411,266	103,219,347	107,044,197	81,610,541	1,649,426	6,120,239	26,694,659	436,025,242
Other Operating Costs	951,157	2,122,051	420,854	3,347,032	2,786,534	269,163	156,997	3,782,973	13,836,761
Increase/(Decrease) in Required Reserves	-	-	-	-	-	-	-	7,900,000	7,900,000
Total General District Requirements	263,101,972	748,904,207	115,361,188	110,391,229	84,397,075	56,804,810	6,277,236	38,377,632	1,423,615,349
Revenue Offsets	(51,533,769)	(129,244,557)	(1,174,020)	(1,687,918)	(2,451,320)	(322,395)	(10,772,587)	(28,531,347)	(225,717,914)
Net Revenue Requirements	\$ 253,009,050	\$ 712,115,042	\$ 132,523,286	\$ 254,529,768	\$ 203,351,939	\$ 68,209,542	\$ 2,344,825	\$ 174,666,195	\$ 1,800,749,647

* Includes Delta Conveyance planning costs net of California WaterFix refund

Totals may not foot due to rounding

Schedule 9: Revenue Requirement by sub-function and budget line item, FY 2022/23 and FY 2023/24

Fiscal Year Ending 2023	Supply			Conveyance & Aqueduct					Storage				Treatment	Distribution	Demand Mgt.	Hydro	Total
	CRA	SWC	Other	CRA power	CRA other	SWC power	SWC other	Other C&A	Emergency	Drought	Regulatory	Power					
Dept. Operations & Maintenance	9,515,545	16,555,050	14,721,714	3,584,263	54,378,539	-	24,218,050	8,375,656	8,102,451	6,191,901	4,283,907	-	141,042,024	119,107,915	11,228,825	6,734,820	428,040,660
General District Requirements																	
State Water Contract*																	
Capital	-	80,437,139	-	-	-	(4,981,305)	90,506,317	-	-	-	-	-	-	-	-	-	165,962,151
O&M	-	110,115,149	-	-	-	211,574,465	194,057,356	-	-	-	-	-	-	-	-	-	515,746,970
Colorado River Aqueduct Power				105,857,041	-	-	-	-	-	-	-	-	-	-	-	-	105,857,041
Supply Programs (cash funded portion)	47,197,861	-	1,250,000	-	-	-	-	-	-	18,211,661	-	-	-	-	-	-	66,659,522
Demand Management (cash funded portion)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	50,815,317	-	50,815,317
Capital Financing Program	-	-	16,589,556	8,252,673	13,094,802	-	6,400,032	63,158,208	47,831,816	28,758,037	22,947,482	-	105,544,356	77,856,873	842,109	6,273,715	397,549,660
Other Operating Costs	230,383	400,819	356,431	86,780	1,316,573	-	586,350	202,785	196,171	149,914	103,719	-	3,414,806	2,883,754	271,864	163,059	10,363,408
Revenue Offsets	(187,719)	(53,557,779)	(108,516)	(3,764,899)	(226,771)	(51,576,226)	(64,318,135)	(236,485)	(185,038)	(175,745)	(90,112)	(679,733)	(1,315,350)	(2,136,362)	(208,205)	(12,654,695)	(191,421,770)
Admin. & General	8,909,328	24,166,481	5,150,248	2,308,598	9,759,089	663,334	33,700,180	6,333,852	1,463,537	8,341,029	2,165,276	(2,909)	23,601,317	24,007,927	9,881,611	2,894,377	163,343,274
Net Revenue Requirement	65,665,399	178,116,858	37,959,434	116,324,454	78,322,232	155,680,268	285,150,150	77,834,016	57,408,937	61,476,796	29,410,272	(682,642)	272,287,153	221,720,107	72,831,522	3,411,276	1,712,916,232

* Includes Delta Conveyance planning costs net of California WaterFix refund
Totals may not foot due to rounding

Fiscal Year Ending 2024	Supply			Conveyance & Aqueduct					Storage				Treatment	Distribution	Demand Mgt.	Hydro	Total
	CRA	SWC	Other	CRA power	CRA other	SWC power	SWC other	Other C&A	Emergency	Drought	Regulatory	Power					
Dept. Operations & Maintenance	9,658,647	16,925,532	14,856,669	3,712,419	56,015,844	-	24,725,744	8,001,384	7,834,122	6,304,412	4,197,584	-	145,826,457	121,406,184	11,727,128	6,840,176	438,032,302
General District Requirements																	
State Water Contract*																	
Capital	-	85,494,959	-	-	-	(3,654,765)	115,160,127	-	-	-	-	-	-	-	-	-	197,000,320
O&M	-	107,000,290	-	-	-	258,551,933	198,687,447	-	-	-	-	-	-	-	-	-	564,239,670
Colorado River Aqueduct Power				85,626,149	-	-	-	-	-	-	-	-	-	-	-	-	85,626,149
Supply Programs (cash funded portion)	51,129,998	-	1,250,000	-	-	-	-	-	-	11,720,987	-	-	-	-	-	-	64,100,985
Demand Management (cash funded portion)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	54,886,221	-	54,886,221
Capital Financing Program	-	-	17,275,568	8,898,220	13,195,409	-	6,554,298	63,763,339	48,397,633	31,252,283	23,569,430	-	107,044,197	81,610,541	1,649,426	6,120,239	409,330,584
Other Operating Costs	221,687	388,478	340,993	85,208	1,285,685	-	567,509	183,649	179,810	144,700	96,344	-	3,347,032	2,786,534	269,163	156,997	10,053,788
Revenue Offsets	(287,011)	(51,088,113)	(158,644)	(3,452,041)	(331,639)	(59,531,911)	(65,590,498)	(338,467)	(265,377)	(232,498)	(131,078)	(545,067)	(1,687,918)	(2,451,320)	(322,395)	(10,772,587)	(197,186,567)
Admin. & General	9,606,670	25,110,314	5,310,050	3,015,771	10,108,777	2,394,664	36,987,237	6,463,267	1,795,590	7,782,035	2,262,547	(6,681)	25,113,641	24,988,708	10,791,020	2,942,586	174,666,195
Net Revenue Requirement	70,329,990	183,831,459	38,874,635	97,885,726	80,274,075	197,759,920	317,091,865	78,073,172	57,941,778	56,971,919	29,994,828	(551,748)	279,643,409	228,340,646	79,000,562	5,287,412	1,800,749,647

* Includes Delta Conveyance planning costs net of California WaterFix refund
Totals may not foot due to rounding

Allocated Costs

In the cost allocation step, functionalized costs are further categorized based on the causes and behavioral characteristics of these costs. An important part of the allocation process is identifying which costs are incurred to meet average demands versus peak demands and which costs are incurred for standby. As with the functional assignment process, the proposed allocation process is consistent with AWWA guidelines, but has been tailored to meet Metropolitan's specific operational structure and service environment.

Two methods are discussed in the AWWA M1 Manual, Principles of Water Rates, Fees and Charges. These two methods are the Commodity/Demand method and the Base/Extra Capacity method.

In the simplest sense, these approaches offer alternative means of distinguishing between utility costs incurred to meet average or base demands and costs incurred to meet peak demands. The Commodity/Demand method allocates costs that vary with the amount of water produced to the commodity category with all other costs associated with water production allocated to the demand category. In the Base/Extra Capacity method, costs related to average demand conditions are allocated to the base category, and capacity costs associated with meeting above average demand conditions are allocated to the extra capacity category.

The Commodity/Demand approach was modified for its application to Metropolitan's rate structure by adding a separate cost allocation for costs related to standby. Analysis of system operating data indicated that a modified Commodity/Demand approach was most appropriate for developing Metropolitan's cost of service allocation bases.

A modified Commodity/Demand approach is the most appropriate for Metropolitan's cost of service needs because this approach is best suited for systems that are not designed to meet peak-day or peak-hour demands or provide flows for fire-fighting requirements. Metropolitan's system is designed to meet weekly demand peaks rather than daily or hourly peaks. It is also designed to provide available capacity to meet operational flexibility and reliability for emergencies, outages, and hydrologic variability.

Allocation categories used in the analysis include:

- Fixed Demand costs
- Fixed Commodity costs
- Fixed Standby costs
- Variable Commodity costs
- Hydroelectric costs

Fixed Demand costs are incurred to meet peak demands. Only the *direct* capital financing costs were included in the Fixed Demand allocation category. A portion of capital financing costs was included in the Fixed Demand allocation category because in order to meet peak demands additional physical capacity is designed into the system and, therefore, additional capital costs are incurred.

Variable Commodity costs vary with the amount of water produced, and include costs of chemicals, most power costs, and other O&M cost components that increase or decrease in relation to the volume of water supplied. Fixed Commodity costs include fixed operations and maintenance and comprise the balance of Metropolitan's O&M expenses. Fixed Commodity costs also include capital financing costs associated with meeting average demands. Fixed Commodity costs do not vary with the amount of water produced.

Fixed Standby costs relate to Metropolitan's role in ensuring system reliability during emergencies such as an earthquake, an outage of a major facility like the CRA and SWP, and hydrologic variability due to weather variances locally or in the two major supply basins Metropolitan relies on. Only the *direct* capital financing

costs were included in the Fixed Standby allocation category. The Fixed Standby costs identified include the emergency storage capacity within the system, and the available capacity within the conveyance and distribution systems.

An additional component used in Metropolitan's cost allocation process is the hydroelectric component. While not a part of most water utilities' cost allocation procedures, the Hydroelectric allocation component is necessary to segregate revenue requirements carried from the hydroelectric function established in the functional assignment process. Hydroelectric revenue requirements are ultimately recovered in the distribution system portion of the System Access Rate. Any net revenues generated by the hydroelectric operations offset the distribution costs and reduce the System Access Rate. All users of the distribution system benefit proportionately from the revenue offset provided by the sale of hydroelectric energy.

Schedules 10 and 11 provide the allocation percentages used to allocate the capital financing operational function costs into Fixed Demand, Fixed Commodity and Fixed Standby allocation categories for FY 2022/23 and FY 2023/24, respectively.

All capital financing costs functionalized to Supply are allocated as Fixed Commodity costs. Because these particular supply costs have been incurred to provide an amount of annual reliable system yield and not to provide peak demand delivery capability or standby availability, they are reasonably treated as Fixed Commodity costs.

Costs for the Conveyance and Aqueduct (C&A) function are allocated into Fixed Commodity, Fixed Demand and Fixed Standby categories. Because the capital costs for C&A were incurred to meet all three allocation categories, an analysis of C&A capacity usage was used. C&A capacity is the sum of the CRA actual capacity of 1.3 million acre-feet plus the SWP amount attributable to Metropolitan of 1.9 million acre-feet under a 100 percent allocation, for a total Conveyance Capacity of approximately 3.2 million acre-feet. For FY 2022/23, 49 percent of the available conveyance capacity varies with the quantity of water produced and is allocated to Fixed Commodity. A system peak factor¹² of 1.17 was applied to the annual usage to determine that 8 percent of available capacity is used to meet peak monthly deliveries to the member agencies and is allocated to Fixed Demand. The remaining portion of C&A, about 43 percent, is allocated to Fixed Standby. The same allocation percentages are applied to the CRA, SWP, and Other (Inland Feeder) Conveyance and Aqueduct sub-functions. The allocation shares reflect the system average use of conveyance capacity and not the usage of individual facilities. All Conveyance and Aqueduct energy costs for pumping water to Southern California are allocated as Variable Commodity costs and, therefore, are not shown in Schedule 6 because they carry through the allocation step. For FY 2023/24, 47 percent of the available conveyance capacity varies with the quantity of water produced and is allocated to Fixed Commodity. A system peak factor of 1.17 was applied to the annual usage to determine that 8 percent of available capacity is used to meet peak monthly deliveries to the member agencies and is allocated to Fixed Demand. The remaining portion of C&A, about 44 percent, is allocated to Fixed Standby.

Storage function costs for emergency, drought and regulatory storage are also distributed to the allocation categories based on the purpose they serve. Emergency storage costs are allocated as 100 percent Fixed Standby. Emergency storage is a prime example of a cost Metropolitan incurs to ensure the reliability of deliveries to the member agencies. In effect, through the emergency storage capacity in the system, Metropolitan is "standing by" with available capacity and water supply to provide service in the event of a catastrophe such as a major earthquake that disrupts regional conveyance capacity for an extended period of time. Drought carryover storage serves to provide reliable supplies by carrying over surplus supplies from periods of above normal precipitation and snowpack to drought periods when supplies decrease. Drought storage creates supply and is one component of the portfolio of resources that result in a reliable amount of

¹² Peak monthly deliveries to the member agencies average about 41 percent more than the average monthly deliveries.

annual system supplies. As a result, drought storage is allocated as a Fixed Commodity cost, in the same manner as Metropolitan's supply costs. Regulatory storage within the Metropolitan system provides operational flexibility in meeting peak demands and flow requirements, essentially increasing the physical distribution capacity. Therefore, regulatory storage is allocated in the same manner as Distribution costs.

Distribution function costs were allocated as Fixed Commodity by using projected transactions data for the test year. For FY 2022/23, 40 percent of the system distribution capacity is associated with the quantity of water delivered and is allocated to Fixed Commodity. Distribution function costs were allocated to Fixed Demand by using three years of recorded non-coincident peak demands. The difference between the three-year average non-coincident peak demand and the fixed commodity flows divided by the system capacity, or 33 percent of the distribution capacity, was used to meet non-coincident peak day demands, and is allocated to Fixed Demand. Although the Metropolitan Distribution System has a great deal of operational flexibility, the total amount of distribution capacity was limited to the historical non-coincident¹³ peak (maximum) day flow of all the member agencies; based on the last 20 years that maximum flow was 5,510 cfs in 2004. The remaining 27 percent of distribution capacity is associated with Standby and is allocated to Fixed Standby. For FY 2023/24, 39 percent of the system distribution capacity is associated with the quantity of water delivered, and is allocated to Fixed Commodity, 35 percent was used to meet non-coincident peak (maximum) day demands and is allocated to Fixed Demand, and the remaining 27 percent of distribution capacity is associated with Standby, and is allocated to Fixed Standby.

Treatment function costs were allocated to Fixed Commodity by using projected treated deliveries to the member agencies for the test year. The Treatment Fixed Demand calculation uses the system non-coincident peak factor of 2.1 applied to the test year usage; the remaining capacity is associated with Fixed Standby. Total treated water capacity of 3,652 cfs, which is the total design capacity of all the treatment plants, was used in the calculation. General and Administrative costs have been assigned to the allocation categories by operational function based on the ratio of allocated non-A&G function costs to total non-A&G function costs.

¹³ The term "non-coincident" means that the peak day for each agency may or may not coincide with the peak day for the system. A non-coincident approach is used in the rate design to capture the different operating characteristics of the member agencies. The sum of the member agency peak day demands is used as a proxy for peak week. For Metropolitan, "peak" and "maximum" flows, measured in cfs, are synonymous.

Schedule 10: Capital Financing Allocation Percentages, FY 2022/23

Fiscal year ending 2023	Allocation Percentages			Total % Allocated	Comments
	Fixed Commodity	Fixed Demand	Fixed Standby		
Source of Supply					
Colorado River Aqueduct	100%	0%	0%	100%	Supply costs allocated as fixed commodity
State Water Project	100%	0%	0%	100%	Supply costs allocated as fixed commodity
Conveyance & Aqueduct					
Colorado River Aqueduct	49%	8%	43%	100%	Demand percentage represents amount of system conveyance capacity used to meet maximum demands. Commodity percentage represents amount of capacity that is a function of the amount of water delivered. Standby percentage is the remaining conveyance capacity. SWP, CRA, and Other are treated the same due to the use of a uniform system-wide System Access Rate.
State Water Project	49%	8%	43%	100%	
Other	49%	8%	43%	100%	
Storage					
Emergency	0%	0%	100%	100%	Allocated as Standby (recovered by RTS)
Drought	100%	0%	0%	100%	Allocated as fixed commodity (recovered by Supply Rates)
Regulatory	40%	33%	27%	100%	Allocated the same way as distribution.
Treatment					
	29%	31%	39%	100%	Demand percentage represents amount of system treatment capacity used to meet maximum demands. Commodity percentage represents amount of capacity that is a function of the amount of treated water delivered. Standby percentage is the remaining treatment capacity. The same allocations is applied to all five treatment plants due to the use of a uniform system-wide Treatment Surcharge.
Distribution					
	40%	33%	27%	100%	Demand percentage represents amount of system distribution capacity used to meet maximum demands. Commodity percentage represents amount of capacity that is a function of the amount of water delivered. Standby percentage is the remaining distribution capacity. The same allocations is applied to all distribution facilities due to the use of a uniform system-wide System Access Rate.
Demand Management	100%	0%	0%	100%	Allocated as fixed commodity (recovered by Supply Rates)

Totals may not foot due to rounding

Schedule 11: Capital Financing Allocation Percentages, FY 2023/24

Fiscal year ending 2024 Function	Allocation Percentages			Total % Allocated	Comments
	Fixed Commodity	Fixed Demand	Fixed Standby		
Source of Supply					
Colorado River Aqueduct	100%	0%	0%	100%	Supply costs allocated as fixed commodity
State Water Project	100%	0%	0%	100%	Supply costs allocated as fixed commodity
Conveyance & Aqueduct					
Colorado River Aqueduct	47%	8%	44%	100%	Demand percentage represents amount of system conveyance capacity used to meet maximum demands. Commodity percentage represents amount of capacity that is a function of the amount of water delivered. Standby percentage is the remaining conveyance capacity. SWP, CRA, and Other are treated the same due to the use of a uniform system-wide System Access Rate.
State Water Project	47%	8%	44%	100%	
Other	47%	8%	44%	100%	
Storage					
Emergency	0%	0%	100%	100%	Allocated as Standby (recovered by RTS)
Drought	100%	0%	0%	100%	Allocated as fixed commodity (recovered by Supply Rates)
Regulatory	39%	35%	27%	100%	Allocated the same way as distribution.
Treatment	29%	32%	39%	100%	Demand percentage represents amount of system treatment capacity used to meet maximum demands. Commodity percentage represents amount of capacity that is a function of the amount of treated water delivered. Standby percentage is the remaining treatment capacity. The same allocations is applied to all five treatment plants due to the use of a uniform system-wide Treatment Surcharge.
Distribution	39%	35%	27%	100%	Demand percentage represents amount of system distribution capacity used to meet maximum demands. Commodity percentage represents amount of capacity that is a function of the amount of water delivered. Standby percentage is the remaining distribution capacity. The same allocations is applied to all distribution facilities due to the use of a uniform system-wide System Access Rate.
Demand Management	100%	0%	0%	100%	Allocated as fixed commodity (recovered by Supply Rates)

Totals may not foot due to rounding

FY 2022/23 Operational Function Revenue Requirements (by allocation category)

A summary of cost allocation results for FY 2022/23 is shown in Schedules 12 and 13. The allocation of the functionalized costs results in about 5 percent, or \$79 million of the total revenue requirements, being allocated to the Fixed Demand allocation category. This amount represents a reasonable estimate of the annual fixed capital financing costs incurred to meet peak demands (plus the allocated administrative and general costs). A portion of Metropolitan's property tax revenue is allocated to Conveyance and Aqueduct Fixed Demand costs and is used to pay for the general obligation bond debt service allocated to the C&A costs, and other SWP costs. This revenue offsets the amount that needs to be recovered through rates.

About 68 percent of the revenue requirement (\$1,166 million) is allocated as Fixed Commodity. These fixed capital and operating costs are incurred by Metropolitan to meet annual average service needs and are typically recovered by a combination of fixed charges and volumetric rates. Fixed capital costs allocated to the Fixed Standby category total about \$180 million and account for about 10 percent of the revenue requirements. Standby costs are commonly recovered by a fixed charge allocated on a reasonable representation of a customer's need for standby availability. The Variable Commodity costs for power on the conveyance and aqueduct systems, and power, chemicals and solids handling at the treatment plants change with the amount of water delivered to the member agencies. These costs are allocated as Variable Commodity costs, total about \$285 million, and account for about 17 percent of the total revenue requirement. Because of the variable nature of these costs, it is appropriate to recover them through volumetric rates.

With regard to Metropolitan's planned contribution for Delta Conveyance Project planning costs, consistent with the treatment of SWP Conveyance and Aqueduct capital costs, 49 percent of costs are allocated to Fixed Commodity, which is recovered through the System Access Rate, and 51 percent of costs are allocated to Fixed Demand and Fixed Standby, which is recovered through the Readiness-to-Serve Charge.

FY 2023/24 Operational Function Revenue Requirement (by allocation category)

A summary of cost allocation results for FY 2023/24 is shown in Schedule 14 and 15. The allocation of the functionalized costs results in about 5 percent, or \$84 million of the total revenue requirements, being allocated to the Fixed Demand allocation category. This amount represents a reasonable estimate of the annual fixed capital financing costs incurred to meet peak demands (plus the allocated administrative and general costs). A portion of Metropolitan's property tax revenue is allocated to C&A Fixed Demand costs and is used to pay for the general obligation bond debt service allocated to the C&A costs, and other SWP costs. This revenue offsets the amount that needs to be recovered through rates.

About 67 percent of the revenue requirement (\$1,207 million) is allocated as Fixed Commodity. These fixed capital and operating costs are incurred by Metropolitan to meet annual average service needs and are typically recovered by a combination of fixed charges and volumetric rates. Fixed capital costs allocated to the Fixed Standby category total about \$195 million and account for about 11 percent of the revenue requirements. Standby costs are commonly recovered by a fixed charge allocated on a reasonable representation of a customer's need for standby. The Variable Commodity costs for power on the conveyance and aqueduct systems, and power, chemicals and solids handling at the treatment plants change with the amount of water delivered to the member agencies. These costs are allocated as Variable Commodity costs, total about \$310 million, and account for about 17 percent of the total revenue requirement. Because of the variable nature of these costs, it is appropriate to recover them through volumetric rates.

In FY 2023/24, consistent with the treatment of SWP Conveyance and Aqueduct capital costs, 47 percent of Metropolitan's planned contribution of Delta Conveyance Project planning costs are allocated to Fixed

Commodity, which is recovered through the System Access Rate, and 53 percent of costs are allocated to Fixed Demand and Fixed Standby, which is recovered through the Readiness-to-Serve Charge.

Schedule 12: Revenue Requirements by sub-function and allocation category, FY 2022/23

Fiscal Year Ending 2023	Supply			Conveyance & Aqueduct					Storage				Treatment	Distribution	Demand Mgt.	Hydro	Total
	CRA	SWC	Other	CRA power	CRA other	SWC power	SWC other	Other C&A	Emergency	Drought	Regulatory	Power					
Fixed Demand																	
engineering factors	-	-	-	0.0%	8.3%	0.0%	8.3%	8.3%	0.0%	0.0%	33.5%	0.0%	31.4%	33.5%	-	-	-
SWC Capital	-	-	-	-	-	-	7,541,538	-	-	-	-	-	-	-	-	-	7,541,538
Capital Financing	-	-	-	-	1,091,139	-	533,290	5,262,727	-	-	7,684,107	-	33,193,206	26,070,857	-	-	73,835,324
A&G less Offsets	-	-	-	-	(14,671)	-	(1,884,813)	(216,682)	-	-	30,274	-	(129,436)	(394,000)	-	-	(2,609,329)
Total fixed demand	-	-	-	-	1,076,467	-	6,190,015	5,046,044	-	-	7,714,381	-	33,063,770	25,676,856	-	-	78,767,533
Fixed Commodity																	
engineering factors	100%	100%	100%	100%	49.0%	0%	49.0%	49.0%	0%	100%	39.9%	0%	29.1%	39.9%	100%	-	-
Capital Financing	-	-	16,589,556	8,252,673	6,418,463	-	3,136,998	30,957,217	-	28,758,037	9,147,249	-	30,734,450	31,035,048	842,109	-	165,871,800
SWC Capital*	-	80,437,139	-	-	-	-	44,361,989	-	-	-	-	-	-	-	-	-	124,799,128
SWC O&M	-	110,115,149	-	-	-	-	194,057,356	-	-	-	-	-	-	-	-	-	304,172,505
Dept. O&M	9,515,545	16,555,050	14,721,714	3,584,263	54,378,539	-	24,218,050	8,375,656	8,102,451	6,191,901	4,283,907	-	108,577,733	119,107,915	11,228,825	-	388,841,549
Supply Programs (cash funded portion)	47,197,861	-	1,250,000	-	-	-	-	-	-	18,211,661	-	-	-	-	-	-	66,659,522
Demand Management (cash funded portion)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	50,815,317
Other Operating Costs	230,383	400,819	356,431	86,780	1,316,573	-	586,350	202,785	196,171	149,914	103,719	-	3,414,806	2,883,754	271,864	-	10,200,349
A&G less Offsets	8,721,609	(29,391,299)	5,041,732	1,871,735	9,621,726	-	(19,087,453)	6,206,141	1,075,718	8,165,283	2,020,390	-	28,205,241	22,577,826	9,673,406	-	54,702,056
Total fixed commodity	65,665,399	178,116,858	37,959,434	13,795,450	71,735,301	-	247,273,289	45,741,799	9,374,340	61,476,796	15,555,265	-	170,932,230	175,604,543	72,831,522	-	1,166,062,226
Fixed Standby																	
engineering factors	-	-	-	0%	43%	0%	42.7%	42.7%	100%	0%	26.7%	0%	39.4%	26.7%	-	-	-
SWC Capital	-	-	-	-	-	-	38,602,790	-	-	-	-	-	-	-	-	-	38,602,790
Capital Financing	-	-	-	-	5,585,200	-	2,729,744	26,938,264	47,831,816	-	6,116,127	-	41,616,700	20,750,969	-	-	151,568,820
A&G less Offsets	-	-	-	-	(74,737)	-	(9,645,688)	107,909	202,781	-	24,500	-	(652,731)	(312,260)	-	-	(10,350,227)
Total fixed standby	-	-	-	-	5,510,463	-	31,686,846	27,046,173	48,034,597	-	6,140,626	-	40,963,969	20,438,709	-	-	179,821,383
Variable Commodity																	
SWC Power	-	-	-	-	-	206,593,160	-	-	-	-	-	-	-	-	-	-	206,593,160
CRA Power	-	-	-	105,857,041	-	-	-	-	-	-	-	-	-	-	-	-	105,857,041
Variable Treatment	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	32,464,291
A&G less Offsets	-	-	-	(3,328,036)	-	(50,912,892)	-	-	-	-	-	(682,642)	32,464,291	(5,137,108)	-	-	(60,060,678)
Total variable commodity	-	-	-	102,529,005	-	155,680,268	-	-	-	-	-	(682,642)	27,327,183	-	-	-	284,853,814
Hydroelectric																	
A&G less Offsets	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13,171,594	13,171,594
Total hydroelectric	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	(9,760,318)	(9,760,318)
Total Costs	65,665,399	178,116,858	37,959,434	116,324,454	78,322,232	155,680,268	285,150,150	77,834,016	57,408,937	61,476,796	29,410,272	(682,642)	272,287,153	221,720,107	72,831,522	3,411,276	1,712,916,232

* Includes Delta Conveyance planning costs net of California WaterFix refund
Totals may not foot due to rounding

Schedule 13: Operational function Revenue Requirements (by allocation category), FY 2022/23

Fiscal year ending 2023 Functional categories (by sub-Function)	Fixed Demand	Fixed Commodity	Fixed Standby	Variable Commodity	Hydroelectric	Total allocated
Source of Supply						
CRA	\$ -	\$ 65,665,399	\$ -	\$ -	\$ -	\$ 65,665,399
SWP	-	178,116,858	-	-	-	178,116,858
Other Supply	-	37,959,434	-	-	-	37,959,434
Subtotal: Source of Supply	-	281,741,691	-	-	-	281,741,691
Conveyance & Aqueduct						
CRA						
CRA Power	-	13,795,450	-	102,529,005	-	116,324,454
CRA All Other	1,076,467	71,735,301	5,510,463	-	-	78,322,232
SWP*						
SWP Power	-	-	-	155,680,268	-	155,680,268
SWP All Other	6,190,015	247,273,289	31,686,846	-	-	285,150,150
Other Conveyance & Aqueduct	5,046,044	45,741,799	27,046,173	-	-	77,834,016
Subtotal: Conveyance & Aqueduct	12,312,527	378,545,839	64,243,482	258,209,273	-	713,311,121
Storage						
Storage Costs Other Than Power						
Emergency	-	9,374,340	48,034,597	-	-	57,408,937
Drought	-	61,476,796	-	-	-	61,476,796
Regulatory	7,714,381	15,555,265	6,140,626	-	-	29,410,272
Storage Power	-	-	-	(682,642)	-	(682,642)
Subtotal: Storage	7,714,381	86,406,402	54,175,223	(682,642)	-	147,613,364
Treatment	33,063,770	170,932,230	40,963,969	27,327,183	-	272,287,153
Distribution	25,676,856	175,604,543	20,438,709	-	-	221,720,107
Demand Management	-	72,831,522	-	-	-	72,831,522
Hydroelectric	-	-	-	-	3,411,276	3,411,276
Total Costs Allocated	\$ 78,767,533	\$ 1,166,062,226	\$ 179,821,383	\$ 284,853,814	\$ 3,411,276	\$ 1,712,916,232

* Includes Delta Conveyance planning costs net of California WaterFix refund

Totals may not foot due to rounding

Schedule 14: Revenue Requirements by sub-function and allocation category, FY 2023/24

Fiscal Year Ending 2024	Supply			Conveyance & Aqueduct					Storage				Treatment	Distribution	Demand Mgt.	Hydro	Total
	CRA	SWC	Other	CRA power	CRA other	SWC power	SWC other	Other C&A	Emergency	Drought	Regulatory	Power					
Fixed Demand																	
engineering factors	-	-	-	0.0%	8.1%	0.0%	8.1%	8.1%	0.0%	0.0%	34.7%	0.0%	31.8%	34.7%	-	-	-
SWC Capital	-	-	-	-	-	-	9,291,517	-	-	-	-	-	-	-	-	-	9,291,517
Capital Financing	-	-	-	-	1,064,651	-	528,823	5,144,647	-	-	8,190,332	-	34,088,003	28,359,507	-	-	77,375,964
A&G less Offsets	-	-	-	-	(15,045)	-	(2,065,733)	(284,227)	-	-	92,433	-	(3,463)	(361,740)	-	-	(2,637,775)
Total fixed demand	-	-	-	-	1,049,607	-	7,754,608	4,860,420	-	-	8,282,765	-	34,084,541	27,997,767	-	-	84,029,707
Fixed Commodity																	
engineering factors	100%	100%	100%	100%	47.5%	0%	47.5%	47.5%	0%	100%	38.6%	0%	29.5%	38.6%	100%	-	-
Capital Financing	-	-	17,275,568	8,898,220	6,262,654	-	3,110,726	30,262,628	-	31,252,283	9,097,206	-	31,562,966	31,499,610	1,649,426	-	170,871,287
SWC Capital*	-	85,494,959	-	-	-	-	54,655,984	-	-	-	-	-	-	-	-	-	140,150,942
SWC O&M	-	107,000,290	-	-	-	-	198,687,447	-	-	-	-	-	-	-	-	-	305,687,738
Dept. O&M	9,658,647	16,925,532	14,856,669	3,712,419	56,015,844	-	24,725,744	8,001,384	7,834,122	6,304,412	4,197,584	-	110,943,184	121,406,184	11,727,128	-	396,308,853
Supply Programs (cash funded portion)	51,129,998	-	1,250,000	-	-	-	-	-	-	11,720,987	-	-	-	-	-	-	64,100,985
Demand Management (cash funded portion)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	54,886,221	-	54,886,221
Other Operating Costs	221,687	388,478	340,993	85,208	1,285,685	-	567,509	183,649	179,810	144,700	96,344	-	3,347,032	2,786,534	269,163	-	9,896,791
A&G less Offsets	9,319,658	(25,977,800)	5,151,406	2,008,533	9,873,805	-	(15,161,298)	6,082,572	1,059,579	7,549,536	1,966,715	-	29,184,118	23,171,756	10,468,624	-	64,697,207
Total fixed commodity	70,329,990	183,831,459	38,874,635	14,704,380	73,437,988	-	266,586,113	44,530,233	9,073,511	56,971,919	15,357,849	-	175,037,301	178,864,084	79,000,562	-	1,206,600,024
Fixed Standby																	
engineering factors	-	-	-	0%	44%	0%	44.5%	44.5%	100%	0%	26.7%	0%	38.7%	26.7%	-	-	-
SWC Capital	-	-	-	-	-	-	51,212,626	-	-	-	-	-	-	-	-	-	51,212,626
Capital Financing	-	-	-	-	5,868,103	-	2,914,749	28,356,065	48,397,633	-	6,281,893	-	41,393,227	21,751,423	-	-	154,963,094
A&G less Offsets	-	-	-	-	(81,623)	-	(11,376,230)	326,454	470,633	-	72,321	-	(483,058)	(272,628)	-	-	(11,344,131)
Total fixed standby	-	-	-	-	5,786,480	-	42,751,144	28,682,519	48,868,267	-	6,354,214	-	40,910,169	21,478,795	-	-	194,831,588
Variable Commodity																	
SWC Power	-	-	-	-	-	254,897,168	-	-	-	-	-	-	-	-	-	-	254,897,168
CRA Power	-	-	-	85,626,149	-	-	-	-	-	-	-	-	-	-	-	-	85,626,149
Variable Treatment	-	-	-	-	-	-	-	-	-	-	-	-	34,883,273	-	-	-	34,883,273
A&G less Offsets	-	-	-	(2,444,803)	-	(57,137,248)	-	-	-	-	-	(551,748)	(5,271,875)	-	-	-	(65,405,673)
Total variable commodity	-	-	-	83,181,346	-	197,759,920	-	-	-	-	-	(551,748)	29,611,398	-	-	-	310,000,916
Hydroelectric																	
A&G less Offsets	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13,117,412	13,117,412
Total hydroelectric	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5,287,412	5,287,412
Total Costs	70,329,990	183,831,459	38,874,635	97,885,726	80,274,075	197,759,920	317,091,865	78,073,172	57,941,778	56,971,919	29,994,828	(551,748)	279,643,409	228,340,646	79,000,562	5,287,412	1,800,749,647

* Includes Delta Conveyance planning costs net of California WaterFix refund
Totals may not foot due to rounding

Schedule 15: Operational function Revenue Requirements (by allocation category), FY 2023/24

Fiscal year ending 2024 Functional categories (by sub-Function)	Fixed Demand	Fixed Commodity	Fixed Standby	Variable Commodity	Hydroelectric	Total allocated
Source of Supply						
CRA	\$ -	\$ 70,329,990	\$ -	\$ -	\$ -	\$ 70,329,990
SWP	-	183,831,459	-	-	-	183,831,459
Other Supply	-	38,874,635	-	-	-	38,874,635
Subtotal: Source of Supply	-	293,036,084	-	-	-	293,036,084
Conveyance & Aqueduct						
CRA						
CRA Power	-	14,704,380	-	83,181,346	-	97,885,726
CRA All Other	1,049,607	73,437,988	5,786,480	-	-	80,274,075
SWP*						
SWP Power	-	-	-	197,759,920	-	197,759,920
SWP All Other	7,754,608	266,586,113	42,751,144	-	-	317,091,865
Other Conveyance & Aqueduct	4,860,420	44,530,233	28,682,519	-	-	78,073,172
Subtotal: Conveyance & Aqueduct	13,664,634	399,258,714	77,220,144	280,941,266	-	771,084,757
Storage						
Storage Costs Other Than Power						
Emergency	-	9,073,511	48,868,267	-	-	57,941,778
Drought	-	56,971,919	-	-	-	56,971,919
Regulatory	8,282,765	15,357,849	6,354,214	-	-	29,994,828
Storage Power	-	-	-	(551,748)	-	(551,748)
Subtotal: Storage	8,282,765	81,403,279	55,222,481	(551,748)	-	144,356,777
Treatment	34,084,541	175,037,301	40,910,169	29,611,398	-	279,643,409
Distribution	27,997,767	178,864,084	21,478,795	-	-	228,340,646
Demand Management	-	79,000,562	-	-	-	79,000,562
Hydroelectric	-	-	-	-	5,287,412	5,287,412
Total Costs Allocated	\$ 84,029,707	\$ 1,206,600,024	\$ 194,831,588	\$ 310,000,916	\$ 5,287,412	\$ 1,800,749,647

* Includes Delta Conveyance planning costs net of California WaterFix refund

Totals may not foot due to rounding

Distribution of Costs: Rates and Charges

Use of System-Wide (Postage Stamp) Rates

Metropolitan's rate structure consists of unbundled rate elements designed to provide transparency regarding the cost of specific functions to member agencies (system access, untreated water supplies, water treatment, etc.). The rates for each of these unbundled rate elements are uniform across Metropolitan's entire regional service area; they do not vary by member agency and they do not vary by geographic zone or distance.

In the utility industry, system-wide rates that are the same for all customers are referred to as "postage stamp" rates. Under a postage stamp rate design approach, every customer pays the same average rate for a service regardless of whether the cost caused by, or the benefit derived by, a customer for a given transaction varies from the average. The postage stamp rate design approach stands in contrast to alternative rate design approaches such as distance sensitive pricing schemes that attempt to develop rates applicable to specific geographic zones.

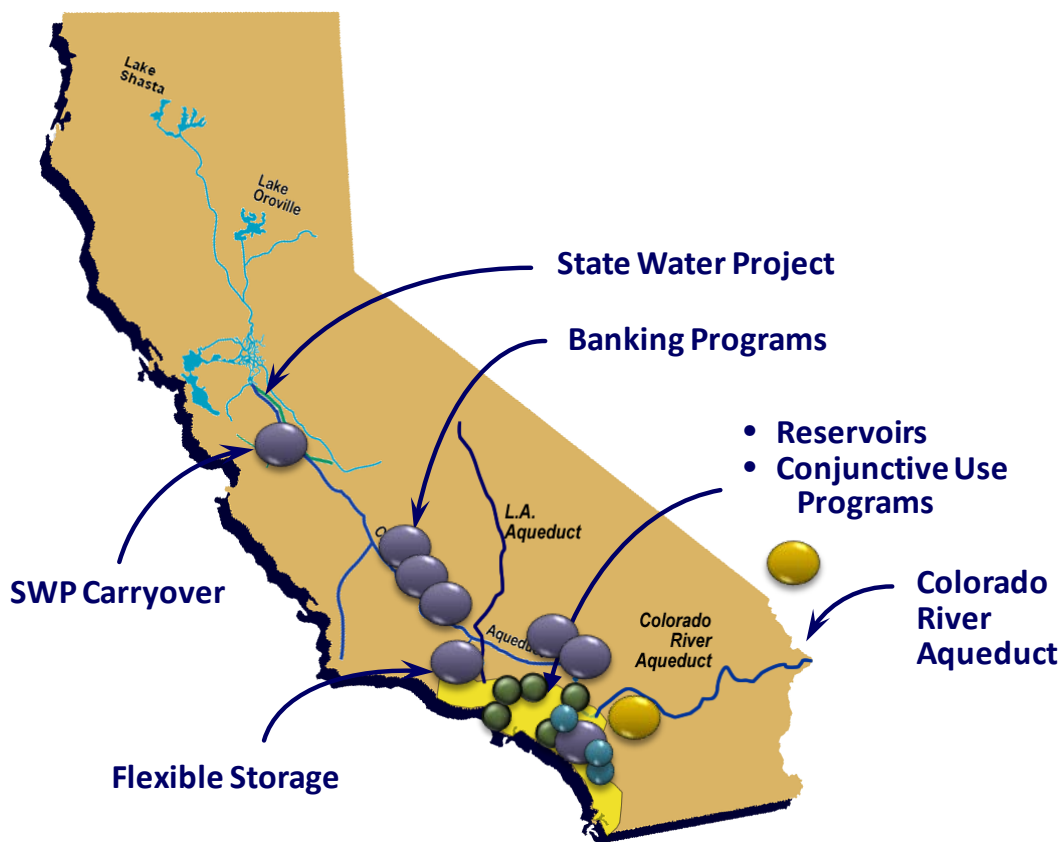
Metropolitan's postage stamp rate design is appropriate given Metropolitan's integrated regional system that benefits all member agencies. Metropolitan's system is not a point-to-point service, but an interconnected regional system. In order to balance the local concerns within the region, Metropolitan has long maintained postage stamp rates. In fact, Metropolitan has used uniform postage stamp rates since it started delivering water in 1942. Under the postage stamp approach, an agency develops an average rate for a service, as opposed to a point-to-point rate based on each customer's specific use, and all customers receiving that service pay the average rate. This allows the agency to establish non-discriminatory rates that match the cost of providing the service to a customer class. A postage stamp approach is especially appropriate for an interconnected regional system because it allows the agency to develop reliable alternatives to point-to-point service. Metropolitan's uniform, postage stamp rate structure has allowed it to develop an interconnected regional conveyance and distribution system with the ability to deliver supplies from the SWP, the Colorado River, and its storage portfolio throughout its vast and diverse service area. Metropolitan's conveyance and distribution system can deliver water from both the SWP and Colorado River to almost every member agency. This flexibility benefits all member agencies. Uniform postage stamp rates provide a region-wide funding mechanism to recover the costs of Metropolitan's integrated system, help ensure economies of scale, and result in lower costs for all of Metropolitan's member agencies. Given Metropolitan's integrated system, it is not logical to do otherwise.

Metropolitan's system draws on diverse supply sources, transports water across a large part of the State, distributes water in six counties, and serves an area that is home to 19 million residents. The 2007 Integrated Area Study (IAS), emphasized regional system flexibility as a key component of overall reliability.¹⁴ Metropolitan must maintain operational flexibility—the ability to respond to short-term changes in regional water supply, water quality, treatment requirements, and member agency demands. And it must maintain delivery flexibility—the ability to maintain partial to full water supply deliveries during planned and unplanned facility outages. Metropolitan is also required by state statute to have the objective, to the extent determined to be reasonable and practical, to deliver a blend of water constituting at least 50 percent of SWP water. (MWD Act, Sec. 136.) Each of Metropolitan's integrated conveyance, distribution and storage assets contributes to regional system reliability. It is fair and reasonable, therefore, to expect member agencies to share the cost of developing and maintaining these assets because all member agencies benefit from regional system reliability. And all member agencies are voluntary members of the cooperative formed to benefit from pooling of resources to enhance regional benefits to their service areas.

¹⁴ 2007 Integrated Area Study, Report No. 1317, pg. 2-10.

Operational flexibility has been achieved by creating an interconnected regional delivery network integrating the SWP and the CRA conveyance systems with the Distribution System. This integrated network allows Metropolitan to incorporate supply from the SWP and the Colorado River with a diverse portfolio of geographically dispersed storage programs, including the Central Valley groundwater storage programs, carryover storage in San Luis Reservoir, flexible storage capacity in Castaic Lake and Lake Perris, Lake Mead storage, the DWCV Advanced Delivery account, in-basin surface storage in DVL and Lake Mathews, and in-basin groundwater Conjunctive Use Programs. This integrated, regional network allows Metropolitan to move supplies throughout the system in response to service demands, supply availability and operational needs, and is shown in Figure 18.

Figure 18: Metropolitan Facilities, Supplies and Storage Portfolio



System flexibility and integration is easily demonstrated. In a year with a high SWP allocation, SWP supplies can be moved from the West Branch down into the Central Pool as far as western Orange County; on the East Branch, moving SWP supplies results in high SWP blends for eastern areas all the way into south San Diego County, with relatively little Colorado River water delivered to the Skinner area. In a year with a low SWP allocation, Colorado River water will dominate; this impact is mitigated by blending Colorado River water with SWP supplies stored in DVL. Under normal operations these CRA supplies can be pushed as far west as the Santa Monica Feeder.

The system flexibility can be seen through the operations of the system during calendar year 2020. As water conditions shifted, so did Metropolitan's operations to ensure continued water supply reliability. At the beginning of 2020, operations were transitioning from the extraordinary surplus year of 2019. Metropolitan strategically began repositioning storage to reduce the risk of spill and provide operational flexibility.

Figure 19: Operating Flexibility and Regional System Reliability: Moderate Deliveries of SWP Supplies (40% SWP Blend Target)



As calendar year 2020 progressed and hydrologic conditions turned dry, Metropolitan shifted system operations to minimize SWP deliveries with SWP blends at zero percent, and with Colorado River water supplies maximized throughout the distribution system through the end of the year.

Figure 20: Operating Flexibility and Regional System Reliability: Minimized Deliveries of SWP Supplies (0% SWP Blend Target Supplies)



The integrated conveyance and distribution network that Metropolitan has developed to serve the member agencies enables water supplies from multiple sources to be delivered throughout its service area to provide regional reliability. In 2014, the SWP allocation was a historically low 5 percent. Metropolitan re-operated its system to move CRA water all the way west to deliver to the areas south, west and east of the Jensen treatment plant, which are normally served with SWP water and Metropolitan is maximizing all flexibility during the current historic low Table A allocation.

Metropolitan's operational flexibility developed over time to where Metropolitan now has substantial operational flexibility to accommodate short-term changes in water supply, treatment, and demands. This is the result of having multiple water supplies and the ability to blend the supplies, robust treatment processes, and large storage capacities in multiple treated and untreated water reservoirs.

Delivery flexibility helps mitigate the impacts of regional facility outages. Metropolitan's delivery flexibility also developed over time. The 2007 IAS reported that 260 of 344 service connections, or 76 percent, had full back-up capability for single failures within Metropolitan's Distribution System. In the event of a treatment plant outage, 299 of 344 service connections, or 87 percent, had full back-up capability¹⁵.

The same flexibility principles inform development and operation of Metropolitan's storage functionality. Metropolitan's ability to shift among resources in its storage portfolio in order to enhance the regional reliability of Metropolitan's imported water service in the face of so many changing conditions is the result of its integrated, flexible operating system, consisting of its right to use the SWP conveyance pursuant to its participation therein, the CRA, and the Distribution System. Metropolitan is able to accomplish system reliability and operational flexibility while accommodating outages, managing to water quality goals, minimizing the risk of invasive species infestation and maintaining emergency storage reserves.

¹⁵ 2007 Integrated Area Study, Report No. 1317, pp. 2-10 and 2-11.

Metropolitan's integrated, flexible system directly benefits all agencies as to all services, including wheeling and exchange transactions. Wheeling and exchange transactions benefit from a robust and flexible system, including Metropolitan's right to use SWP facilities. Given the operating flexibility of Metropolitan's system, Metropolitan allocates costs in a way that allows it to develop and maintain such a flexible system. And every member agency is served by this system flexibility.

The vast majority of utilities operate under an implicit regulatory compact, which provides the exclusive service area in exchange for the obligation to serve. Metropolitan's system is a wholesale system and provides only "supplemental" wholesale supplies, meaning that Metropolitan is not the exclusive water source for its member agencies. Metropolitan is a wholesaler that has no exclusive right to serve in its service area. To the degree a member agency has local resources, develops local resources, implements conservation, or otherwise reduces demands, that member agency may not require Metropolitan's deliveries, although all member agencies rely on the availability of Metropolitan's services for various reasons. Moreover, member agencies are free to acquire supplies from other sources. Indeed, Metropolitan's Board has adopted the concept of "direct access", or customer choice for supplier, to accommodate a water transfer market.¹⁶

Metropolitan maintains an unbundled rate structure based on types of functions creating the costs, which provides transparency. Member agencies pay rates based on the services they use (full-service treated or full-service untreated), and agencies that use the same service pay the same rate. Agencies that take treated full-service water cover treatment costs, whereas agencies that take untreated full-service water pay no treatment costs. In fact, Metropolitan provides incentives for conservation and local resource development so member agencies do not have to take full-service water from Metropolitan.

This is an important distinction in the context of not having an exclusive service area. A water agency with an exclusive service area has more certainty in its revenues because it has no competition for its services. Metropolitan does have competition for its services. Therefore, Metropolitan has developed its unbundled rate structure in a fair and reasonable manner to ensure that system users pay for the services they use and the costs of Metropolitan's functions are transparent. Fair and reasonable rates that reflect applicable costs avoid negatively impacting the rates and charges paid by member agencies who do not acquire their own supplies to move through Metropolitan's interconnected delivery network. This is particularly true with regard to member agencies exercising choice of supplier. Compared to other water systems, Metropolitan's system is used to move significant amounts of non-Metropolitan supplies.

One Customer Class

Metropolitan, a wholesaler, provides full-service water service (treated or untreated) for which the Board sets rates and charges, as well as wheeling, exchange, and other arrangements pursuant to negotiated agreements. Metropolitan has one class of customers: its member agencies. The level of rate unbundling in Metropolitan's rate structure provides transparency to show that charges recover only for functions involved in the applicable service, and that no cross-subsidy of costs exists.

Metropolitan's volumetric rates recover operating costs as well as the portion of the conveyance and distribution system capital costs that are associated with meeting average water demands using system-wide rates that are the same for all customers, or "postage stamp" rates, as explained previously. Under a postage stamp rate design approach, every customer pays the same average rate for a service regardless of whether the cost caused by, or the benefit derived by, a customer for a given transaction varies from the average.

The Readiness-to-Serve (RTS) Charge recovers system capital costs for emergency storage capacity and ensures there is adequate capacity in the conveyance and distribution systems to reliably deliver supplies

¹⁶The Metropolitan Board adopted Strategic Plan Policy Principles on December 14, 1999, consisting of seven principles, presented on page 5.

during emergencies, major facility outages, hydrologic variability, and variances in local resources. The Capacity Charge recovers distribution system capital costs necessary to meet peak member agency needs on Metropolitan's distribution system during the summer.

Member agencies have unique usage characteristics that are captured in the Metropolitan rates and charges relating to treatment, peak use on the Metropolitan system, the need for emergency and available capacity, or average use. For this reason, it is not necessary to group member agencies into traditional customer classes as would be done in a typical retail rate setting process. The end result of the Metropolitan process is the determination of the cost of each service available to a member agency and to the extent a member agency uses that service, an amount, a rate or charge, is paid by the member agency that is reflective of the cost of that service.

Distributed Costs to Services

Schedules 16 and 17 provide a cross-reference between the allocated function costs and their distribution to the rate design elements for FY 2022/23 and FY 2023/24, respectively. The specifics of each rate design element are discussed in detail in the following section.

Schedule 16: Allocated Operational function Revenue Requirements (Distributed to rate design element): FY 2022/23

Fiscal year ending 2023	Rate Design Elements							Total Costs
	Supply Rates	System Access Rate	Supply - DM	System Power Rate	Capacity Charge	Readiness-to-Serve Charge	Treatment Surcharge	
Supply								
Fixed Demand	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Fixed Commodity	281,741,691	-	-	-	-	-	-	281,741,691
Fixed Standby	-	-	-	-	-	-	-	-
Variable Commodity	-	-	-	-	-	-	-	-
Hydroelectric	-	-	-	-	-	-	-	-
Subtotal: Supply	281,741,691	-	-	-	-	-	-	281,741,691
Conveyance and Aqueduct								
Fixed Demand	-	-	-	-	-	-	-	-
Fixed Commodity	-	378,545,839	-	-	-	12,312,527	-	12,312,527
Fixed Standby	-	-	-	-	-	-	-	378,545,839
Variable Commodity	-	-	-	258,209,273	-	64,243,482	-	64,243,482
Hydroelectric	-	-	-	-	-	-	-	258,209,273
Subtotal: Conveyance and Aqueduct	-	378,545,839	-	258,209,273	-	76,556,009	-	713,311,121
Storage								
Fixed Demand	-	-	-	-	-	-	-	-
Fixed Commodity	61,476,796	24,929,605	-	-	7,714,381	-	-	7,714,381
Fixed Standby	-	-	-	-	-	-	-	86,406,402
Variable Commodity	(682,642)	-	-	-	-	54,175,223	-	54,175,223
Hydroelectric	-	-	-	-	-	-	-	(682,642)
Subtotal: Storage	60,794,154	24,929,605	-	-	7,714,381	54,175,223	-	147,613,364
Treatment								
Fixed Demand	-	-	-	-	-	-	-	-
Fixed Commodity	-	-	-	-	-	-	33,063,770	33,063,770
Fixed Standby	-	-	-	-	-	-	170,932,230	170,932,230
Variable Commodity	-	-	-	-	-	-	40,963,969	40,963,969
Hydroelectric	-	-	-	-	-	-	27,327,183	27,327,183
Subtotal: Treatment	-	-	-	-	-	-	272,287,153	272,287,153
Distribution								
Fixed Demand	-	-	-	-	-	-	-	-
Fixed Commodity	-	175,604,543	-	-	25,676,856	-	-	25,676,856
Fixed Standby	-	-	-	-	-	-	-	175,604,543
Variable Commodity	-	-	-	-	-	20,438,709	-	20,438,709
Hydroelectric	-	3,411,276	-	-	-	-	-	-
Subtotal: Distribution	-	179,015,818	-	-	25,676,856	20,438,709	-	225,131,383
Demand Management								
Fixed Demand	-	-	-	-	-	-	-	-
Fixed Commodity	-	-	72,831,522	-	-	-	-	-
Fixed Standby	-	-	-	-	-	-	-	72,831,522
Variable Commodity	-	-	-	-	-	-	-	-
Hydroelectric	-	-	-	-	-	-	-	-
Subtotal: Demand Management	-	-	72,831,522	-	-	-	-	72,831,522
Total								
Fixed Demand	-	-	-	-	-	-	-	-
Fixed Commodity	343,218,487	579,079,987	72,831,522	-	33,391,237	12,312,527	33,063,770	78,767,533
Fixed Standby	-	-	-	-	-	-	170,932,230	1,166,062,226
Variable Commodity	(682,642)	-	-	258,209,273	-	138,857,414	40,963,969	179,821,383
Hydroelectric	-	3,411,276	-	-	-	-	27,327,183	284,853,814
Total	\$ 342,535,845	\$ 582,491,263	\$ 72,831,522	\$ 258,209,273	\$ 33,391,237	\$ 151,169,941	\$ 272,287,153	\$ 1,712,916,232

Schedule 17: Allocated Operational function Revenue Requirements (Distributed to rate design element): FY 2023/24

Fiscal year ending 2024	Rate Design Elements							Total Costs
	Supply Rates	System Access Rate	Supply - DM	System Power Rate	Capacity Charge	Readiness-to-Serve Charge	Treatment Surcharge	
Supply								
Fixed Demand	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Fixed Commodity	293,036,084	-	-	-	-	-	-	293,036,084
Fixed Standby	-	-	-	-	-	-	-	-
Variable Commodity	-	-	-	-	-	-	-	-
Hydroelectric	-	-	-	-	-	-	-	-
Subtotal: Supply	293,036,084	-	-	-	-	-	-	293,036,084
Conveyance and Aqueduct	-	-	-	-	-	-	-	-
Fixed Demand	-	-	-	-	-	13,664,634	-	13,664,634
Fixed Commodity	-	399,258,714	-	-	-	-	-	399,258,714
Fixed Standby	-	-	-	-	-	77,220,144	-	77,220,144
Variable Commodity	-	-	-	280,941,266	-	-	-	280,941,266
Hydroelectric	-	-	-	-	-	-	-	-
Subtotal: Conveyance and Aqueduct	-	399,258,714	-	280,941,266	-	90,884,778	-	771,084,757
Storage	-	-	-	-	-	-	-	-
Fixed Demand	-	-	-	-	8,282,765	-	-	8,282,765
Fixed Commodity	56,971,919	24,431,360	-	-	-	-	-	81,403,279
Fixed Standby	-	-	-	-	-	55,222,481	-	55,222,481
Variable Commodity	(551,748)	-	-	-	-	-	-	(551,748)
Hydroelectric	-	-	-	-	-	-	-	-
Subtotal: Storage	56,420,171	24,431,360	-	-	8,282,765	55,222,481	-	144,356,777
Treatment	-	-	-	-	-	-	-	-
Fixed Demand	-	-	-	-	-	-	34,084,541	34,084,541
Fixed Commodity	-	-	-	-	-	-	175,037,301	175,037,301
Fixed Standby	-	-	-	-	-	-	40,910,169	40,910,169
Variable Commodity	-	-	-	-	-	-	29,611,398	29,611,398
Hydroelectric	-	-	-	-	-	-	-	-
Subtotal: Treatment	-	-	-	-	-	-	279,643,409	279,643,409
Distribution	-	-	-	-	-	-	-	-
Fixed Demand	-	-	-	-	27,997,767	-	-	27,997,767
Fixed Commodity	-	178,864,084	-	-	-	-	-	178,864,084
Fixed Standby	-	-	-	-	-	21,478,795	-	21,478,795
Variable Commodity	-	-	-	-	-	-	-	-
Hydroelectric	-	5,287,412	-	-	-	-	-	5,287,412
Subtotal: Distribution	-	184,151,496	-	-	27,997,767	21,478,795	-	233,628,058
Demand Management	-	-	-	-	-	-	-	-
Fixed Demand	-	-	-	-	-	-	-	-
Fixed Commodity	-	-	79,000,562	-	-	-	-	79,000,562
Fixed Standby	-	-	-	-	-	-	-	-
Variable Commodity	-	-	-	-	-	-	-	-
Hydroelectric	-	-	-	-	-	-	-	-
Subtotal: Demand Management	-	-	79,000,562	-	-	-	-	79,000,562
Total	-	-	-	-	-	-	-	-
Fixed Demand	-	-	-	-	36,280,532	13,664,634	34,084,541	84,029,707
Fixed Commodity	350,008,003	602,554,158	79,000,562	-	-	-	175,037,301	1,206,600,024
Fixed Standby	-	-	-	-	-	153,921,419	40,910,169	194,831,588
Variable Commodity	(551,748)	-	-	280,941,266	-	-	29,611,398	310,000,916
Hydroelectric	-	5,287,412	-	-	-	-	-	5,287,412
Total	\$ 349,456,255	\$ 607,841,570	\$ 79,000,562	\$ 280,941,266	\$ 36,280,532	\$ 167,586,053	\$ 279,643,409	\$ 1,800,749,647

Totals may not foot due to rounding

Proof of Revenue

FY 2022/23

Schedule 18 shows the Proof of Revenue for FY 2022/23. Based on expected transactions of 1.59 MAF, the expected revenues would be about \$67.3 million higher than the total revenue requirement, if the rates and charges were in effect the entire test year period. The cost of service allocation assuming a full twelve months of revenue is used to allocate costs among the various rate elements but should not be interpreted as over- or under-collection during a given fiscal year. However, because the recommended rates do not take effect until January 1, 2023, the expected revenues for FY 2022/23 will be about \$28.5 million lower than the total revenue requirement in FY 2022/23. The total revenue requirement includes a \$15.4 million decrease in the required reserves for the Revenue Remainder Fund. Withdrawals from the Treatment Surcharge Stabilization Fund are \$2.9 million in FY 2022/23. Withdrawals from the Water Stewardship Fund are \$56.1 million in FY 2022/23. Accounting for these adjustments, the withdrawal from reserves is about \$15.1 million in FY 2022/23.

FY 2023/24

Schedule 19 shows the Proof of Revenue for FY 2023/24. Based on expected sales of 1.54 MAF the expected revenues would be about \$78.1 million higher than the total revenue requirement, if the rates and charges were in effect the entire test year period. The cost of service allocation assuming a full twelve months of revenue is used to allocate costs among the various rate elements but should not be interpreted as over- or under-collection during a given fiscal year. However, because the recommended rates do not take effect until January 1, 2024, the expected revenues for FY 2023/24 will be about \$18.7 million lower than the total revenue requirement in FY 2023/24. The total revenue requirement includes a \$12.2 million increase in the required reserves for the Revenue Remainder Fund. Deposits to the Treatment Surcharge Stabilization Fund are \$7.7 million in FY 2023/24. Withdrawals from the Water Stewardship Fund are \$0 million in FY 2023/24. Accounting for these adjustments, the deposit from reserves is about \$14.2 million in FY 2023/24. Schedule 20 summarizes the rates and charges that would be effective on January 1, 2023 and January 1, 2024 using the assumptions and methodology of this report. Member agency impacts will vary depending upon an agency's RTS allocation, capacity charge and relative proportions of treated and untreated Tier 1 and Tier 2 purchases.

Schedule 18: FY 2022/23 Proof of Revenue (\$ millions)***Proof of Revenue FY2023 if Rates Effective for Full Test Year***

Rate Elements	Revenue Requirements	% Over (Under) Collected		Revenues if Rates Effective July 1st	Billing Determinant	Unit Rate
	\$M	\$M	%	\$M	MAF	\$/AF
Supply	415.4	15.9	4%	431.3	1.31	329
System Access Rate	582.5	23.4	4%	605.9	1.59	381
System Power Rate	258.2	10.5	4%	268.7	1.59	169
Treatment Surcharge	272.3	10.3	4%	282.6	0.77	367
Readiness-to-serve Charge	151.2	5.8	4%	157.0		
Capacity Charge	33.4	1.4	4%	34.8		
Total	1,712.9	67.3	4%	1,780.3		

Totals may not foot due to rounding

Proof of Revenue FY2023 if Rates Effective January 1st

Fiscal Year Ending 2023	Revenue Requirements	% Over (Under) Collected		Revenues if Rates Effective Jan 1st
Supply	415.4	(69.5)	-17%	345.9
System Access Rate	582.5	32.8	6%	615.3
System Power Rate	258.2	8.2	3%	266.4
Treatment Surcharge	272.3	(2.9)	-1%	269.4
Readiness-to-serve Charge	151.2	(2.7)	-2%	148.5
Capacity Charge	33.4	5.6	17%	39.0
Total	1,712.9	(28.5)	-2%	1,684.4

Totals may not foot due to rounding

Schedule 19: FY 2023/24 Proof of Revenue (\$ millions)***Proof of Revenue FY2024 if Rates Effective for Full Test Year***

Rate Elements	Revenue	% Over (Under)		Revenues if Rates	Billing	Unit Rate
	Requirements	Collected		Effective July 1st	Determinant	
	\$M	\$M	%	\$M	MAF	\$/AF
Supply	428.5	19.6	5%	448.0	1.26	355
System Access Rate	607.8	26.5	4%	634.4	1.54	412
System Power Rate	280.9	11.6	4%	292.6	1.54	190
Treatment Surcharge	279.6	11.2	4%	290.8	0.78	373
Readiness-to-serve Charge	167.6	7.4	4%	175.0		
Capacity Charge	36.3	1.8	5%	38.1		
Total	1,800.7	78.1	4%	1,878.8		

Totals may not foot due to rounding

Proof of Revenue FY2024 if Rates Effective January 1st

Fiscal Year Ending 2024	Revenue	% Over (Under)		Revenues if Rates
	Requirements	Collected		Effective Jan 1st
Supply	428.5	(4.8)	-1%	423.7
System Access Rate	607.8	(8.3)	-1%	599.6
System Power Rate	280.9	(12.0)	-4%	269.0
Treatment Surcharge	279.6	7.7	3%	287.3
Readiness-to-serve Charge	167.6	(1.6)	-1%	166.0
Capacity Charge	36.3	0.2	0%	36.5
Total	1,800.7	(18.7)	-1%	1,782.0

Totals may not foot due to rounding

Schedule 20: Rates and Charges Summary

Effective January 1st	2022	2023	2024
Tier 1 Supply Rate (\$/AF)	\$243	\$329	\$355
Tier 2 Supply Rate (\$/AF)	\$285	\$532	\$540
System Access Rate (\$/AF)	\$389	\$381	\$412
System Power Rate (\$/AF)	\$167	\$169	\$190
Full Service Untreated Volumetric Cost (\$/AF)			
Tier 1	\$799	\$879	\$957
Tier 2	\$841	\$1,082	\$1,142
Treatment Surcharge (\$/AF)	\$344	\$367	\$373
Full Service Treated Volumetric Cost (\$/AF)			
Tier 1	\$1,143	\$1,246	\$1,330
Tier 2	\$1,185	\$1,449	\$1,515
Readiness-to-Serve Charge (\$M)	\$140	\$157	\$175
Capacity Charge (\$/cfs)	\$12,200	\$10,800	\$11,800

System Access Rate (SAR)

The SAR is a volumetric¹⁷ system-wide rate charged on each acre-foot of water sold to member public agencies, which water is conveyed through Metropolitan's interconnected regional delivery network, including Metropolitan's right to use SWP facilities for conveyance of SWP and non-SWP water. The SAR would decrease to \$381 per acre-foot in 2023 primarily due to reduced Delta Conveyance, SWC Capital costs and RRWP planning costs, and increase to \$412 per acre-foot in 2024, primarily due to increasing Delta Conveyance and SWC Capital costs. The SAR recovers the cost of providing conveyance and distribution capacity to meet average annual demands, and a portion of Regulatory/Emergency Storage.

The SAR recovers, among other costs, the capital, operating, maintenance, and overhead costs associated with the interconnected regional delivery network necessary to deliver water to meet member agencies' average annual demands, which include the costs of conveyance facilities (facilities outside of Metropolitan's service area) and distribution facilities (facilities within Metropolitan's Distribution System), and portions of Regulatory/Emergency Storage facilities.

Metropolitan's delivery network costs are treated the same whether they were incurred for the SWP or the CRA. The fact that, unlike the CRA, Metropolitan does not hold legal title to the SWP facilities and does not operate the SWP facilities is immaterial for purposes of cost functionalization for the COS and rate determination process.

Metropolitan, like the other State Water Contractors, is obligated to pay all operating expenses and capital costs incurred by the SWP to provide the contractual supply and transportation services. The expenses include all unexpected expenses resulting from operational issues and changes in regulations. DWR charges Metropolitan based on estimated expenses and has the right to charge Metropolitan for any expenses beyond

¹⁷ A volumetric rate is a charge applied to the actual amount of water delivered.

the estimates. The State Water Contractors carry all financial risk and must pay any costs without any regard for Metropolitan's own cash flows. By allocating costs, DWR does not bear any of these risks; the risks fall to the State Water Contractors. Metropolitan was even responsible for paying for the SWP costs during the extended original construction period, years before Metropolitan received any SWP water. This is also not something typical of a supply contract and hence supportive of Metropolitan's cost functionalization process.

Metropolitan is also responsible for managing its SWP supply and transportation resources. Metropolitan determines what water to store and deliver in any year from its resource portfolio. On October 1 prior to the beginning of the Calendar Year, Metropolitan must provide its initial water order, plus any variations requested by DWR. The planning for this water order begins as early as the preceding July. A considerable amount of strategy goes in to determining which resource Metropolitan will dispatch when and deliver where to maximize resources. Examples of issues that Metropolitan must consider when managing SWP resources include:

- the level of the Table A allocation, and the amount of Table A supply available to Metropolitan, Desert Water Agency (DWA) and Coachella Valley Water District CVWD;
- shaping deliveries to the order to accommodate Article 21 (surplus water), turnback pool water (Table A allocation not needed by a Contractor) or Article 56 (b) water (water rescheduled due to system outages) if available;
- the amount of Carryover water in San Luis Reservoir, and the timing and location of need;
- the maximum input and withdrawal capacities of the Central Valley Storage programs, depending on whether Metropolitan is storing or withdrawing from these programs, and considering the level of water stored;
- the availability or need to refill Flexible Storage in Castaic and Perris Reservoirs;
- the availability of water transfer supplies; and,
- the supply conditions on the Colorado River.

Metropolitan, not DWR, is responsible for determining how, when or where to deliver any of the supply sources Metropolitan has that can be conveyed on the SWP. As a result of the execution of Monterey Amendments, the SWP can convey SWP water and non-SWP water and can be used by non-State Water Contractors; it is, therefore, appropriate to consider the SWP as part of Metropolitan's interconnected regional delivery network as has been confirmed by the Court of Appeal in *SDCWA v. MWD* (2017) 12 Cal.App.5th 1124. The volume of water delivered under arrangements, other than the contracts for delivery of water with the DWR, is also not determinative of the cost treatment; the ability to move *any* volume is what is relevant to the functionalization of Metropolitan's costs.

Like the SWP costs, Metropolitan fully pays the operating and capital costs of the CRA maintenance, operations and supply portfolio and the risks fall on Metropolitan.

Metropolitan uses the CRA for the conveyance of its multiple CRA resources. It is responsible for determining what water to store and deliver in any year from its resource portfolio. Prior to the beginning of the calendar year, Metropolitan must provide its Plan for the Creation of Extraordinary Conservation ICS to the Bureau of Reclamation in June and its best estimate of monthly diversion requirements in September. The amount of Extraordinary Conservation ICS which Metropolitan plans to create is deducted from the total supply available for diversion. In October or November, Reclamation staff conducts a consultation with Metropolitan prior to Reclamation's Regional Director making an annual determination of Metropolitan's estimated water requirements for the ensuing calendar year to the end that deliveries of Colorado River water to Metropolitan will not exceed those reasonably required for beneficial use. Reclamation provides Metropolitan with a notice of the Regional Director's determination regarding Metropolitan's proposed diversion and beneficial use of Colorado River water for the calendar year. A considerable amount of strategy is employed to

determine which resources Metropolitan will dispatch and deliver to maximize use of the resources. Examples of issues that Metropolitan must consider when managing CRA resources include:

- the magnitude of the SWP Table A allocation, and the amount of Table A supply available to Metropolitan, DWA and CVWD;
- the amount of SWP surplus, turnback pool, and carryover water;
- the amount of ICS water that can be accessed;
- the amount of water in the DWA/CVWD advance delivery account; and,
- the Colorado River supply conditions and the projection of the likelihood of Lake Mead shortage, normal, and surplus conditions in future years.

Metropolitan is responsible for determining how, when and where to deliver any of the supply sources Metropolitan has that can be transported by the CRA. Metropolitan also uses the CRA to convey non-Metropolitan water to non-member agencies: the temporary emergency wheeling of Mexican Treaty Waters of the Colorado River for Tijuana. Given that the CRA can deliver water as a result of the execution of agreements apart from Metropolitan's 1930 contract for delivery of water, 1931 supplementary contract for delivery of water, 1946 contract merging the rights of the City of San Diego and Metropolitan, and 1987 contract for delivery of surplus flows from the Colorado River with the U.S. Department of the Interior, and that it is capable of delivering water to other water agencies, it is appropriate to consider the CRA as part of Metropolitan's interconnected regional delivery network. The volume of water delivered under arrangements, other than the contracts for delivery of water with the U.S. Department of the Interior, is also not determinative of the cost treatment; the ability to move *any* volume is what is relevant to the functionalization of Metropolitan's costs.

Metropolitan's Conveyance and Aqueduct and Distribution System form a single integrated system for all imported water, which is available to Metropolitan for the conveyance of SWP and CRA water, as well as water supply obtained from supply programs and other water transfers. Metropolitan's rights and ownership of the facilities create regional system flexibility to maintain operating flexibility and delivery flexibility and meet Metropolitan's mission as a public steward of water resources. Metropolitan's member agencies and all residents of Metropolitan's service area benefit from the integration of the SWP and CRA as Metropolitan's Conveyance and Aqueduct facilities, as it allows Metropolitan to meet varying regional demands, accommodate outages, manage water quality goals, maintain emergency storage reserves, and minimize the risk of invasive species infestation.

The treatment of Metropolitan's Conveyance and Aqueduct facilities as one integrated system for purposes of rate-setting is not uncommon or novel. The Federal Energy Regulatory Commission (FERC), for example, recognizes the practice of rolling the costs of transmission facilities into a single rate when the facilities are part of an integrated system. The practice is recognized regardless of legal ownership of (or allocations in) a particular facility.

Benefits

The SAR benefits include: (1) support of a regional approach; (2) accommodates a water transfer market that does not unfairly advantage one user over another; (3) provides a clear linkage between costs and benefits; and (4) establishes a simple approach to recovering the costs of conveyance and distribution functions.

The SAR supports a regional approach through the uniform, postage stamp rate element. This region-wide funding mechanism helps ensure economies of scale and low costs for all of Metropolitan's member agencies.

The SAR is a cost-based rate. By providing a non-discriminatory rate element to all parties that wish to use available system capacity to move water anywhere in the Metropolitan service area, the uniform SAR creates the opportunity for a fair and efficient water transfer market to develop. In keeping with the spirit of a

regional provider approach, the SAR is uniform throughout the service area. Member agencies that receive full-service water from Metropolitan will pay the exact same cost for access to the system as a customer that obtains supply from another supply source.

Charging all users, the same price for access to essential facilities is a basic principle of regulatory economics. The SAR provides a clear linkage between costs and benefits. The cost of service process clearly identifies the costs that are recovered by the SAR. The operational function revenue requirements for conveyance and aqueduct, distribution, and storage are identified and then allocated into commodity (average use), demand (peak use), and standby (emergency and available capacity) related costs.

Only commodity-related costs are allocated to the SAR. The SAR is an easily understood approach. The SAR is a uniform, volumetric per acre-foot rate and is straightforward for both Metropolitan and the member agencies to implement and administer.

System Power Rate (SPR)

The SPR is a volumetric, system-wide rate charged on each acre-foot of Metropolitan supplies moving through the Metropolitan system. SPR would increase to \$169 per acre-foot for 2023 and increase to \$190 in 2024, primarily due to higher State Water Contract power costs and higher CRA power costs. The SPR is a volumetric rate element that recovers the costs of pumping water to Southern California. The SPR recovers the cost of power for both the SWP and CRA.

Benefits

The primary benefit of the SPR is that it clearly identifies Metropolitan's average cost of power.

Treatment Surcharge

The Treatment Surcharge is a system-wide volumetric rate charged on water treated by Metropolitan. The Treatment Surcharge recovers the cost of treating water, including commodity, demand and standby-related costs as determined in the COS for all five treatment plants. The Treatment Surcharge would increase to \$367 per acre-foot in 2023, and increase to \$373 per acre-foot in FY 2024 primarily due to lower treated water sales.

Benefits

There are several primary benefits provided by the Treatment Surcharge. First, only treated water users pay for the costs of treatment. Second, by averaging the costs of providing treated water service over the entire system the regional economies of scale are preserved.

Capacity Charge

The Capacity Charge would decrease to \$10,800 per cubic-foot-second of capacity during calendar year 2023, as less capital costs are allocated to meet peak day system use, reflecting recent member agency non-coincident peaks and reduced capital financing costs. The Capacity Charge would increase to \$11,800 per cubic-foot-second of capacity during calendar year 2024, reflecting the increases to capital financing costs. The Capacity Charge is charged on the peak (maximum) summer day demand, measured in cfs, placed on the distribution system between May 1 and September 30 for a three-calendar year period, calculated for each member agency. The calculation is non-coincident, meaning the peak day will differ for each member agency. The sum of the member agency non-coincident peak day demands is a proxy for peak week demands, which

are the design criteria for the Metropolitan Distribution system. The three-year period ending December 31, 2021 is used to charge the Capacity Charge effective January 1, 2023 through December 31, 2023. Demands measured for the purposes of billing the Capacity Charge include all firm demands including wheeling service and exchange.

The Capacity Charge is intended to pay for the cost of providing peak day capacity on Metropolitan's Distribution System, while providing an incentive for local agencies to decrease their use of the Metropolitan system to meet peak day demands and to shift demands into lower use time periods particularly October through April. Over time, a member agency will benefit from local supply investments and operational strategies that reduce its peak day demand on the system in the form of a lower total Capacity Charge. The estimated Capacity Charge to be paid by each member agency in calendar year 2023 is included in Schedule 21.

Benefits

The Capacity Charge provides several benefits including: (1) increasing the overall efficiency of water use; (2) improving the fair allocation of costs among member agencies based upon the demand imposed by each agency; and (3) providing a source of fixed revenue.

The Capacity Charge will improve the overall efficiency of water use by encouraging local agencies to invest in cost effective local storage and resources to avoid using the Metropolitan system to meet peak (maximum) day demands. In addition, significant regional savings can be realized through the deferral of expensive capacity expansion.

Schedule 21: Capacity Charge (by member agency)

Calendar Year 2023 Capacity Charge					
	Peak Day Demand (cfs) (May 1 through September 30)				Rate (\$/cfs): \$10,800
	Calendar Year				
Member Agency	2019	2020	2021	3-Year Peak	Calendar Year 2023 Capacity Charge
Anaheim	37.1	84.1	77.2	84.1	\$908,280
Beverly Hills	23.5	23.2	24.8	24.8	\$267,840
Burbank	17.3	16.6	15.5	17.3	\$186,840
Calleguas	168.9	178.2	189.6	189.6	\$2,047,680
Central Basin	48.6	51.9	54.1	54.1	\$584,280
Compton	2.9	0.0	0.0	2.9	\$31,320
Eastern	196.8	211.5	215.3	215.3	\$2,325,240
Foothill	16.0	19.3	22.8	22.8	\$246,240
Fullerton	13.1	14.1	20.0	20.0	\$216,000
Glendale	32.2	37.9	32.5	37.9	\$409,320
Inland Empire	118.7	98.4	101.4	118.7	\$1,281,960
Las Virgenes	39.4	41.7	42.9	42.9	\$463,320
Long Beach	51.8	67.3	45.7	67.3	\$726,840
Los Angeles	283.2	339.0	584.1	584.1	\$6,308,280
MWDOC	262.8	272.0	332.4	332.4	\$3,589,920
Pasadena	39.9	46.4	48.2	48.2	\$520,560
San Diego CWA	672.1	723.4	672.5	723.4	\$7,812,720
San Fernando	0.0	0.0	0.0	0.0	\$0
San Marino	2.3	7.3	5.4	7.3	\$78,840
Santa Ana	19.4	21.7	18.3	21.7	\$234,360
Santa Monica	20.7	17.0	15.1	20.7	\$223,560
Three Valleys	128.1	134.3	138.3	138.3	\$1,493,640
Torrance	27.8	28.9	27.2	28.9	\$312,120
Upper San Gabriel	29.1	21.1	32.4	32.4	\$349,920
West Basin	211.8	196.0	218.2	218.2	\$2,356,560
Western MWD	186.1	175.1	189.4	189.4	\$2,045,520
Total	2,649.6	2,826.4	3,123.3	3,242.7	\$35,021,160
Totals may not foot due to rounding					

The Capacity Charge also improves the equitable distribution of costs among the member agencies. Agencies that have relatively high peak demand to average demand ratios will bear a greater share of the costs of providing peak (maximum) day distribution capacity. The Capacity Charge also increases the portion of Metropolitan's fixed costs that are recovered by fixed charges.

Readiness-to-Serve Charge

The RTS recovers the costs of providing emergency storage capacity and available capacity to meet outages and hydrologic variability. The RTS will increase to \$157 million in calendar year 2023. The RTS increases to \$175 million in calendar year 2024, reflecting increases in capital financing costs and Delta Conveyance planning costs.

The RTS is allocated to the member agencies based on each agency's share of a ten-year rolling average of all firm demands, including water transfers and exchanges that use Metropolitan system capacity.¹⁸ A ten-year rolling average leads to a relatively stable RTS allocation that reasonably represents an agency's potential long-term need for available capacity under different hydrologic conditions. Member agencies that so choose may have a portion of their total RTS obligation offset by Standby Charge collections collected by Metropolitan on behalf of the member agency. The estimated RTS for each member agency for calendar year 2023 is shown in Schedule 22.

Benefits

The RTS provides two major benefits. These include: (1) a better matching of costs and benefits; and (2) a SAR that recovers only those costs associated with providing average annual service.

The proposed RTS matches costs and benefits in two ways. First, the RTS will recover the amount of emergency storage and available capacity costs needed to maintain reliable deliveries during outages and service interruptions and during periods of hydrologic variability, as identified in the COS, that is not paid for by ad valorem property tax revenues. Second, the proposed RTS allocates the emergency storage and available capacity costs among the member agencies in a manner that better represents each agency's potential need for standby availability. The RTS uses a ten-year rolling average of demands. A long-term rolling average like the ten-year measure is a simple and reasonable representation of an agency's potential need for available capacity under a range of 91 conditions.

¹⁸ The SDCWA exchange water transactions are excluded from the calculation of the ten-year rolling average per the terms of the parties' exchange agreement.

Schedule 22: Readiness-to-Serve Charge (by member agency)

Calendar Year 2023 RTS Charge			
Member Agency	Rolling Ten-Year Average Firm Deliveries (Acre-Feet) FY2011/12 - FY2020/21	RTS Share	12 months @ \$157 million per year (1/23-12/23)
Anaheim	19,376.9	1.37%	\$ 2,143,981
Beverly Hills	10,308.7	0.73%	1,140,619
Burbank	13,354.6	0.94%	1,477,636
Calleguas MWD	96,573.4	6.81%	10,685,484
Central Basin MWD	34,311.0	2.42%	3,796,383
Compton	340.2	0.02%	37,642
Eastern MWD	97,570.2	6.88%	10,795,776
Foothill MWD	8,306.1	0.59%	919,039
Fullerton	7,280.1	0.51%	805,516
Glendale	16,256.7	1.15%	1,798,743
Inland Empire Utilities Agency	55,761.7	3.93%	6,169,822
Las Virgenes MWD	20,715.7	1.46%	2,292,114
Long Beach	29,251.8	2.06%	3,236,602
Los Angeles	273,537.0	19.28%	30,265,841
Municipal Water District of Orange County	195,277.4	13.76%	21,606,710
Pasadena	18,954.2	1.34%	2,097,211
San Diego County Water Authority	214,362.4	15.11%	23,718,394
San Fernando	29.7	0.00%	3,286
San Marino	974.0	0.07%	107,769
Santa Ana	9,606.6	0.68%	1,062,934
Santa Monica	4,607.4	0.32%	509,791
Three Valleys MWD	63,736.2	4.49%	7,052,171
Torrance	15,549.0	1.10%	1,720,438
Upper San Gabriel Valley MWD	30,096.0	2.12%	3,330,009
West Basin MWD	113,660.3	8.01%	12,576,085
Western MWD	69,139.3	4.87%	7,650,004
MWD Total	1,418,936.6	100.00%	\$ 157,000,000

Totals may not foot due to rounding

Purchase Order

Purchase Orders were developed to establish a financial commitment from the member agency to Metropolitan in exchange for the ability to purchase more water at the lower Tier 1 Supply Rate. In November 2014, the Metropolitan Board approved new Purchase Orders effective January 1, 2015 through December 31, 2024. Twenty-one of the twenty-six-member agencies have Purchase Orders, which commit the member agencies to purchase a minimum amount of supply from Metropolitan (the Purchase Order Commitment) over a ten-year period.

There is no annual minimum or maximum purchase commitment required by the Purchase Order. A member agency has the full ten-year term to fulfill the Purchase Order Commitment. In exchange for this commitment, the member agency can purchase an amount of firm water supply equal to 90 percent of its cumulative Base Period Demand over the full ten years at the lower Tier 1 Supply Rate. An agency that determined that a Purchase Order is not in its best interest may purchase up to 60 percent of its Revised Base Firm Demand annually at the lower Tier 1 Supply Rate. The terms and conditions of the Purchase Order are uniform for all member agencies.

The Base Period Demand was established for each member agency. Member agencies chose a base amount of (1) the member agency's Revised Base Firm Demand which is the highest fiscal year purchases during the 13-year period of fiscal year 1990 through fiscal year 2002, or (2) the highest year purchases in the most recent 12-year period of fiscal year 2003 through fiscal year 2014.

At the end of the Purchase Order Term, if the member agency has not purchased enough firm supply to meet its Purchase Order Commitment, it will be billed for the remaining balance of the Purchase Order Commitment at the average of the Tier 1 Supply Rate in effect during the Term. This payment may be prorated with interest evenly over the next 12 invoices.

If a member agency fulfills its Purchase Order Commitment prior to the end of the Purchase Order Term, (e.g. purchased ten times 60 percent of the Initial Base Period Demand) then the member agency has met its obligation under the Purchase Order. The member agency may continue to purchase up to 90 percent of its cumulative Base Period Demand over the Term at the Tier 1 Supply Rate for the duration of the Purchase Order Term.

Although the maximum amount of water that can be purchased at the Tier 1 Supply Rate may increase over time if the agency's Base Period Demand increases, the Purchase Order Commitment is fixed for the entire Purchase Order Term and does not increase.

Tier 1 Supply Rate

The Tier 1 Supply Rate is a volumetric rate charged on Metropolitan water transactions that are within a member agency's Tier 1 maximum. The Tier 1 Supply Rate would increase to \$329 per acre-foot in 2023 due to increasing Supply Program costs. The Tier 1 Supply Rate would increase to \$355 per acre-foot in 2024. The Tier 1 Supply Rate supports a regional approach through the uniform, postage stamp rate element. The Tier 1 Supply Rate is calculated as the amount of the total supply revenue requirement that is not recovered by the Tier 2 Supply Rate divided by the estimated amount of Tier 1 water transactions.

Tier 2 Supply Rate

The Tier 2 Supply Rate is a volumetric rate that reflects the costs in Tier 1, plus Metropolitan's cost of purchasing water transfers north of the Delta. The Tier 2 Supply Rate is charged on Metropolitan water transactions that exceed a member agency's Tier 1 maximum. The Tier 2 Supply Rate also encourages the member agencies and their customers to maintain existing local supplies and develop cost-effective local

supply resources and conservation. The Tier 2 Supply Rate would increase to \$532 per acre-foot in 2023 and to \$540 in 2024. At an expected average sales level of 1.59 MAF in cash year 2022/23 and 1.54 MAF in cash year 2023/24, it is estimated that no supply will be sold at the Tier 2 Supply Rate in either fiscal year.

Benefits

The use of the Tier 2 Supply Rate provides several benefits including, efficient resource management and clear price signals to accommodate a water transfer market. By pricing supplies that exceed 90 percent of a member agency's Base demand at a price reflecting Metropolitan's supply cost, a price incentive exists to encourage efficient regional resource management. Member agencies will be encouraged to invest in cost-effective conservation measures and local resources like water recycling. Metropolitan has historically set its water rates with the primary objective of recovering cost. The Tier 2 Supply Rate is a pricing tool designed specifically for the purpose of creating a greater incentive for member agencies to make economic resource management decisions, while recognizing additional costs associated with securing more supply resources.

The Tier 2 Supply Rate will reflect Metropolitan's cost of acquiring transfers from north of the Delta. In so doing, Metropolitan will be competing in the water transfer market along with other providers of imported water supplies. If other providers of imported supply can develop additional supply at a lower cost than Metropolitan's Tier 2 Supply Rate, the water transfer market will expand to meet the region's increasing demands.

Transactions

Staff estimates of water transactions used for developing the rate recommendation were based on current member agency demands and information and an expectation that demands will trend to levels expected under normal weather conditions. "Firm Transactions" refers to member agency purchases that are subject to the calculation of transactions subject to the Readiness-to-Serve Charge and to the calculation of Base Firm Demand used to determine the threshold for the applicability of Tier 2 to member agency purchases. Table 23 summarizes projected water transactions by service type for Cash Year 2022/23 and Cash Year 2023/24.

Schedule 23: Cash Year Transactions, by Type

Cash Year Ending	2023	2024
Transactions by Treatment Type		
Treated Firm Transactions	770	780
Untreated Firm Transactions	541	482
Untreated Exchange	279	278
Total Transactions	1,590	1,540
Firm Transactions by Type		
Tier 1	1,311	1,262
Tier 2	-	-
Total Firm Transactions	1,311	1,262

APPENDIX: COS TABLES

4/12/2022 Board Meeting

		1	2	3	4	5	6	7
		Labor And Labor Additive	Outside Services	Utilities	Chemicals	Other O&M	O&M Capitalization (pre-rated)	Projected Total To Be functionalized
Departmental O&M								
Group	Item							
Office of General Manager	Office of General Manager	6,913,197	1,000,000	-	-	226,200	(289,049)	7,850,348
Office of General Manager	Board of Directors	1,515,902	105,000	-	-	564,190	(77,598)	2,107,494
Bay Delta Initiatives	Bay Delta Initiatives	5,525,660	3,455,700	-	-	3,518,076	(443,885)	12,055,551
External Affairs	Legislative Services	4,041,848	1,320,500	5,250	-	1,080,348	(229,337)	6,228,609
External Affairs	Media Communications Services	5,070,386	351,449	-	-	549,290	(212,049)	5,759,076
External Affairs	Manager, External Affairs/Special Projects	6,639,019	775,172	-	-	2,835,058	(363,975)	9,885,274
External Affairs	Conservation & Community Services	3,838,821	1,050,500	-	-	1,091,650	(212,718)	5,777,253
Human Resources	Office of the Manager	12,043,795	2,180,692	-	-	2,006,325	(576,395)	15,654,418
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	8,305,151	245,000	3,000,000	-	251,715	(419,112)	11,382,754
Water Systems Operations	Office of the Manager, Treatment Section	855,353	-	-	-	51,930	(32,220)	875,063
Water Systems Operations	Office of the Manager, Operations Support Services	427,676	110,000	-	-	693,500	(43,722)	1,187,454
Water Systems Operations	Operations Support Services	1,677,544	323,000	6,500	-	275,350	(81,053)	2,201,341
Water Systems Operations	Desert Region / C&D CRA	7,146,152	195,000	45,600	-	812,750	(291,184)	7,908,318
Water Systems Operations	System Operations Unit	27,049,712	451,300	198,000	13,800	6,770,483	(1,224,584)	33,258,711
Water Systems Operations	Power Operations and Planning	7,696,700	69,700	66,580	-	1,892,461	(334,374)	9,380,068
Water Systems Operations	Operations Planning & Programs Unit	3,224,757	223,000	-	-	443,500	(135,188)	3,753,069
Water Systems Operations	Treatment Jensen	2,024,585	-	-	-	146,988	(77,118)	2,094,455
Water Systems Operations	Treatment Skinner	11,836,690	342,000	1,859,640	5,294,053	953,857	(701,630)	19,584,610
Water Systems Operations	Treatment Weymouth	11,355,450	223,600	2,994,449	6,201,492	551,864	(744,381)	20,593,474
Water Systems Operations	Treatment Mills	10,774,027	244,242	900,965	2,216,092	660,117	(528,079)	14,267,365
Water Systems Operations	Treatment Skinner	10,562,878	144,070	2,127,753	3,759,531	605,099	(601,087)	16,598,243
Water Systems Operations	Water Quality Section	12,326,929	113,000	1,619,124	5,491,193	553,189	(754,192)	19,379,244
Water Systems Operations	C&D, Eastern Unit	22,642,690	3,296,696	461,000	-	3,458,755	(1,060,334)	28,797,807
Water Systems Operations	C&D, Western Unit	15,069,220	2,729,100	1,799,700	-	2,683,684	(791,276)	21,490,427
Water Systems Operations	CSS, Manufacturing Services Unit	12,670,814	1,525,000	2,985,705	-	1,751,990	(672,374)	18,261,135
Water Systems Operations	Environmental Health & Safety Section	7,820,904	223,700	238,100	-	547,800	(313,521)	8,514,983
Water Systems Operations	CSS, Fleet Services Unit	12,663,609	1,280,591	1,400,000	-	1,431,825	(595,757)	16,180,269
Water Systems Operations	CSS, Power Support Unit	7,840,347	455,100	13,100	-	5,171,000	(478,691)	13,000,856
Water Systems Operations	Office of the Manager, Operations & Planning Section	8,303,288	315,500	60,000	-	860,450	(338,868)	9,203,370
Water Systems Operations	Security Team & Security Management	745,910	23,000	-	-	81,922	(30,215)	820,617
Water Systems Operations	Office of the Manager	-	-	-	-	-	-	-
Sustainability, Resilience & Innovation	Office of the Manager	6,150,206	3,830,000	-	-	338,574	(366,444)	9,952,336
Diversity, Equity & Inclusion	Office of the Manager	1,036,727	400,000	-	-	42,540	(52,532)	1,426,735
Equal Employment Opportunity	Office of the Manager	1,629,751	400,000	-	-	18,820	(72,750)	1,975,822
Office of the Chief Financial Officer	Office of the Manager	13,575,961	1,780,900	-	-	14,850,102	(1,065,619)	28,941,344
Business Technology	Office of the Manager	-	-	-	-	-	-	-
Engineering Services	Administrative Services	38,863,302	8,801,000	85,000	-	3,068,400	(1,804,658)	49,013,044
Business Technology	Information Technology	18,951,861	12,671,100	-	-	2,732,590	(1,220,048)	33,135,504
Business Technology	Resource Planning & Development	33,621,556	5,414,500	-	-	11,937,544	(1,810,194)	49,163,406
Water Resources Management	Resource Implementation	4,251,421	1,020,000	-	-	441,907	(202,894)	5,510,434
Water Resources Management	Office of the Group Manager	10,902,237	1,537,800	-	-	5,098,764	(622,845)	13,915,956
Ethics Office	Office of the Group Manager	2,506,605	75,000	-	-	75,090	(94,346)	2,562,350
Real Property	Real Property	1,833,374	270,369	-	-	80,460	(77,566)	2,106,637
General Counsel	General Counsel	12,205,062	9,962,125	1,742,000	-	6,537,110	(1,081,221)	29,365,077
General Auditor	General Auditor	13,057,727	2,810,000	-	-	549,000	(582,997)	15,833,730
Total Departmental O&M		411,326,600	72,255,406	21,606,466	22,976,160	88,279,767	(21,891,413)	594,553,066
GENERAL DISTRICT REQUIREMENTS								
State Water Contract*								
Supply - O&M								110,115,149
Supply - Capital								80,437,139
Power - O&M & Off-Ag Capital								211,574,465
Power - Capital (less Off-Ag)								(4,981,305)
Transmission - Capital - Commodity, Demand, & Standby								60,506,317
Transmission - O&M - Commodity only								194,057,356
Delta Conveyance - Other								30,000,000
Total State Water Contract								681,709,121
Colorado River Aqueduct Power Costs								105,857,041
Supply Programs (cash funded portion)								66,659,522
Demand Management (cash funded portion)								
Local Resources Program								22,175,417
Future Supply Actions & Stormwater Pilot								3,639,900
Conservation Program (cash funded portion)								25,000,000
Total Demand Management Costs								50,815,317
Capital Financing								
Revenue Bond Debt Service net of BABs Interest Subsidy Payment								283,264,623
G.O. Bond Debt Service								1,968,750
Debt Administration								2,790,098
Bond Deleverage								
PAYGO								135,000,000
Total Capital Financing Costs								423,023,470
Other Operating Costs								
Operating Equipment								9,394,884
Succession Planning Labor Pool								5,000,000
OPEB/PEPS Pre-Funding								-
Total Other Operating Costs								14,394,884
Increase/(Decrease) in Required Reserves								11,000,000
Total General District Requirements								1,353,459,356
REQUIREMENTS BEFORE OFFSETS:								1,948,012,422
Revenue Offsets								
Property Taxes - MWD Portion of SWC GO Debt Service								564,249
Property Taxes - MWD GO Debt Service								1,968,750
Interest on Investments								6,421,762
Hydro-Power Revenue								12,611,274
CRA Power Revenue								3,376,627
Wadsworth Pumping Plant (DVL) Power Revenue								679,733
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)								42,991,971
Misc. allocated to supply (PVID Lease)								5,930,280
Property Taxes - SWC								160,551,544
Revenue Reserve used for Revenue Bonds - I&P								-
Amortization								-
Total Revenue Offsets								235,096,190
NET REVENUE REQUIREMENTS:								1,712,916,232

NET REVENUE REQUIREMENTS:						
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Departmental O&M

Group	Item
Office of General Manager	Board of Directors
Office of General Manager	Bay Delta Initiatives
External Affairs	Legislative Services
External Affairs	Media Communications Services
External Affairs	Manager, External Affairs/Special P
External Affairs	Conservation & Community Service
Human Resources	Office of the Manager
Water Systems Operations	Office of the Manager, Conveyance
Water Systems Operations	Office of the Manager, Treatment S
Water Systems Operations	Operations Support Services
Water Systems Operations	Desert Region / C&D CRA
Water Systems Operations	System Operations Unit
Water Systems Operations	Power Operations and Planning
Water Systems Operations	Operations Planning & Programs U
Water Systems Operations	Treatment Jensen
Water Systems Operations	Treatment Diemer
Water Systems Operations	Treatment Mills
Water Systems Operations	Treatment Skinner
Water Systems Operations	Treatment Weymouth
Water Systems Operations	Water Quality Section
Water Systems Operations	C&D, Eastern Unit
Water Systems Operations	C&D, Western Unit
Water Systems Operations	OSS, Manufacturing Services Unit
Water Systems Operations	Environmental Health & Safety Sect
Water Systems Operations	OSS, Fleet Services Unit
Water Systems Operations	OSS, Power Support Unit
Water Systems Operations	Office of the Manager, Operations &
Water Systems Operations	Security Team & Security Manag
Sustainability, Resilience & Inno	
Diversity, Equity & Inclusion	
Equal Employment Opportunity	
Office of the Chief Financial Officer	
Business Technology	Office of Manager
Engineering Services	
Business Technology	Administrative Services
Business Technology	Information Technology
Water Resources Management	Resource Planning & Development
Water Resources Management	Resource Implementation
Water Resources Management	Office of the Group Manager
Ethics Office	
Real Property	
General Counsel	
General Auditor	
Total Departmental O&M	

Water Supply			Conveyance & Aqueduct						Storage				Treatment					Distribution		Demand Management	Hydro-Electric	Administrative & General	Total \$ Functionalized
CRA	SWP	Other Subsv	CRA Power	CRA All Other	SWP Power	SWP All Other	Other Conv. & Aqueduct	Emergency	Drought	Regulatory	Power	Jensen	Weymouth	Diemer	Mills	Skinner							
110,643	192,495	171,178	41,676	632,289		281,597	97,388																
						5,525,860																	
192,755	335,354	298,216	489,160	1,101,540		490,582	169,665	164,130	125,429	86,779		605,532	605,382	640,816	457,440	547,903	2,412,756	227,461	136,427	3,373,023	12,043,795		
153,480	153,480	153,480	98,681	1,316,385		82,825		24,000	24,000	24,000		600,834	618,560	583,471	562,412	554,778	2,679,955		170,736	528,308	8,305,151		
				434,125		30,829											357,963		20,186	855,353			
31,001	31,001	31,001	19,084	265,894		16,730		4,848	4,848	4,848		77,372	80,576	74,232	70,425	69,045	56,026		34,487	1,677,544	106,712		
				188,658								121,362	124,942	117,854	113,601	112,059	541,320						
				27,049,712								89,184	89,184	89,184	89,184	89,184	6,145,691		108,622	257,261	7,146,152		
																	7,696,700						
																	1,080,294		786,841		306,352		
																	1,550,606				11,836,690		
																	1,487,695				11,356,450		
																	9,362,630				10,774,027		
																	9,179,141				10,562,878		
																	1,614,828				12,326,929		

		Functionalization	Allocation Percentages					% Total
			Fixed			Variable		
			Demand	Commodity	Standby	Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		125,641	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Office of General Manager	Board of Directors	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Bay Delta Initiatives	Bay Delta Initiatives	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Legislative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Media Communications Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Manager, External Affairs/Special Projects	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Conservation & Community Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Human Resources		250,542	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager	210,355	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Treatment Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations Support Services	40,681	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Support Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Desert Region / C&D CRA	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	System Operations Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Power Operations and Planning	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Planning & Programs Unit	698,152	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Jensen	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Diemer	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Mills	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Skinner	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Weymouth	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Water Quality Section	3,868,505	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Eastern Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Western Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Manufacturing Services Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Environmental Health & Safety Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Fleet Services Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Power Support Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations & Planning Section	15,165	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Security Team & Security Management	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Sustainability, Resilience & Innovation		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Diversity, Equity & Inclusion		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Equal Employment Opportunity		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Office of the Chief Financial Officer		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Office of Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Engineering Services		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Administrative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Information Technology	786,837	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Planning & Development	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Implementation	2,552,618	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Office of the Group Manager	291,652	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Ethics Office		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Real Property		675,397	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
General Counsel		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
General Auditor		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Departmental O&M		9,515,545	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
GENERAL DISTRICT REQUIREMENTS								
State Water Contract*								
Supply - O&M		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Supply - Capital		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Power - O&M & Off-Aq Capital		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Power - Capital (less Off-Aq)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Transmission - Capital - Commodity, Demand, & Standby		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Transmission - O&M - Commodity only		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Supply		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Power		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Other		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total State Water Contract		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Colorado River Aqueduct Power Costs								
		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Supply Programs (cash funded portion)								
		47,197,861	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Demand Management (cash funded portion)								
Local Resources Program		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Future Supply Actions & Stormwater Pilot		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Conservation Program (cash funded portion)		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Demand Management Costs		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Capital Financing								
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
G.O. Bond Debt Service		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Debt Administration		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Bond Defeasance		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
PAYGO		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total Capital Financing Costs		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Other Operating Costs								
Operating Equipment		150,361	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Succession Planning Labor Pool		80,023	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
OPEB/PERS Pre-Funding		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Other Operating Costs		230,383	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Increase/(Decrease) in Required Reserves								
		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total General District Requirements								
		47,428,245	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
REQUIREMENTS BEFORE OFFSETS:								
		56,943,789	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Revenue Offsets								
Property Taxes - MWD Portion of SWC GO Debt Service		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Property Taxes - MWD GO Debt Service		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Interest on Investments		187,719	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Hydro-Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
CRA Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Wadsworth Pumping Plant (DVL) Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to supply (PVID Lease)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Property Taxes - SWC		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Revenue Reserve used for Revenue Bonds - I&P		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Annexation		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total Revenue Offsets		187,719	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
NET REVENUE REQUIREMENTS:								
		56,756,070	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

	Functionalization	Allocation Percentages					Total
		Demand	Fixed Commodity	Standby	Variable Commodity	Other	
Departmental O&M							
Group	Item						
Office of General Manager		125,641	-	125,641	-	-	125,641
Office of General Manager	Board of Directors	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-
Human Resources		250,542	-	250,542	-	-	250,542
Water Systems Operations	Office of the Manager	210,355	-	210,355	-	-	210,355
Water Systems Operations	Office of the Manager, Conveyance & Distribution S	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations Support Services	40,681	-	40,681	-	-	40,681
Water Systems Operations	Operations Support Services	-	-	-	-	-	-
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	698,152	-	698,152	-	-	698,152
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	3,868,505	-	3,868,505	-	-	3,868,505
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	-	-	-	-	-	-
Water Systems Operations	Environmental Health & Safety Section	-	-	-	-	-	-
Water Systems Operations	OSS, Fleet Services Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Power Support Unit	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations & Planning Secti	15,165	-	15,165	-	-	15,165
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-
Sustainability, Resilience & Innova		-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-
Office of the Chief Financial Office		-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-
Engineering Services		-	-	-	-	-	-
Business Technology	Administrative Services	-	-	-	-	-	-
Business Technology	Information Technology	786,837	-	786,837	-	-	786,837
Water Resources Management	Resource Planning & Development	-	-	-	-	-	-
Water Resources Management	Resource Implementation	2,552,618	-	2,552,618	-	-	2,552,618
Water Resources Management	Office of the Group Manager	291,652	-	291,652	-	-	291,652
Ethics Office		-	-	-	-	-	-
Real Property		675,397	-	675,397	-	-	675,397
General Counsel		-	-	-	-	-	-
General Auditor		-	-	-	-	-	-
Total Departmental O&M	-	9,515,545	-	9,515,545	-	-	9,515,545
GENERAL DISTRICT REQUIREMENTS							
State Water Contract*		-	-	-	-	-	-
Supply - O&M		-	-	-	-	-	-
Supply - Capital		-	-	-	-	-	-
Power - O&M & Off-Aq Capital		-	-	-	-	-	-
Power - Capital (less Off-Aq)		-	-	-	-	-	-
Transmission - Capital - Commodity, Demand, & Standby		-	-	-	-	-	-
Transmission - O&M - Commodity only		-	-	-	-	-	-
Delta Conveyance - Supply	-	-	-	-	-	-	-
Delta Conveyance - Power	-	-	-	-	-	-	-
Delta Conveyance - Other		-	-	-	-	-	-
Total State Water Contract		-	-	-	-	-	-
Colorado River Aqueduct Power Costs		-	-	-	-	-	-
Supply Programs (cash funded portion)	47,197,861	-	47,197,861	-	-	-	47,197,861
Demand Management (cash funded portion)	-	-	-	-	-	-	-
Local Resources Program		-	-	-	-	-	-
Future Supply Actions & Stormwater Pilot		-	-	-	-	-	-
Conservation Program (cash funded portion)		-	-	-	-	-	-
Total Demand Management Costs	-	-	-	-	-	-	-
Capital Financing		-	-	-	-	-	-
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		-	-	-	-	-	-
G.O. Bond Debt Service		-	-	-	-	-	-
Debt Administration		-	-	-	-	-	-
Bond Defeasance		-	-	-	-	-	-
PAYGO		-	-	-	-	-	-
Total Capital Financing Costs	-	-	-	-	-	-	-
Other Operating Costs		-	-	-	-	-	-
Operating Equipment	150,361	-	150,361	-	-	-	150,361
Succession Planning Labor Pool	80,023	-	80,023	-	-	-	80,023
OPEB/PERS Pre-Funding	-	-	-	-	-	-	-
Total Other Operating Costs	230,383	-	230,383	-	-	-	230,383
Increase/(Decrease) in Required Reserves	-	-	-	-	-	-	-
Total General District Requirements	47,428,245	-	47,428,245	-	-	-	47,428,245
REQUIREMENTS BEFORE OFFSETS:	56,943,789	-	56,943,789	-	-	-	56,943,789
Revenue Offsets		-	-	-	-	-	-
Property Taxes - MWD Portion of SWC GO Debt Service	-	-	-	-	-	-	-
Property Taxes - MWD GO Debt Service	-	-	-	-	-	-	-
Interest on Investments	187,719	-	187,719	-	-	-	187,719
Hydro-Power Revenue	-	-	-	-	-	-	-
CRA Power Revenue	-	-	-	-	-	-	-
Wadsworth Pumping Plant (DVL) Power Revenue	-	-	-	-	-	-	-
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)	-	-	-	-	-	-	-
Misc. allocated to supply (PVID Lease)	-	-	-	-	-	-	-
Property Taxes - SWC	-	-	-	-	-	-	-
Revenue Reserve used for Revenue Bonds - I&P	-	-	-	-	-	-	-
Annexation	-	-	-	-	-	-	-
Total Revenue Offsets	187,719	-	187,719	-	-	-	187,719
NET REVENUE REQUIREMENTS:	56,756,070	-	56,756,070	-	-	-	56,756,070

		Functionalization	Allocation Percentages					Total
			Fixed			Variable		
			Demand	Commodity	Standby	Commodity	Other	
Departmental O&M								
Group	Item							
Office of General Manager		110,643	-	110,643	-	-	-	110,643
Office of General Manager	Board of Directors	-	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-	-
Human Resources		192,755	-	192,755	-	-	-	192,755
Water Systems Operations	Office of the Manager	153,480	-	153,480	-	-	-	153,480
Water Systems Operations	Office of the Manager, Conveyance & Distribution Sec	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations Support Services	31,001	-	31,001	-	-	-	31,001
Water Systems Operations	Operations Support Services	-	-	-	-	-	-	-
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	674,862	-	674,862	-	-	-	674,862
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	3,041,668	-	3,041,668	-	-	-	3,041,668
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	-	-	-	-	-	-	-
Water Systems Operations	Environmental Health & Safety Section	-	-	-	-	-	-	-
Water Systems Operations	OSS, Fleet Services Unit	-	-	-	-	-	-	-
Water Systems Operations	OSS, Power Support Unit	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations & Planning Section	13,785	-	13,785	-	-	-	13,785
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-	-
Sustainability, Resilience & Innovati		-	-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-	-
Office of the Chief Financial Officer		-	-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-	-
Engineering Services		-	-	-	-	-	-	-
Business Technology	Administrative Services	-	-	-	-	-	-	-
Business Technology	Information Technology	538,097	-	538,097	-	-	-	538,097
Water Resources Management	Resource Planning & Development	-	-	-	-	-	-	-
Water Resources Management	Resource Implementation	1,645,147	-	1,645,147	-	-	-	1,645,147
Water Resources Management	Office of the Group Manager	285,307	-	285,307	-	-	-	285,307
Ethics Office		-	-	-	-	-	-	-
Real Property		280,716	-	280,716	-	-	-	280,716
General Counsel		-	-	-	-	-	-	-
General Auditor		-	-	-	-	-	-	-
Total Departmental O&M	-	6,967,462	-	6,967,462	-	-	-	6,967,462

		Functionalization	Allocation Percentages					% Total
			Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		218,589	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Office of General Manager	Board of Directors	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Bay Delta Initiatives	Bay Delta Initiatives	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Legislative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Media Communications Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Manager, External Affairs/Special Projects	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Conservation & Community Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Human Resources		435,890	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager	210,355	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Treatment Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations Support Services	40,681	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Support Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Desert Region / C&D CRA	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	System Operations Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Power Operations and Planning	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Planning & Programs Unit	698,152	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Jensen	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Diemer	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Mills	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Skinner	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Weymouth	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Water Quality Section	3,868,505	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Eastern Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Western Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Manufacturing Services Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Environmental Health & Safety Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Fleet Services Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Power Support Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations & Planning Section	15,165	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Security Team & Security Management	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Sustainability, Resilience & Innovation		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Diversity, Equity & Inclusion		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Equal Employment Opportunity		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Office of the Chief Financial Officer		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Office of Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Engineering Services		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Administrative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Information Technology	1,368,932	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Planning & Development	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Implementation	7,676,461	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Office of the Group Manager	877,082	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Ethics Office		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Real Property		1,145,238	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
General Counsel		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
General Auditor		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Departmental O&M		16,555,050	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
GENERAL DISTRICT REQUIREMENTS								
State Water Contract*								
Supply - O&M		110,115,149	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Supply - Capital		80,437,139	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Power - O&M & Off-Aq Capital		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Power - Capital (less Off-Aq)		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Transmission - Capital - Commodity, Demand, & Standby		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Transmission - O&M - Commodity only		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Delta Conveyance - Supply		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Delta Conveyance - Power		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Delta Conveyance - Other		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total State Water Contract		190,552,288	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Colorado River Aqueduct Power Costs								
		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Supply Programs (cash funded portion)								
		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Demand Management (cash funded portion)								
Local Resources Program		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Future Supply Actions & Stormwater Pilot		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Conservation Program (cash funded portion)		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Demand Management Costs		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Capital Financing								
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
G.O. Bond Debt Service		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Debt Administration		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Bond Defeasance		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
PAYGO		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total Capital Financing Costs		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Other Operating Costs								
Operating Equipment		261,596	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Succession Planning Labor Pool		139,223	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
OPEB/PERS Pre-Funding		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Other Operating Costs		400,819	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Increase/(Decrease) in Required Reserves								
		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total General District Requirements								
		190,953,107	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
REQUIREMENTS BEFORE OFFSETS:								
		207,508,157	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Revenue Offsets								
Property Taxes - MWD Portion of SWC GO Debt Service		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Property Taxes - MWD GO Debt Service		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Interest on Investments		684,065	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Hydro-Power Revenue		-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
CRA Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Wadsworth Pumping Plant (DVL) Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to supply (PVID Lease)		5,930,280	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Property Taxes - SWC		46,943,434	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Revenue Reserve used for Revenue Bonds - I&P		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Annexation		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total Revenue Offsets		53,557,779	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
NET REVENUE REQUIREMENTS:								
-		153,950,377	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

	Functionalization	Allocation Percentages					Total
		Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M							
Group	Item						
Office of General Manager	Office of General Manager	218,589	-	218,589	-	-	218,589
Office of General Manager	Board of Directors	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-
Human Resources	Human Resources	435,890	-	435,890	-	-	435,890
Water Systems Operations	Office of the Manager	210,355	-	210,355	-	-	210,355
Water Systems Operations	Office of the Manager, Conveyance & Distribution S	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations Support Services	40,681	-	40,681	-	-	40,681
Water Systems Operations	Operations Support Services	-	-	-	-	-	-
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	698,152	-	698,152	-	-	698,152
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	3,868,505	-	3,868,505	-	-	3,868,505
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	-	-	-	-	-	-
Water Systems Operations	Environmental Health & Safety Section	-	-	-	-	-	-
Water Systems Operations	OSS, Fleet Services Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Power Support Unit	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations & Planning Secti	15,165	-	15,165	-	-	15,165
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-
Sustainability, Resilience & Inn	Sustainability, Resilience & Inn	-	-	-	-	-	-
Diversity, Equity & Inclusion	Diversity, Equity & Inclusion	-	-	-	-	-	-
Equal Employment Opportunity	Equal Employment Opportunity	-	-	-	-	-	-
Office of the Chief Financial O	Office of the Chief Financial O	-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-
Engineering Services	Engineering Services	-	-	-	-	-	-
Business Technology	Administrative Services	-	-	-	-	-	-
Business Technology	Information Technology	1,368,932	-	1,368,932	-	-	1,368,932
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	7,676,461	-	7,676,461	-	-	7,676,461
Water Resources Managemen	Office of the Group Manager	877,082	-	877,082	-	-	877,082
Ethics Office	Ethics Office	-	-	-	-	-	-
Real Property	Real Property	1,145,238	-	1,145,238	-	-	1,145,238
General Counsel	General Counsel	-	-	-	-	-	-
General Auditor	General Auditor	-	-	-	-	-	-
Total Departmental O&M	-	16,555,050	-	16,555,050	-	-	16,555,050
GENERAL DISTRICT REQUIREMENTS		-	-	-	-	-	-
State Water Contract*		-	-	-	-	-	-
Supply - O&M	Supply - O&M	110,115,149	-	110,115,149	-	-	110,115,149
Supply - Capital	Supply - Capital	80,437,139	-	80,437,139	-	-	80,437,139
Power - O&M & Off-Aq Capital	Power - O&M & Off-Aq Capital	-	-	-	-	-	-
Power - Capital (less Off-Aq)	Power - Capital (less Off-Aq)	-	-	-	-	-	-
Transmission - Capital - Commodity, Demand, & Standby	Transmission - Capital - Commodity, Demand, & Standby	-	-	-	-	-	-
Transmission - O&M - Commodity only	Transmission - O&M - Commodity only	-	-	-	-	-	-
Delta Conveyance - Supply	Delta Conveyance - Supply	-	-	-	-	-	-
Delta Conveyance - Power	Delta Conveyance - Power	-	-	-	-	-	-
Delta Conveyance - Other	Delta Conveyance - Other	-	-	-	-	-	-
Total State Water Contract		190,552,288	-	190,552,288	-	-	190,552,288
Colorado River Aqueduct Power Costs		-	-	-	-	-	-
Supply Programs (cash funded portion)		-	-	-	-	-	-
Demand Management (cash funded portion)		-	-	-	-	-	-
Local Resources Program	Local Resources Program	-	-	-	-	-	-
Future Supply Actions & Stormwater Pilot	Future Supply Actions & Stormwater Pilot	-	-	-	-	-	-
Conservation Program (cash funded portion)	Conservation Program (cash funded portion)	-	-	-	-	-	-
Total Demand Management Costs		-	-	-	-	-	-
Capital Financing		-	-	-	-	-	-
Revenue Bond Debt Service net of BABs Interest Subsidy Payment	Revenue Bond Debt Service net of BABs Interest Subsidy Payment	-	-	-	-	-	-
G.O. Bond Debt Service	G.O. Bond Debt Service	-	-	-	-	-	-
Debt Administration	Debt Administration	-	-	-	-	-	-
Bond Defeasance	Bond Defeasance	-	-	-	-	-	-
PAYGO	PAYGO	-	-	-	-	-	-
Total Capital Financing Costs		-	-	-	-	-	-
Other Operating Costs		-	-	-	-	-	-
Operating Equipment	Operating Equipment	261,596	-	261,596	-	-	261,596
Succession Planning Labor Pool	Succession Planning Labor Pool	139,223	-	139,223	-	-	139,223
OPEB/PERS Pre-Funding	OPEB/PERS Pre-Funding	-	-	-	-	-	-
Total Other Operating Costs		400,819	-	400,819	-	-	400,819
Increase/(Decrease) in Required Reserves		-	-	-	-	-	-
Total General District Requirements		190,953,107	-	190,953,107	-	-	190,953,107
REQUIREMENTS BEFORE OFFSETS:		207,508,157	-	207,508,157	-	-	207,508,157
Revenue Offsets		-	-	-	-	-	-
Property Taxes - MWD Portion of SWC GO Debt Service	Property Taxes - MWD Portion of SWC GO Debt Service	-	-	-	-	-	-
Property Taxes - MWD GO Debt Service	Property Taxes - MWD GO Debt Service	-	-	-	-	-	-
Interest on Investments	Interest on Investments	684,065	-	684,065	-	-	684,065
Hydro-Power Revenue	Hydro-Power Revenue	-	-	-	-	-	-
CRA Power Revenue	CRA Power Revenue	-	-	-	-	-	-
Wadsworth Pumping Plant (DVL) Power Revenue	Wadsworth Pumping Plant (DVL) Power Revenue	-	-	-	-	-	-
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)	Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)	-	-	-	-	-	-
Misc. allocated to supply (PVID Lease)	Misc. allocated to supply (PVID Lease)	5,930,280	-	5,930,280	-	-	5,930,280
Property Taxes - SWC	Property Taxes - SWC	46,943,434	-	46,943,434	-	-	46,943,434
Revenue Reserve used for Revenue Bonds - I&P	Revenue Reserve used for Revenue Bonds - I&P	-	-	-	-	-	-
Annexation	Annexation	-	-	-	-	-	-
Total Revenue Offsets		53,557,779	-	53,557,779	-	-	53,557,779
NET REVENUE REQUIREMENTS:		153,950,377	-	153,950,377	-	-	153,950,377

		Functionalization	Allocation Percentages					Total
			Fixed			Variable		
			Demand	Commodity	Standby	Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		192,495	-	192,495	-	-	-	192,495
Office of General Manager	Board of Directors	-	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-	-
Human Resources		335,354	-	335,354	-	-	-	335,354
Water Systems Operations	Office of the Manager	153,480	-	153,480	-	-	-	153,480
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations Support Services	31,001	-	31,001	-	-	-	31,001
Water Systems Operations	Operations Support Services	-	-	-	-	-	-	-
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	674,862	-	674,862	-	-	-	674,862
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	3,041,668	-	3,041,668	-	-	-	3,041,668
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	-	-	-	-	-	-	-
Water Systems Operations	Environmental Health & Safety Section	-	-	-	-	-	-	-
Water Systems Operations	OSS, Fleet Services Unit	-	-	-	-	-	-	-
Water Systems Operations	OSS, Power Support Unit	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations & Planning Section	13,785	-	13,785	-	-	-	13,785
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-	-
Sustainability, Resilience & Inr		-	-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-	-
Engineering Services		-	-	-	-	-	-	-
Business Technology	Administrative Services	-	-	-	-	-	-	-
Business Technology	Information Technology	936,176	-	936,176	-	-	-	936,176
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	4,947,435	-	4,947,435	-	-	-	4,947,435
Water Resources Managemen	Office of the Group Manager	858,001	-	858,001	-	-	-	858,001
Ethics Office		-	-	-	-	-	-	-
Real Property		475,997	-	475,997	-	-	-	475,997
General Counsel		-	-	-	-	-	-	-
General Auditor		-	-	-	-	-	-	-
Total Departmental O&M		11,660,254	-	11,660,254	-	-	-	11,660,254

		Functionalization	Allocation Percentages					% Total
			Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		194,382	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Office of General Manager	Board of Directors	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Bay Delta Initiatives	Bay Delta Initiatives	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Legislative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Media Communications Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Manager, External Affairs/Special Projects	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Conservation & Community Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Human Resources		387,619	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager	210,355	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Treatment Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations Support Services	40,681	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Support Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Desert Region / C&D CRA	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	System Operations Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Power Operations and Planning	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Planning & Programs Unit	698,152	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Jensen	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Diemer	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Mills	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Skinner	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Weymouth	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Water Quality Section	3,868,505	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Eastern Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Western Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Manufacturing Services Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Environmental Health & Safety Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Fleet Services Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Power Support Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations & Planning Section	15,165	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Security Team & Security Management	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Sustainability, Resilience & Innovation		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Diversity, Equity & Inclusion		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Equal Employment Opportunity		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Office of the Chief Financial Officer		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Office of Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Engineering Services		1,931,114	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Administrative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Information Technology	1,217,334	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Planning & Development	4,777,546	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Implementation	749,377	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Office of the Group Manager	631,484	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Ethics Office		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Real Property		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
General Counsel		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
General Auditor		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Departmental O&M		14,721,714	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
GENERAL DISTRICT REQUIREMENTS								
State Water Contract*								
Supply - O&M		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Supply - Capital		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Power - O&M & Off-Aq Capital		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Power - Capital (less Off-Aq)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Transmission - Capital - Commodity, Demand, & Standby		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Transmission - O&M - Commodity only		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Supply		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Power		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Other		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total State Water Contract		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Colorado River Aqueduct Power Costs								
		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Supply Programs (cash funded portion)								
		1,250,000	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Demand Management (cash funded portion)								
Local Resources Program		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Future Supply Actions & Stormwater Pilot		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Conservation Program (cash funded portion)		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Demand Management Costs		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Capital Financing								
		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		11,160,626	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
G.O. Bond Debt Service		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Debt Administration		109,930	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Bond Defeasance		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
PAYGO		5,319,000	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Capital Financing Costs		16,589,556	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Other Operating Costs								
Operating Equipment		232,627	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Succession Planning Labor Pool		123,805	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
OPEB/PERS Pre-Funding		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Other Operating Costs		356,431	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Increase/(Decrease) in Required Reserves								
		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total General District Requirements								
		18,195,987	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
REQUIREMENTS BEFORE OFFSETS:								
		32,917,702	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Revenue Offsets								
Property Taxes - MWD Portion of SWC GO Debt Service		-	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Property Taxes - MWD GO Debt Service		-	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Interest on Investments		108,516	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Hydro-Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
CRA Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Wadsworth Pumping Plant (DVL) Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to supply (PVID Lease)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Property Taxes - SWC		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Revenue Reserve used for Revenue Bonds - I&P		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Annexation		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total Revenue Offsets		108,516	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
NET REVENUE REQUIREMENTS:								
	-	32,809,186	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

	Functionalization	Allocation Percentages					Total
		Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M							
Group	Item						
Office of General Manager	Office of General Manager	194,382	-	194,382	-	-	194,382
Office of General Manager	Board of Directors	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-
Human Resources	Human Resources	387,619	-	387,619	-	-	387,619
Water Systems Operations	Office of the Manager	210,355	-	210,355	-	-	210,355
Water Systems Operations	Office of the Manager, Conveyance & Distribution S	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations Support Services	40,681	-	40,681	-	-	40,681
Water Systems Operations	Operations Support Services	-	-	-	-	-	-
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	698,152	-	698,152	-	-	698,152
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	3,868,505	-	3,868,505	-	-	3,868,505
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	-	-	-	-	-	-
Water Systems Operations	Environmental Health & Safety Section	-	-	-	-	-	-
Water Systems Operations	OSS, Fleet Services Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Power Support Unit	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations & Planning Secti	15,165	-	15,165	-	-	15,165
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-
Sustainability, Resilience & Inn	Sustainability, Resilience & Inn	-	-	-	-	-	-
Diversity, Equity & Inclusion	Diversity, Equity & Inclusion	-	-	-	-	-	-
Equal Employment Opportunity	Equal Employment Opportunity	-	-	-	-	-	-
Office of the Chief Financial O	Office of the Chief Financial O	-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-
Engineering Services	Engineering Services	1,931,114	-	1,931,114	-	-	1,931,114
Business Technology	Administrative Services	-	-	-	-	-	-
Business Technology	Information Technology	1,217,334	-	1,217,334	-	-	1,217,334
Water Resources Managemen	Resource Planning & Development	4,777,546	-	4,777,546	-	-	4,777,546
Water Resources Managemen	Resource Implementation	749,377	-	749,377	-	-	749,377
Water Resources Managemen	Office of the Group Manager	631,484	-	631,484	-	-	631,484
Ethics Office	Ethics Office	-	-	-	-	-	-
Real Property	Real Property	-	-	-	-	-	-
General Counsel	General Counsel	-	-	-	-	-	-
General Auditor	General Auditor	-	-	-	-	-	-
Total Departmental O&M		14,721,714	-	14,721,714	-	-	14,721,714
GENERAL DISTRICT REQUIREMENTS		-	-	-	-	-	-
State Water Contract*		-	-	-	-	-	-
Supply - O&M	Supply - O&M	-	-	-	-	-	-
Supply - Capital	Supply - Capital	-	-	-	-	-	-
Power - O&M & Off-Aq Capital	Power - O&M & Off-Aq Capital	-	-	-	-	-	-
Power - Capital (less Off-Aq)	Power - Capital (less Off-Aq)	-	-	-	-	-	-
Transmission - Capital - Commodity, Demand, & Standby	Transmission - Capital - Commodity, Demand, & Standby	-	-	-	-	-	-
Transmission - O&M - Commodity only	Transmission - O&M - Commodity only	-	-	-	-	-	-
Delta Conveyance - Supply	Delta Conveyance - Supply	-	-	-	-	-	-
Delta Conveyance - Power	Delta Conveyance - Power	-	-	-	-	-	-
Delta Conveyance - Other	Delta Conveyance - Other	-	-	-	-	-	-
Total State Water Contract		-	-	-	-	-	-
Colorado River Aqueduct Power Costs		-	-	-	-	-	-
Supply Programs (cash funded portion)		1,250,000	-	1,250,000	-	-	1,250,000
Demand Management (cash funded portion)		-	-	-	-	-	-
Local Resources Program	Local Resources Program	-	-	-	-	-	-
Future Supply Actions & Stormwater Pilot	Future Supply Actions & Stormwater Pilot	-	-	-	-	-	-
Conservation Program (cash funded portion)	Conservation Program (cash funded portion)	-	-	-	-	-	-
Total Demand Management Costs		-	-	-	-	-	-
Capital Financing		-	-	-	-	-	-
Revenue Bond Debt Service net of BABs Interest Subsidy Payment	Revenue Bond Debt Service net of BABs Interest Subsidy Payment	11,160,626	-	11,160,626	-	-	11,160,626
G.O. Bond Debt Service	G.O. Bond Debt Service	-	-	-	-	-	-
Debt Administration	Debt Administration	109,930	-	109,930	-	-	109,930
Bond Defeasance	Bond Defeasance	-	-	-	-	-	-
PAYGO	PAYGO	5,319,000	-	5,319,000	-	-	5,319,000
Total Capital Financing Costs		16,589,556	-	16,589,556	-	-	16,589,556
Other Operating Costs		-	-	-	-	-	-
Operating Equipment	Operating Equipment	232,627	-	232,627	-	-	232,627
Succession Planning Labor Pool	Succession Planning Labor Pool	123,805	-	123,805	-	-	123,805
OPEB/PERS Pre-Funding	OPEB/PERS Pre-Funding	-	-	-	-	-	-
Total Other Operating Costs		356,431	-	356,431	-	-	356,431
Increase/(Decrease) in Required Reserves		-	-	-	-	-	-
Total General District Requirements		18,195,987	-	18,195,987	-	-	18,195,987
REQUIREMENTS BEFORE OFFSETS:		32,917,702	-	32,917,702	-	-	32,917,702
Revenue Offsets		-	-	-	-	-	-
Property Taxes - MWD Portion of SWC GO Debt Service	Property Taxes - MWD Portion of SWC GO Debt Service	-	-	-	-	-	-
Property Taxes - MWD GO Debt Service	Property Taxes - MWD GO Debt Service	-	-	-	-	-	-
Interest on Investments	Interest on Investments	108,516	-	108,516	-	-	108,516
Hydro-Power Revenue	Hydro-Power Revenue	-	-	-	-	-	-
CRA Power Revenue	CRA Power Revenue	-	-	-	-	-	-
Wadsworth Pumping Plant (DVL) Power Revenue	Wadsworth Pumping Plant (DVL) Power Revenue	-	-	-	-	-	-
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)	Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)	-	-	-	-	-	-
Misc. allocated to supply (PVID Lease)	Misc. allocated to supply (PVID Lease)	-	-	-	-	-	-
Property Taxes - SWC	Property Taxes - SWC	-	-	-	-	-	-
Revenue Reserve used for Revenue Bonds - I&P	Revenue Reserve used for Revenue Bonds - I&P	-	-	-	-	-	-
Annexation	Annexation	-	-	-	-	-	-
Total Revenue Offsets		108,516	-	108,516	-	-	108,516
NET REVENUE REQUIREMENTS:		32,809,186	-	32,809,186	-	-	32,809,186

		Functionalization	Allocation Percentages					Total
			Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		171,178	-	171,178	-	-	-	171,178
Office of General Manager	Board of Directors	-	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-	-
Human Resources		298,216	-	298,216	-	-	-	298,216
Water Systems Operations	Office of the Manager	153,480	-	153,480	-	-	-	153,480
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations Support Services	31,001	-	31,001	-	-	-	31,001
Water Systems Operations	Operations Support Services	-	-	-	-	-	-	-
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	674,862	-	674,862	-	-	-	674,862
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	3,041,668	-	3,041,668	-	-	-	3,041,668
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	-	-	-	-	-	-	-
Water Systems Operations	Environmental Health & Safety Section	-	-	-	-	-	-	-
Water Systems Operations	OSS, Fleet Services Unit	-	-	-	-	-	-	-
Water Systems Operations	OSS, Power Support Unit	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations & Planning Section	13,785	-	13,785	-	-	-	13,785
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-	-
Sustainability, Resilience & Inr		-	-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-	-
Equal Employment Opportunit		-	-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-	-
Engineering Services		1,531,214	-	1,531,214	-	-	-	1,531,214
Business Technology	Administrative Services	-	-	-	-	-	-	-
Business Technology	Information Technology	832,503	-	832,503	-	-	-	832,503
Water Resources Managemen	Resource Planning & Development	3,685,982	-	3,685,982	-	-	-	3,685,982
Water Resources Managemen	Resource Implementation	482,969	-	482,969	-	-	-	482,969
Water Resources Managemen	Office of the Group Manager	617,746	-	617,746	-	-	-	617,746
Ethics Office		-	-	-	-	-	-	-
Real Property		-	-	-	-	-	-	-
General Counsel		-	-	-	-	-	-	-
General Auditor		-	-	-	-	-	-	-
Total Departmental O&M	-	11,534,603	-	11,534,603	-	-	-	11,534,603

		Functionalization	Allocation Percentages					% Total
			Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
	Office of General Manager	47,326	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Office of General Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Bay Delta Initiatives	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	External Affairs	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	External Affairs	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	External Affairs	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	External Affairs	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Human Resources	94,373	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	102,033	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	19,733	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	1,223,501	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%

	Functionalization	Allocation Percentages					Total
		Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M							
Group	Item						
Office of General Manager		47,326	-	47,326	-	-	47,326
Office of General Manager	Board of Directors	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-
Human Resources		94,373	-	94,373	-	-	94,373
Water Systems Operations	Office of the Manager	102,033	-	102,033	-	-	102,033
Water Systems Operations	Office of the Manager, Conveyance & Distribution S	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations Support Services	19,733	-	19,733	-	-	19,733
Water Systems Operations	Operations Support Services	-	-	-	-	-	-
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	1,223,501	-	1,223,501	-	-	1,223,501
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	-	-	-	-	-	-
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	-	-	-	-	-	-
Water Systems Operations	Environmental Health & Safety Section	-	-	-	-	-	-
Water Systems Operations	OSS, Fleet Services Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Power Support Unit	832,905	-	832,905	-	-	832,905
Water Systems Operations	Office of the Manager, Operations & Planning Secti	7,356	-	7,356	-	-	7,356
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-
Sustainability, Resilience & Inn		-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-
Engineering Services		960,656	-	960,656	-	-	960,656
Business Technology	Administrative Services	-	-	-	-	-	-
Business Technology	Information Technology	296,382	-	296,382	-	-	296,382
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	-	-	-	-	-	-
Water Resources Managemen	Office of the Group Manager	-	-	-	-	-	-
Ethics Office		-	-	-	-	-	-
Real Property		-	-	-	-	-	-
General Counsel		-	-	-	-	-	-
General Auditor		-	-	-	-	-	-
Total Departmental O&M	-	3,584,263	-	3,584,263	-	-	3,584,263
GENERAL DISTRICT REQUIREMENTS							
		-	-	-	-	-	-
State Water Contract*							
Supply - O&M		-	-	-	-	-	-
Supply - Capital		-	-	-	-	-	-
Power - O&M & Off-Aq Capital		-	-	-	-	-	-
Power - Capital (less Off-Aq)		-	-	-	-	-	-
Transmission - Capital - Commodity, Demand, & Standby		-	-	-	-	-	-
Transmission - O&M - Commodity only		-	-	-	-	-	-
Delta Conveyance - Supply		-	-	-	-	-	-
Delta Conveyance - Power		-	-	-	-	-	-
Delta Conveyance - Other		-	-	-	-	-	-
Total State Water Contract		-	-	-	-	-	-
Colorado River Aqueduct Power Costs	105,857,041	-	-	-	105,857,041	-	105,857,041
Supply Programs (cash funded portion)	-	-	-	-	-	-	-
Demand Management (cash funded portion)	-	-	-	-	-	-	-
Local Resources Program	-	-	-	-	-	-	-
Future Supply Actions & Stormwater Pilot	-	-	-	-	-	-	-
Conservation Program (cash funded portion)	-	-	-	-	-	-	-
Total Demand Management Costs	-	-	-	-	-	-	-
Capital Financing	-	-	-	-	-	-	-
Revenue Bond Debt Service net of BABs Interest Subsidy Payment	5,551,987	-	5,551,987	-	-	-	5,551,987
G.O. Bond Debt Service	-	-	-	-	-	-	-
Debt Administration	54,686	-	54,686	-	-	-	54,686
Bond Defeasance	-	-	-	-	-	-	-
PAYGO	2,646,000	-	2,646,000	-	-	-	2,646,000
Total Capital Financing Costs	8,252,673	-	8,252,673	-	-	-	8,252,673
Other Operating Costs	-	-	-	-	-	-	-
Operating Equipment	56,637	-	56,637	-	-	-	56,637
Succession Planning Labor Pool	30,143	-	30,143	-	-	-	30,143
OPEB/PERS Pre-Funding	-	-	-	-	-	-	-
Total Other Operating Costs	86,780	-	86,780	-	-	-	86,780
Increase/(Decrease) in Required Reserves	-	-	-	-	-	-	-
Total General District Requirements	114,196,493	-	8,339,452	-	105,857,041	-	114,196,493
REQUIREMENTS BEFORE OFFSETS:	117,780,756	-	11,923,715	-	105,857,041	-	117,780,756
Revenue Offsets							
Property Taxes - MWD Portion of SWC GO Debt Service	-	-	-	-	-	-	-
Property Taxes - MWD GO Debt Service	-	-	-	-	-	-	-
Interest on Investments	388,273	-	-	-	388,273	-	388,273
Hydro-Power Revenue	-	-	-	-	-	-	-
CRA Power Revenue	3,376,627	-	-	-	3,376,627	-	3,376,627
Wadsworth Pumping Plant (DVL) Power Revenue	-	-	-	-	-	-	-
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)	-	-	-	-	-	-	-
Misc. allocated to supply (PVID Lease)	-	-	-	-	-	-	-
Property Taxes - SWC	-	-	-	-	-	-	-
Revenue Reserve used for Revenue Bonds - I&P	-	-	-	-	-	-	-
Annexation	-	-	-	-	-	-	-
Total Revenue Offsets	3,764,899	-	-	-	3,764,899	-	3,764,899
NET REVENUE REQUIREMENTS:	114,015,857	-	11,923,715	-	102,092,142	-	114,015,857

	Functionalization	Allocation Percentages					Total
		Fixed			Variable		
		Demand	Commodity	Standby	Commodity	Hydroelectric	
Departmental O&M							
Group	Item						
Office of General Manager		41,676	-	41,676	-	-	41,676
Office of General Manager	Board of Directors	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-
Human Resources		72,606	-	72,606	-	-	72,606
Water Systems Operations	Office of the Manager	74,446	-	74,446	-	-	74,446
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations Support Services	15,037	-	15,037	-	-	15,037
Water Systems Operations	Operations Support Services	-	-	-	-	-	-
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	1,051,271	-	1,051,271	-	-	1,051,271
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	-	-	-	-	-	-
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	-	-	-	-	-	-
Water Systems Operations	Environmental Health & Safety Section	-	-	-	-	-	-
Water Systems Operations	OSS, Fleet Services Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Power Support Unit	751,448	-	751,448	-	-	751,448
Water Systems Operations	Office of the Manager, Operations & Planning Section	6,686	-	6,686	-	-	6,686
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-
Sustainability, Resilience & Inr		-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-
Engineering Services		761,721	-	761,721	-	-	761,721
Business Technology	Administrative Services	-	-	-	-	-	-
Business Technology	Information Technology	202,688	-	202,688	-	-	202,688
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	-	-	-	-	-	-
Water Resources Managemen	Office of the Group Manager	-	-	-	-	-	-
Ethics Office		-	-	-	-	-	-
Real Property		-	-	-	-	-	-
General Counsel		-	-	-	-	-	-
General Auditor		-	-	-	-	-	-
Total Departmental O&M	-	2,977,579	-	2,977,579	-	-	2,977,579

		Functionalization	Allocation Percentages					% Total
			Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		718,002	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Office of General Manager	Board of Directors	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Bay Delta Initiatives	Bay Delta Initiatives	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Legislative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Media Communications Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Manager, External Affairs/Special Projects	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Conservation & Community Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Human Resources		1,431,772	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager	1,804,192	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	444,129	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Treatment Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations Support Services	348,917	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Support Services	208,780	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Desert Region / C&D CRA	33,258,711	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	System Operations Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Power Operations and Planning	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Planning & Programs Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Jensen	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Diemer	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Mills	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Skinner	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Weymouth	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Water Quality Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Eastern Unit	1,080,968	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Western Unit	365	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Manufacturing Services Unit	408,719	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Environmental Health & Safety Section	2,477,199	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Fleet Services Unit	1,876,024	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Power Support Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations & Planning Section	130,070	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Security Team & Security Management	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Sustainability, Resilience & Innovation		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Diversity, Equity & Inclusion		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Equal Employment Opportunity		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Office of the Chief Financial Officer		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Office of Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Engineering Services		1,524,306	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Administrative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Information Technology	4,496,544	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Planning & Development	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Implementation	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Office of the Group Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Ethics Office		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Real Property		4,169,841	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
General Counsel		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
General Auditor		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Departmental O&M		54,378,539	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
GENERAL DISTRICT REQUIREMENTS								
State Water Contract*								
Supply - O&M		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Supply - Capital		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Power - O&M & Off-Aq Capital		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Power - Capital (less Off-Aq)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Transmission - Capital - Commodity, Demand, & Standby		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Transmission - O&M - Commodity only		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Supply		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Power		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Other		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total State Water Contract		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Colorado River Aqueduct Power Costs								
		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Supply Programs (cash funded portion)								
		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Demand Management (cash funded portion)								
Local Resources Program		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Future Supply Actions & Stormwater Pilot		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Conservation Program (cash funded portion)		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Demand Management Costs		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Capital Financing								
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		8,809,530	8.3%	49.0%	42.7%	0.0%	0.0%	100.0%
G.O. Bond Debt Service		-	8.3%	49.0%	42.7%	0.0%	0.0%	100.0%
Debt Administration		86,772	8.3%	49.0%	42.7%	0.0%	0.0%	100.0%
Bond Defeasance		-	8.3%	49.0%	42.7%	0.0%	0.0%	100.0%
PAYGO		4,198,500	8.3%	49.0%	42.7%	0.0%	0.0%	100.0%
Total Capital Financing Costs		13,094,802	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Other Operating Costs								
Operating Equipment		859,267	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Succession Planning Labor Pool		457,306	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
OPEB/PERS Pre-Funding		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Other Operating Costs		1,316,573	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Increase/(Decrease) in Required Reserves								
		-	7.6%	53.7%	38.8%	0.0%	0.0%	100.0%
Total General District Requirements								
		14,411,375	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
REQUIREMENTS BEFORE OFFSETS:								
		68,789,914	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Revenue Offsets								
Property Taxes - MWD Portion of SWC GO Debt Service		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Property Taxes - MWD GO Debt Service		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Interest on Investments		226,771	8.3%	49.0%	42.7%	0.0%	0.0%	100.0%
Hydro-Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
CRA Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Wadsworth Pumping Plant (DVL) Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to supply (PVID Lease)		-	1.6%	90.3%	8.1%	0.0%	0.0%	100.0%
Property Taxes - SWC		-	8.3%	49.0%	42.7%	0.0%	0.0%	100.0%
Revenue Reserve used for Revenue Bonds - I&P		-	50.0%	50.0%	0.0%	0.0%	0.0%	100.0%
Annexation		-	8.3%	49.0%	42.7%	0.0%	0.0%	100.0%
Total Revenue Offsets		226,771	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
NET REVENUE REQUIREMENTS:								
	-	68,563,143	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

	Functionalization	Allocation Percentages					Total
		Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M							
Group	Item						
Office of General Manager		718,002	-	718,002	-	-	718,002
Office of General Manager	Board of Directors	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-
Human Resources		1,431,772	-	1,431,772	-	-	1,431,772
Water Systems Operations	Office of the Manager	1,804,192	-	1,804,192	-	-	1,804,192
Water Systems Operations	Office of the Manager, Conveyance & Distribution S	444,129	-	444,129	-	-	444,129
Water Systems Operations	Office of the Manager, Treatment Section	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations Support Services	348,917	-	348,917	-	-	348,917
Water Systems Operations	Operations Support Services	208,780	-	208,780	-	-	208,780
Water Systems Operations	Desert Region / C&D CRA	33,258,711	-	33,258,711	-	-	33,258,711
Water Systems Operations	System Operations Unit	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	-	-	-	-	-	-
Water Systems Operations	C&D, Eastern Unit	1,080,968	-	1,080,968	-	-	1,080,968
Water Systems Operations	C&D, Western Unit	365	-	365	-	-	365
Water Systems Operations	OSS, Manufacturing Services Unit	408,719	-	408,719	-	-	408,719
Water Systems Operations	Environmental Health & Safety Section	2,477,199	-	2,477,199	-	-	2,477,199
Water Systems Operations	OSS, Fleet Services Unit	1,876,024	-	1,876,024	-	-	1,876,024
Water Systems Operations	OSS, Power Support Unit	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations & Planning Secti	-	-	-	-	-	-
Water Systems Operations	Security Team & Security Management	130,070	-	130,070	-	-	130,070
Sustainability, Resilience & Inn		-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-
Engineering Services		1,524,306	-	1,524,306	-	-	1,524,306
Business Technology	Administrative Services	-	-	-	-	-	-
Business Technology	Information Technology	4,496,544	-	4,496,544	-	-	4,496,544
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	-	-	-	-	-	-
Water Resources Managemen	Office of the Group Manager	-	-	-	-	-	-
Ethics Office		-	-	-	-	-	-
Real Property		4,169,841	-	4,169,841	-	-	4,169,841
General Counsel		-	-	-	-	-	-
General Auditor		-	-	-	-	-	-
Total Departmental O&M		54,378,539	-	54,378,539	-	-	54,378,539
GENERAL DISTRICT REQUIREMENTS		-	-	-	-	-	-
State Water Contract*		-	-	-	-	-	-
Supply - O&M		-	-	-	-	-	-
Supply - Capital		-	-	-	-	-	-
Power - O&M & Off-Aq Capital		-	-	-	-	-	-
Power - Capital (less Off-Aq)		-	-	-	-	-	-
Transmission - Capital - Commodity, Demand, & Standby		-	-	-	-	-	-
Transmission - O&M - Commodity only		-	-	-	-	-	-
Delta Conveyance - Supply		-	-	-	-	-	-
Delta Conveyance - Power		-	-	-	-	-	-
Delta Conveyance - Other		-	-	-	-	-	-
Total State Water Contract		-	-	-	-	-	-
Colorado River Aqueduct Power Costs		-	-	-	-	-	-
Supply Programs (cash funded portion)		-	-	-	-	-	-
Demand Management (cash funded portion)		-	-	-	-	-	-
Local Resources Program		-	-	-	-	-	-
Future Supply Actions & Stormwater Pilot		-	-	-	-	-	-
Conservation Program (cash funded portion)		-	-	-	-	-	-
Total Demand Management Costs		-	-	-	-	-	-
Capital Financing		-	-	-	-	-	-
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		8,809,530	734,064	4,318,022	3,757,444	-	8,809,530
G.O. Bond Debt Service		-	-	-	-	-	-
Debt Administration		86,772	7,230	42,532	37,010	-	86,772
Bond Defeasance		-	-	-	-	-	-
PAYGO		4,198,500	349,845	2,057,909	1,790,746	-	4,198,500
Total Capital Financing Costs		13,094,802	1,091,139	6,418,463	5,585,200	-	13,094,802
Other Operating Costs		-	-	-	-	-	-
Operating Equipment		859,267	-	859,267	-	-	859,267
Succession Planning Labor Pool		457,306	-	457,306	-	-	457,306
OPEB/PERS Pre-Funding		-	-	-	-	-	-
Total Other Operating Costs		1,316,573	-	1,316,573	-	-	1,316,573
Increase/(Decrease) in Required Reserves		-	-	-	-	-	-
Total General District Requirements		14,411,375	1,091,139	7,735,036	5,585,200	-	14,411,375
REQUIREMENTS BEFORE OFFSETS:		68,789,914	1,091,139	62,113,575	5,585,200	-	68,789,914
Revenue Offsets		-	-	-	-	-	-
Property Taxes - MWD Portion of SWC GO Debt Service		-	-	-	-	-	-
Property Taxes - MWD GO Debt Service		-	-	-	-	-	-
Interest on Investments		226,771	18,896	111,153	96,722	-	226,771
Hydro-Power Revenue		-	-	-	-	-	-
CRA Power Revenue		-	-	-	-	-	-
Wadsworth Pumping Plant (DVL) Power Revenue		-	-	-	-	-	-
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)		-	-	-	-	-	-
Misc. allocated to supply (PVID Lease)		-	-	-	-	-	-
Property Taxes - SWC		-	-	-	-	-	-
Revenue Reserve used for Revenue Bonds - I&P		-	-	-	-	-	-
Annexation		-	-	-	-	-	-
Total Revenue Offsets		226,771	18,896	111,153	96,722	-	226,771
NET REVENUE REQUIREMENTS:		68,563,143	1,072,243	62,002,423	5,488,478	-	68,563,143

		Functionalization	Allocation Percentages					Total
			Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		632,289	-	632,289	-	-	-	632,289
Office of General Manager	Board of Directors	-	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-	-
Human Resources		1,101,540	-	1,101,540	-	-	-	1,101,540
Water Systems Operations	Office of the Manager	1,316,385	-	1,316,385	-	-	-	1,316,385
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	434,125	-	434,125	-	-	-	434,125
Water Systems Operations	Office of the Manager, Treatment Section	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations Support Services	265,894	-	265,894	-	-	-	265,894
Water Systems Operations	Operations Support Services	188,658	-	188,658	-	-	-	188,658
Water Systems Operations	Desert Region / C&D CRA	27,049,712	-	27,049,712	-	-	-	27,049,712
Water Systems Operations	System Operations Unit	-	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	-	-	-	-	-	-	-
Water Systems Operations	C&D, Eastern Unit	757,982	-	757,982	-	-	-	757,982
Water Systems Operations	C&D, Western Unit	253	-	253	-	-	-	253
Water Systems Operations	OSS, Manufacturing Services Unit	375,403	-	375,403	-	-	-	375,403
Water Systems Operations	Environmental Health & Safety Section	1,938,799	-	1,938,799	-	-	-	1,938,799
Water Systems Operations	OSS, Fleet Services Unit	1,131,362	-	1,131,362	-	-	-	1,131,362
Water Systems Operations	OSS, Power Support Unit	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations & Planning Section	118,228	-	118,228	-	-	-	118,228
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-	-
Sustainability, Resilience & Inr		-	-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-	-
Equal Employment Opportuniti		-	-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-	-
Engineering Services		1,208,649	-	1,208,649	-	-	-	1,208,649
Business Technology	Administrative Services	-	-	-	-	-	-	-
Business Technology	Information Technology	3,075,068	-	3,075,068	-	-	-	3,075,068
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	-	-	-	-	-	-	-
Water Resources Managemen	Office of the Group Manager	-	-	-	-	-	-	-
Ethics Office		-	-	-	-	-	-	-
Real Property		1,733,119	-	1,733,119	-	-	-	1,733,119
General Counsel		-	-	-	-	-	-	-
General Auditor		-	-	-	-	-	-	-
Total Departmental O&M		41,327,467	-	41,327,467	-	-	-	41,327,467

		Functionalization	Allocation Percentages					% Total
			Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Office of General Manager	Board of Directors	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Bay Delta Initiatives	Bay Delta Initiatives	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Legislative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Media Communications Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Manager, External Affairs/Special Projects	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Conservation & Community Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Human Resources		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Treatment Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations Support Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Support Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Desert Region / C&D CRA	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	System Operations Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Power Operations and Planning	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Planning & Programs Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Jensen	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Diemer	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Mills	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Skinner	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Weymouth	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Water Quality Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Eastern Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Western Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Manufacturing Services Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Environmental Health & Safety Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Fleet Services Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Power Support Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations & Planning Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Security Team & Security Management	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Sustainability, Resilience & Innovation		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Diversity, Equity & Inclusion		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Equal Employment Opportunity		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Office of the Chief Financial Officer		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Office of Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Engineering Services		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Administrative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Information Technology	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Planning & Development	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Implementation	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Office of the Group Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Ethics Office		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Real Property		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
General Counsel		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
General Auditor		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Departmental O&M		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
GENERAL DISTRICT REQUIREMENTS								
State Water Contract*								
Supply - O&M		-	0.0%	0.0%	0.0%	100.0%	0.0%	100.0%
Supply - Capital		-	0.0%	0.0%	0.0%	100.0%	0.0%	100.0%
Power - O&M & Off-Aq Capital	211,574,465	-	0.0%	0.0%	0.0%	100.0%	0.0%	100.0%
Power - Capital (less Off-Aq)	(4,981,305)	-	0.0%	0.0%	0.0%	100.0%	0.0%	100.0%
Transmission - Capital - Commodity, Demand, & Standby		-	0.0%	0.0%	0.0%	100.0%	0.0%	100.0%
Transmission - O&M - Commodity only		-	0.0%	0.0%	0.0%	100.0%	0.0%	100.0%
Delta Conveyance - Supply		-	0.0%	0.0%	0.0%	100.0%	0.0%	100.0%
Delta Conveyance - Power		-	0.0%	0.0%	0.0%	100.0%	0.0%	100.0%
Delta Conveyance - Other		-	0.0%	0.0%	0.0%	100.0%	0.0%	100.0%
Total State Water Contract	206,593,160	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Colorado River Aqueduct Power Costs			-	0.0%	0.0%	0.0%	0.0%	0.0%
Supply Programs (cash funded portion)			-	0.0%	0.0%	0.0%	0.0%	0.0%
Demand Management (cash funded portion)			-	0.0%	0.0%	0.0%	0.0%	0.0%
Local Resources Program		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Future Supply Actions & Stormwater Pilot		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Conservation Program (cash funded portion)		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Demand Management Costs		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Capital Financing			-	0.0%	0.0%	0.0%	0.0%	0.0%
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
G.O. Bond Debt Service		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Debt Administration		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Bond Defeasance		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
PAYGO		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total Capital Financing Costs		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Other Operating Costs								
Operating Equipment		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Succession Planning Labor Pool		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
OPEB/PERS Pre-Funding		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Other Operating Costs		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Increase/(Decrease) in Required Reserves			-	0.0%	0.0%	100.0%	0.0%	100.0%
Total General District Requirements			206,593,160	0.0%	0.0%	0.0%	0.0%	0.0%
REQUIREMENTS BEFORE OFFSETS:			206,593,160	0.0%	0.0%	0.0%	0.0%	0.0%
Revenue Offsets								
Property Taxes - MWD Portion of SWC GO Debt Service		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Property Taxes - MWD GO Debt Service		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Interest on Investments	681,049	-	0.0%	0.0%	0.0%	100.0%	0.0%	100.0%
Hydro-Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
CRA Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Wadsworth Pumping Plant (DVL) Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to supply (PVID Lease)		-	0.0%	0.0%	0.0%	100.0%	0.0%	100.0%
Property Taxes - SWC	50,895,177	-	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Revenue Reserve used for Revenue Bonds - I&P		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Annexation		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total Revenue Offsets	51,576,226	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
NET REVENUE REQUIREMENTS:			-	155,016,934	0.0%	0.0%	0.0%	0.0%

	Functionalization	Allocation Percentages					Total
		Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M							
Group	Item						
Office of General Manager	Office of General Manager	-	-	-	-	-	-
Office of General Manager	Board of Directors	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-
Human Resources		-	-	-	-	-	-
Water Systems Operations	Office of the Manager	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Conveyance & Distribution S	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations Support Services	-	-	-	-	-	-
Water Systems Operations	Operations Support Services	-	-	-	-	-	-
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	-	-	-	-	-	-
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	-	-	-	-	-	-
Water Systems Operations	Environmental Health & Safety Section	-	-	-	-	-	-
Water Systems Operations	OSS, Fleet Services Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Power Support Unit	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations & Planning Secti	-	-	-	-	-	-
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-
Sustainability, Resilience & Inn		-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-
Engineering Services		-	-	-	-	-	-
Business Technology	Administrative Services	-	-	-	-	-	-
Business Technology	Information Technology	-	-	-	-	-	-
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	-	-	-	-	-	-
Water Resources Managemen	Office of the Group Manager	-	-	-	-	-	-
Ethics Office		-	-	-	-	-	-
Real Property		-	-	-	-	-	-
General Counsel		-	-	-	-	-	-
General Auditor		-	-	-	-	-	-
Total Departmental O&M	-	-	-	-	-	-	-
GENERAL DISTRICT REQUIREMENTS		-	-	-	-	-	-
State Water Contract*		-	-	-	-	-	-
Supply - O&M		-	-	-	-	-	-
Supply - Capital		-	-	-	-	-	-
Power - O&M & Off-Aq Capital	211,574,465	-	-	-	211,574,465	-	211,574,465
Power - Capital (less Off-Aq)	(4,981,305)	-	-	-	(4,981,305)	-	(4,981,305)
Transmission - Capital - Commodity, Demand, & Standby		-	-	-	-	-	-
Transmission - O&M - Commodity only		-	-	-	-	-	-
Delta Conveyance - Supply		-	-	-	-	-	-
Delta Conveyance - Power		-	-	-	-	-	-
Delta Conveyance - Other		-	-	-	-	-	-
Total State Water Contract	206,593,160	-	-	-	206,593,160	-	206,593,160
Colorado River Aqueduct Power Costs		-	-	-	-	-	-
Supply Programs (cash funded portion)		-	-	-	-	-	-
Demand Management (cash funded portion)		-	-	-	-	-	-
Local Resources Program		-	-	-	-	-	-
Future Supply Actions & Stormwater Pilot		-	-	-	-	-	-
Conservation Program (cash funded portion)		-	-	-	-	-	-
Total Demand Management Costs		-	-	-	-	-	-
Capital Financing		-	-	-	-	-	-
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		-	-	-	-	-	-
G.O. Bond Debt Service		-	-	-	-	-	-
Debt Administration		-	-	-	-	-	-
Bond Defeasance		-	-	-	-	-	-
PAYGO		-	-	-	-	-	-
Total Capital Financing Costs		-	-	-	-	-	-
Other Operating Costs		-	-	-	-	-	-
Operating Equipment		-	-	-	-	-	-
Succession Planning Labor Pool		-	-	-	-	-	-
OPEB/PERS Pre-Funding		-	-	-	-	-	-
Total Other Operating Costs		-	-	-	-	-	-
Increase/(Decrease) in Required Reserves		-	-	-	-	-	-
Total General District Requirements	206,593,160	-	-	-	206,593,160	-	206,593,160
REQUIREMENTS BEFORE OFFSETS:	206,593,160	-	-	-	206,593,160	-	206,593,160
Revenue Offsets		-	-	-	-	-	-
Property Taxes - MWD Portion of SWC GO Debt Service		-	-	-	-	-	-
Property Taxes - MWD GO Debt Service		-	-	-	-	-	-
Interest on Investments	681,049	-	-	-	681,049	-	681,049
Hydro-Power Revenue		-	-	-	-	-	-
CRA Power Revenue		-	-	-	-	-	-
Wadsworth Pumping Plant (DVL) Power Revenue		-	-	-	-	-	-
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)		-	-	-	-	-	-
Misc. allocated to supply (PVID Lease)		-	-	-	-	-	-
Property Taxes - SWC	50,895,177	-	-	-	50,895,177	-	50,895,177
Revenue Reserve used for Revenue Bonds - I&P		-	-	-	-	-	-
Annexation		-	-	-	-	-	-
Total Revenue Offsets	51,576,226	-	-	-	51,576,226	-	51,576,226
NET REVENUE REQUIREMENTS:	155,016,934	-	-	-	155,016,934	-	155,016,934

	Functionalization	Allocation Percentages					Total
		Fixed			Variable		
		Demand	Commodity	Standby	Commodity	Hydroelectric	
Departmental O&M							
Group	Item						
Office of General Manager		-	-	-	-	-	-
Office of General Manager	Board of Directors	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-
Human Resources		-	-	-	-	-	-
Water Systems Operations	Office of the Manager	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations Support Services	-	-	-	-	-	-
Water Systems Operations	Operations Support Services	-	-	-	-	-	-
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	-	-	-	-	-	-
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	-	-	-	-	-	-
Water Systems Operations	Environmental Health & Safety Section	-	-	-	-	-	-
Water Systems Operations	OSS, Fleet Services Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Power Support Unit	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations & Planning Section	-	-	-	-	-	-
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-
Sustainability, Resilience & Inr		-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-
Engineering Services		-	-	-	-	-	-
Business Technology	Administrative Services	-	-	-	-	-	-
Business Technology	Information Technology	-	-	-	-	-	-
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	-	-	-	-	-	-
Water Resources Managemen	Office of the Group Manager	-	-	-	-	-	-
Ethics Office		-	-	-	-	-	-
Real Property		-	-	-	-	-	-
General Counsel		-	-	-	-	-	-
General Auditor		-	-	-	-	-	-
Total Departmental O&M	-	-	-	-	-	-	-

		Functionalization	Allocation Percentages					% Total
			Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		319,770	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Office of General Manager	Board of Directors	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Bay Delta Initiatives	Bay Delta Initiatives	12,055,551	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Legislative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Media Communications Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Manager, External Affairs/Special Projects	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Conservation & Community Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Human Resources		637,655	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager	113,517	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	31,540	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Treatment Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations Support Services	21,953	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Support Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Desert Region / C&D CRA	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	System Operations Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Power Operations and Planning	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Planning & Programs Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Jensen	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Diemer	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Mills	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Skinner	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Weymouth	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Water Quality Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Eastern Unit	2,219,961	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Western Unit	602,617	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Manufacturing Services Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Environmental Health & Safety Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Fleet Services Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Power Support Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations & Planning Section	8,184	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Security Team & Security Management	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Sustainability, Resilience & Innovation		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Diversity, Equity & Inclusion		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Equal Employment Opportunity		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Office of the Chief Financial Officer		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Office of Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Engineering Services		744,998	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Administrative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Information Technology	2,002,583	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Planning & Development	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Implementation	50,748	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Office of the Group Manager	5,798	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Ethics Office		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Real Property		5,403,174	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
General Counsel		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
General Auditor		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Departmental O&M		24,218,050	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
GENERAL DISTRICT REQUIREMENTS								
State Water Contract*								
Supply - O&M		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Supply - Capital		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Power - O&M & Off-Aq Capital		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Power - Capital (less Off-Aq)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Transmission - Capital - Commodity, Demand, & Standby		60,506,317	8.3%	49.0%	42.7%	0.0%	0.0%	100.0%
Transmission - O&M - Commodity only		194,057,356	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Delta Conveyance - Supply		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Delta Conveyance - Power		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Delta Conveyance - Other		30,000,000	8.3%	49.0%	42.7%	0.0%	0.0%	100.0%
Total State Water Contract		284,563,673	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Colorado River Aqueduct Power Costs								
		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Supply Programs (cash funded portion)								
		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Demand Management (cash funded portion)								
Local Resources Program		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Future Supply Actions & Stormwater Pilot		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Conservation Program (cash funded portion)		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Demand Management Costs		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Capital Financing								
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
G.O. Bond Debt Service	4,305,622	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Debt Administration	42,409	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Bond Defeasance	-	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
PAYGO	2,052,000	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Capital Financing Costs	6,400,032	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Other Operating Costs								
Operating Equipment	382,684	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Succession Planning Labor Pool	203,666	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
OPEB/PERS Pre-Funding	-	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Other Operating Costs	586,350	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Increase/(Decrease) in Required Reserves								
	-	-	2.6%	84.2%	13.2%	0.0%	0.0%	100.0%
Total General District Requirements								
	291,550,054	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
REQUIREMENTS BEFORE OFFSETS:								
	315,768,105	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Revenue Offsets								
Property Taxes - MWD Portion of SWC GO Debt Service	564,249	-	8.3%	49.0%	42.7%	0.0%	0.0%	100.0%
Property Taxes - MWD GO Debt Service	-	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Interest on Investments	1,040,952	-	8.3%	49.0%	42.7%	0.0%	0.0%	100.0%
Hydro-Power Revenue	-	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
CRA Power Revenue	-	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Wadsworth Pumping Plant (DVL) Power Revenue	-	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)	-	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to supply (PVID Lease)	-	-	2.4%	85.4%	12.2%	0.0%	0.0%	100.0%
Property Taxes - SWC	62,712,933	-	2.0%	87.9%	10.1%	0.0%	0.0%	100.0%
Revenue Reserve used for Revenue Bonds - I&P	-	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Annexation	-	-	8.3%	49.0%	42.7%	0.0%	0.0%	100.0%
Total Revenue Offsets	64,318,135	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
NET REVENUE REQUIREMENTS:								
-	251,449,970	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

	Functionalization	Allocation Percentages					Total
		Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M							
Group	Item						
Office of General Manager		319,770	-	319,770	-	-	319,770
Office of General Manager	Board of Directors	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	12,055,551	-	12,055,551	-	-	12,055,551
External Affairs	Legislative Services	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-
Human Resources		637,655	-	637,655	-	-	637,655
Water Systems Operations	Office of the Manager	113,517	-	113,517	-	-	113,517
Water Systems Operations	Office of the Manager, Conveyance & Distribution S	31,540	-	31,540	-	-	31,540
Water Systems Operations	Office of the Manager, Treatment Section	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations Support Services	21,953	-	21,953	-	-	21,953
Water Systems Operations	Operations Support Services	-	-	-	-	-	-
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	-	-	-	-	-	-
Water Systems Operations	C&D, Eastern Unit	2,219,961	-	2,219,961	-	-	2,219,961
Water Systems Operations	C&D, Western Unit	602,617	-	602,617	-	-	602,617
Water Systems Operations	OSS, Manufacturing Services Unit	-	-	-	-	-	-
Water Systems Operations	Environmental Health & Safety Section	-	-	-	-	-	-
Water Systems Operations	OSS, Fleet Services Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Power Support Unit	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations & Planning Secti	8,184	-	8,184	-	-	8,184
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-
Sustainability, Resilience & Inn		-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-
Engineering Services		744,998	-	744,998	-	-	744,998
Business Technology	Administrative Services	-	-	-	-	-	-
Business Technology	Information Technology	2,002,583	-	2,002,583	-	-	2,002,583
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	50,748	-	50,748	-	-	50,748
Water Resources Managemen	Office of the Group Manager	5,798	-	5,798	-	-	5,798
Ethics Office		-	-	-	-	-	-
Real Property		5,403,174	-	5,403,174	-	-	5,403,174
General Counsel		-	-	-	-	-	-
General Auditor		-	-	-	-	-	-
Total Departmental O&M		24,218,050	-	24,218,050	-	-	24,218,050
GENERAL DISTRICT REQUIREMENTS		-	-	-	-	-	-
State Water Contract*		-	-	-	-	-	-
Supply - O&M		-	-	-	-	-	-
Supply - Capital		-	-	-	-	-	-
Power - O&M & Off-Aq Capital		-	-	-	-	-	-
Power - Capital (less Off-Aq)		-	-	-	-	-	-
Transmission - Capital - Commodity, Demand, & Standby		60,506,317	5,041,755	29,657,383	25,807,178	-	60,506,317
Transmission - O&M - Commodity only		194,057,356	-	194,057,356	-	-	194,057,356
Delta Conveyance - Supply		-	-	-	-	-	-
Delta Conveyance - Power		-	-	-	-	-	-
Delta Conveyance - Other		30,000,000	2,499,783	14,704,605	12,795,612	-	30,000,000
Total State Water Contract		284,563,673	7,541,538	238,419,345	38,602,790	-	284,563,673
Colorado River Aqueduct Power Costs		-	-	-	-	-	-
Supply Programs (cash funded portion)		-	-	-	-	-	-
Demand Management (cash funded portion)		-	-	-	-	-	-
Local Resources Program		-	-	-	-	-	-
Future Supply Actions & Stormwater Pilot		-	-	-	-	-	-
Conservation Program (cash funded portion)		-	-	-	-	-	-
Total Demand Management Costs		-	-	-	-	-	-
Capital Financing		-	-	-	-	-	-
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		4,305,622	-	4,305,622	-	-	4,305,622
G.O. Bond Debt Service		-	-	-	-	-	-
Debt Administration		42,409	-	42,409	-	-	42,409
Bond Defeasance		-	-	-	-	-	-
PAYGO		2,052,000	-	2,052,000	-	-	2,052,000
Total Capital Financing Costs		6,400,032	-	6,400,032	-	-	6,400,032
Other Operating Costs		-	-	-	-	-	-
Operating Equipment		382,684	-	382,684	-	-	382,684
Succession Planning Labor Pool		203,666	-	203,666	-	-	203,666
OPEB/PERS Pre-Funding		-	-	-	-	-	-
Total Other Operating Costs		586,350	-	586,350	-	-	586,350
Increase/(Decrease) in Required Reserves		-	-	-	-	-	-
Total General District Requirements		291,550,054	7,541,538	245,405,726	38,602,790	-	291,550,054
REQUIREMENTS BEFORE OFFSETS:		315,768,105	7,541,538	269,623,776	38,602,790	-	315,768,105
Revenue Offsets							
Property Taxes - MWD Portion of SWC GO Debt Service		564,249	47,017	276,569	240,664	-	564,249
Property Taxes - MWD GO Debt Service		-	-	-	-	-	-
Interest on Investments		1,040,952	86,738	510,226	443,987	-	1,040,952
Hydro-Power Revenue		-	-	-	-	-	-
CRA Power Revenue		-	-	-	-	-	-
Wadsworth Pumping Plant (DVL) Power Revenue		-	-	-	-	-	-
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)		-	-	-	-	-	-
Misc. allocated to supply (PVID Lease)		-	-	-	-	-	-
Property Taxes - SWC		62,712,933	1,242,060	55,113,157	6,357,717	-	62,712,933
Revenue Reserve used for Revenue Bonds - I&P		-	-	-	-	-	-
Annexation		-	-	-	-	-	-
Total Revenue Offsets		64,318,135	1,375,815	55,899,952	7,042,368	-	64,318,135
NET REVENUE REQUIREMENTS:		251,449,970	6,165,723	213,723,825	31,560,422	-	251,449,970

		Functionalization	Allocation Percentages					Total
			Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		281,597	-	281,597	-	-	-	281,597
Office of General Manager	Board of Directors	-	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	5,525,660	-	5,525,660	-	-	-	5,525,660
External Affairs	Legislative Services	-	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-	-
Human Resources		490,582	-	490,582	-	-	-	490,582
Water Systems Operations	Office of the Manager	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	82,825	-	82,825	-	-	-	82,825
Water Systems Operations	Office of the Manager, Treatment Section	30,829	-	30,829	-	-	-	30,829
Water Systems Operations	Office of the Manager, Operations Support Services	-	-	-	-	-	-	-
Water Systems Operations	Operations Support Services	16,730	-	16,730	-	-	-	16,730
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	-	-	-	-	-	-	-
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	1,556,650	-	1,556,650	-	-	-	1,556,650
Water Systems Operations	OSS, Manufacturing Services Unit	418,137	-	418,137	-	-	-	418,137
Water Systems Operations	Environmental Health & Safety Section	-	-	-	-	-	-	-
Water Systems Operations	OSS, Fleet Services Unit	-	-	-	-	-	-	-
Water Systems Operations	OSS, Power Support Unit	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations & Planning Section	-	-	-	-	-	-	-
Water Systems Operations	Security Team & Security Management	7,439	-	7,439	-	-	-	7,439
Sustainability, Resilience & Inr		-	-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-	-
Equal Employment Opportuniti		-	-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-	-
Engineering Services		590,722	-	590,722	-	-	-	590,722
Business Technology	Administrative Services	-	-	-	-	-	-	-
Business Technology	Information Technology	1,369,514	-	1,369,514	-	-	-	1,369,514
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	32,707	-	32,707	-	-	-	32,707
Water Resources Managemen	Office of the Group Manager	5,672	-	5,672	-	-	-	5,672
Ethics Office		-	-	-	-	-	-	-
Real Property		2,245,731	-	2,245,731	-	-	-	2,245,731
General Counsel		-	-	-	-	-	-	-
General Auditor		-	-	-	-	-	-	-
Total Departmental O&M	-	12,654,795	-	12,654,795	-	-	-	12,654,795

		Functionalization	Allocation Percentages					% Total
			Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
	Office of General Manager	110,590	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Office of General Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Bay Delta Initiatives	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	External Affairs	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	External Affairs	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	External Affairs	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	External Affairs	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Human Resources	220,529	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems							

	Functionalization	Allocation Percentages					Total
		Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M							
Group	Item						
Office of General Manager		110,590	-	110,590	-	-	110,590
Office of General Manager	Board of Directors	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-
Human Resources		220,529	-	220,529	-	-	220,529
Water Systems Operations	Office of the Manager	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Conveyance & Distribution S	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations Support Services	-	-	-	-	-	-
Water Systems Operations	Operations Support Services	-	-	-	-	-	-
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	-	-	-	-	-	-
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	-	-	-	-	-	-
Water Systems Operations	Environmental Health & Safety Section	-	-	-	-	-	-
Water Systems Operations	OSS, Fleet Services Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Power Support Unit	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations & Planning Secti	-	-	-	-	-	-
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-
Sustainability, Resilience & Inn		-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-
Engineering Services		7,351,957	-	7,351,957	-	-	7,351,957
Business Technology	Administrative Services	-	-	-	-	-	-
Business Technology	Information Technology	692,580	-	692,580	-	-	692,580
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	-	-	-	-	-	-
Water Resources Managemen	Office of the Group Manager	-	-	-	-	-	-
Ethics Office		-	-	-	-	-	-
Real Property		-	-	-	-	-	-
General Counsel		-	-	-	-	-	-
General Auditor		-	-	-	-	-	-
Total Departmental O&M	-	8,375,656	-	8,375,656	-	-	8,375,656
GENERAL DISTRICT REQUIREMENTS		-	-	-	-	-	-
State Water Contract*		-	-	-	-	-	-
Supply - O&M		-	-	-	-	-	-
Supply - Capital		-	-	-	-	-	-
Power - O&M & Off-Aq Capital		-	-	-	-	-	-
Power - Capital (less Off-Aq)		-	-	-	-	-	-
Transmission - Capital - Commodity, Demand, & Standby		-	-	-	-	-	-
Transmission - O&M - Commodity only		-	-	-	-	-	-
Delta Conveyance - Supply		-	-	-	-	-	-
Delta Conveyance - Power		-	-	-	-	-	-
Delta Conveyance - Other		-	-	-	-	-	-
Total State Water Contract		-	-	-	-	-	-
Colorado River Aqueduct Power Costs		-	-	-	-	-	-
Supply Programs (cash funded portion)		-	-	-	-	-	-
Demand Management (cash funded portion)		-	-	-	-	-	-
Local Resources Program		-	-	-	-	-	-
Future Supply Actions & Stormwater Pilot		-	-	-	-	-	-
Conservation Program (cash funded portion)		-	-	-	-	-	-
Total Demand Management Costs		-	-	-	-	-	-
Capital Financing		-	-	-	-	-	-
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		42,489,693	3,540,500	20,826,472	18,122,721	-	42,489,693
G.O. Bond Debt Service		-	-	-	-	-	-
Debt Administration		418,515	34,873	205,136	178,505	-	418,515
Bond Defeasance		-	-	-	-	-	-
PAYGO		20,250,000	1,687,353	9,925,609	8,637,038	-	20,250,000
Total Capital Financing Costs		63,158,208	5,262,727	30,957,217	26,938,264	-	63,158,208
Other Operating Costs		-	-	-	-	-	-
Operating Equipment		132,349	-	132,349	-	-	132,349
Succession Planning Labor Pool		70,437	-	70,437	-	-	70,437
OPEBVERS Pre-Funding		-	-	-	-	-	-
Total Other Operating Costs		202,785	-	202,785	-	-	202,785
Increase/(Decrease) in Required Reserves		-	-	-	-	-	-
Total General District Requirements		63,360,993	5,262,727	31,160,002	26,938,264	-	63,360,993
REQUIREMENTS BEFORE OFFSETS:		71,736,649	5,262,727	39,535,658	26,938,264	-	71,736,649
Revenue Offsets		-	-	-	-	-	-
Property Taxes - MWD Portion of SWC GO Debt Service		-	-	-	-	-	-
Property Taxes - MWD GO Debt Service		-	-	-	-	-	-
Interest on Investments		236,485	236,485	-	-	-	236,485
Hydro-Power Revenue		-	-	-	-	-	-
CRA Power Revenue		-	-	-	-	-	-
Wadsworth Pumping Plant (DVL) Power Revenue		-	-	-	-	-	-
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)		-	-	-	-	-	-
Misc. allocated to supply (PVID Lease)		-	-	-	-	-	-
Property Taxes - SWC		-	-	-	-	-	-
Revenue Reserve used for Revenue Bonds - I&P		-	-	-	-	-	-
Annexation		-	-	-	-	-	-
Total Revenue Offsets		236,485	236,485	-	-	-	236,485
NET REVENUE REQUIREMENTS:		71,500,164	5,026,242	39,535,658	26,938,264	-	71,500,164

		Functionalization	Allocation Percentages					Total
			Fixed			Variable		
			Demand	Commodity	Standby	Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		97,388	-	97,388	-	-	-	97,388
Office of General Manager	Board of Directors	-	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-	-
Human Resources		169,665	-	169,665	-	-	-	169,665
Water Systems Operations	Office of the Manager	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations Support Services	-	-	-	-	-	-	-
Water Systems Operations	Operations Support Services	-	-	-	-	-	-	-
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	-	-	-	-	-	-	-
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	-	-	-	-	-	-	-
Water Systems Operations	Environmental Health & Safety Section	-	-	-	-	-	-	-
Water Systems Operations	OSS, Fleet Services Unit	-	-	-	-	-	-	-
Water Systems Operations	OSS, Power Support Unit	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations & Planning Section	-	-	-	-	-	-	-
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-	-
Sustainability, Resilience & Inr		-	-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-	-
Engineering Services		5,829,495	-	5,829,495	-	-	-	5,829,495
Business Technology	Administrative Services	-	-	-	-	-	-	-
Business Technology	Information Technology	473,637	-	473,637	-	-	-	473,637
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	-	-	-	-	-	-	-
Water Resources Managemen	Office of the Group Manager	-	-	-	-	-	-	-
Ethics Office		-	-	-	-	-	-	-
Real Property		-	-	-	-	-	-	-
General Counsel		-	-	-	-	-	-	-
General Auditor		-	-	-	-	-	-	-
Total Departmental O&M	-	6,570,186	-	6,570,186	-	-	-	6,570,186

		Functionalization	Allocation Percentages					% Total
			Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		106,983	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Office of General Manager	Board of Directors	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Bay Delta Initiatives	Bay Delta Initiatives	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Legislative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Media Communications Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Manager, External Affairs/Special Projects	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Conservation & Community Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Human Resources		213,335	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager	32,894	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Treatment Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations Support Services	6,361	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Support Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Desert Region / C&D CRA	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	System Operations Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Power Operations and Planning	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Planning & Programs Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Jensen	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Diemer	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Mills	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Skinner	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Weymouth	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Water Quality Section	739,144	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Eastern Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Western Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Manufacturing Services Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Environmental Health & Safety Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Fleet Services Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Power Support Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations & Planning Section	2,371	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Security Team & Security Management	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Sustainability, Resilience & Innovation		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Diversity, Equity & Inclusion		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Equal Employment Opportunity		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Office of the Chief Financial Officer		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Office of Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Engineering Services		5,567,882	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Administrative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Information Technology	669,989	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Planning & Development	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Implementation	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Office of the Group Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Ethics Office		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Real Property		763,492	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
General Counsel		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
General Auditor		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Departmental O&M		8,102,451	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
GENERAL DISTRICT REQUIREMENTS								
State Water Contract*								
Supply - O&M		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Supply - Capital		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Power - O&M & Off-Aq Capital		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Power - Capital (less Off-Aq)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Transmission - Capital - Commodity, Demand, & Standby		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Transmission - O&M - Commodity only		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Supply		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Power		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Other		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total State Water Contract		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Colorado River Aqueduct Power Costs								
		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Supply Programs (cash funded portion)								
		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Demand Management (cash funded portion)								
Local Resources Program		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Future Supply Actions & Stormwater Pilot		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Conservation Program (cash funded portion)		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Demand Management Costs		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Capital Financing								
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
G.O. Bond Debt Service	32,178,861	-	0.0%	0.0%	100.0%	0.0%	0.0%	100.0%
Debt Administration	316,955	-	0.0%	0.0%	100.0%	0.0%	0.0%	100.0%
Bond Defeasance	-	-	0.0%	0.0%	100.0%	0.0%	0.0%	100.0%
PAYGO	15,336,000	-	0.0%	0.0%	100.0%	0.0%	0.0%	100.0%
Total Capital Financing Costs	47,831,816	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Other Operating Costs								
Operating Equipment	128,032	-	0.0%	0.0%	100.0%	0.0%	0.0%	100.0%
Succession Planning Labor Pool	68,139	-	0.0%	0.0%	100.0%	0.0%	0.0%	100.0%
OPEB/PERS Pre-Funding	-	-	0.0%	0.0%	100.0%	0.0%	0.0%	100.0%
Total Other Operating Costs	196,171	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Increase/(Decrease) in Required Reserves								
		-	0.0%	0.0%	100.0%	0.0%	0.0%	100.0%
Total General District Requirements								
		48,027,987	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
REQUIREMENTS BEFORE OFFSETS:								
		56,130,438	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Revenue Offsets								
Property Taxes - MWD Portion of SWC GO Debt Service		-	0.0%	0.0%	100.0%	0.0%	0.0%	100.0%
Property Taxes - MWD GO Debt Service		-	0.0%	0.0%	100.0%	0.0%	0.0%	100.0%
Interest on Investments	185,038	-	0.0%	0.0%	100.0%	0.0%	0.0%	100.0%
Hydro-Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
CRA Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Wadsworth Pumping Plant (DVL) Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to supply (PVID Lease)		-	0.0%	0.0%	100.0%	0.0%	0.0%	100.0%
Property Taxes - SWC		-	0.0%	0.0%	100.0%	0.0%	0.0%	100.0%
Revenue Reserve used for Revenue Bonds - I&P		-	0.0%	0.0%	100.0%	0.0%	0.0%	100.0%
Annexation		-	0.0%	0.0%	100.0%	0.0%	0.0%	100.0%
Total Revenue Offsets	185,038	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
NET REVENUE REQUIREMENTS:								
-		55,945,400	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

	Functionalization	Allocation Percentages					Total
		Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M							
Group	Item						
Office of General Manager		106,983	-	106,983	-	-	106,983
Office of General Manager	Board of Directors	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-
Human Resources		213,335	-	213,335	-	-	213,335
Water Systems Operations	Office of the Manager	32,894	-	32,894	-	-	32,894
Water Systems Operations	Office of the Manager, Conveyance & Distribution S	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations Support Services	6,361	-	6,361	-	-	6,361
Water Systems Operations	Operations Support Services	-	-	-	-	-	-
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	739,144	-	739,144	-	-	739,144
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	-	-	-	-	-	-
Water Systems Operations	Environmental Health & Safety Section	-	-	-	-	-	-
Water Systems Operations	OSS, Fleet Services Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Power Support Unit	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations & Planning Secti	2,371	-	2,371	-	-	2,371
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-
Sustainability, Resilience & Inn		-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-
Engineering Services		5,567,882	-	5,567,882	-	-	5,567,882
Business Technology	Administrative Services	-	-	-	-	-	-
Business Technology	Information Technology	669,989	-	669,989	-	-	669,989
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	-	-	-	-	-	-
Water Resources Managemen	Office of the Group Manager	-	-	-	-	-	-
Ethics Office		-	-	-	-	-	-
Real Property		763,492	-	763,492	-	-	763,492
General Counsel		-	-	-	-	-	-
General Auditor		-	-	-	-	-	-
Total Departmental O&M		8,102,451	-	8,102,451	-	-	8,102,451
GENERAL DISTRICT REQUIREMENTS		-	-	-	-	-	-
State Water Contract*		-	-	-	-	-	-
Supply - O&M		-	-	-	-	-	-
Supply - Capital		-	-	-	-	-	-
Power - O&M & Off-Aq Capital		-	-	-	-	-	-
Power - Capital (less Off-Aq)		-	-	-	-	-	-
Transmission - Capital - Commodity, Demand, & Standby		-	-	-	-	-	-
Transmission - O&M - Commodity only		-	-	-	-	-	-
Delta Conveyance - Supply		-	-	-	-	-	-
Delta Conveyance - Power		-	-	-	-	-	-
Delta Conveyance - Other		-	-	-	-	-	-
Total State Water Contract		-	-	-	-	-	-
Colorado River Aqueduct Power Costs		-	-	-	-	-	-
Supply Programs (cash funded portion)		-	-	-	-	-	-
Demand Management (cash funded portion)		-	-	-	-	-	-
Local Resources Program		-	-	-	-	-	-
Future Supply Actions & Stormwater Pilot		-	-	-	-	-	-
Conservation Program (cash funded portion)		-	-	-	-	-	-
Total Demand Management Costs		-	-	-	-	-	-
Capital Financing		-	-	-	-	-	-
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		32,178,861	-	32,178,861	-	-	32,178,861
G.O. Bond Debt Service		-	-	-	-	-	-
Debt Administration		316,955	-	316,955	-	-	316,955
Bond Defeasance		-	-	-	-	-	-
PAYGO		15,336,000	-	15,336,000	-	-	15,336,000
Total Capital Financing Costs		47,831,816	-	47,831,816	-	-	47,831,816
Other Operating Costs		-	-	-	-	-	-
Operating Equipment		128,032	-	128,032	-	-	128,032
Succession Planning Labor Pool		68,139	-	68,139	-	-	68,139
OPEB/PERS Pre-Funding		-	-	-	-	-	-
Total Other Operating Costs		196,171	-	196,171	-	-	196,171
Increase/(Decrease) in Required Reserves		-	-	-	-	-	-
Total General District Requirements		48,027,987	-	48,027,987	-	-	48,027,987
REQUIREMENTS BEFORE OFFSETS:		56,130,438	-	8,102,451	48,027,987	-	56,130,438
Revenue Offsets		-	-	-	-	-	-
Property Taxes - MWD Portion of SWC GO Debt Service		-	-	-	-	-	-
Property Taxes - MWD GO Debt Service		-	-	-	-	-	-
Interest on Investments		185,038	-	185,038	-	-	185,038
Hydro-Power Revenue		-	-	-	-	-	-
CRA Power Revenue		-	-	-	-	-	-
Wadsworth Pumping Plant (DVL) Power Revenue		-	-	-	-	-	-
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)		-	-	-	-	-	-
Misc. allocated to supply (PVID Lease)		-	-	-	-	-	-
Property Taxes - SWC		-	-	-	-	-	-
Revenue Reserve used for Revenue Bonds - I&P		-	-	-	-	-	-
Annexation		-	-	-	-	-	-
Total Revenue Offsets		185,038	-	185,038	-	-	185,038
NET REVENUE REQUIREMENTS:		55,945,400	-	8,102,451	47,842,949	-	55,945,400

		Functionalization	Allocation Percentages					Total
			Fixed			Variable		
			Demand	Commodity	Standby	Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		94,212	-	94,212	-	-	-	94,212
Office of General Manager	Board of Directors	-	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-	-
Human Resources		164,130	-	164,130	-	-	-	164,130
Water Systems Operations	Office of the Manager	24,000	-	24,000	-	-	-	24,000
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations Support Services	4,848	-	4,848	-	-	-	4,848
Water Systems Operations	Operations Support Services	-	-	-	-	-	-	-
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	581,162	-	581,162	-	-	-	581,162
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	-	-	-	-	-	-	-
Water Systems Operations	Environmental Health & Safety Section	-	-	-	-	-	-	-
Water Systems Operations	OSS, Fleet Services Unit	-	-	-	-	-	-	-
Water Systems Operations	OSS, Power Support Unit	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations & Planning Section	2,156	-	2,156	-	-	-	2,156
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-	-
Sustainability, Resilience & Inr		-	-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-	-
Engineering Services		4,414,871	-	4,414,871	-	-	-	4,414,871
Business Technology	Administrative Services	-	-	-	-	-	-	-
Business Technology	Information Technology	458,188	-	458,188	-	-	-	458,188
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	-	-	-	-	-	-	-
Water Resources Managemen	Office of the Group Manager	-	-	-	-	-	-	-
Ethics Office		-	-	-	-	-	-	-
Real Property		317,332	-	317,332	-	-	-	317,332
General Counsel		-	-	-	-	-	-	-
General Auditor		-	-	-	-	-	-	-
Total Departmental O&M	-	6,060,899	-	6,060,899	-	-	-	6,060,899

		Functionalization	Allocation Percentages					% Total
			Demand	Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		81,756	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Office of General Manager	Board of Directors	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Bay Delta Initiatives	Bay Delta Initiatives	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Legislative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Media Communications Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Manager, External Affairs/Special Projects	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Conservation & Community Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Human Resources		163,031	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager	32,894	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Treatment Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations Support Services	6,361	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Support Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Desert Region / C&D CRA	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	System Operations Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Power Operations and Planning	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Planning & Programs Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Jensen	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Diemer	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Mills	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Skinner	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Weymouth	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Water Quality Section	739,144	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Eastern Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Western Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Manufacturing Services Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Environmental Health & Safety Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Fleet Services Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Power Support Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations & Planning Section	2,371	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Security Team & Security Management	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Sustainability, Resilience & Innovation		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Diversity, Equity & Inclusion		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Equal Employment Opportunity		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Office of the Chief Financial Officer		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Office of Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Engineering Services		3,347,591	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Administrative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Information Technology	512,006	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Planning & Development	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Implementation	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Office of the Group Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Ethics Office		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Real Property		1,306,746	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
General Counsel		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
General Auditor		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Departmental O&M		6,191,901	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
GENERAL DISTRICT REQUIREMENTS								
State Water Contract*								
Supply - O&M		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Supply - Capital		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Power - O&M & Off-Aq Capital		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Power - Capital (less Off-Aq)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Transmission - Capital - Commodity, Demand, & Standby		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Transmission - O&M - Commodity only		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Supply		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Power		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Other		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total State Water Contract		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Colorado River Aqueduct Power Costs								
		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Supply Programs (cash funded portion)								
		18,211,661	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Demand Management (cash funded portion)								
Local Resources Program		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Future Supply Actions & Stormwater Pilot		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Conservation Program (cash funded portion)		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Demand Management Costs		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Capital Financing								
		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		19,346,974	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
G.O. Bond Debt Service		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Debt Administration		190,564	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Bond Defeasance		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
PAYGO		9,220,500	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Capital Financing Costs		28,758,037	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Other Operating Costs								
Operating Equipment		97,842	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Succession Planning Labor Pool		52,072	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
OPEB/PERS Pre-Funding		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Other Operating Costs		149,914	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Increase/(Decrease) in Required Reserves								
		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total General District Requirements								
		47,119,612	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
REQUIREMENTS BEFORE OFFSETS:								
		53,311,513	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Revenue Offsets								
Property Taxes - MWD Portion of SWC GO Debt Service		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Property Taxes - MWD GO Debt Service		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Interest on Investments		175,745	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Hydro-Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
CRA Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Wadsworth Pumping Plant (DVL) Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to supply (PVID Lease)		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Property Taxes - SWC		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Revenue Reserve used for Revenue Bonds - I&P		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Annexation		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Revenue Offsets		175,745	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
NET REVENUE REQUIREMENTS:								
-		53,135,768	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

	Functionalization	Allocation Percentages					Total
		Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M							
Group	Item						
Office of General Manager	Office of General Manager	81,756	-	81,756	-	-	81,756
Office of General Manager	Board of Directors	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-
Human Resources	Human Resources	163,031	-	163,031	-	-	163,031
Water Systems Operations	Office of the Manager	32,894	-	32,894	-	-	32,894
Water Systems Operations	Office of the Manager, Conveyance & Distribution S	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations Support Services	6,361	-	6,361	-	-	6,361
Water Systems Operations	Operations Support Services	-	-	-	-	-	-
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	739,144	-	739,144	-	-	739,144
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	-	-	-	-	-	-
Water Systems Operations	Environmental Health & Safety Section	-	-	-	-	-	-
Water Systems Operations	OSS, Fleet Services Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Power Support Unit	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations & Planning Secti	2,371	-	2,371	-	-	2,371
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-
Sustainability, Resilience & Inn	Sustainability, Resilience & Inn	-	-	-	-	-	-
Diversity, Equity & Inclusion	Diversity, Equity & Inclusion	-	-	-	-	-	-
Equal Employment Opportunity	Equal Employment Opportunity	-	-	-	-	-	-
Office of the Chief Financial O	Office of the Chief Financial O	-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-
Engineering Services	Engineering Services	3,347,591	-	3,347,591	-	-	3,347,591
Business Technology	Administrative Services	-	-	-	-	-	-
Business Technology	Information Technology	512,006	-	512,006	-	-	512,006
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	-	-	-	-	-	-
Water Resources Managemen	Office of the Group Manager	-	-	-	-	-	-
Ethics Office	Ethics Office	-	-	-	-	-	-
Real Property	Real Property	1,306,746	-	1,306,746	-	-	1,306,746
General Counsel	General Counsel	-	-	-	-	-	-
General Auditor	General Auditor	-	-	-	-	-	-
Total Departmental O&M	-	6,191,901	-	6,191,901	-	-	6,191,901
GENERAL DISTRICT REQUIREMENTS							
State Water Contract*							
Supply - O&M	Supply - O&M	-	-	-	-	-	-
Supply - Capital	Supply - Capital	-	-	-	-	-	-
Power - O&M & Off-Aq Capital	Power - O&M & Off-Aq Capital	-	-	-	-	-	-
Power - Capital (less Off-Aq)	Power - Capital (less Off-Aq)	-	-	-	-	-	-
Transmission - Capital - Commodity, Demand, & Standby	Transmission - Capital - Commodity, Demand, & Standby	-	-	-	-	-	-
Transmission - O&M - Commodity only	Transmission - O&M - Commodity only	-	-	-	-	-	-
Delta Conveyance - Supply	Delta Conveyance - Supply	-	-	-	-	-	-
Delta Conveyance - Power	Delta Conveyance - Power	-	-	-	-	-	-
Delta Conveyance - Other	Delta Conveyance - Other	-	-	-	-	-	-
Total State Water Contract		-	-	-	-	-	-
Colorado River Aqueduct Power Costs							
Supply Programs (cash funded portion)		18,211,661	-	18,211,661	-	-	18,211,661
Demand Management (cash funded portion)							
Local Resources Program	Local Resources Program	-	-	-	-	-	-
Future Supply Actions & Stormwater Pilot	Future Supply Actions & Stormwater Pilot	-	-	-	-	-	-
Conservation Program (cash funded portion)	Conservation Program (cash funded portion)	-	-	-	-	-	-
Total Demand Management Costs		-	-	-	-	-	-
Capital Financing							
Revenue Bond Debt Service net of BABs Interest Subsidy Payment	Revenue Bond Debt Service net of BABs Interest Subsidy Payment	19,346,974	-	19,346,974	-	-	19,346,974
G.O. Bond Debt Service	G.O. Bond Debt Service	-	-	-	-	-	-
Debt Administration	Debt Administration	190,564	-	190,564	-	-	190,564
Bond Defeasance	Bond Defeasance	-	-	-	-	-	-
PAYGO	PAYGO	9,220,500	-	9,220,500	-	-	9,220,500
Total Capital Financing Costs		28,758,037	-	28,758,037	-	-	28,758,037
Other Operating Costs							
Operating Equipment	Operating Equipment	97,842	-	97,842	-	-	97,842
Succession Planning Labor Pool	Succession Planning Labor Pool	52,072	-	52,072	-	-	52,072
OPEB/PERS Pre-Funding	OPEB/PERS Pre-Funding	-	-	-	-	-	-
Total Other Operating Costs		149,914	-	149,914	-	-	149,914
Increase/(Decrease) in Required Reserves							
Total General District Requirements		47,119,612	-	47,119,612	-	-	47,119,612
REQUIREMENTS BEFORE OFFSETS:		53,311,513	-	53,311,513	-	-	53,311,513
Revenue Offsets							
Property Taxes - MWD Portion of SWC GO Debt Service	Property Taxes - MWD Portion of SWC GO Debt Service	-	-	-	-	-	-
Property Taxes - MWD GO Debt Service	Property Taxes - MWD GO Debt Service	-	-	-	-	-	-
Interest on Investments	Interest on Investments	175,745	-	175,745	-	-	175,745
Hydro-Power Revenue	Hydro-Power Revenue	-	-	-	-	-	-
CRA Power Revenue	CRA Power Revenue	-	-	-	-	-	-
Wadsworth Pumping Plant (DVL) Power Revenue	Wadsworth Pumping Plant (DVL) Power Revenue	-	-	-	-	-	-
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)	Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)	-	-	-	-	-	-
Misc. allocated to supply (PVID Lease)	Misc. allocated to supply (PVID Lease)	-	-	-	-	-	-
Property Taxes - SWC	Property Taxes - SWC	-	-	-	-	-	-
Revenue Reserve used for Revenue Bonds - I&P	Revenue Reserve used for Revenue Bonds - I&P	-	-	-	-	-	-
Annexation	Annexation	-	-	-	-	-	-
Total Revenue Offsets		175,745	-	175,745	-	-	175,745
NET REVENUE REQUIREMENTS:		53,135,768	-	53,135,768	-	-	53,135,768

		Functionalization	Allocation Percentages					Total
			Fixed			Variable		
			Demand	Commodity	Standby	Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		71,997	-	71,997	-	-	-	71,997
Office of General Manager	Board of Directors	-	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-	-
Human Resources		125,429	-	125,429	-	-	-	125,429
Water Systems Operations	Office of the Manager	24,000	-	24,000	-	-	-	24,000
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations Support Services	4,848	-	4,848	-	-	-	4,848
Water Systems Operations	Operations Support Services	-	-	-	-	-	-	-
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	581,162	-	581,162	-	-	-	581,162
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	-	-	-	-	-	-	-
Water Systems Operations	Environmental Health & Safety Section	-	-	-	-	-	-	-
Water Systems Operations	OSS, Fleet Services Unit	-	-	-	-	-	-	-
Water Systems Operations	OSS, Power Support Unit	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations & Planning Section	2,156	-	2,156	-	-	-	2,156
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-	-
Sustainability, Resilience & Inr		-	-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-	-
Engineering Services		2,654,364	-	2,654,364	-	-	-	2,654,364
Business Technology	Administrative Services	-	-	-	-	-	-	-
Business Technology	Information Technology	350,148	-	350,148	-	-	-	350,148
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	-	-	-	-	-	-	-
Water Resources Managemen	Office of the Group Manager	-	-	-	-	-	-	-
Ethics Office		-	-	-	-	-	-	-
Real Property		543,125	-	543,125	-	-	-	543,125
General Counsel		-	-	-	-	-	-	-
General Auditor		-	-	-	-	-	-	-
Total Departmental O&M	-	4,357,227	-	4,357,227	-	-	-	4,357,227

		Functionalization	Allocation Percentages					% Total
			Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
	Office of General Manager	56,564	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Office of General Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Bay Delta Initiatives	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	External Affairs	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	External Affairs	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	External Affairs	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	External Affairs	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	External Affairs	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Human Resources	112,794	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	32,894	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	6,361	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	

	Functionalization	Allocation Percentages					Total
		Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M							
Group	Item						
Office of General Manager	Office of General Manager	56,564	-	56,564	-	-	56,564
Office of General Manager	Board of Directors	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-
Human Resources	Human Resources	112,794	-	112,794	-	-	112,794
Water Systems Operations	Office of the Manager	32,894	-	32,894	-	-	32,894
Water Systems Operations	Office of the Manager, Conveyance & Distribution S	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations Support Services	6,361	-	6,361	-	-	6,361
Water Systems Operations	Operations Support Services	-	-	-	-	-	-
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	739,144	-	739,144	-	-	739,144
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	-	-	-	-	-	-
Water Systems Operations	Environmental Health & Safety Section	-	-	-	-	-	-
Water Systems Operations	OSS, Fleet Services Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Power Support Unit	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations & Planning Secti	2,371	-	2,371	-	-	2,371
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-
Sustainability, Resilience & Inn	Sustainability, Resilience & Inn	-	-	-	-	-	-
Diversity, Equity & Inclusion	Diversity, Equity & Inclusion	-	-	-	-	-	-
Equal Employment Opportunity	Equal Employment Opportunity	-	-	-	-	-	-
Office of the Chief Financial O	Office of the Chief Financial O	-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-
Engineering Services	Engineering Services	2,671,211	-	2,671,211	-	-	2,671,211
Business Technology	Administrative Services	-	-	-	-	-	-
Business Technology	Information Technology	354,235	-	354,235	-	-	354,235
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	-	-	-	-	-	-
Water Resources Managemen	Office of the Group Manager	-	-	-	-	-	-
Ethics Office	Ethics Office	-	-	-	-	-	-
Real Property	Real Property	308,333	-	308,333	-	-	308,333
General Counsel	General Counsel	-	-	-	-	-	-
General Auditor	General Auditor	-	-	-	-	-	-
Total Departmental O&M		4,283,907	-	4,283,907	-	-	4,283,907
GENERAL DISTRICT REQUIREMENTS		-	-	-	-	-	-
State Water Contract*		-	-	-	-	-	-
Supply - O&M	Supply - O&M	-	-	-	-	-	-
Supply - Capital	Supply - Capital	-	-	-	-	-	-
Power - O&M & Off-Aq Capital	Power - O&M & Off-Aq Capital	-	-	-	-	-	-
Power - Capital (less Off-Aq)	Power - Capital (less Off-Aq)	-	-	-	-	-	-
Transmission - Capital - Commodity, Demand, & Standby	Transmission - Capital - Commodity, Demand, & Standby	-	-	-	-	-	-
Transmission - O&M - Commodity only	Transmission - O&M - Commodity only	-	-	-	-	-	-
Delta Conveyance - Supply	Delta Conveyance - Supply	-	-	-	-	-	-
Delta Conveyance - Power	Delta Conveyance - Power	-	-	-	-	-	-
Delta Conveyance - Other	Delta Conveyance - Other	-	-	-	-	-	-
Total State Water Contract		-	-	-	-	-	-
Colorado River Aqueduct Power Costs		-	-	-	-	-	-
Supply Programs (cash funded portion)		-	-	-	-	-	-
Demand Management (cash funded portion)		-	-	-	-	-	-
Local Resources Program	Local Resources Program	-	-	-	-	-	-
Future Supply Actions & Stormwater Pilot	Future Supply Actions & Stormwater Pilot	-	-	-	-	-	-
Conservation Program (cash funded portion)	Conservation Program (cash funded portion)	-	-	-	-	-	-
Total Demand Management Costs		-	-	-	-	-	-
Capital Financing		-	-	-	-	-	-
Revenue Bond Debt Service net of BABs Interest Subsidy Payment	Revenue Bond Debt Service net of BABs Interest Subsidy Payment	15,437,922	5,169,484	6,153,813	4,114,625	-	15,437,922
G.O. Bond Debt Service	G.O. Bond Debt Service	-	-	-	-	-	-
Debt Administration	Debt Administration	152,060	50,918	60,814	40,528	-	152,060
Bond Defeasance	Bond Defeasance	-	-	-	-	-	-
PAYGO	PAYGO	7,357,500	2,463,704	2,932,822	1,960,973	-	7,357,500
Total Capital Financing Costs		22,947,482	7,684,107	9,147,249	6,116,127	-	22,947,482
Other Operating Costs		-	-	-	-	-	-
Operating Equipment	Operating Equipment	67,693	-	67,693	-	-	67,693
Succession Planning Labor Pool	Succession Planning Labor Pool	36,026	-	36,026	-	-	36,026
OPEB/PERS Pre-Funding	OPEB/PERS Pre-Funding	-	-	-	-	-	-
Total Other Operating Costs		103,719	-	103,719	-	-	103,719
Increase/(Decrease) in Required Reserves		-	-	-	-	-	-
Total General District Requirements		23,051,201	7,684,107	9,250,968	6,116,127	-	23,051,201
REQUIREMENTS BEFORE OFFSETS:		27,335,108	7,684,107	13,534,875	6,116,127	-	27,335,108
Revenue Offsets		-	-	-	-	-	-
Property Taxes - MWD Portion of SWC GO Debt Service	Property Taxes - MWD Portion of SWC GO Debt Service	-	-	-	-	-	-
Property Taxes - MWD GO Debt Service	Property Taxes - MWD GO Debt Service	-	-	-	-	-	-
Interest on Investments	Interest on Investments	90,112	-	90,112	-	-	90,112
Hydro-Power Revenue	Hydro-Power Revenue	-	-	-	-	-	-
CRA Power Revenue	CRA Power Revenue	-	-	-	-	-	-
Wadsworth Pumping Plant (DVL) Power Revenue	Wadsworth Pumping Plant (DVL) Power Revenue	-	-	-	-	-	-
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)	Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)	-	-	-	-	-	-
Misc. allocated to supply (PVID Lease)	Misc. allocated to supply (PVID Lease)	-	-	-	-	-	-
Property Taxes - SWC	Property Taxes - SWC	-	-	-	-	-	-
Revenue Reserve used for Revenue Bonds - I&P	Revenue Reserve used for Revenue Bonds - I&P	-	-	-	-	-	-
Annexation	Annexation	-	-	-	-	-	-
Total Revenue Offsets		90,112	-	90,112	-	-	90,112
NET REVENUE REQUIREMENTS:		27,244,996	7,684,107	13,444,763	6,116,127	-	27,244,996

		Functionalization	Allocation Percentages					Total
			Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		49,811	-	49,811	-	-	-	49,811
Office of General Manager	Board of Directors	-	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-	-
Human Resources		86,779	-	86,779	-	-	-	86,779
Water Systems Operations	Office of the Manager	24,000	-	24,000	-	-	-	24,000
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations Support Services	4,848	-	4,848	-	-	-	4,848
Water Systems Operations	Operations Support Services	-	-	-	-	-	-	-
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	581,162	-	581,162	-	-	-	581,162
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	-	-	-	-	-	-	-
Water Systems Operations	Environmental Health & Safety Section	-	-	-	-	-	-	-
Water Systems Operations	OSS, Fleet Services Unit	-	-	-	-	-	-	-
Water Systems Operations	OSS, Power Support Unit	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations & Planning Section	2,156	-	2,156	-	-	-	2,156
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-	-
Sustainability, Resilience & Inr		-	-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-	-
Equal Employment Opportuniti		-	-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-	-
Engineering Services		2,118,050	-	2,118,050	-	-	-	2,118,050
Business Technology	Administrative Services	-	-	-	-	-	-	-
Business Technology	Information Technology	242,252	-	242,252	-	-	-	242,252
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	-	-	-	-	-	-	-
Water Resources Managemen	Office of the Group Manager	-	-	-	-	-	-	-
Ethics Office		-	-	-	-	-	-	-
Real Property		128,153	-	128,153	-	-	-	128,153
General Counsel		-	-	-	-	-	-	-
General Auditor		-	-	-	-	-	-	-
Total Departmental O&M		3,237,211	-	3,237,211	-	-	-	3,237,211

		Functionalization	Allocation Percentages					% Total
			Fixed			Variable	Hydroelectric	
			Demand	Commodity	Standby	Commodity		
Departmental O&M								
Group	Item							
	Office of General Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Office of General Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Bay Delta Initiatives	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	External Affairs	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	External Affairs	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	External Affairs	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	External Affairs	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Human Resources	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%

	Functionalization	Allocation Percentages					Total
		Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M							
Group	Item						
Office of General Manager	Office of General Manager	-	-	-	-	-	-
Office of General Manager	Board of Directors	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-
Human Resources		-	-	-	-	-	-
Water Systems Operations	Office of the Manager	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Conveyance & Distribution S	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations Support Services	-	-	-	-	-	-
Water Systems Operations	Operations Support Services	-	-	-	-	-	-
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	-	-	-	-	-	-
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	-	-	-	-	-	-
Water Systems Operations	Environmental Health & Safety Section	-	-	-	-	-	-
Water Systems Operations	OSS, Fleet Services Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Power Support Unit	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations & Planning Secti	-	-	-	-	-	-
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-
Sustainability, Resilience & Inn		-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-
Engineering Services		-	-	-	-	-	-
Business Technology	Administrative Services	-	-	-	-	-	-
Business Technology	Information Technology	-	-	-	-	-	-
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	-	-	-	-	-	-
Water Resources Managemen	Office of the Group Manager	-	-	-	-	-	-
Ethics Office		-	-	-	-	-	-
Real Property		-	-	-	-	-	-
General Counsel		-	-	-	-	-	-
General Auditor		-	-	-	-	-	-
Total Departmental O&M	-	-	-	-	-	-	-
GENERAL DISTRICT REQUIREMENTS		-	-	-	-	-	-
State Water Contract*		-	-	-	-	-	-
Supply - O&M		-	-	-	-	-	-
Supply - Capital		-	-	-	-	-	-
Power - O&M & Off-Aq Capital		-	-	-	-	-	-
Power - Capital (less Off-Aq)		-	-	-	-	-	-
Transmission - Capital - Commodity, Demand, & Standby		-	-	-	-	-	-
Transmission - O&M - Commodity only		-	-	-	-	-	-
Delta Conveyance - Supply		-	-	-	-	-	-
Delta Conveyance - Power		-	-	-	-	-	-
Delta Conveyance - Other		-	-	-	-	-	-
Total State Water Contract		-	-	-	-	-	-
Colorado River Aqueduct Power Costs		-	-	-	-	-	-
Supply Programs (cash funded portion)		-	-	-	-	-	-
Demand Management (cash funded portion)		-	-	-	-	-	-
Local Resources Program		-	-	-	-	-	-
Future Supply Actions & Stormwater Pilot		-	-	-	-	-	-
Conservation Program (cash funded portion)		-	-	-	-	-	-
Total Demand Management Costs		-	-	-	-	-	-
Capital Financing		-	-	-	-	-	-
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		-	-	-	-	-	-
G.O. Bond Debt Service		-	-	-	-	-	-
Debt Administration		-	-	-	-	-	-
Bond Defeasance		-	-	-	-	-	-
PAYGO		-	-	-	-	-	-
Total Capital Financing Costs		-	-	-	-	-	-
Other Operating Costs		-	-	-	-	-	-
Operating Equipment		-	-	-	-	-	-
Succession Planning Labor Pool		-	-	-	-	-	-
OPEB/PERS Pre-Funding		-	-	-	-	-	-
Total Other Operating Costs		-	-	-	-	-	-
Increase/(Decrease) in Required Reserves		-	-	-	-	-	-
Total General District Requirements		-	-	-	-	-	-
REQUIREMENTS BEFORE OFFSETS:		-	-	-	-	-	-
Revenue Offsets		-	-	-	-	-	-
Property Taxes - MWD Portion of SWC GO Debt Service		-	-	-	-	-	-
Property Taxes - MWD GO Debt Service		-	-	-	-	-	-
Interest on Investments		-	-	-	-	-	-
Hydro-Power Revenue		-	-	-	-	-	-
CRA Power Revenue		-	-	-	-	-	-
Wadsworth Pumping Plant (DVL) Power Revenue	679,733	-	-	-	679,733	-	679,733
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)		-	-	-	-	-	-
Misc. allocated to supply (PVID Lease)		-	-	-	-	-	-
Property Taxes - SWC		-	-	-	-	-	-
Revenue Reserve used for Revenue Bonds - I&P		-	-	-	-	-	-
Annexation		-	-	-	-	-	-
Total Revenue Offsets	679,733	-	-	-	679,733	-	679,733
NET REVENUE REQUIREMENTS:	(679,733)	-	-	-	(679,733)	-	(679,733)

	Functionalization	Allocation Percentages					Total
		Fixed			Variable		
		Demand	Commodity	Standby	Commodity	Hydroelectric	
Departmental O&M							
Group	Item						
Office of General Manager		-	-	-	-	-	-
Office of General Manager	Board of Directors	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-
Human Resources		-	-	-	-	-	-
Water Systems Operations	Office of the Manager	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations Support Services	-	-	-	-	-	-
Water Systems Operations	Operations Support Services	-	-	-	-	-	-
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	-	-	-	-	-	-
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	-	-	-	-	-	-
Water Systems Operations	Environmental Health & Safety Section	-	-	-	-	-	-
Water Systems Operations	OSS, Fleet Services Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Power Support Unit	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations & Planning Section	-	-	-	-	-	-
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-
Sustainability, Resilience & Inr		-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-
Engineering Services		-	-	-	-	-	-
Business Technology	Administrative Services	-	-	-	-	-	-
Business Technology	Information Technology	-	-	-	-	-	-
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	-	-	-	-	-	-
Water Resources Managemen	Office of the Group Manager	-	-	-	-	-	-
Ethics Office		-	-	-	-	-	-
Real Property		-	-	-	-	-	-
General Counsel		-	-	-	-	-	-
General Auditor		-	-	-	-	-	-
Total Departmental O&M	-	-	-	-	-	-	-

		Functionalization	Allocation Percentages					Total
			Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		394,696	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Office of General Manager	Board of Directors	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Bay Delta Initiatives	Bay Delta Initiatives	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Legislative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Media Communications Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Manager, External Affairs/Special Projects	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Conservation & Community Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Human Resources		787,065	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager	823,483	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Treatment Section	214,824	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations Support Services	159,256	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Support Services	98,696	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Desert Region / C&D CRA	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	System Operations Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Power Operations and Planning	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Planning & Programs Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Jensen	17,019,026	0.0%	64.7%	0.0%	35.3%	0.0%	100.0%
Water Systems Operations	Treatment Diemer	-	0.0%	56.9%	0.0%	43.1%	0.0%	100.0%
Water Systems Operations	Treatment Mills	-	0.0%	78.9%	0.0%	21.1%	0.0%	100.0%
Water Systems Operations	Treatment Skinner	-	0.0%	65.8%	0.0%	34.2%	0.0%	100.0%
Water Systems Operations	Treatment Weymouth	-	0.0%	64.7%	0.0%	35.3%	0.0%	100.0%
Water Systems Operations	Water Quality Section	2,994,972	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Eastern Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Western Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Manufacturing Services Unit	144,108	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Environmental Health & Safety Section	1,298,305	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Fleet Services Unit	562,417	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Power Support Unit	281,623	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations & Planning Section	59,367	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Security Team & Security Management	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Sustainability, Resilience & Innovation		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Diversity, Equity & Inclusion		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Equal Employment Opportunity		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Office of the Chief Financial Officer		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Office of Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Engineering Services		2,582,987	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Administrative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Information Technology	2,471,813	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Planning & Development	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Implementation	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Office of the Group Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Ethics Office		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Real Property		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
General Counsel		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
General Auditor		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Departmental O&M		29,892,637	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
GENERAL DISTRICT REQUIREMENTS								
State Water Contract*								
Supply - O&M		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Supply - Capital		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Power - O&M & Off-Aq Capital		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Power - Capital (less Off-Aq)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Transmission - Capital - Commodity, Demand, & Standby		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Transmission - O&M - Commodity only		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Supply		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Power		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Other		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total State Water Contract		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Colorado River Aqueduct Power Costs								
		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Supply Programs (cash funded portion)								
		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Demand Management (cash funded portion)								
Local Resources Program		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Future Supply Actions & Stormwater Pilot		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Conservation Program (cash funded portion)		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Demand Management Costs		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Capital Financing								
		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		14,928,046	31.4%	29.1%	39.4%	0.0%	0.0%	100.0%
G.O. Bond Debt Service		103,753	31.4%	29.1%	39.4%	0.0%	0.0%	100.0%
Debt Administration		147,038	31.4%	29.1%	39.4%	0.0%	0.0%	100.0%
Bond Defeasance		-	31.4%	29.1%	39.4%	0.0%	0.0%	100.0%
PAYGO		7,114,500	31.4%	29.1%	39.4%	0.0%	0.0%	100.0%
Total Capital Financing Costs		22,293,337	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Other Operating Costs								
Operating Equipment		472,351	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Succession Planning Labor Pool		251,387	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
OPEB/PERS Pre-Funding		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Other Operating Costs		723,739	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Increase/(Decrease) in Required Reserves								
		-	30.5%	31.3%	38.2%	0.0%	0.0%	100.0%
Total General District Requirements								
		23,017,076	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
REQUIREMENTS BEFORE OFFSETS:								
		52,909,713	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Revenue Offsets								
Property Taxes - MWD Portion of SWC GO Debt Service		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Property Taxes - MWD GO Debt Service		103,753	0.0%	0.0%	100.0%	0.0%	0.0%	100.0%
Interest on Investments		174,421	31.4%	29.1%	39.4%	0.0%	0.0%	100.0%
Hydro-Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
CRA Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Wadsworth Pumping Plant (DVL) Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to supply (PVID Lease)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Property Taxes - SWC		-	31.4%	29.1%	39.4%	0.0%	0.0%	100.0%
Revenue Reserve used for Revenue Bonds - I&P		-	31.4%	29.1%	39.4%	0.0%	0.0%	100.0%
Annexation		-	31.4%	29.1%	39.4%	0.0%	0.0%	100.0%
Total Revenue Offsets		278,174	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
NET REVENUE REQUIREMENTS:								
	-	52,631,539	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

	Functionalization	Allocation Percentages					Total
		Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M							
Group	Item						
Office of General Manager		394,696	-	394,696	-	-	394,696
Office of General Manager	Board of Directors	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-
Human Resources		787,065	-	787,065	-	-	787,065
Water Systems Operations	Office of the Manager	823,483	-	823,483	-	-	823,483
Water Systems Operations	Office of the Manager, Conveyance & Distribution S	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	214,824	-	214,824	-	-	214,824
Water Systems Operations	Office of the Manager, Operations Support Services	159,256	-	159,256	-	-	159,256
Water Systems Operations	Operations Support Services	98,696	-	98,696	-	-	98,696
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	17,019,026	-	11,017,476	-	6,001,550	17,019,026
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	2,994,972	-	2,994,972	-	-	2,994,972
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	144,108	-	144,108	-	-	144,108
Water Systems Operations	Environmental Health & Safety Section	1,298,305	-	1,298,305	-	-	1,298,305
Water Systems Operations	OSS, Fleet Services Unit	562,417	-	562,417	-	-	562,417
Water Systems Operations	OSS, Power Support Unit	281,623	-	281,623	-	-	281,623
Water Systems Operations	Office of the Manager, Operations & Planning Secti	59,367	-	59,367	-	-	59,367
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-
Sustainability, Resilience & Inn		-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-
Engineering Services		2,582,987	-	2,582,987	-	-	2,582,987
Business Technology	Administrative Services	-	-	-	-	-	-
Business Technology	Information Technology	2,471,813	-	2,471,813	-	-	2,471,813
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	-	-	-	-	-	-
Water Resources Managemen	Office of the Group Manager	-	-	-	-	-	-
Ethics Office		-	-	-	-	-	-
Real Property		-	-	-	-	-	-
General Counsel		-	-	-	-	-	-
General Auditor		-	-	-	-	-	-
Total Departmental O&M	-	29,892,637	-	23,891,087	-	6,001,550	29,892,637
GENERAL DISTRICT REQUIREMENTS		-	-	-	-	-	-
State Water Contract*		-	-	-	-	-	-
Supply - O&M		-	-	-	-	-	-
Supply - Capital		-	-	-	-	-	-
Power - O&M & Off-Aq Capital		-	-	-	-	-	-
Power - Capital (less Off-Aq)		-	-	-	-	-	-
Transmission - Capital - Commodity, Demand, & Standby		-	-	-	-	-	-
Transmission - O&M - Commodity only		-	-	-	-	-	-
Delta Conveyance - Supply		-	-	-	-	-	-
Delta Conveyance - Power		-	-	-	-	-	-
Delta Conveyance - Other		-	-	-	-	-	-
Total State Water Contract		-	-	-	-	-	-
Colorado River Aqueduct Power Costs		-	-	-	-	-	-
Supply Programs (cash funded portion)		-	-	-	-	-	-
Demand Management (cash funded portion)		-	-	-	-	-	-
Local Resources Program		-	-	-	-	-	-
Future Supply Actions & Stormwater Pilot		-	-	-	-	-	-
Conservation Program (cash funded portion)		-	-	-	-	-	-
Total Demand Management Costs		-	-	-	-	-	-
Capital Financing		-	-	-	-	-	-
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		14,928,046	4,694,800	4,347,037	5,886,208	-	14,928,046
G.O. Bond Debt Service		103,753	32,630	30,213	40,910	-	103,753
Debt Administration		147,038	46,243	42,817	57,978	-	147,038
Bond Defeasance		-	-	-	-	-	-
PAYGO		7,114,500	2,237,477	2,071,738	2,805,285	-	7,114,500
Total Capital Financing Costs		22,293,337	7,011,150	6,491,806	8,790,381	-	22,293,337
Other Operating Costs		-	-	-	-	-	-
Operating Equipment		472,351	-	472,351	-	-	472,351
Succession Planning Labor Pool		251,387	-	251,387	-	-	251,387
OPEB/PERS Pre-Funding		-	-	-	-	-	-
Total Other Operating Costs		723,739	-	723,739	-	-	723,739
Increase/(Decrease) in Required Reserves		-	-	-	-	-	-
Total General District Requirements		23,017,076	7,011,150	7,215,544	8,790,381	-	23,017,076
REQUIREMENTS BEFORE OFFSETS:		52,909,713	7,011,150	31,106,631	8,790,381	6,001,550	52,909,713
Revenue Offsets		-	-	-	-	-	-
Property Taxes - MWD Portion of SWC GO Debt Service		-	-	-	-	-	-
Property Taxes - MWD GO Debt Service		103,753	-	-	103,753	-	103,753
Interest on Investments		174,421	54,854	50,791	68,775	-	174,421
Hydro-Power Revenue		-	-	-	-	-	-
CRA Power Revenue		-	-	-	-	-	-
Wadsworth Pumping Plant (DVL) Power Revenue		-	-	-	-	-	-
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)		-	-	-	-	-	-
Misc. allocated to supply (PVID Lease)		-	-	-	-	-	-
Property Taxes - SWC		-	-	-	-	-	-
Revenue Reserve used for Revenue Bonds - I&P		-	-	-	-	-	-
Annexation		-	-	-	-	-	-
Total Revenue Offsets		278,174	54,854	50,791	172,528	-	278,174
NET REVENUE REQUIREMENTS:		52,631,539	6,956,296	31,055,840	8,617,853	6,001,550	52,631,539

		Functionalization	Allocation Percentages					Total
			Fixed			Variable		
			Demand	Commodity	Standby	Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		347,578	-	347,578	-	-	-	347,578
Office of General Manager	Board of Directors	-	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-	-
Human Resources		605,532	-	605,532	-	-	-	605,532
Water Systems Operations	Office of the Manager	600,834	-	600,834	-	-	-	600,834
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	77,372	-	77,372	-	-	-	77,372
Water Systems Operations	Office of the Manager, Operations Support Services	121,362	-	121,362	-	-	-	121,362
Water Systems Operations	Operations Support Services	89,184	-	89,184	-	-	-	89,184
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	10,286,084	-	10,286,084	-	-	-	10,286,084
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	2,354,840	-	2,354,840	-	-	-	2,354,840
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	132,361	-	132,361	-	-	-	132,361
Water Systems Operations	Environmental Health & Safety Section	1,016,128	-	1,016,128	-	-	-	1,016,128
Water Systems Operations	OSS, Fleet Services Unit	339,173	-	339,173	-	-	-	339,173
Water Systems Operations	OSS, Power Support Unit	254,081	-	254,081	-	-	-	254,081
Water Systems Operations	Office of the Manager, Operations & Planning Section	53,963	-	53,963	-	-	-	53,963
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-	-
Sustainability, Resilience & Inr		-	-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-	-
Engineering Services		2,048,096	-	2,048,096	-	-	-	2,048,096
Business Technology	Administrative Services	-	-	-	-	-	-	-
Business Technology	Information Technology	1,690,408	-	1,690,408	-	-	-	1,690,408
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	-	-	-	-	-	-	-
Water Resources Managemen	Office of the Group Manager	-	-	-	-	-	-	-
Ethics Office		-	-	-	-	-	-	-
Real Property		-	-	-	-	-	-	-
General Counsel		-	-	-	-	-	-	-
General Auditor		-	-	-	-	-	-	-
Total Departmental O&M	-	20,016,994	-	20,016,994	-	-	-	20,016,994

		Functionalization	Allocation Percentages					Total
			Demand	Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		394,598	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Office of General Manager	Board of Directors	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Bay Delta Initiatives	Bay Delta Initiatives	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Legislative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Media Communications Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Manager, External Affairs/Special Projects	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Conservation & Community Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Human Resources		786,870	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager	847,777	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Treatment Section	223,722	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations Support Services	163,954	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Support Services	98,696	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Desert Region / C&D CRA	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	System Operations Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Power Operations and Planning	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Planning & Programs Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Jensen	-	0.0%	64.7%	0.0%	35.3%	0.0%	100.0%
Water Systems Operations	Treatment Diemer	-	0.0%	56.9%	0.0%	43.1%	0.0%	100.0%
Water Systems Operations	Treatment Mills	-	0.0%	78.9%	0.0%	21.1%	0.0%	100.0%
Water Systems Operations	Treatment Skinner	-	0.0%	65.8%	0.0%	34.2%	0.0%	100.0%
Water Systems Operations	Treatment Weymouth	16,840,563	0.0%	64.7%	0.0%	35.3%	0.0%	100.0%
Water Systems Operations	Water Quality Section	2,994,972	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Eastern Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Western Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Manufacturing Services Unit	144,108	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Environmental Health & Safety Section	1,298,305	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Fleet Services Unit	562,417	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Power Support Unit	281,623	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations & Planning Section	61,119	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Security Team & Security Management	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Sustainability, Resilience & Innovation		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Diversity, Equity & Inclusion		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Equal Employment Opportunity		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Office of the Chief Financial Officer		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Office of Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Engineering Services		2,715,323	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Administrative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Information Technology	2,471,202	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Planning & Development	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Implementation	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Office of the Group Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Ethics Office		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Real Property		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
General Counsel		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
General Auditor		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Departmental O&M		29,885,247	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
GENERAL DISTRICT REQUIREMENTS								
State Water Contract*								
Supply - O&M		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Supply - Capital		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Power - O&M & Off-Aq Capital		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Power - Capital (less Off-Aq)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Transmission - Capital - Commodity, Demand, & Standby		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Transmission - O&M - Commodity only		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Supply		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Power		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Other		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total State Water Contract		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Colorado River Aqueduct Power Costs								
		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Supply Programs (cash funded portion)								
		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Demand Management (cash funded portion)								
Local Resources Program		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Future Supply Actions & Stormwater Pilot		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Conservation Program (cash funded portion)		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Demand Management Costs		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Capital Financing								
		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Revenue Bond Debt Service net of BABs Interest Subsidy Payment	15,692,860		31.4%	29.1%	39.4%	0.0%	0.0%	100.0%
G.O. Bond Debt Service	109,069		31.4%	29.1%	39.4%	0.0%	0.0%	100.0%
Debt Administration	154,571		31.4%	29.1%	39.4%	0.0%	0.0%	100.0%
Bond Defeasance	-		31.4%	29.1%	39.4%	0.0%	0.0%	100.0%
PAYGO	7,479,000		31.4%	29.1%	39.4%	0.0%	0.0%	100.0%
Total Capital Financing Costs	23,435,500		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Other Operating Costs								
Operating Equipment	472,234		0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Succession Planning Labor Pool	251,325		0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
OPEB/PERS Pre-Funding	-		0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Other Operating Costs	723,560		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Increase/(Decrease) in Required Reserves								
		-	30.5%	31.2%	38.2%	0.0%	0.0%	100.0%
Total General District Requirements								
		24,159,060	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
REQUIREMENTS BEFORE OFFSETS:								
		54,044,307	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Revenue Offsets								
Property Taxes - MWD Portion of SWC GO Debt Service	-		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Property Taxes - MWD GO Debt Service	109,069		0.0%	0.0%	100.0%	0.0%	0.0%	100.0%
Interest on Investments	178,161		31.4%	29.1%	39.4%	0.0%	0.0%	100.0%
Hydro-Power Revenue	-		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
CRA Power Revenue	-		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Wadsworth Pumping Plant (DVL) Power Revenue	-		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)	-		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to supply (PVID Lease)	-		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Property Taxes - SWC	-		31.4%	29.1%	39.4%	0.0%	0.0%	100.0%
Revenue Reserve used for Revenue Bonds - I&P	-		31.4%	29.1%	39.4%	0.0%	0.0%	100.0%
Annexation	-		31.4%	29.1%	39.4%	0.0%	0.0%	100.0%
Total Revenue Offsets	287,230		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
NET REVENUE REQUIREMENTS:								
	-	53,757,077	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

	Functionalization	Allocation Percentages					Total
		Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M							
Group	Item						
Office of General Manager		394,598	-	394,598	-	-	394,598
Office of General Manager	Board of Directors	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-
Human Resources		786,870	-	786,870	-	-	786,870
Water Systems Operations	Office of the Manager	847,777	-	847,777	-	-	847,777
Water Systems Operations	Office of the Manager, Conveyance & Distribution S	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	223,722	-	223,722	-	-	223,722
Water Systems Operations	Office of the Manager, Operations Support Services	163,954	-	163,954	-	-	163,954
Water Systems Operations	Operations Support Services	98,696	-	98,696	-	-	98,696
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	16,840,563	-	10,893,155	-	5,947,408	16,840,563
Water Systems Operations	Water Quality Section	2,994,972	-	2,994,972	-	-	2,994,972
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	144,108	-	144,108	-	-	144,108
Water Systems Operations	Environmental Health & Safety Section	1,298,305	-	1,298,305	-	-	1,298,305
Water Systems Operations	OSS, Fleet Services Unit	562,417	-	562,417	-	-	562,417
Water Systems Operations	OSS, Power Support Unit	281,623	-	281,623	-	-	281,623
Water Systems Operations	Office of the Manager, Operations & Planning Secti	61,119	-	61,119	-	-	61,119
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-
Sustainability, Resilience & Inn		-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-
Engineering Services		2,715,323	-	2,715,323	-	-	2,715,323
Business Technology	Administrative Services	-	-	-	-	-	-
Business Technology	Information Technology	2,471,202	-	2,471,202	-	-	2,471,202
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	-	-	-	-	-	-
Water Resources Managemen	Office of the Group Manager	-	-	-	-	-	-
Ethics Office		-	-	-	-	-	-
Real Property		-	-	-	-	-	-
General Counsel		-	-	-	-	-	-
General Auditor		-	-	-	-	-	-
Total Departmental O&M	-	29,885,247	-	23,937,839	-	5,947,408	29,885,247
GENERAL DISTRICT REQUIREMENTS		-	-	-	-	-	-
State Water Contract*		-	-	-	-	-	-
Supply - O&M		-	-	-	-	-	-
Supply - Capital		-	-	-	-	-	-
Power - O&M & Off-Aq Capital		-	-	-	-	-	-
Power - Capital (less Off-Aq)		-	-	-	-	-	-
Transmission - Capital - Commodity, Demand, & Standby		-	-	-	-	-	-
Transmission - O&M - Commodity only		-	-	-	-	-	-
Delta Conveyance - Supply		-	-	-	-	-	-
Delta Conveyance - Power		-	-	-	-	-	-
Delta Conveyance - Other		-	-	-	-	-	-
Total State Water Contract		-	-	-	-	-	-
Colorado River Aqueduct Power Costs		-	-	-	-	-	-
Supply Programs (cash funded portion)		-	-	-	-	-	-
Demand Management (cash funded portion)		-	-	-	-	-	-
Local Resources Program		-	-	-	-	-	-
Future Supply Actions & Stormwater Pilot		-	-	-	-	-	-
Conservation Program (cash funded portion)		-	-	-	-	-	-
Total Demand Management Costs		-	-	-	-	-	-
Capital Financing		-	-	-	-	-	-
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		15,692,860	4,935,331	4,569,751	6,187,778	-	15,692,860
G.O. Bond Debt Service		109,069	34,302	31,761	43,006	-	109,069
Debt Administration		154,571	48,612	45,011	60,948	-	154,571
Bond Defeasance		-	-	-	-	-	-
PAYGO		7,479,000	2,352,110	2,177,880	2,949,009	-	7,479,000
Total Capital Financing Costs		23,435,500	7,370,355	6,824,403	9,240,742	-	23,435,500
Other Operating Costs		-	-	-	-	-	-
Operating Equipment		472,234	-	472,234	-	-	472,234
Succession Planning Labor Pool		251,325	-	251,325	-	-	251,325
OPEB/PERS Pre-Funding		-	-	-	-	-	-
Total Other Operating Costs		723,560	-	723,560	-	-	723,560
Increase/(Decrease) in Required Reserves		-	-	-	-	-	-
Total General District Requirements		24,159,060	7,370,355	7,547,963	9,240,742	-	24,159,060
REQUIREMENTS BEFORE OFFSETS:		54,044,307	7,370,355	31,485,802	9,240,742	5,947,408	54,044,307
Revenue Offsets		-	-	-	-	-	-
Property Taxes - MWD Portion of SWC GO Debt Service		-	-	-	-	-	-
Property Taxes - MWD GO Debt Service		109,069	-	-	109,069	-	109,069
Interest on Investments		178,161	56,031	51,880	70,250	-	178,161
Hydro-Power Revenue		-	-	-	-	-	-
CRA Power Revenue		-	-	-	-	-	-
Wadsworth Pumping Plant (DVL) Power Revenue		-	-	-	-	-	-
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)		-	-	-	-	-	-
Misc. allocated to supply (PVID Lease)		-	-	-	-	-	-
Property Taxes - SWC		-	-	-	-	-	-
Revenue Reserve used for Revenue Bonds - I&P		-	-	-	-	-	-
Annexation		-	-	-	-	-	-
Total Revenue Offsets		287,230	56,031	51,880	179,319	-	287,230
NET REVENUE REQUIREMENTS:		53,757,077	7,314,324	31,433,922	9,061,424	5,947,408	53,757,077

		Functionalization	Allocation Percentages					Total
			Fixed			Variable		
			Demand	Commodity	Standby	Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		347,492	-	347,492	-	-	-	347,492
Office of General Manager	Board of Directors	-	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-	-
Human Resources		605,382	-	605,382	-	-	-	605,382
Water Systems Operations	Office of the Manager	618,560	-	618,560	-	-	-	618,560
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	80,576	-	80,576	-	-	-	80,576
Water Systems Operations	Office of the Manager, Operations Support Services	124,942	-	124,942	-	-	-	124,942
Water Systems Operations	Operations Support Services	89,184	-	89,184	-	-	-	89,184
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	10,712,101	-	10,712,101	-	-	-	10,712,101
Water Systems Operations	Water Quality Section	2,354,840	-	2,354,840	-	-	-	2,354,840
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	132,361	-	132,361	-	-	-	132,361
Water Systems Operations	Environmental Health & Safety Section	1,016,128	-	1,016,128	-	-	-	1,016,128
Water Systems Operations	OSS, Fleet Services Unit	339,173	-	339,173	-	-	-	339,173
Water Systems Operations	OSS, Power Support Unit	254,081	-	254,081	-	-	-	254,081
Water Systems Operations	Office of the Manager, Operations & Planning Section	55,555	-	55,555	-	-	-	55,555
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-	-
Sustainability, Resilience & Inr		-	-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-	-
Engineering Services		2,153,027	-	2,153,027	-	-	-	2,153,027
Business Technology	Administrative Services	-	-	-	-	-	-	-
Business Technology	Information Technology	1,689,990	-	1,689,990	-	-	-	1,689,990
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	-	-	-	-	-	-	-
Water Resources Managemen	Office of the Group Manager	-	-	-	-	-	-	-
Ethics Office		-	-	-	-	-	-	-
Real Property		-	-	-	-	-	-	-
General Counsel		-	-	-	-	-	-	-
General Auditor		-	-	-	-	-	-	-
Total Departmental O&M	-	20,573,392	-	20,573,392	-	-	-	20,573,392

		Functionalization	Allocation Percentages					% Total
			Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		417,695	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Office of General Manager	Board of Directors	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Bay Delta Initiatives	Bay Delta Initiatives	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Legislative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Media Communications Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Manager, External Affairs/Special Projects	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Conservation & Community Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Human Resources		832,927	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager	799,685	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Treatment Section	206,108	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations Support Services	154,653	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Support Services	98,696	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Desert Region / C&D CRA	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	System Operations Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Power Operations and Planning	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Planning & Programs Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Jensen	-	0.0%	64.7%	0.0%	35.3%	0.0%	100.0%
Water Systems Operations	Treatment Diemer	17,895,729	0.0%	56.9%	0.0%	43.1%	0.0%	100.0%
Water Systems Operations	Treatment Mills	-	0.0%	78.9%	0.0%	21.1%	0.0%	100.0%
Water Systems Operations	Treatment Skinner	-	0.0%	65.8%	0.0%	34.2%	0.0%	100.0%
Water Systems Operations	Treatment Weymouth	-	0.0%	64.7%	0.0%	35.3%	0.0%	100.0%
Water Systems Operations	Water Quality Section	2,994,972	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Eastern Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Western Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Manufacturing Services Unit	144,108	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Environmental Health & Safety Section	1,298,305	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Fleet Services Unit	562,417	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Power Support Unit	281,623	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations & Planning Section	57,652	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Security Team & Security Management	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Sustainability, Resilience & Innovation		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Diversity, Equity & Inclusion		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Equal Employment Opportunity		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Office of the Chief Financial Officer		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Office of Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Engineering Services		3,274,071	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Administrative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Information Technology	2,615,846	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Planning & Development	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Implementation	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Office of the Group Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Ethics Office		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Real Property		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
General Counsel		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
General Auditor		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Departmental O&M		31,634,486	0.0%		0.0%	0.0%	0.0%	0.0%
GENERAL DISTRICT REQUIREMENTS								
State Water Contract*								
Supply - O&M		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Supply - Capital		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Power - O&M & Off-Aq Capital		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Power - Capital (less Off-Aq)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Transmission - Capital - Commodity, Demand, & Standby		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Transmission - O&M - Commodity only		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Supply		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Power		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Other		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total State Water Contract		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Colorado River Aqueduct Power Costs								
		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Supply Programs (cash funded portion)								
		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Demand Management (cash funded portion)								
Local Resources Program		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Future Supply Actions & Stormwater Pilot		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Conservation Program (cash funded portion)		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Demand Management Costs		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Capital Financing								
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
G.O. Bond Debt Service		18,922,077	31.4%	29.1%	39.4%	0.0%	0.0%	100.0%
Debt Administration		131,513	31.4%	29.1%	39.4%	0.0%	0.0%	100.0%
Bond Defeasance		186,379	31.4%	29.1%	39.4%	0.0%	0.0%	100.0%
PAYGO		-	31.4%	29.1%	39.4%	0.0%	0.0%	100.0%
Total Capital Financing Costs		9,018,000	31.4%	29.1%	39.4%	0.0%	0.0%	100.0%
		28,257,968	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Other Operating Costs								
Operating Equipment		499,875	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Succession Planning Labor Pool		266,036	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
OPEB/PERS Pre-Funding		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Other Operating Costs		765,911	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Increase/(Decrease) in Required Reserves								
		-	30.6%	31.0%	38.4%	0.0%	0.0%	100.0%
Total General District Requirements								
		29,023,879	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
REQUIREMENTS BEFORE OFFSETS:								
		60,658,365	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Revenue Offsets								
Property Taxes - MWD Portion of SWC GO Debt Service		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Property Taxes - MWD GO Debt Service		131,513	0.0%	0.0%	100.0%	0.0%	0.0%	100.0%
Interest on Investments		199,965	31.4%	29.1%	39.4%	0.0%	0.0%	100.0%
Hydro-Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
CRA Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Wadsworth Pumping Plant (DVL) Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to supply (PVID Lease)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Property Taxes - SWC		-	31.4%	29.1%	39.4%	0.0%	0.0%	100.0%
Revenue Reserve used for Revenue Bonds - I&P		-	31.4%	29.1%	39.4%	0.0%	0.0%	100.0%
Annexation		-	31.4%	29.1%	39.4%	0.0%	0.0%	100.0%
Total Revenue Offsets		331,477	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
NET REVENUE REQUIREMENTS:								
-		60,326,888	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

	Functionalization	Allocation Percentages					Total
		Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M							
Group	Item						
Office of General Manager		417,695	-	417,695	-	-	417,695
Office of General Manager	Board of Directors	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-
Human Resources		832,927	-	832,927	-	-	832,927
Water Systems Operations	Office of the Manager	799,685	-	799,685	-	-	799,685
Water Systems Operations	Office of the Manager, Conveyance & Distribution S	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	206,108	-	206,108	-	-	206,108
Water Systems Operations	Office of the Manager, Operations Support Services	154,653	-	154,653	-	-	154,653
Water Systems Operations	Operations Support Services	98,696	-	98,696	-	-	98,696
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	17,895,729	-	10,183,236	7,712,493	-	17,895,729
Water Systems Operations	Treatment Mills	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	2,994,972	-	2,994,972	-	-	2,994,972
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	144,108	-	144,108	-	-	144,108
Water Systems Operations	Environmental Health & Safety Section	1,298,305	-	1,298,305	-	-	1,298,305
Water Systems Operations	OSS, Fleet Services Unit	562,417	-	562,417	-	-	562,417
Water Systems Operations	OSS, Power Support Unit	281,623	-	281,623	-	-	281,623
Water Systems Operations	Office of the Manager, Operations & Planning Secti	57,652	-	57,652	-	-	57,652
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-
Sustainability, Resilience & Inn		-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-
Engineering Services		3,274,071	-	3,274,071	-	-	3,274,071
Business Technology	Administrative Services	-	-	-	-	-	-
Business Technology	Information Technology	2,615,846	-	2,615,846	-	-	2,615,846
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	-	-	-	-	-	-
Water Resources Managemen	Office of the Group Manager	-	-	-	-	-	-
Ethics Office		-	-	-	-	-	-
Real Property		-	-	-	-	-	-
General Counsel		-	-	-	-	-	-
General Auditor		-	-	-	-	-	-
Total Departmental O&M	-	31,634,486	-	23,921,993	7,712,493	-	31,634,486
GENERAL DISTRICT REQUIREMENTS							
		-	-	-	-	-	-
State Water Contract*							
Supply - O&M		-	-	-	-	-	-
Supply - Capital		-	-	-	-	-	-
Power - O&M & Off-Aq Capital		-	-	-	-	-	-
Power - Capital (less Off-Aq)		-	-	-	-	-	-
Transmission - Capital - Commodity, Demand, & Standby		-	-	-	-	-	-
Transmission - O&M - Commodity only		-	-	-	-	-	-
Delta Conveyance - Supply		-	-	-	-	-	-
Delta Conveyance - Power		-	-	-	-	-	-
Delta Conveyance - Other		-	-	-	-	-	-
Total State Water Contract		-	-	-	-	-	-
Colorado River Aqueduct Power Costs							
		-	-	-	-	-	-
Supply Programs (cash funded portion)							
		-	-	-	-	-	-
Demand Management (cash funded portion)							
Local Resources Program		-	-	-	-	-	-
Future Supply Actions & Stormwater Pilot		-	-	-	-	-	-
Conservation Program (cash funded portion)		-	-	-	-	-	-
Total Demand Management Costs		-	-	-	-	-	-
Capital Financing							
Revenue Bond Debt Service net of BABs Interest Subsidy Payment	18,922,077	5,950,905	5,510,097	7,461,075	-	-	18,922,077
G.O. Bond Debt Service	131,513	41,360	38,296	51,856	-	-	131,513
Debt Administration	186,379	58,615	54,273	73,490	-	-	186,379
Bond Defeasance	-	-	-	-	-	-	-
PAYGO	9,018,000	2,836,119	2,626,036	3,555,845	-	-	9,018,000
Total Capital Financing Costs	28,257,968	8,886,999	8,228,702	11,142,267	-	-	28,257,968
Other Operating Costs							
Operating Equipment	499,875	-	499,875	-	-	-	499,875
Succession Planning Labor Pool	266,036	-	266,036	-	-	-	266,036
OPEB\PERS Pre-Funding	-	-	-	-	-	-	-
Total Other Operating Costs	765,911	-	765,911	-	-	-	765,911
Increase/(Decrease) in Required Reserves							
	-	-	-	-	-	-	-
Total General District Requirements	29,023,879	8,886,999	8,994,613	11,142,267	-	-	29,023,879
REQUIREMENTS BEFORE OFFSETS:	60,658,365	8,886,999	32,916,606	11,142,267	7,712,493	-	60,658,365
Revenue Offsets							
Property Taxes - MWD Portion of SWC GO Debt Service	-	-	-	-	-	-	-
Property Taxes - MWD GO Debt Service	131,513	-	-	131,513	-	-	131,513
Interest on Investments	199,965	62,888	58,230	78,847	-	-	199,965
Hydro-Power Revenue	-	-	-	-	-	-	-
CRA Power Revenue	-	-	-	-	-	-	-
Wadsworth Pumping Plant (DVL) Power Revenue	-	-	-	-	-	-	-
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)	-	-	-	-	-	-	-
Misc. allocated to supply (PVID Lease)	-	-	-	-	-	-	-
Property Taxes - SWC	-	-	-	-	-	-	-
Revenue Reserve used for Revenue Bonds - I&P	-	-	-	-	-	-	-
Annexation	-	-	-	-	-	-	-
Total Revenue Offsets	331,477	62,888	58,230	210,360	-	-	331,477
NET REVENUE REQUIREMENTS:	60,326,888	8,824,111	32,858,377	10,931,907	7,712,493	-	60,326,888

		Functionalization	Allocation Percentages					Total
			Fixed			Variable		
			Demand	Commodity	Standby	Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		367,832	-	367,832	-	-	-	367,832
Office of General Manager	Board of Directors	-	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-	-
Human Resources		640,816	-	640,816	-	-	-	640,816
Water Systems Operations	Office of the Manager	583,471	-	583,471	-	-	-	583,471
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	74,232	-	74,232	-	-	-	74,232
Water Systems Operations	Office of the Manager, Operations Support Services	117,854	-	117,854	-	-	-	117,854
Water Systems Operations	Operations Support Services	89,184	-	89,184	-	-	-	89,184
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	9,868,755	-	9,868,755	-	-	-	9,868,755
Water Systems Operations	Treatment Mills	-	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	2,354,840	-	2,354,840	-	-	-	2,354,840
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	132,361	-	132,361	-	-	-	132,361
Water Systems Operations	Environmental Health & Safety Section	1,016,128	-	1,016,128	-	-	-	1,016,128
Water Systems Operations	OSS, Fleet Services Unit	339,173	-	339,173	-	-	-	339,173
Water Systems Operations	OSS, Power Support Unit	254,081	-	254,081	-	-	-	254,081
Water Systems Operations	Office of the Manager, Operations & Planning Section	52,403	-	52,403	-	-	-	52,403
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-	-
Sustainability, Resilience & Inr		-	-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-	-
Engineering Services		2,596,069	-	2,596,069	-	-	-	2,596,069
Business Technology	Administrative Services	-	-	-	-	-	-	-
Business Technology	Information Technology	1,788,908	-	1,788,908	-	-	-	1,788,908
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	-	-	-	-	-	-	-
Water Resources Managemen	Office of the Group Manager	-	-	-	-	-	-	-
Ethics Office		-	-	-	-	-	-	-
Real Property		-	-	-	-	-	-	-
General Counsel		-	-	-	-	-	-	-
General Auditor		-	-	-	-	-	-	-
Total Departmental O&M	-	20,276,107	-	20,276,107	-	-	-	20,276,107

		Functionalization	Allocation Percentages					%
			Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		298,167	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Office of General Manager	Board of Directors	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Bay Delta Initiatives	Bay Delta Initiatives	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Legislative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Media Communications Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Manager, External Affairs/Special Projects	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Conservation & Community Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Human Resources		594,576	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager	770,822	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Treatment Section	195,538	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations Support Services	149,071	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Support Services	98,696	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Desert Region / C&D CRA	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	System Operations Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Power Operations and Planning	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Planning & Programs Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Jensen	-	0.0%	64.7%	0.0%	35.3%	0.0%	100.0%
Water Systems Operations	Treatment Diemer	-	0.0%	56.9%	0.0%	43.1%	0.0%	100.0%
Water Systems Operations	Treatment Mills	12,398,340	0.0%	78.9%	0.0%	21.1%	0.0%	100.0%
Water Systems Operations	Treatment Skinner	-	0.0%	65.8%	0.0%	34.2%	0.0%	100.0%
Water Systems Operations	Treatment Weymouth	-	0.0%	64.7%	0.0%	35.3%	0.0%	100.0%
Water Systems Operations	Water Quality Section	2,994,972	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Eastern Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Western Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Manufacturing Services Unit	144,108	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Environmental Health & Safety Section	1,298,305	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Fleet Services Unit	562,417	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Power Support Unit	281,623	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations & Planning Section	55,571	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Security Team & Security Management	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Sustainability, Resilience & Innovation		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Diversity, Equity & Inclusion		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Equal Employment Opportunity		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Office of the Chief Financial Officer		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Office of Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Engineering Services		872,432	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Administrative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Information Technology	1,867,293	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Planning & Development	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Implementation	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Office of the Group Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Ethics Office		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Real Property		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
General Counsel		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
General Auditor		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Departmental O&M		22,581,931	0.0%		0.0%	0.0%	0.0%	0.0%
GENERAL DISTRICT REQUIREMENTS								
State Water Contract*								
Supply - O&M		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Supply - Capital		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Power - O&M & Off-Aq Capital		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Power - Capital (less Off-Aq)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Transmission - Capital - Commodity, Demand, & Standby		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Transmission - O&M - Commodity only		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Supply		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Power		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Other		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total State Water Contract		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Colorado River Aqueduct Power Costs								
		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Supply Programs (cash funded portion)								
		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Demand Management (cash funded portion)								
Local Resources Program		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Future Supply Actions & Stormwater Pilot		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Conservation Program (cash funded portion)		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Demand Management Costs		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Capital Financing								
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
G.O. Bond Debt Service	5,042,110	31.4%	29.1%	39.4%	0.0%	0.0%	0.0%	100.0%
	35,044	31.4%	29.1%	39.4%	0.0%	0.0%	0.0%	100.0%
Debt Administration	49,664	31.4%	29.1%	39.4%	0.0%	0.0%	0.0%	100.0%
Bond Defeasance	-	31.4%	29.1%	39.4%	0.0%	0.0%	0.0%	100.0%
PAYGO	2,403,000	31.4%	29.1%	39.4%	0.0%	0.0%	0.0%	100.0%
Total Capital Financing Costs	7,529,818	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Other Operating Costs								
Operating Equipment	356,830	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Succession Planning Labor Pool	189,907	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%
OPEB/PERS Pre-Funding	-	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Total Other Operating Costs	546,737	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Increase/(Decrease) in Required Reserves								
	-	29.3%	33.9%	36.8%	0.0%	0.0%		100.0%
Total General District Requirements								
	8,076,555	0.0%	0.0%	0.0%	0.0%	0.0%		0.0%
REQUIREMENTS BEFORE OFFSETS:								
	30,658,486	0.0%	0.0%	0.0%	0.0%	0.0%		0.0%
Revenue Offsets								
Property Taxes - MWD Portion of SWC GO Debt Service	-	0.0%	0.0%	0.0%	0.0%	0.0%		0.0%
Property Taxes - MWD GO Debt Service	35,044	0.0%	0.0%	100.0%	0.0%	0.0%		100.0%
Interest on Investments	101,068	31.4%	29.1%	39.4%	0.0%	0.0%		100.0%
Hydro-Power Revenue	-	0.0%	0.0%	0.0%	0.0%	0.0%		0.0%
CRA Power Revenue	-	0.0%	0.0%	0.0%	0.0%	0.0%		0.0%
Wadsworth Pumping Plant (DVL) Power Revenue	-	0.0%	0.0%	0.0%	0.0%	0.0%		0.0%
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)	-	0.0%	0.0%	0.0%	0.0%	0.0%		0.0%
Misc. allocated to supply (PVID Lease)	-	0.0%	0.0%	0.0%	0.0%	0.0%		0.0%
Property Taxes - SWC	-	31.4%	29.1%	39.4%	0.0%	0.0%		100.0%
Revenue Reserve used for Revenue Bonds - I&P	-	31.4%	29.1%	39.4%	0.0%	0.0%		100.0%
Annexation	-	31.4%	29.1%	39.4%	0.0%	0.0%		100.0%
Total Revenue Offsets	136,112	0.0%	0.0%	0.0%	0.0%	0.0%		0.0%
NET REVENUE REQUIREMENTS:								
-	30,522,374	0.0%	0.0%	0.0%	0.0%	0.0%		0.0%

	Functionalization	Allocation Percentages					Total
		Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M							
Group	Item						
Office of General Manager	Office of General Manager	298,167	-	298,167	-	-	298,167
Office of General Manager	Board of Directors	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-
Human Resources	Human Resources	594,576	-	594,576	-	-	594,576
Water Systems Operations	Office of the Manager	770,822	-	770,822	-	-	770,822
Water Systems Operations	Office of the Manager, Conveyance & Distribution S	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	195,538	-	195,538	-	-	195,538
Water Systems Operations	Office of the Manager, Operations Support Services	149,071	-	149,071	-	-	149,071
Water Systems Operations	Operations Support Services	98,696	-	98,696	-	-	98,696
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	12,398,340	-	9,786,297	2,612,043	-	12,398,340
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	2,994,972	-	2,994,972	-	-	2,994,972
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	144,108	-	144,108	-	-	144,108
Water Systems Operations	Environmental Health & Safety Section	1,298,305	-	1,298,305	-	-	1,298,305
Water Systems Operations	OSS, Fleet Services Unit	562,417	-	562,417	-	-	562,417
Water Systems Operations	OSS, Power Support Unit	281,623	-	281,623	-	-	281,623
Water Systems Operations	Office of the Manager, Operations & Planning Secti	55,571	-	55,571	-	-	55,571
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-
Sustainability, Resilience & Inn	Sustainability, Resilience & Inn	-	-	-	-	-	-
Diversity, Equity & Inclusion	Diversity, Equity & Inclusion	-	-	-	-	-	-
Equal Employment Opportunity	Equal Employment Opportunity	-	-	-	-	-	-
Office of the Chief Financial O	Office of the Chief Financial O	-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-
Engineering Services	Engineering Services	872,432	-	872,432	-	-	872,432
Business Technology	Administrative Services	-	-	-	-	-	-
Business Technology	Information Technology	1,867,293	-	1,867,293	-	-	1,867,293
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	-	-	-	-	-	-
Water Resources Managemen	Office of the Group Manager	-	-	-	-	-	-
Ethics Office	Ethics Office	-	-	-	-	-	-
Real Property	Real Property	-	-	-	-	-	-
General Counsel	General Counsel	-	-	-	-	-	-
General Auditor	General Auditor	-	-	-	-	-	-
Total Departmental O&M	-	22,581,931	-	19,969,888	2,612,043	-	22,581,931
GENERAL DISTRICT REQUIREMENTS		-	-	-	-	-	-
State Water Contract*		-	-	-	-	-	-
Supply - O&M	Supply - O&M	-	-	-	-	-	-
Supply - Capital	Supply - Capital	-	-	-	-	-	-
Power - O&M & Off-Aq Capital	Power - O&M & Off-Aq Capital	-	-	-	-	-	-
Power - Capital (less Off-Aq)	Power - Capital (less Off-Aq)	-	-	-	-	-	-
Transmission - Capital - Commodity, Demand, & Standby	Transmission - Capital - Commodity, Demand, & Standby	-	-	-	-	-	-
Transmission - O&M - Commodity only	Transmission - O&M - Commodity only	-	-	-	-	-	-
Delta Conveyance - Supply	Delta Conveyance - Supply	-	-	-	-	-	-
Delta Conveyance - Power	Delta Conveyance - Power	-	-	-	-	-	-
Delta Conveyance - Other	Delta Conveyance - Other	-	-	-	-	-	-
Total State Water Contract		-	-	-	-	-	-
Colorado River Aqueduct Power Costs		-	-	-	-	-	-
Supply Programs (cash funded portion)		-	-	-	-	-	-
Demand Management (cash funded portion)		-	-	-	-	-	-
Local Resources Program	Local Resources Program	-	-	-	-	-	-
Future Supply Actions & Stormwater Pilot	Future Supply Actions & Stormwater Pilot	-	-	-	-	-	-
Conservation Program (cash funded portion)	Conservation Program (cash funded portion)	-	-	-	-	-	-
Total Demand Management Costs		-	-	-	-	-	-
Capital Financing		-	-	-	-	-	-
Revenue Bond Debt Service net of BABs Interest Subsidy Payment	Revenue Bond Debt Service net of BABs Interest Subsidy Payment	5,042,110	1,585,720	1,468,259	1,988,131	-	5,042,110
G.O. Bond Debt Service	G.O. Bond Debt Service	35,044	11,021	10,205	13,818	-	35,044
Debt Administration	Debt Administration	49,664	15,619	14,462	19,583	-	49,664
Bond Defeasance	Bond Defeasance	-	-	-	-	-	-
PAYGO	PAYGO	2,403,000	755,732	699,752	947,516	-	2,403,000
Total Capital Financing Costs		7,529,818	2,368,092	2,192,678	2,969,047	-	7,529,818
Other Operating Costs		-	-	-	-	-	-
Operating Equipment	Operating Equipment	356,830	-	356,830	-	-	356,830
Succession Planning Labor Pool	Succession Planning Labor Pool	189,907	-	189,907	-	-	189,907
OPEB/PERS Pre-Funding	OPEB/PERS Pre-Funding	-	-	-	-	-	-
Total Other Operating Costs		546,737	-	546,737	-	-	546,737
Increase/(Decrease) in Required Reserves		-	-	-	-	-	-
Total General District Requirements		8,076,555	2,368,092	2,739,415	2,969,047	-	8,076,555
REQUIREMENTS BEFORE OFFSETS:		30,658,486	2,368,092	22,709,303	2,969,047	2,612,043	30,658,486
Revenue Offsets		-	-	-	-	-	-
Property Taxes - MWD Portion of SWC GO Debt Service	Property Taxes - MWD Portion of SWC GO Debt Service	-	-	-	-	-	-
Property Taxes - MWD GO Debt Service	Property Taxes - MWD GO Debt Service	35,044	-	-	35,044	-	35,044
Interest on Investments	Interest on Investments	101,068	31,785	29,431	39,852	-	101,068
Hydro-Power Revenue	Hydro-Power Revenue	-	-	-	-	-	-
CRA Power Revenue	CRA Power Revenue	-	-	-	-	-	-
Wadsworth Pumping Plant (DVL) Power Revenue	Wadsworth Pumping Plant (DVL) Power Revenue	-	-	-	-	-	-
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)	Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)	-	-	-	-	-	-
Misc. allocated to supply (PVID Lease)	Misc. allocated to supply (PVID Lease)	-	-	-	-	-	-
Property Taxes - SWC	Property Taxes - SWC	-	-	-	-	-	-
Revenue Reserve used for Revenue Bonds - I&P	Revenue Reserve used for Revenue Bonds - I&P	-	-	-	-	-	-
Annexation	Annexation	-	-	-	-	-	-
Total Revenue Offsets		136,112	31,785	29,431	74,895	-	136,112
NET REVENUE REQUIREMENTS:		30,522,374	2,336,307	22,679,872	2,894,152	2,612,043	30,522,374

		Functionalization	Allocation Percentages					Total
			Fixed			Variable		
			Demand	Commodity	Standby	Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		262,573	-	262,573	-	-	-	262,573
Office of General Manager	Board of Directors		-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives		-	-	-	-	-	-
External Affairs	Legislative Services		-	-	-	-	-	-
External Affairs	Media Communications Services		-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects		-	-	-	-	-	-
External Affairs	Conservation & Community Services		-	-	-	-	-	-
Human Resources		457,440	-	457,440	-	-	-	457,440
Water Systems Operations	Office of the Manager	562,412	-	562,412	-	-	-	562,412
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section		-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	70,425	-	70,425	-	-	-	70,425
Water Systems Operations	Office of the Manager, Operations Support Services	113,601	-	113,601	-	-	-	113,601
Water Systems Operations	Operations Support Services	89,184	-	89,184	-	-	-	89,184
Water Systems Operations	Desert Region / C&D CRA		-	-	-	-	-	-
Water Systems Operations	System Operations Unit		-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning		-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit		-	-	-	-	-	-
Water Systems Operations	Treatment Jensen		-	-	-	-	-	-
Water Systems Operations	Treatment Diemer		-	-	-	-	-	-
Water Systems Operations	Treatment Mills	9,362,630	-	9,362,630	-	-	-	9,362,630
Water Systems Operations	Treatment Skinner		-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth		-	-	-	-	-	-
Water Systems Operations	Water Quality Section	2,354,840	-	2,354,840	-	-	-	2,354,840
Water Systems Operations	C&D, Eastern Unit		-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit		-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	132,361	-	132,361	-	-	-	132,361
Water Systems Operations	Environmental Health & Safety Section	1,016,128	-	1,016,128	-	-	-	1,016,128
Water Systems Operations	OSS, Fleet Services Unit	339,173	-	339,173	-	-	-	339,173
Water Systems Operations	OSS, Power Support Unit	254,081	-	254,081	-	-	-	254,081
Water Systems Operations	Office of the Manager, Operations & Planning Section	50,512	-	50,512	-	-	-	50,512
Water Systems Operations	Security Team & Security Management		-	-	-	-	-	-
Sustainability, Resilience & Inr			-	-	-	-	-	-
Diversity, Equity & Inclusion			-	-	-	-	-	-
Equal Employment Opportunity			-	-	-	-	-	-
Office of the Chief Financial O			-	-	-	-	-	-
Business Technology	Office of Manager		-	-	-	-	-	-
Engineering Services		691,767	-	691,767	-	-	-	691,767
Business Technology	Administrative Services		-	-	-	-	-	-
Business Technology	Information Technology	1,276,992	-	1,276,992	-	-	-	1,276,992
Water Resources Managemen	Resource Planning & Development		-	-	-	-	-	-
Water Resources Managemen	Resource Implementation		-	-	-	-	-	-
Water Resources Managemen	Office of the Group Manager		-	-	-	-	-	-
Ethics Office			-	-	-	-	-	-
Real Property			-	-	-	-	-	-
General Counsel			-	-	-	-	-	-
General Auditor			-	-	-	-	-	-
Total Departmental O&M	-	17,034,118	-	17,034,118	-	-	-	17,034,118

		Functionalization	Allocation Percentages					Total
			Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		357,132	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Office of General Manager	Board of Directors	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Bay Delta Initiatives	Bay Delta Initiatives	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Legislative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Media Communications Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Manager, External Affairs/Special Projects	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Conservation & Community Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Human Resources		712,159	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager	760,359	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Treatment Section	191,706	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations Support Services	147,048	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Support Services	98,696	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Desert Region / C&D CRA	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	System Operations Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Power Operations and Planning	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Planning & Programs Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Jensen	-	0.0%	64.7%	0.0%	35.3%	0.0%	100.0%
Water Systems Operations	Treatment Diemer	-	0.0%	56.9%	0.0%	43.1%	0.0%	100.0%
Water Systems Operations	Treatment Mills	-	0.0%	78.9%	0.0%	21.1%	0.0%	100.0%
Water Systems Operations	Treatment Skinner	14,423,873	0.0%	65.8%	0.0%	34.2%	0.0%	100.0%
Water Systems Operations	Treatment Weymouth	-	0.0%	64.7%	0.0%	35.3%	0.0%	100.0%
Water Systems Operations	Water Quality Section	2,994,972	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Eastern Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Western Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Manufacturing Services Unit	144,108	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Environmental Health & Safety Section	1,298,305	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Fleet Services Unit	562,417	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Power Support Unit	281,623	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations & Planning Section	54,817	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Security Team & Security Management	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Sustainability, Resilience & Innovation		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Diversity, Equity & Inclusion		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Equal Employment Opportunity		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Office of the Chief Financial Officer		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Office of Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Engineering Services		2,783,941	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Administrative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Information Technology	2,236,568	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Planning & Development	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Implementation	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Office of the Group Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Ethics Office		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Real Property		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
General Counsel		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
General Auditor		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Departmental O&M		27,047,723	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
GENERAL DISTRICT REQUIREMENTS								
State Water Contract*								
Supply - O&M		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Supply - Capital		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Power - O&M & Off-Aq Capital		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Power - Capital (less Off-Aq)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Transmission - Capital - Commodity, Demand, & Standby		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Transmission - O&M - Commodity only		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Supply		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Power		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Other		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total State Water Contract		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Colorado River Aqueduct Power Costs								
		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Supply Programs (cash funded portion)								
		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Demand Management (cash funded portion)								
Local Resources Program		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Future Supply Actions & Stormwater Pilot		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Conservation Program (cash funded portion)		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Demand Management Costs		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Capital Financing								
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
G.O. Bond Debt Service	16,089,431	31.4%	29.1%	39.4%	0.0%	0.0%	0.0%	100.0%
	111,825	31.4%	29.1%	39.4%	0.0%	0.0%	0.0%	100.0%
Debt Administration	158,478	31.4%	29.1%	39.4%	0.0%	0.0%	0.0%	100.0%
Bond Defeasance	-	31.4%	29.1%	39.4%	0.0%	0.0%	0.0%	100.0%
PAYGO	7,668,000	31.4%	29.1%	39.4%	0.0%	0.0%	0.0%	100.0%
Total Capital Financing Costs	24,027,733	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Other Operating Costs								
Operating Equipment	427,397	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Succession Planning Labor Pool	227,463	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%
OPEB/PERS Pre-Funding	-	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Total Other Operating Costs	654,860	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Increase/(Decrease) in Required Reserves								
	-	30.6%	31.0%	38.4%	0.0%	0.0%	0.0%	100.0%
Total General District Requirements								
	24,682,593	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
REQUIREMENTS BEFORE OFFSETS:								
	51,730,315	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Revenue Offsets								
Property Taxes - MWD Portion of SWC GO Debt Service	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Property Taxes - MWD GO Debt Service	111,825	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Interest on Investments	170,533	31.4%	29.1%	39.4%	0.0%	0.0%	0.0%	100.0%
Hydro-Power Revenue	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
CRA Power Revenue	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Wadsworth Pumping Plant (DVL) Power Revenue	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to supply (PVID Lease)	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Property Taxes - SWC	-	31.4%	29.1%	39.4%	0.0%	0.0%	0.0%	100.0%
Revenue Reserve used for Revenue Bonds - I&P	-	31.4%	29.1%	39.4%	0.0%	0.0%	0.0%	100.0%
Annexation	-	31.4%	29.1%	39.4%	0.0%	0.0%	0.0%	100.0%
Total Revenue Offsets	282,358	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
NET REVENUE REQUIREMENTS:								
-	51,447,958	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

	Functionalization	Allocation Percentages					Total
		Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M							
Group	Item						
Office of General Manager		357,132	-	357,132	-	-	357,132
Office of General Manager	Board of Directors	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-
Human Resources		712,159	-	712,159	-	-	712,159
Water Systems Operations	Office of the Manager	760,359	-	760,359	-	-	760,359
Water Systems Operations	Office of the Manager, Conveyance & Distribution S	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	191,706	-	191,706	-	-	191,706
Water Systems Operations	Office of the Manager, Operations Support Services	147,048	-	147,048	-	-	147,048
Water Systems Operations	Operations Support Services	98,696	-	98,696	-	-	98,696
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	14,423,873	-	9,486,621	4,937,252	-	14,423,873
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	2,994,972	-	2,994,972	-	-	2,994,972
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	144,108	-	144,108	-	-	144,108
Water Systems Operations	Environmental Health & Safety Section	1,298,305	-	1,298,305	-	-	1,298,305
Water Systems Operations	OSS, Fleet Services Unit	562,417	-	562,417	-	-	562,417
Water Systems Operations	OSS, Power Support Unit	281,623	-	281,623	-	-	281,623
Water Systems Operations	Office of the Manager, Operations & Planning Secti	54,817	-	54,817	-	-	54,817
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-
Sustainability, Resilience & Inn		-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-
Engineering Services		2,783,941	-	2,783,941	-	-	2,783,941
Business Technology	Administrative Services	-	-	-	-	-	-
Business Technology	Information Technology	2,236,568	-	2,236,568	-	-	2,236,568
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	-	-	-	-	-	-
Water Resources Managemen	Office of the Group Manager	-	-	-	-	-	-
Ethics Office		-	-	-	-	-	-
Real Property		-	-	-	-	-	-
General Counsel		-	-	-	-	-	-
General Auditor		-	-	-	-	-	-
Total Departmental O&M	-	27,047,723	-	22,110,471	4,937,252	-	27,047,723
GENERAL DISTRICT REQUIREMENTS							
		-	-	-	-	-	-
State Water Contract*							
Supply - O&M		-	-	-	-	-	-
Supply - Capital		-	-	-	-	-	-
Power - O&M & Off-Aq Capital		-	-	-	-	-	-
Power - Capital (less Off-Aq)		-	-	-	-	-	-
Transmission - Capital - Commodity, Demand, & Standby		-	-	-	-	-	-
Transmission - O&M - Commodity only		-	-	-	-	-	-
Delta Conveyance - Supply		-	-	-	-	-	-
Delta Conveyance - Power		-	-	-	-	-	-
Delta Conveyance - Other		-	-	-	-	-	-
Total State Water Contract		-	-	-	-	-	-
Colorado River Aqueduct Power Costs							
		-	-	-	-	-	-
Supply Programs (cash funded portion)							
		-	-	-	-	-	-
Demand Management (cash funded portion)							
Local Resources Program		-	-	-	-	-	-
Future Supply Actions & Stormwater Pilot		-	-	-	-	-	-
Conservation Program (cash funded portion)		-	-	-	-	-	-
Total Demand Management Costs		-	-	-	-	-	-
Capital Financing							
Revenue Bond Debt Service net of BABs Interest Subsidy Payment	16,089,431	5,060,051	4,685,232	6,344,148	-	-	16,089,431
G.O. Bond Debt Service	111,825	35,168	32,563	44,093	-	-	111,825
Debt Administration	158,478	49,840	46,149	62,489	-	-	158,478
Bond Defeasance	-	-	-	-	-	-	-
PAYGO	7,668,000	2,411,550	2,232,917	3,023,533	-	-	7,668,000
Total Capital Financing Costs	24,027,733	7,556,610	6,996,861	9,474,263	-	-	24,027,733
Other Operating Costs							
Operating Equipment	427,397	-	427,397	-	-	-	427,397
Succession Planning Labor Pool	227,463	-	227,463	-	-	-	227,463
OPEB/PERS Pre-Funding	-	-	-	-	-	-	-
Total Other Operating Costs	654,860	-	654,860	-	-	-	654,860
Increase/(Decrease) in Required Reserves							
	-	-	-	-	-	-	-
Total General District Requirements	24,682,593	7,556,610	7,651,720	9,474,263	-	-	24,682,593
REQUIREMENTS BEFORE OFFSETS:	51,730,315	7,556,610	29,762,191	9,474,263	4,937,252	-	51,730,315
Revenue Offsets							
Property Taxes - MWD Portion of SWC GO Debt Service	-	-	-	-	-	-	-
Property Taxes - MWD GO Debt Service	111,825	-	-	111,825	-	-	111,825
Interest on Investments	170,533	53,632	49,659	67,242	-	-	170,533
Hydro-Power Revenue	-	-	-	-	-	-	-
CRA Power Revenue	-	-	-	-	-	-	-
Wadsworth Pumping Plant (DVL) Power Revenue	-	-	-	-	-	-	-
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)	-	-	-	-	-	-	-
Misc. allocated to supply (PVID Lease)	-	-	-	-	-	-	-
Property Taxes - SWC	-	-	-	-	-	-	-
Revenue Reserve used for Revenue Bonds - I&P	-	-	-	-	-	-	-
Annexation	-	-	-	-	-	-	-
Total Revenue Offsets	282,358	53,632	49,659	179,067	-	-	282,358
NET REVENUE REQUIREMENTS:	51,447,958	7,502,978	29,712,532	9,295,196	4,937,252	-	51,447,958

		Functionalization	Allocation Percentages					Total
			Fixed			Variable		
			Demand	Commodity	Standby	Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		314,499	-	314,499	-	-	-	314,499
Office of General Manager	Board of Directors	-	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-	-
Human Resources		547,903	-	547,903	-	-	-	547,903
Water Systems Operations	Office of the Manager	554,778	-	554,778	-	-	-	554,778
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	69,045	-	69,045	-	-	-	69,045
Water Systems Operations	Office of the Manager, Operations Support Services	112,059	-	112,059	-	-	-	112,059
Water Systems Operations	Operations Support Services	89,184	-	89,184	-	-	-	89,184
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	9,179,141	-	9,179,141	-	-	-	9,179,141
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	2,354,840	-	2,354,840	-	-	-	2,354,840
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	132,361	-	132,361	-	-	-	132,361
Water Systems Operations	Environmental Health & Safety Section	1,016,128	-	1,016,128	-	-	-	1,016,128
Water Systems Operations	OSS, Fleet Services Unit	339,173	-	339,173	-	-	-	339,173
Water Systems Operations	OSS, Power Support Unit	254,081	-	254,081	-	-	-	254,081
Water Systems Operations	Office of the Manager, Operations & Planning Section	49,826	-	49,826	-	-	-	49,826
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-	-
Sustainability, Resilience & Inr		-	-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-	-
Engineering Services		2,207,436	-	2,207,436	-	-	-	2,207,436
Business Technology	Administrative Services	-	-	-	-	-	-	-
Business Technology	Information Technology	1,529,530	-	1,529,530	-	-	-	1,529,530
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	-	-	-	-	-	-	-
Water Resources Managemen	Office of the Group Manager	-	-	-	-	-	-	-
Ethics Office		-	-	-	-	-	-	-
Real Property		-	-	-	-	-	-	-
General Counsel		-	-	-	-	-	-	-
General Auditor		-	-	-	-	-	-	-
Total Departmental O&M	-	18,749,982	-	18,749,982	-	-	-	18,749,982

		Functionalization	Allocation Percentages					% Total
			Demand	Fixed Commodity	Standby	Variable Commodity	Other	
Departmental O&M								
Group	Item							
	Office of General Manager	1,572,675	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Office of General Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Bay Delta Initiatives	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	External Affairs	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	External Affairs	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	External Affairs	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	External Affairs	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Human Resources	3,136,078	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	3,673,054	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	366,212	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	155,557	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	710,342	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	6,801,153	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	9,380,068	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	1,257,278	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	2,565,584	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	2,697,745	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	1,869,025	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	2,174,370	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	2,538,681	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	16,726,000	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	16,142,844	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	6,727,688	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	6,407,386	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	6,882,653	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	4,251,957	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	264,802	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Sustainability, Resilience & Innovation	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Diversity, Equity & Inclusion	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Equal Employment Opportunity	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Office of the Chief Financial Officer	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Business Technology	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Engineering Services	8,890,966	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Business Technology	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Business Technology	9,848,996	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Resources Management	418,793	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Resources Management	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Resources Management	47,850	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Ethics Office	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Real Property	3,600,158	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	General Counsel	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	General Auditor	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Total Departmental O&M	119,107,915	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
GENERAL DISTRICT REQUIREMENTS								
State Water Contract*								
	Supply - O&M	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Supply - Capital	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Power - O&M & Off-Aq Capital	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Power - Capital (less Off-Aq)	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Transmission - Capital - Commodity, Demand, & Standby	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Transmission - O&M - Commodity only	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Delta Conveyance - Supply	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Delta Conveyance - Power	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Delta Conveyance - Other	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Total State Water Contract	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Colorado River Aqueduct Power Costs		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Supply Programs (cash funded portion)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Demand Management (cash funded portion)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Local Resources Program	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Future Supply Actions & Stormwater Pilot	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Conservation Program (cash funded portion)	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Total Demand Management Costs	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Capital Financing		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Revenue Bond Debt Service net of BABs Interest Subsidy Payment	51,384,203	33.5%	39.9%	26.7%	0.0%	0.0%	100.0%
	G.O. Bond Debt Service	1,477,547	33.5%	39.9%	26.7%	0.0%	0.0%	100.0%
	Debt Administration	506,124	33.5%	39.9%	26.7%	0.0%	0.0%	100.0%
	Bond Defeasance	-	33.5%	39.9%	26.7%	0.0%	0.0%	100.0%
	PAYGO	24,489,000	33.5%	39.9%	26.7%	0.0%	0.0%	100.0%
	Total Capital Financing Costs	77,856,873	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Other Operating Costs								
	Operating Equipment	1,882,095	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Succession Planning Labor Pool	1,001,659	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	OPEB/PERS Pre-Funding	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Total Other Operating Costs	2,883,754	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Increase/(Decrease) in Required Reserves		-	32.3%	42.0%	25.7%	0.0%	0.0%	100.0%
Total General District Requirements		80,740,627	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
REQUIREMENTS BEFORE OFFSETS:		199,848,542	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Revenue Offsets								
	Property Taxes - MWD Portion of SWC GO Debt Service	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Property Taxes - MWD GO Debt Service	1,477,547	33.5%	39.9%	26.7%	0.0%	0.0%	100.0%
	Interest on Investments	658,815	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Hydro-Power Revenue	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	CRA Power Revenue	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Wadsworth Pumping Plant (DVL) Power Revenue	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Misc. allocated to supply (PVID Lease)	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Property Taxes - SWC	-	33.5%	39.9%	26.7%	0.0%	0.0%	100.0%
	Revenue Reserve used for Revenue Bonds - I&P	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Annexation	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Total Revenue Offsets	2,136,362	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
NET REVENUE REQUIREMENTS:		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

	Functionalization	Allocation Percentages					Total
		Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M							
Group	Item						
Office of General Manager		1,572,675	-	1,572,675	-	-	1,572,675
Office of General Manager	Board of Directors	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-
Human Resources		3,136,078	-	3,136,078	-	-	3,136,078
Water Systems Operations	Office of the Manager	3,673,054	-	3,673,054	-	-	3,673,054
Water Systems Operations	Office of the Manager, Conveyance & Distribution S	366,212	-	366,212	-	-	366,212
Water Systems Operations	Office of the Manager, Treatment Section	155,557	-	155,557	-	-	155,557
Water Systems Operations	Office of the Manager, Operations Support Services	710,342	-	710,342	-	-	710,342
Water Systems Operations	Operations Support Services	6,801,153	-	6,801,153	-	-	6,801,153
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	9,380,068	-	9,380,068	-	-	9,380,068
Water Systems Operations	Power Operations and Planning	1,257,278	-	1,257,278	-	-	1,257,278
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	2,565,584	-	2,565,584	-	-	2,565,584
Water Systems Operations	Treatment Diemer	2,697,745	-	2,697,745	-	-	2,697,745
Water Systems Operations	Treatment Mills	1,869,025	-	1,869,025	-	-	1,869,025
Water Systems Operations	Treatment Skinner	2,174,370	-	2,174,370	-	-	2,174,370
Water Systems Operations	Treatment Weymouth	2,538,681	-	2,538,681	-	-	2,538,681
Water Systems Operations	Water Quality Section	-	-	-	-	-	-
Water Systems Operations	C&D, Eastern Unit	16,726,000	-	16,726,000	-	-	16,726,000
Water Systems Operations	C&D, Western Unit	16,142,844	-	16,142,844	-	-	16,142,844
Water Systems Operations	OSS, Manufacturing Services Unit	6,727,688	-	6,727,688	-	-	6,727,688
Water Systems Operations	Environmental Health & Safety Section	6,407,386	-	6,407,386	-	-	6,407,386
Water Systems Operations	OSS, Fleet Services Unit	6,882,653	-	6,882,653	-	-	6,882,653
Water Systems Operations	OSS, Power Support Unit	4,251,957	-	4,251,957	-	-	4,251,957
Water Systems Operations	Office of the Manager, Operations & Planning Secti	264,802	-	264,802	-	-	264,802
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-
Sustainability, Resilience & Inn		-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-
Engineering Services		8,890,966	-	8,890,966	-	-	8,890,966
Business Technology	Administrative Services	-	-	-	-	-	-
Business Technology	Information Technology	9,848,996	-	9,848,996	-	-	9,848,996
Water Resources Managemen	Resource Planning & Development	418,793	-	418,793	-	-	418,793
Water Resources Managemen	Resource Implementation	-	-	-	-	-	-
Water Resources Managemen	Office of the Group Manager	47,850	-	47,850	-	-	47,850
Ethics Office		-	-	-	-	-	-
Real Property		3,600,158	-	3,600,158	-	-	3,600,158
General Counsel		-	-	-	-	-	-
General Auditor		-	-	-	-	-	-
Total Departmental O&M	-	119,107,915	-	119,107,915	-	-	119,107,915
GENERAL DISTRICT REQUIREMENTS							
		-	-	-	-	-	-
State Water Contract*							
Supply - O&M		-	-	-	-	-	-
Supply - Capital		-	-	-	-	-	-
Power - O&M & Off-Aq Capital		-	-	-	-	-	-
Power - Capital (less Off-Aq)		-	-	-	-	-	-
Transmission - Capital - Commodity, Demand, & Standby		-	-	-	-	-	-
Transmission - O&M - Commodity only		-	-	-	-	-	-
Delta Conveyance - Supply		-	-	-	-	-	-
Delta Conveyance - Power		-	-	-	-	-	-
Delta Conveyance - Other		-	-	-	-	-	-
Total State Water Contract		-	-	-	-	-	-
Colorado River Aqueduct Power Costs							
		-	-	-	-	-	-
Supply Programs (cash funded portion)							
		-	-	-	-	-	-
Demand Management (cash funded portion)							
Local Resources Program		-	-	-	-	-	-
Future Supply Actions & Stormwater Pilot		-	-	-	-	-	-
Conservation Program (cash funded portion)		-	-	-	-	-	-
Total Demand Management Costs		-	-	-	-	-	-
Capital Financing							
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		-	-	-	-	-	-
G.O. Bond Debt Service	51,384,203	17,206,319	20,482,600	13,695,284	-	-	51,384,203
Debt Administration	1,477,547	494,766	588,975	393,806	-	-	1,477,547
Bond Defeasance	506,124	169,479	201,749	134,896	-	-	506,124
PAYGO	-	-	-	-	-	-	-
PAYGO	24,489,000	8,200,293	9,761,724	6,526,983	-	-	24,489,000
Total Capital Financing Costs	77,856,873	26,070,857	31,035,048	20,750,969	-	-	77,856,873
Other Operating Costs							
Operating Equipment	1,882,095	-	1,882,095	-	-	-	1,882,095
Succession Planning Labor Pool	1,001,659	-	1,001,659	-	-	-	1,001,659
OPEB/PERS Pre-Funding	-	-	-	-	-	-	-
Total Other Operating Costs	2,883,754	-	2,883,754	-	-	-	2,883,754
Increase/(Decrease) in Required Reserves							
	-	-	-	-	-	-	-
Total General District Requirements	80,740,627	26,070,857	33,918,801	20,750,969	-	-	80,740,627
REQUIREMENTS BEFORE OFFSETS:	199,848,542	26,070,857	153,026,717	20,750,969	-	-	199,848,542
Revenue Offsets							
Property Taxes - MWD Portion of SWC GO Debt Service	-	-	-	-	-	-	-
Property Taxes - MWD GO Debt Service	1,477,547	494,766	588,975	393,806	-	-	1,477,547
Interest on Investments	658,815	-	658,815	-	-	-	658,815
Hydro-Power Revenue	-	-	-	-	-	-	-
CRA Power Revenue	-	-	-	-	-	-	-
Wadsworth Pumping Plant (DVL) Power Revenue	-	-	-	-	-	-	-
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)	-	-	-	-	-	-	-
Misc. allocated to supply (PVID Lease)	-	-	-	-	-	-	-
Property Taxes - SWC	-	-	-	-	-	-	-
Revenue Reserve used for Revenue Bonds - I&P	-	-	-	-	-	-	-
Annexation	-	-	-	-	-	-	-
Total Revenue Offsets	2,136,362	494,766	1,247,790	393,806	-	-	2,136,362
NET REVENUE REQUIREMENTS:	197,712,180	25,576,091	151,778,927	20,357,163	-	-	197,712,180

		Functionalization	Allocation Percentages					Total
			Fixed			Variable		
			Demand	Commodity	Standby	Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		1,384,934	-	1,384,934	-	-	-	1,384,934
Office of General Manager	Board of Directors	-	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-	-
Human Resources		2,412,756	-	2,412,756	-	-	-	2,412,756
Water Systems Operations	Office of the Manager	2,679,955	-	2,679,955	-	-	-	2,679,955
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	357,963	-	357,963	-	-	-	357,963
Water Systems Operations	Office of the Manager, Treatment Section	56,026	-	56,026	-	-	-	56,026
Water Systems Operations	Office of the Manager, Operations Support Services	541,320	-	541,320	-	-	-	541,320
Water Systems Operations	Operations Support Services	6,145,691	-	6,145,691	-	-	-	6,145,691
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	7,696,700	-	7,696,700	-	-	-	7,696,700
Water Systems Operations	Power Operations and Planning	1,080,294	-	1,080,294	-	-	-	1,080,294
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	1,550,606	-	1,550,606	-	-	-	1,550,606
Water Systems Operations	Treatment Diemer	1,487,695	-	1,487,695	-	-	-	1,487,695
Water Systems Operations	Treatment Mills	1,411,398	-	1,411,398	-	-	-	1,411,398
Water Systems Operations	Treatment Skinner	1,383,737	-	1,383,737	-	-	-	1,383,737
Water Systems Operations	Treatment Weymouth	1,614,828	-	1,614,828	-	-	-	1,614,828
Water Systems Operations	Water Quality Section	-	-	-	-	-	-	-
Water Systems Operations	C&D, Eastern Unit	11,728,374	-	11,728,374	-	-	-	11,728,374
Water Systems Operations	C&D, Western Unit	11,201,000	-	11,201,000	-	-	-	11,201,000
Water Systems Operations	OSS, Manufacturing Services Unit	6,179,297	-	6,179,297	-	-	-	6,179,297
Water Systems Operations	Environmental Health & Safety Section	5,014,789	-	5,014,789	-	-	-	5,014,789
Water Systems Operations	OSS, Fleet Services Unit	4,150,680	-	4,150,680	-	-	-	4,150,680
Water Systems Operations	OSS, Power Support Unit	3,836,119	-	3,836,119	-	-	-	3,836,119
Water Systems Operations	Office of the Manager, Operations & Planning Section	240,695	-	240,695	-	-	-	240,695
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-	-
Sustainability, Resilience & Inr		-	-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-	-
Engineering Services		7,049,803	-	7,049,803	-	-	-	7,049,803
Business Technology	Administrative Services	-	-	-	-	-	-	-
Business Technology	Information Technology	6,735,469	-	6,735,469	-	-	-	6,735,469
Water Resources Managemen	Resource Planning & Development	323,108	-	323,108	-	-	-	323,108
Water Resources Managemen	Resource Implementation	-	-	-	-	-	-	-
Water Resources Managemen	Office of the Group Manager	46,809	-	46,809	-	-	-	46,809
Ethics Office		-	-	-	-	-	-	-
Real Property		1,496,341	-	1,496,341	-	-	-	1,496,341
General Counsel		-	-	-	-	-	-	-
General Auditor		-	-	-	-	-	-	-
Total Departmental O&M		87,806,384	-	87,806,384	-	-	-	87,806,384

	Functionalization	Allocation Percentages					% Total
		Fixed			Variable	Hydroelectric	
		Demand	Commodity	Standby	Commodity		
Departmental O&M							
Group	Item						
Office of General Manager		88,925	0.0%	0.0%	0.0%	100.0%	100.0%
Office of General Manager	Board of Directors	-	0.0%	0.0%	0.0%	100.0%	100.0%
Bay Delta Initiatives	Bay Delta Initiatives	-	0.0%	0.0%	0.0%	100.0%	100.0%
External Affairs	Legislative Services	-	0.0%	0.0%	0.0%	100.0%	100.0%
External Affairs	Media Communications Services	-	0.0%	0.0%	0.0%	100.0%	100.0%
External Affairs	Manager, External Affairs/Special Projects	-	0.0%	0.0%	0.0%	100.0%	100.0%
External Affairs	Conservation & Community Services	-	0.0%	0.0%	0.0%	100.0%	100.0%
Human Resources		177,326	0.0%	0.0%	0.0%	100.0%	100.0%
Water Systems Operations	Office of the Manager	234,005	0.0%	0.0%	0.0%	100.0%	100.0%
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	12,531	0.0%	0.0%	0.0%	100.0%	100.0%
Water Systems Operations	Office of the Manager, Treatment Section	-	0.0%	0.0%	0.0%	100.0%	100.0%
Water Systems Operations	Office of the Manager, Operations Support Services	45,255	0.0%	0.0%	0.0%	100.0%	100.0%
Water Systems Operations	Operations Support Services	120,206	0.0%	0.0%	0.0%	100.0%	100.0%
Water Systems Operations	Desert Region / C&D CRA	-	0.0%	0.0%	0.0%	100.0%	100.0%
Water Systems Operations	System Operations Unit	-	0.0%	0.0%	0.0%	100.0%	100.0%
Water Systems Operations	Power Operations and Planning	915,749	0.0%	0.0%	0.0%	100.0%	100.0%
Water Systems Operations	Operations Planning & Programs Unit	-	0.0%	0.0%	0.0%	100.0%	100.0%
Water Systems Operations	Treatment Jensen	-	0.0%	0.0%	0.0%	100.0%	100.0%
Water Systems Operations	Treatment Diemer	-	0.0%	0.0%	0.0%	100.0%	100.0%
Water Systems Operations	Treatment Mills	-	0.0%	0.0%	0.0%	100.0%	100.0%
Water Systems Operations	Treatment Skinner	-	0.0%	0.0%	0.0%	100.0%	100.0%
Water Systems Operations	Treatment Weymouth	-	0.0%	0.0%	0.0%	100.0%	100.0%
Water Systems Operations	Water Quality Section	-	0.0%	0.0%	0.0%	100.0%	100.0%
Water Systems Operations	C&D, Eastern Unit	558,751	0.0%	0.0%	0.0%	100.0%	100.0%
Water Systems Operations	C&D, Western Unit	566,095	0.0%	0.0%	0.0%	100.0%	100.0%
Water Systems Operations	OSS, Manufacturing Services Unit	84,809	0.0%	0.0%	0.0%	100.0%	100.0%
Water Systems Operations	Environmental Health & Safety Section	50,159	0.0%	0.0%	0.0%	100.0%	100.0%
Water Systems Operations	OSS, Fleet Services Unit	-	0.0%	0.0%	0.0%	100.0%	100.0%
Water Systems Operations	OSS, Power Support Unit	2,576,944	0.0%	0.0%	0.0%	100.0%	100.0%
Water Systems Operations	Office of the Manager, Operations & Planning Section	16,870	0.0%	0.0%	0.0%	100.0%	100.0%
Water Systems Operations	Security Team & Security Management	-	0.0%	0.0%	0.0%	100.0%	100.0%
Sustainability, Resilience & Innovation		-	0.0%	0.0%	0.0%	100.0%	100.0%
Diversity, Equity & Inclusion		-	0.0%	0.0%	0.0%	100.0%	100.0%
Equal Employment Opportunity		-	0.0%	0.0%	0.0%	100.0%	100.0%
Office of the Chief Financial Officer		-	0.0%	0.0%	0.0%	100.0%	100.0%
Business Technology	Office of Manager	-	0.0%	0.0%	0.0%	100.0%	100.0%
Engineering Services		730,294	0.0%	0.0%	0.0%	100.0%	100.0%
Business Technology	Administrative Services	-	0.0%	0.0%	0.0%	100.0%	100.0%
Business Technology	Information Technology	556,900	0.0%	0.0%	0.0%	100.0%	100.0%
Water Resources Management	Resource Planning & Development	-	0.0%	0.0%	0.0%	100.0%	100.0%
Water Resources Management	Resource Implementation	-	0.0%	0.0%	0.0%	100.0%	100.0%
Water Resources Management	Office of the Group Manager	-	0.0%	0.0%	0.0%	100.0%	100.0%
Ethics Office		-	0.0%	0.0%	0.0%	100.0%	100.0%
Real Property		-	0.0%	0.0%	0.0%	100.0%	100.0%
General Counsel		-	0.0%	0.0%	0.0%	100.0%	100.0%
General Auditor		-	0.0%	0.0%	0.0%	100.0%	100.0%
Total Departmental O&M		6,734,820	0.0%	0.0%	0.0%	0.0%	0.0%
GENERAL DISTRICT REQUIREMENTS							
State Water Contract*							
Supply - O&M		-	0.0%	0.0%	0.0%	0.0%	0.0%
Supply - Capital		-	0.0%	0.0%	0.0%	0.0%	0.0%
Power - O&M & Off-Aq Capital		-	0.0%	0.0%	0.0%	0.0%	0.0%
Power - Capital (less Off-Aq)		-	0.0%	0.0%	0.0%	0.0%	0.0%
Transmission - Capital - Commodity, Demand, & Standby		-	0.0%	0.0%	0.0%	0.0%	0.0%
Transmission - O&M - Commodity only		-	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Supply		-	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Power		-	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Other		-	0.0%	0.0%	0.0%	0.0%	0.0%
Total State Water Contract		-	0.0%	0.0%	0.0%	0.0%	0.0%
Colorado River Aqueduct Power Costs							
		-	0.0%	0.0%	0.0%	0.0%	0.0%
Supply Programs (cash funded portion)							
		-	0.0%	0.0%	0.0%	0.0%	0.0%
Demand Management (cash funded portion)							
Local Resources Program		-	0.0%	0.0%	0.0%	0.0%	0.0%
Future Supply Actions & Stormwater Pilot		-	0.0%	0.0%	0.0%	100.0%	100.0%
Conservation Program (cash funded portion)		-	0.0%	0.0%	0.0%	100.0%	100.0%
Total Demand Management Costs		-	0.0%	0.0%	0.0%	0.0%	0.0%
Capital Financing							
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		-	0.0%	0.0%	0.0%	0.0%	0.0%
G.O. Bond Debt Service	4,220,643	-	0.0%	0.0%	0.0%	100.0%	100.0%
Debt Administration	41,572	-	0.0%	0.0%	0.0%	100.0%	100.0%
Bond Defeasance	-	-	0.0%	0.0%	0.0%	100.0%	100.0%
PAYGO	2,011,500	-	0.0%	0.0%	0.0%	100.0%	100.0%
Total Capital Financing Costs	6,273,715	-	0.0%	0.0%	0.0%	0.0%	0.0%
Other Operating Costs							
Operating Equipment	106,421	-	0.0%	0.0%	0.0%	100.0%	100.0%
Succession Planning Labor Pool	56,638	-	0.0%	0.0%	0.0%	100.0%	100.0%
OPEB/PERS Pre-Funding	-	-	0.0%	0.0%	0.0%	100.0%	100.0%
Total Other Operating Costs	163,059	-	0.0%	0.0%	0.0%	0.0%	0.0%
Increase/(Decrease) in Required Reserves							
	-	-	0.0%	0.0%	0.0%	100.0%	100.0%
Total General District Requirements							
	6,436,774	-	0.0%	0.0%	0.0%	0.0%	0.0%
REQUIREMENTS BEFORE OFFSETS:							
	13,171,594	-	0.0%	0.0%	0.0%	0.0%	0.0%
Revenue Offsets							
Property Taxes - MWD Portion of SWC GO Debt Service	-	-	0.0%	0.0%	0.0%	100.0%	100.0%
Property Taxes - MWD GO Debt Service	-	-	0.0%	0.0%	0.0%	100.0%	100.0%
Interest on Investments	43,421	-	0.0%	0.0%	0.0%	100.0%	100.0%
Hydro-Power Revenue	12,611,274	-	0.0%	0.0%	0.0%	100.0%	100.0%
CRA Power Revenue	-	-	0.0%	0.0%	0.0%	100.0%	100.0%
Wadsworth Pumping Plant (DVL) Power Revenue	-	-	0.0%	0.0%	0.0%	100.0%	100.0%
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)	-	-	0.0%	0.0%	0.0%	100.0%	100.0%
Misc. allocated to supply (PVID Lease)	-	-	0.0%	0.0%	0.0%	100.0%	100.0%
Property Taxes - SWC	-	-	0.0%	0.0%	0.0%	100.0%	100.0%
Revenue Reserve used for Revenue Bonds - I&P	-	-	0.0%	0.0%	0.0%	100.0%	100.0%
Annexation	-	-	0.0%	0.0%	0.0%	100.0%	100.0%
Total Revenue Offsets	12,654,695	-	0.0%	0.0%	0.0%	0.0%	0.0%
NET REVENUE REQUIREMENTS:							
-	516,898	-	0.0%	0.0%	0.0%	0.0%	0.0%

		Functionalization	Allocation Percentages					Total
			Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		88,925	-	-	-	-	88,925	88,925
Office of General Manager	Board of Directors	-	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-	-
Human Resources		177,326	-	-	-	-	177,326	177,326
Water Systems Operations	Office of the Manager	234,005	-	-	-	-	234,005	234,005
Water Systems Operations	Office of the Manager, Conveyance & Distribution S	12,531	-	-	-	-	12,531	12,531
Water Systems Operations	Office of the Manager, Treatment Section	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations Support Services	45,255	-	-	-	-	45,255	45,255
Water Systems Operations	Operations Support Services	120,206	-	-	-	-	120,206	120,206
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	915,749	-	-	-	-	915,749	915,749
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	-	-	-	-	-	-	-
Water Systems Operations	C&D, Eastern Unit	558,751	-	-	-	-	558,751	558,751
Water Systems Operations	C&D, Western Unit	566,095	-	-	-	-	566,095	566,095
Water Systems Operations	OSS, Manufacturing Services Unit	84,809	-	-	-	-	84,809	84,809
Water Systems Operations	Environmental Health & Safety Section	50,159	-	-	-	-	50,159	50,159
Water Systems Operations	OSS, Fleet Services Unit	-	-	-	-	-	-	-
Water Systems Operations	OSS, Power Support Unit	2,576,944	-	-	-	-	2,576,944	2,576,944
Water Systems Operations	Office of the Manager, Operations & Planning Sect	16,870	-	-	-	-	16,870	16,870
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-	-
Sustainability, Resilience & Inr		-	-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-	-
Equal Employment Opportunit		-	-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-	-
Engineering Services		730,294	-	-	-	-	730,294	730,294
Business Technology	Administrative Services	-	-	-	-	-	-	-
Business Technology	Information Technology	556,900	-	-	-	-	556,900	556,900
Water Resources Management	Resource Planning & Development	-	-	-	-	-	-	-
Water Resources Management	Resource Implementation	-	-	-	-	-	-	-
Water Resources Management	Office of the Group Manager	-	-	-	-	-	-	-
Ethics Office		-	-	-	-	-	-	-
Real Property		-	-	-	-	-	-	-
General Counsel		-	-	-	-	-	-	-
General Auditor		-	-	-	-	-	-	-
Total Departmental O&M	-	6,734,820	-	-	-	-	6,734,820	6,734,820
GENERAL DISTRICT REQUIREMENTS		-	-	-	-	-	-	-
State Water Contract*		-	-	-	-	-	-	-
Supply - O&M		-	-	-	-	-	-	-
Supply - Capital		-	-	-	-	-	-	-
Power - O&M & Off-Aq Capital		-	-	-	-	-	-	-
Power - Capital (less Off-Aq)		-	-	-	-	-	-	-
Transmission - Capital - Commodity, Demand, & Standby		-	-	-	-	-	-	-
Transmission - O&M - Commodity only		-	-	-	-	-	-	-
Delta Conveyance - Supply		-	-	-	-	-	-	-
Delta Conveyance - Power		-	-	-	-	-	-	-
Delta Conveyance - Other		-	-	-	-	-	-	-
Total State Water Contract		-	-	-	-	-	-	-
Colorado River Aqueduct Power Costs		-	-	-	-	-	-	-
Supply Programs (cash funded portion)		-	-	-	-	-	-	-
Demand Management (cash funded portion)		-	-	-	-	-	-	-
Local Resources Program		-	-	-	-	-	-	-
Future Supply Actions & Stormwater Pilot		-	-	-	-	-	-	-
Conservation Program (cash funded portion)		-	-	-	-	-	-	-
Total Demand Management Costs		-	-	-	-	-	-	-
Capital Financing		-	-	-	-	-	-	-
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		4,220,643	-	-	-	-	4,220,643	4,220,643
G.O. Bond Debt Service		-	-	-	-	-	-	-
Debt Administration		41,572	-	-	-	-	41,572	41,572
Bond Defeasance		-	-	-	-	-	-	-
PAYGO		2,011,500	-	-	-	-	2,011,500	2,011,500
Total Capital Financing Costs		6,273,715	-	-	-	-	6,273,715	6,273,715
Other Operating Costs		-	-	-	-	-	-	-
Operating Equipment		106,421	-	-	-	-	106,421	106,421
Succession Planning Labor Pool		56,638	-	-	-	-	56,638	56,638
OPEB/PERS Pre-Funding		-	-	-	-	-	-	-
Total Other Operating Costs		163,059	-	-	-	-	163,059	163,059
Increase/(Decrease) in Required Reserves		-	-	-	-	-	-	-
Total General District Requirements		6,436,774	-	-	-	-	6,436,774	6,436,774
REQUIREMENTS BEFORE OFFSETS:		13,171,594	-	-	-	-	13,171,594	13,171,594
Revenue Offsets		-	-	-	-	-	-	-
Property Taxes - MWD Portion of SWC GO Debt Service		-	-	-	-	-	-	-
Property Taxes - MWD GO Debt Service		-	-	-	-	-	-	-
Interest on Investments		43,421	-	-	-	-	43,421	43,421
Hydro-Power Revenue		12,611,274	-	-	-	-	12,611,274	12,611,274
CRA Power Revenue		-	-	-	-	-	-	-
Wadsworth Pumping Plant (DVL) Power Revenue		-	-	-	-	-	-	-
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)		-	-	-	-	-	-	-
Misc. allocated to supply (PVID Lease)		-	-	-	-	-	-	-
Property Taxes - SWC		-	-	-	-	-	-	-
Revenue Reserve used for Revenue Bonds - I&P		-	-	-	-	-	-	-
Annexation		-	-	-	-	-	-	-
Total Revenue Offsets		12,654,695	-	-	-	-	12,654,695	12,654,695
NET REVENUE REQUIREMENTS:		516,898	-	-	-	-	516,898	516,898

		Functionalization	Allocation Percentages					Total	
			Fixed			Variable Commodity	Other		Hydroelectric
			Demand	Commodity	Standby				
Departmental O&M									
Group	Item								
Office of General Manager		78,309	-	-	-	-	-	78,309	
Office of General Manager	Board of Directors								
Bay Delta Initiatives	Bay Delta Initiatives	-							
External Affairs	Legislative Services	-							
External Affairs	Media Communications Services	-							
External Affairs	Manager, External Affairs/Special Projects	-							
External Affairs	Conservation & Community Services	-							
Human Resources		136,427						136,427	
Water Systems Operations	Office of the Manager	170,736	-	-	-	-	-	170,736	
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	12,249						12,249	
Water Systems Operations	Office of the Manager, Treatment Section	-							
Water Systems Operations	Office of the Manager, Operations Support Services	34,487						34,487	
Water Systems Operations	Operations Support Services	108,622						108,622	
Water Systems Operations	Desert Region / C&D CRA	-							
Water Systems Operations	System Operations Unit	-							
Water Systems Operations	Power Operations and Planning	786,841						786,841	
Water Systems Operations	Operations Planning & Programs Unit	-							
Water Systems Operations	Treatment Jensen	-							
Water Systems Operations	Treatment Diemer	-							
Water Systems Operations	Treatment Mills	-							
Water Systems Operations	Treatment Skinner	-							
Water Systems Operations	Treatment Weymouth	-							
Water Systems Operations	Water Quality Section	-							
Water Systems Operations	C&D, Eastern Unit	391,800						391,800	
Water Systems Operations	C&D, Western Unit	392,795						392,795	
Water Systems Operations	OSS, Manufacturing Services Unit	77,896						77,896	
Water Systems Operations	Environmental Health & Safety Section	39,257						39,257	
Water Systems Operations	OSS, Fleet Services Unit	-							
Water Systems Operations	OSS, Power Support Unit	2,324,921						2,324,921	
Water Systems Operations	Office of the Manager, Operations & Planning Section	15,334						15,334	
Water Systems Operations	Security Team & Security Management	-							
Sustainability, Resilience & Inr		-							
Diversity, Equity & Inclusion		-							
Equal Employment Opportunity		-							
Office of the Chief Financial O		-							
Business Technology	Office of Manager	-							
Engineering Services		579,063	-	-	-	-	-	579,063	
Business Technology	Administrative Services	-							
Business Technology	Information Technology	380,849						380,849	
Water Resources Managemen	Resource Planning & Development	-							
Water Resources Managemen	Resource Implementation	-							
Water Resources Managemen	Office of the Group Manager	-							
Ethics Office		-							
Real Property		-							
General Counsel		-							
General Auditor		-							
Total Departmental O&M	-	5,529,586						5,529,586	

		Functionalization	Allocation Percentages					% Total
			Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		148,263	0.0%	100.0%	0.0%	0.0%	100.0%	
Office of General Manager	Board of Directors	-	0.0%	100.0%	0.0%	0.0%	100.0%	
Bay Delta Initiatives	Bay Delta Initiatives	-	0.0%	100.0%	0.0%	0.0%	100.0%	
External Affairs	Legislative Services	-	0.0%	100.0%	0.0%	0.0%	100.0%	
External Affairs	Media Communications Services	-	0.0%	100.0%	0.0%	0.0%	100.0%	
External Affairs	Manager, External Affairs/Special Projects	-	0.0%	100.0%	0.0%	0.0%	100.0%	
External Affairs	Conservation & Community Services	2,888,626	0.0%	100.0%	0.0%	0.0%	100.0%	
Human Resources		295,652	0.0%	100.0%	0.0%	0.0%	100.0%	
Water Systems Operations	Office of the Manager	-	0.0%	100.0%	0.0%	0.0%	100.0%	
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	0.0%	100.0%	0.0%	0.0%	100.0%	
Water Systems Operations	Office of the Manager, Treatment Section	-	0.0%	100.0%	0.0%	0.0%	100.0%	
Water Systems Operations	Office of the Manager, Operations Support Services	-	0.0%	100.0%	0.0%	0.0%	100.0%	
Water Systems Operations	Operations Support Services	-	0.0%	100.0%	0.0%	0.0%	100.0%	
Water Systems Operations	Desert Region / C&D CRA	-	0.0%	100.0%	0.0%	0.0%	100.0%	
Water Systems Operations	System Operations Unit	-	0.0%	100.0%	0.0%	0.0%	100.0%	
Water Systems Operations	Power Operations and Planning	-	0.0%	100.0%	0.0%	0.0%	100.0%	
Water Systems Operations	Operations Planning & Programs Unit	-	0.0%	100.0%	0.0%	0.0%	100.0%	
Water Systems Operations	Treatment Jensen	-	0.0%	100.0%	0.0%	0.0%	100.0%	
Water Systems Operations	Treatment Diemer	-	0.0%	100.0%	0.0%	0.0%	100.0%	
Water Systems Operations	Treatment Mills	-	0.0%	100.0%	0.0%	0.0%	100.0%	
Water Systems Operations	Treatment Skinner	-	0.0%	100.0%	0.0%	0.0%	100.0%	
Water Systems Operations	Treatment Weymouth	-	0.0%	100.0%	0.0%	0.0%	100.0%	
Water Systems Operations	Water Quality Section	-	0.0%	100.0%	0.0%	0.0%	100.0%	
Water Systems Operations	C&D, Eastern Unit	-	0.0%	100.0%	0.0%	0.0%	100.0%	
Water Systems Operations	C&D, Western Unit	-	0.0%	100.0%	0.0%	0.0%	100.0%	
Water Systems Operations	OSS, Manufacturing Services Unit	-	0.0%	100.0%	0.0%	0.0%	100.0%	
Water Systems Operations	Environmental Health & Safety Section	-	0.0%	100.0%	0.0%	0.0%	100.0%	
Water Systems Operations	OSS, Fleet Services Unit	-	0.0%	100.0%	0.0%	0.0%	100.0%	
Water Systems Operations	OSS, Power Support Unit	-	0.0%	100.0%	0.0%	0.0%	100.0%	
Water Systems Operations	Office of the Manager, Operations & Planning Section	-	0.0%	100.0%	0.0%	0.0%	100.0%	
Water Systems Operations	Security Team & Security Management	-	0.0%	100.0%	0.0%	0.0%	100.0%	
Sustainability, Resilience & Innovation		-	0.0%	100.0%	0.0%	0.0%	100.0%	
Diversity, Equity & Inclusion		-	0.0%	100.0%	0.0%	0.0%	100.0%	
Equal Employment Opportunity		-	0.0%	100.0%	0.0%	0.0%	100.0%	
Office of the Chief Financial Officer		-	0.0%	100.0%	0.0%	0.0%	100.0%	
Business Technology	Office of Manager	-	0.0%	100.0%	0.0%	0.0%	100.0%	
Engineering Services		98,026	0.0%	100.0%	0.0%	0.0%	100.0%	
Business Technology	Administrative Services	-	0.0%	100.0%	0.0%	0.0%	100.0%	
Business Technology	Information Technology	928,508	0.0%	100.0%	0.0%	0.0%	100.0%	
Water Resources Management	Resource Planning & Development	314,095	0.0%	100.0%	0.0%	0.0%	100.0%	
Water Resources Management	Resource Implementation	5,851,229	0.0%	100.0%	0.0%	0.0%	100.0%	
Water Resources Management	Office of the Group Manager	704,425	0.0%	100.0%	0.0%	0.0%	100.0%	
Ethics Office		-	0.0%	100.0%	0.0%	0.0%	100.0%	
Real Property		-	0.0%	100.0%	0.0%	0.0%	100.0%	
General Counsel		-	0.0%	100.0%	0.0%	0.0%	100.0%	
General Auditor		-	0.0%	100.0%	0.0%	0.0%	100.0%	
Total Departmental O&M		11,228,825	0.0%	0.0%	0.0%	0.0%	0.0%	
GENERAL DISTRICT REQUIREMENTS								
State Water Contract*								
Supply - O&M		-	0.0%	0.0%	0.0%	0.0%	0.0%	
Supply - Capital		-	0.0%	0.0%	0.0%	0.0%	0.0%	
Power - O&M & Off-Aq Capital		-	0.0%	0.0%	0.0%	0.0%	0.0%	
Power - Capital (less Off-Aq)		-	0.0%	0.0%	0.0%	0.0%	0.0%	
Transmission - Capital - Commodity, Demand, & Standby		-	0.0%	0.0%	0.0%	0.0%	0.0%	
Transmission - O&M - Commodity only		-	0.0%	0.0%	0.0%	0.0%	0.0%	
Delta Conveyance - Supply		-	0.0%	0.0%	0.0%	0.0%	0.0%	
Delta Conveyance - Power		-	0.0%	0.0%	0.0%	0.0%	0.0%	
Delta Conveyance - Other		-	0.0%	0.0%	0.0%	0.0%	0.0%	
Total State Water Contract		-	0.0%	0.0%	0.0%	0.0%	0.0%	
Colorado River Aqueduct Power Costs		-	0.0%	0.0%	0.0%	0.0%	0.0%	
Supply Programs (cash funded portion)		-	0.0%	0.0%	0.0%	0.0%	0.0%	
Demand Management (cash funded portion)		-	0.0%	0.0%	0.0%	0.0%	0.0%	
Local Resources Program		22,175,417	0.0%	100.0%	0.0%	0.0%	100.0%	
Future Supply Actions & Stormwater Pilot		3,639,900	0.0%	100.0%	0.0%	0.0%	100.0%	
Conservation Program (cash funded portion)		25,000,000	0.0%	100.0%	0.0%	0.0%	100.0%	
Total Demand Management Costs		50,815,317	0.0%	0.0%	0.0%	0.0%	0.0%	
Capital Financing		-	0.0%	0.0%	0.0%	0.0%	0.0%	
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		566,529	0.0%	100.0%	0.0%	0.0%	100.0%	
G.O. Bond Debt Service		-	0.0%	100.0%	0.0%	0.0%	100.0%	
Debt Administration		5,580	0.0%	100.0%	0.0%	0.0%	100.0%	
Bond Defeasance		-	0.0%	100.0%	0.0%	0.0%	100.0%	
PAYGO		270,000	0.0%	100.0%	0.0%	0.0%	100.0%	
Total Capital Financing Costs		842,109	0.0%	100.0%	0.0%	0.0%	0.0%	
Other Operating Costs								
Operating Equipment		177,433	0.0%	100.0%	0.0%	0.0%	100.0%	
Succession Planning Labor Pool		94,431	0.0%	100.0%	0.0%	0.0%	100.0%	
OPEB/PERS Pre-Funding		-	0.0%	100.0%	0.0%	0.0%	100.0%	
Total Other Operating Costs		271,864	0.0%	0.0%	0.0%	0.0%	0.0%	
Increase/(Decrease) in Required Reserves		-	0.0%	100.0%	0.0%	0.0%	100.0%	
Total General District Requirements		51,929,291	0.0%	0.0%	0.0%	0.0%	0.0%	
REQUIREMENTS BEFORE OFFSETS:		63,158,115	0.0%	0.0%	0.0%	0.0%	0.0%	
Revenue Offsets								
Property Taxes - MWD Portion of SWC GO Debt Service		-	0.0%	0.0%	0.0%	0.0%	0.0%	
Property Taxes - MWD GO Debt Service		-	0.0%	0.0%	0.0%	0.0%	0.0%	
Interest on Investments		208,205	0.0%	100.0%	0.0%	0.0%	100.0%	
Hydro-Power Revenue		-	0.0%	0.0%	0.0%	100.0%	100.0%	
CRA Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	
Wadsworth Pumping Plant (DVL) Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)		-	0.0%	0.0%	0.0%	0.0%	0.0%	
Misc. allocated to supply (PVID Lease)		-	0.0%	0.0%	0.0%	0.0%	0.0%	
Property Taxes - SWC		-	0.0%	0.0%	0.0%	0.0%	0.0%	
Revenue Reserve used for Revenue Bonds - I&P		-	0.0%	0.0%	0.0%	0.0%	0.0%	
Annexation		-	0.0%	0.0%	0.0%	0.0%	0.0%	
Total Revenue Offsets		208,205	0.0%	0.0%	0.0%	0.0%	0.0%	
NET REVENUE REQUIREMENTS:	-	62,949,910	0.0%	0.0%	0.0%	0.0%	0.0%	

	Functionalization	Allocation Percentages					Total
		Demand	Fixed Commodity	Standby	Variable Commodity	Other	
Departmental O&M							
Group	Item						
Office of General Manager		148,263	-	148,263	-	-	148,263
Office of General Manager	Board of Directors	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-
External Affairs	Conservation & Community Services	2,888,626	-	2,888,626	-	-	2,888,626
Human Resources		295,652	-	295,652	-	-	295,652
Water Systems Operations	Office of the Manager	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Conveyance & Distribution S	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations Support Services	-	-	-	-	-	-
Water Systems Operations	Operations Support Services	-	-	-	-	-	-
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	-	-	-	-	-	-
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	-	-	-	-	-	-
Water Systems Operations	Environmental Health & Safety Section	-	-	-	-	-	-
Water Systems Operations	OSS, Fleet Services Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Power Support Unit	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations & Planning Sect	-	-	-	-	-	-
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-
Sustainability, Resilience & Inr		-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-
Engineering Services		98,026	-	98,026	-	-	98,026
Business Technology	Administrative Services	-	-	-	-	-	-
Business Technology	Information Technology	928,508	-	928,508	-	-	928,508
Water Resources Managemen	Resource Planning & Development	314,095	-	314,095	-	-	314,095
Water Resources Managemen	Resource Implementation	5,851,229	-	5,851,229	-	-	5,851,229
Water Resources Managemen	Office of the Group Manager	704,425	-	704,425	-	-	704,425
Ethics Office		-	-	-	-	-	-
Real Property		-	-	-	-	-	-
General Counsel		-	-	-	-	-	-
General Auditor		-	-	-	-	-	-
Total Departmental O&M	-	11,228,825	-	11,228,825	-	-	11,228,825
GENERAL DISTRICT REQUIREMENTS							
		-	-	-	-	-	-
State Water Contract*		-	-	-	-	-	-
Supply - O&M		-	-	-	-	-	-
Supply - Capital		-	-	-	-	-	-
Power - O&M & Off-Aq Capital		-	-	-	-	-	-
Power - Capital (less Off-Aq)		-	-	-	-	-	-
Transmission - Capital - Commodity, Demand, & Standby		-	-	-	-	-	-
Transmission - O&M - Commodity only		-	-	-	-	-	-
Delta Conveyance - Supply		-	-	-	-	-	-
Delta Conveyance - Power		-	-	-	-	-	-
Delta Conveyance - Other		-	-	-	-	-	-
Total State Water Contract		-	-	-	-	-	-
		-	-	-	-	-	-
Colorado River Aqueduct Power Costs		-	-	-	-	-	-
		-	-	-	-	-	-
Supply Programs (cash funded portion)		-	-	-	-	-	-
		-	-	-	-	-	-
Demand Management (cash funded portion)		-	-	-	-	-	-
Local Resources Program		22,175,417	-	22,175,417	-	-	22,175,417
Future Supply Actions & Stormwater Pilot		3,639,900	-	3,639,900	-	-	3,639,900
Conservation Program (cash funded portion)		25,000,000	-	25,000,000	-	-	25,000,000
Total Demand Management Costs		50,815,317	-	50,815,317	-	-	50,815,317
		-	-	-	-	-	-
Capital Financing		-	-	-	-	-	-
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		566,529	-	566,529	-	-	566,529
G.O. Bond Debt Service		-	-	-	-	-	-
Debt Administration		5,580	-	5,580	-	-	5,580
Bond Defeasance		-	-	-	-	-	-
PAYGO		270,000	-	270,000	-	-	270,000
Total Capital Financing Costs		842,109	-	842,109	-	-	842,109
		-	-	-	-	-	-
Other Operating Costs		-	-	-	-	-	-
Operating Equipment		177,433	-	177,433	-	-	177,433
Succession Planning Labor Pool		94,431	-	94,431	-	-	94,431
OPEB/PERS Pre-Funding		-	-	-	-	-	-
Total Other Operating Costs		271,864	-	271,864	-	-	271,864
		-	-	-	-	-	-
Increase/(Decrease) in Required Reserves		-	-	-	-	-	-
		-	-	-	-	-	-
Total General District Requirements		51,929,291	-	51,929,291	-	-	51,929,291
		-	-	-	-	-	-
REQUIREMENTS BEFORE OFFSETS:		63,158,115	-	63,158,115	-	-	63,158,115
		-	-	-	-	-	-
Revenue Offsets							
Property Taxes - MWD Portion of SWC GO Debt Service		-	-	-	-	-	-
Property Taxes - MWD GO Debt Service		-	-	-	-	-	-
Interest on Investments		208,205	-	208,205	-	-	208,205
Hydro-Power Revenue		-	-	-	-	-	-
CRA Power Revenue		-	-	-	-	-	-
Wadsworth Pumping Plant (DVL) Power Revenue		-	-	-	-	-	-
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)		-	-	-	-	-	-
Misc. allocated to supply (PVID Lease)		-	-	-	-	-	-
Property Taxes - SWC		-	-	-	-	-	-
Revenue Reserve used for Revenue Bonds - I&P		-	-	-	-	-	-
Annexation		-	-	-	-	-	-
Total Revenue Offsets		208,205	-	208,205	-	-	208,205
		-	-	-	-	-	-
NET REVENUE REQUIREMENTS:		62,949,910	-	62,949,910	-	-	62,949,910

		Functionalization	Allocation Percentages					Total
			Fixed			Variable		
			Demand	Commodity	Standby	Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		130,564	-	130,564	-	-	-	130,564
Office of General Manager	Board of Directors	-	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-	-
External Affairs	Conservation & Community Services	1,919,411	-	1,919,411	-	-	-	1,919,411
Human Resources		227,461	-	227,461	-	-	-	227,461
Water Systems Operations	Office of the Manager	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations Support Services	-	-	-	-	-	-	-
Water Systems Operations	Operations Support Services	-	-	-	-	-	-	-
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	-	-	-	-	-	-	-
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	-	-	-	-	-	-	-
Water Systems Operations	Environmental Health & Safety Section	-	-	-	-	-	-	-
Water Systems Operations	OSS, Fleet Services Unit	-	-	-	-	-	-	-
Water Systems Operations	OSS, Power Support Unit	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations & Planning Section	-	-	-	-	-	-	-
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-	-
Sustainability, Resilience & Inr		-	-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-	-
Equal Employment Opportunit		-	-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-	-
Engineering Services		77,727	-	77,727	-	-	-	77,727
Business Technology	Administrative Services	-	-	-	-	-	-	-
Business Technology	Information Technology	634,982	-	634,982	-	-	-	634,982
Water Resources Managemen	Resource Planning & Development	242,331	-	242,331	-	-	-	242,331
Water Resources Managemen	Resource Implementation	3,771,084	-	3,771,084	-	-	-	3,771,084
Water Resources Managemen	Office of the Group Manager	689,100	-	689,100	-	-	-	689,100
Ethics Office		-	-	-	-	-	-	-
Real Property		-	-	-	-	-	-	-
General Counsel		-	-	-	-	-	-	-
General Auditor		-	-	-	-	-	-	-
Total Departmental O&M	-	7,692,659	-	7,692,659	-	-	-	7,692,659

		Functionalization	Allocation Percentages					% Total	
			Demand	Fixed Commodity	Standby	Variable Commodity	Other		Hydroelectric
Departmental O&M									
Group	Item								
Office of General Manager		2,198,593	0.0%	1.6%	0.0%	0.0%	0.0%	0.0%	1.6%
Office of General Manager	Board of Directors	2,107,494	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Bay Delta Initiatives	Bay Delta Initiatives	-	0.0%	1.8%	0.0%	0.0%	0.0%	0.0%	1.8%
External Affairs	Legislative Services	6,228,609	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
External Affairs	Media Communications Services	5,759,076	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
External Affairs	Manager, External Affairs/Special Projects	9,885,274	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
External Affairs	Conservation & Community Services	2,888,626	0.0%	0.6%	0.0%	0.0%	0.0%	0.0%	0.6%
Human Resources		4,384,226	0.0%	2.8%	0.0%	0.0%	0.0%	0.0%	2.8%
Water Systems Operations	Office of the Manager	724,081	0.0%	2.5%	0.0%	0.0%	0.0%	0.1%	2.5%
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	20,652	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.3%
Water Systems Operations	Office of the Manager, Treatment Section	-	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.1%
Water Systems Operations	Office of the Manager, Operations Support Services	140,032	0.0%	0.5%	0.0%	0.0%	0.0%	0.0%	0.5%
Water Systems Operations	Operations Support Services	284,699	0.0%	2.2%	0.0%	0.0%	0.0%	0.0%	2.3%
Water Systems Operations	Desert Region / C&D CRA	-	0.0%	8.9%	0.0%	0.0%	0.0%	0.0%	8.9%
Water Systems Operations	System Operations Unit	-	0.0%	2.5%	0.0%	0.0%	0.0%	0.0%	2.5%
Water Systems Operations	Power Operations and Planning	356,542	0.0%	0.7%	0.0%	0.0%	0.0%	0.3%	1.0%
Water Systems Operations	Operations Planning & Programs Unit	-	0.0%	0.7%	0.0%	0.0%	0.0%	0.0%	0.7%
Water Systems Operations	Treatment Jensen	-	0.0%	3.9%	0.0%	0.0%	0.0%	0.0%	3.9%
Water Systems Operations	Treatment Diemer	-	0.0%	3.7%	0.0%	0.0%	0.0%	0.0%	3.7%
Water Systems Operations	Treatment Mills	-	0.0%	3.5%	0.0%	0.0%	0.0%	0.0%	3.5%
Water Systems Operations	Treatment Skinner	-	0.0%	3.5%	0.0%	0.0%	0.0%	0.0%	3.5%
Water Systems Operations	Treatment Weymouth	-	0.0%	4.0%	0.0%	0.0%	0.0%	0.0%	4.0%
Water Systems Operations	Water Quality Section	-	0.0%	7.4%	0.0%	0.0%	0.0%	0.0%	7.4%
Water Systems Operations	C&D, Eastern Unit	904,747	0.0%	4.6%	0.0%	0.0%	0.0%	0.1%	4.7%
Water Systems Operations	C&D, Western Unit	949,214	0.0%	3.8%	0.0%	0.0%	0.0%	0.1%	3.9%
Water Systems Operations	OSS, Manufacturing Services Unit	573,229	0.0%	2.4%	0.0%	0.0%	0.0%	0.0%	2.4%
Water Systems Operations	Environmental Health & Safety Section	754,001	0.0%	3.9%	0.0%	0.0%	0.0%	0.0%	4.0%
Water Systems Operations	OSS, Fleet Services Unit	1,430,094	0.0%	2.3%	0.0%	0.0%	0.0%	0.0%	2.3%
Water Systems Operations	OSS, Power Support Unit	133,449	0.0%	1.9%	0.0%	0.0%	0.0%	0.8%	2.7%
Water Systems Operations	Office of the Manager, Operations & Planning Section	52,201	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.2%
Water Systems Operations	Security Team & Security Management	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Sustainability, Resilience & Innovation		9,952,336	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Diversity, Equity & Inclusion		1,426,735	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Equal Employment Opportunity		1,975,822	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Office of the Chief Financial Officer		28,941,344	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Business Technology	Office of Manager	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Engineering Services		2,965,289	0.0%	11.8%	0.0%	0.0%	0.0%	0.2%	12.0%
Business Technology	Administrative Services	33,135,504	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Business Technology	Information Technology	13,768,858	0.0%	7.8%	0.0%	0.0%	0.0%	0.1%	7.9%
Water Resources Management	Resource Planning & Development	-	0.0%	1.4%	0.0%	0.0%	0.0%	0.0%	1.4%
Water Resources Management	Resource Implementation	35,524	0.0%	3.6%	0.0%	0.0%	0.0%	0.0%	3.6%
Water Resources Management	Office of the Group Manager	4,059	0.0%	0.8%	0.0%	0.0%	0.0%	0.0%	0.8%
Ethics Office		2,106,637	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Real Property		11,992,697	0.0%	2.4%	0.0%	0.0%	0.0%	0.0%	2.4%
General Counsel		15,833,730	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
General Auditor		4,599,034	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total Departmental O&M		166,512,406	0.0%	98.2%	0.0%	0.0%	0.0%	1.8%	100.0%
GENERAL DISTRICT REQUIREMENTS									
State Water Contract*									
Supply - O&M		-	0.0%	8.4%	0.0%	0.0%	0.0%	0.0%	8.4%
Supply - Capital		-	0.0%	6.1%	0.0%	0.0%	0.0%	0.0%	6.1%
Power - O&M & Off-Aq Capital		-	0.0%	0.0%	0.0%	16.1%	0.0%	0.0%	16.1%
Power - Capital (less Off-Aq)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Transmission - Capital - Commodity, Demand, & Standby		-	0.4%	2.3%	2.0%	0.0%	0.0%	0.0%	4.6%
Transmission - O&M - Commodity only		-	0.0%	14.7%	0.0%	0.0%	0.0%	0.0%	14.7%
Delta Conveyance - Supply		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Power		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Other		-	0.2%	1.1%	1.0%	0.0%	0.0%	0.0%	2.3%
Total State Water Contract		-	0.6%	32.5%	2.9%	16.1%	0.0%	0.0%	52.1%
Colorado River Aqueduct Power Costs									
		-	0.0%	0.0%	0.0%	8.0%	0.0%	0.0%	8.0%
Supply Programs (cash funded portion)									
		-	0.0%	5.1%	0.0%	0.0%	0.0%	0.0%	5.1%
Demand Management (cash funded portion)									
Local Resources Program		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Future Supply Actions & Stormwater Pilot		-	0.0%	1.7%	0.0%	0.0%	0.0%	0.0%	1.7%
Conservation Program (cash funded portion)		-	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.3%
Total Demand Management Costs		-	0.0%	1.9%	0.0%	0.0%	0.0%	0.0%	1.9%
		-	0.0%	3.9%	0.0%	0.0%	0.0%	0.0%	3.9%
Capital Financing									
		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		17,137,510	3.7%	8.6%	7.6%	0.0%	0.0%	0.3%	20.2%
G.O. Bond Debt Service		-	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.1%
Debt Administration		168,801	0.0%	0.1%	0.1%	0.0%	0.0%	0.0%	0.2%
Bond Defeasance		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
PAYGO		8,167,500	1.8%	4.1%	3.6%	0.0%	0.0%	0.2%	9.6%
Total Capital Financing Costs		25,473,811	5.6%	12.8%	11.3%	0.0%	0.0%	0.5%	30.2%
Other Operating Costs									
Operating Equipment		2,631,161	0.0%	0.5%	0.0%	0.0%	0.0%	0.0%	0.5%
Succession Planning Labor Pool		1,400,316	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.3%
OPEB/PERS Pre-Funding		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total Other Operating Costs		4,031,477	0.0%	0.8%	0.0%	0.0%	0.0%	0.0%	0.8%
Increase/(Decrease) in Required Reserves									
		11,000,000	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total General District Requirements									
		40,505,287	6.1%	55.1%	14.2%	24.1%	0.0%	0.5%	100.0%
REQUIREMENTS BEFORE OFFSETS:									
		207,017,693	5.0%	63.2%	11.6%	19.6%	0.0%	0.7%	100.0%
Revenue Offsets									
Property Taxes - MWD Portion of SWC GO Debt Service		-	5.0%	63.2%	11.6%	19.6%	0.0%	0.7%	100.0%
Property Taxes - MWD GO Debt Service		-	5.0%	63.2%	11.6%	19.6%	0.0%	0.7%	100.0%
Interest on Investments		682,449	5.0%	63.2%	11.6%	19.6%	0.0%	0.7%	100.0%
Hydro-Power Revenue		-	5.0%	63.2%	11.6%	19.6%	0.0%	0.7%	100.0%
CRA Power Revenue		-	5.0%	63.2%	11.6%	19.6%	0.0%	0.7%	100.0%
Wadsworth Pumping Plant (DVL) Power Revenue		-	5.0%	63.2%	11.6%	19.6%	0.0%	0.7%	100.0%
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)		42,991,971	5.0%	63.2%	11.6%	19.6%	0.0%	0.7%	100.0%
Misc. allocated to supply (PVID Lease)		-	5.0%	63.2%	11.6%	19.6%	0.0%	0.7%	100.0%
Property Taxes - SWC		-	5.0%	63.2%	11.6%	19.6%	0.0%	0.7%	100.0%
Revenue Reserve used for Revenue Bonds - I&P		-	5.0%	63.2%	11.6%	19.6%	0.0%	0.7%	100.0%
Annexation		-	5.0%	63.2%	11.6%	19.6%	0.0%	0.7%	100.0%
Total Revenue Offsets		43,674,419	5.0%	63.2%	11.6%	19.6%	0.0%	0.7%	100.0%
NET REVENUE REQUIREMENTS:									
	-	163,343,274	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

	Functionalization	Allocation Percentages						Total
		Demand	Fixed Commodity	Standby	Variable Commodity	Other	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		-	2,674,202	-	-	-	42,749	2,716,951
Office of General Manager	Board of Directors	-	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	3,016,425	-	-	-	-	3,016,425
External Affairs	Legislative Services	-	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	1,047,795	-	-	-	-	1,047,795
Human Resources		-	4,658,849	-	-	-	74,474	4,733,324
Water Systems Operations	Office of the Manager	-	4,152,129	-	-	-	93,204	4,245,333
Water Systems Operations	Office of the Manager, Conveyance & Distribution S	-	449,226	-	-	-	6,687	455,913
Water Systems Operations	Office of the Manager, Treatment Section	-	233,466	-	-	-	-	233,466
Water Systems Operations	Office of the Manager, Operations Support Services	-	838,682	-	-	-	18,826	857,508
Water Systems Operations	Operations Support Services	-	3,701,309	-	-	-	59,296	3,760,605
Water Systems Operations	Desert Region / C&D CRA	-	14,766,280	-	-	-	-	14,766,280
Water Systems Operations	System Operations Unit	-	4,201,584	-	-	-	-	4,201,584
Water Systems Operations	Power Operations and Planning	-	1,163,609	-	-	-	429,532	1,593,140
Water Systems Operations	Operations Planning & Programs Unit	-	1,105,209	-	-	-	-	1,105,209
Water Systems Operations	Treatment Jensen	-	6,461,580	-	-	-	-	6,461,580
Water Systems Operations	Treatment Diemer	-	6,199,420	-	-	-	-	6,199,420
Water Systems Operations	Treatment Mills	-	5,881,479	-	-	-	-	5,881,479
Water Systems Operations	Treatment Skinner	-	5,766,213	-	-	-	-	5,766,213
Water Systems Operations	Treatment Weymouth	-	6,729,199	-	-	-	-	6,729,199
Water Systems Operations	Water Quality Section	-	12,360,512	-	-	-	-	12,360,512
Water Systems Operations	C&D, Eastern Unit	-	7,665,995	-	-	-	213,881	7,879,876
Water Systems Operations	C&D, Western Unit	-	6,342,957	-	-	-	214,425	6,557,382
Water Systems Operations	OSS, Manufacturing Services Unit	-	3,939,448	-	-	-	42,523	3,981,971
Water Systems Operations	Environmental Health & Safety Section	-	6,569,415	-	-	-	21,430	6,590,845
Water Systems Operations	OSS, Fleet Services Unit	-	3,809,200	-	-	-	-	3,809,200
Water Systems Operations	OSS, Power Support Unit	-	3,197,831	-	-	-	1,269,161	4,466,992
Water Systems Operations	Office of the Manager, Operations & Planning Secti	-	372,915	-	-	-	8,371	381,286
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-	-
Sustainability, Resilience & Inn		-	-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-	-
Engineering Services		-	19,615,620	-	-	-	316,107	19,931,727
Business Technology	Administrative Services	-	-	-	-	-	-	-
Business Technology	Information Technology	-	13,005,682	-	-	-	207,903	13,213,585
Water Resources Managemen	Resource Planning & Development	-	2,320,826	-	-	-	-	2,320,826
Water Resources Managemen	Resource Implementation	-	5,938,969	-	-	-	-	5,938,969
Water Resources Managemen	Office of the Group Manager	-	1,366,174	-	-	-	-	1,366,174
Ethics Office		-	-	-	-	-	-	-
Real Property		-	3,941,637	-	-	-	-	3,941,637
General Counsel		-	-	-	-	-	-	-
General Auditor		-	-	-	-	-	-	-
Total Departmental O&M		-	163,493,838	-	-	-	3,018,568	166,512,406
GENERAL DISTRICT REQUIREMENTS		-	-	-	-	-	-	-
State Water Contract*		-	-	-	-	-	-	-
Supply - O&M		-	3,384,267	-	-	-	-	3,384,267
Supply - Capital		-	2,472,147	-	-	-	-	2,472,147
Power - O&M & Off-Aq Capital		-	-	-	6,502,507	-	-	6,502,507
Power - Capital (less Off-Aq)		-	-	-	-	-	-	-
Transmission - Capital - Commodity, Demand, & Standby		154,953	911,487	793,155	-	-	-	1,859,595
Transmission - O&M - Commodity only		-	5,964,138	-	-	-	-	5,964,138
Delta Conveyance - Supply		-	-	-	-	-	-	-
Delta Conveyance - Power		-	-	-	-	-	-	-
Delta Conveyance - Other		76,828	451,930	393,259	-	-	-	922,017
Total State Water Contract		231,781	13,183,969	1,186,414	6,502,507	-	-	21,104,671
Colorado River Aqueduct Power Costs		-	-	-	3,253,399	-	-	3,253,399
Supply Programs (cash funded portion)		-	2,048,707	-	-	-	-	2,048,707
Demand Management (cash funded portion)		-	-	-	-	-	-	-
Local Resources Program		-	681,537	-	-	-	-	681,537
Future Supply Actions & Stormwater Pilot		-	111,868	-	-	-	-	111,868
Conservation Program (cash funded portion)		-	768,347	-	-	-	-	768,347
Total Demand Management Costs		-	1,561,753	-	-	-	-	1,561,753
Capital Financing		-	-	-	-	-	-	-
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		1,502,186	3,481,936	3,065,284	-	-	129,717	8,179,123
G.O. Bond Debt Service		19,954	22,498	18,056	-	-	-	60,507
Debt Administration		14,796	34,296	30,192	-	-	1,278	80,563
Bond Defeasance		-	-	-	-	-	-	-
PAYGO		715,921	1,659,442	1,460,872	-	-	61,821	3,898,057
Total Capital Financing Costs		2,252,857	5,198,172	4,574,405	-	-	192,816	12,218,249
Other Operating Costs		-	-	-	-	-	-	-
Operating Equipment		-	200,670	3,935	-	-	3,271	207,876
Succession Planning Labor Pool		-	106,797	2,094	-	-	1,741	110,632
OPEB/PERS Pre-Funding		-	-	-	-	-	-	-
Total Other Operating Costs		-	307,467	6,029	-	-	5,011	318,508
Increase/(Decrease) in Required Reserves		-	-	-	-	-	-	-
Total General District Requirements		-	2,484,638	22,300,068	9,755,907	-	197,827	40,505,287
REQUIREMENTS BEFORE OFFSETS:	207,017,693	2,484,638	185,793,906	5,766,848	9,755,907	-	3,216,396	207,017,693
Revenue Offsets								
Property Taxes - MWD Portion of SWC GO Debt Service		-	-	-	-	-	-	-
Property Taxes - MWD GO Debt Service		-	-	-	-	-	-	-
Interest on Investments	682,449	33,994	431,043	78,901	133,479	-	5,032	682,449
Hydro-Power Revenue		-	-	-	-	-	-	-
CRA Power Revenue		-	-	-	-	-	-	-
Wadsworth Pumping Plant (DVL) Power Revenue		-	-	-	-	-	-	-
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)	42,991,971	2,141,531	27,154,254	4,970,497	8,408,702	-	316,987	42,991,971
Misc. allocated to supply (PVID Lease)		-	-	-	-	-	-	-
Property Taxes - SWC		-	-	-	-	-	-	-
Revenue Reserve used for Revenue Bonds - I&P		-	-	-	-	-	-	-
Annexation		-	-	-	-	-	-	-
Total Revenue Offsets	43,674,419	2,175,526	27,585,297	5,049,398	8,542,180	-	322,018	43,674,419
NET REVENUE REQUIREMENTS:	163,343,274	309,112	158,208,609	717,450	1,213,726	-	2,894,377	163,343,274

		Total Costs to Be Allocated	A&G Cost Redistribution	Adjusted Costs	Allocation Categories					Total
					Demand	Fixed	Standby	Variable Commodity	Hydroelectric	
						Commodity				
Departmental O&M										
Group	Item									
	Office of General Manager	2,198,593	6,170,113	8,368,706	-	8,237,032	-	-	131,674	8,368,706
	Office of General Manager	2,107,494	(2,107,494)	-	-	-	-	-	-	-
	Bay Delta Initiatives	-	15,071,976	15,071,976	-	15,071,976	-	-	-	15,071,976
	External Affairs	6,228,609	(6,228,609)	-	-	-	-	-	-	-
	External Affairs	5,759,076	(5,759,076)	-	-	-	-	-	-	-
	External Affairs	9,885,274	(9,885,274)	-	-	-	-	-	-	-
	External Affairs	2,888,626	1,047,795	3,936,422	-	3,936,422	-	-	-	3,936,422
	Human Resources	4,384,226	11,619,290	16,003,516	-	15,751,716	-	-	251,800	16,003,516
	Water Systems Operations	724,081	14,179,926	14,904,006	-	14,576,798	-	-	327,209	14,904,006
	Water Systems Operations	20,652	1,289,673	1,310,324	-	1,291,107	-	-	19,218	1,310,324
	Water Systems Operations	-	1,420,921	1,420,921	-	1,420,921	-	-	-	1,420,921
	Water Systems Operations	140,032	2,778,785	2,918,817	-	2,854,736	-	-	64,081	2,918,817
	Water Systems Operations	284,699	11,099,524	11,384,224	-	11,204,721	-	-	179,502	11,384,224
	Water Systems Operations	-	48,024,991	48,024,991	-	48,024,991	-	-	-	48,024,991
	Water Systems Operations	-	13,581,652	13,581,652	-	13,581,652	-	-	-	13,581,652
	Water Systems Operations	356,542	4,633,126	4,989,668	-	3,644,387	-	-	1,345,281	4,989,668
	Water Systems Operations	-	3,199,665	3,199,665	-	3,199,665	-	-	-	3,199,665
	Water Systems Operations	-	26,046,190	26,046,190	-	20,044,640	6,001,550	-	-	26,046,190
	Water Systems Operations	-	26,792,894	26,792,894	-	19,080,401	7,712,493	-	-	26,792,894
	Water Systems Operations	-	20,148,843	20,148,843	-	17,536,800	2,612,043	-	-	20,148,843
	Water Systems Operations	-	22,364,457	22,364,457	-	17,427,205	4,937,252	-	-	22,364,457
	Water Systems Operations	-	26,108,442	26,108,442	-	20,161,035	5,947,408	-	-	26,108,442
	Water Systems Operations	-	41,158,320	41,158,320	-	41,158,320	-	-	-	41,158,320
	Water Systems Operations	904,747	27,560,810	28,465,557	-	27,692,924	-	-	772,632	28,465,557
	Water Systems Operations	949,214	22,920,089	23,869,303	-	23,088,783	-	-	780,520	23,869,303
	Water Systems Operations	573,229	11,350,497	11,923,725	-	11,796,393	-	-	127,332	11,923,725
	Water Systems Operations	754,001	21,263,113	22,017,113	-	21,945,524	-	-	71,589	22,017,113
	Water Systems Operations	1,430,094	13,949,868	15,379,962	-	15,379,962	-	-	-	15,379,962
	Water Systems Operations	133,449	13,403,465	13,536,914	-	9,680,809	-	3,846,104	-	13,536,914
	Water Systems Operations	52,201	1,097,501	1,149,702	-	1,124,461	-	-	25,241	1,149,702
	Water Systems Operations	-	-	-	-	-	-	-	-	-
	Sustainability, Resilience & Innovation	9,952,336	(9,952,336)	-	-	-	-	-	-	-
	Diversity, Equity & Inclusion	-	1,426,735	-	-	-	-	-	-	-
	Equal Employment Opportunity	-	1,975,822	-	-	-	-	-	-	-
	Office of the Chief Financial Officer	28,941,344	(28,941,344)	-	-	-	-	-	-	-
	Business Technology	-	-	-	-	-	-	-	-	-
	Engineering Services	2,965,289	63,014,193	65,979,482	-	64,933,081	-	1,046,402	-	65,979,482
	Business Technology	33,135,504	(33,135,504)	-	-	-	-	-	-	-
	Business Technology	13,768,858	34,839,274	48,608,133	-	47,843,329	-	764,804	-	48,608,133
	Water Resources Management	-	7,831,260	7,831,260	-	7,831,260	-	-	-	7,831,260
	Water Resources Management	35,524	22,783,878	22,819,402	-	22,819,402	-	-	-	22,819,402
	Water Resources Management	4,059	3,920,406	3,924,465	-	3,924,465	-	-	-	3,924,465
	Ethics Office	2,106,637	(2,106,637)	-	-	-	-	-	-	-
	Real Property	11,992,697	9,321,319	21,314,016	-	21,314,016	-	-	-	21,314,016
	General Counsel	15,833,730	(15,833,730)	-	-	-	-	-	-	-
	General Auditor	4,599,034	(4,599,034)	-	-	-	-	-	-	-
	Total Departmental O&M	166,512,406	428,040,660	594,553,066	-	557,588,932	-	27,210,746	9,753,388	594,553,066
GENERAL DISTRICT REQUIREMENTS										
State Water Contract*										
	Supply - O&M	110,115,149	3,384,267	113,499,416	-	113,499,416	-	-	-	113,499,416
	Supply - Capital	80,437,139	2,472,147	82,909,286	-	82,909,286	-	-	-	82,909,286
	Power - O&M & Off-Aq Capital	211,574,465	6,502,507	218,076,972	-	-	218,076,972	-	-	218,076,972
	Power - Capital (less Off-Aq)	(4,981,305)	-	(4,981,305)	-	-	(4,981,305)	-	-	(4,981,305)
	Transmission - Capital - Commodity, Demand, & Standby	60,506,317	1,859,595	62,365,912	5,196,708	30,568,870	26,600,333	-	-	62,365,912
	Transmission - O&M - Commodity only	194,057,356	5,964,138	200,021,494	-	200,021,494	-	-	-	200,021,494
	Delta Conveyance - Supply	-	-	-	-	-	-	-	-	-
	Delta Conveyance - Power	-	-	-	-	-	-	-	-	-
	Delta Conveyance - Other	-	-	-	-	-	-	-	-	-
	Total State Water Contract	30,000,000	922,017	30,922,017	2,576,611	15,156,535	13,188,871	-	-	30,922,017
		681,709,121	21,104,671	702,813,792	7,773,319	442,155,602	39,789,204	213,095,667	-	702,813,792
Colorado River Aqueduct Power Costs										
		105,857,041	3,253,399	109,110,440	-	-	-	109,110,440	-	109,110,440
Supply Programs (cash funded portion)										
		66,659,522	2,048,707	68,708,229	-	68,708,229	-	-	-	68,708,229
Demand Management (cash funded portion)										
	Local Resources Program	22,175,417	681,537	22,856,954	-	22,856,954	-	-	-	22,856,954
	Future Supply Actions & Stormwater Pilot	3,639,900	111,868	3,751,768	-	3,751,768	-	-	-	3,751,768
	Conservation Program (cash funded portion)	25,000,000	768,347	25,768,347	-	25,768,347	-	-	-	25,768,347
	Total Demand Management Costs	50,815,317	1,561,753	52,377,070	-	52,377,070	-	-	-	52,377,070
Capital Financing										
	Revenue Bond Debt Service net of BABs Interest Subsidy Payment	283,264,623	(8,958,387)	274,306,236	50,379,359	116,774,957	102,801,559	-	4,350,360	274,306,236
	G.O. Bond Debt Service	1,968,750	60,507	2,029,257	669,201	754,510	605,546	-	-	2,029,257
	Debt Administration	2,790,098	(88,238)	2,701,860	496,226	1,150,209	1,012,574	-	42,850	2,701,860
	Bond Defeasance	-	-	-	-	-	-	-	-	-
	PAYGO	135,000,000	(4,269,443)	130,730,557	24,010,106	55,653,329	48,993,801	-	2,073,321	130,730,557
	Total Capital Financing Costs	423,023,470	(13,255,561)	409,767,909	75,554,892	174,333,006	153,413,480	-	6,466,531	409,767,909
Other Operating Costs										
	Operating Equipment	9,394,884	(2,423,285)	6,971,599	-	6,729,941	131,967	-	109,692	6,971,599
	Succession Planning Labor Pool	5,000,000	(1,289,683)	3,710,317	-	3,581,705	70,233	-	58,378	3,710,317
	OPEB/RS Pre-Funding	-	-	-	-	-	-	-	-	-
	Total Other Operating Costs	14,394,884	(3,712,969)	10,681,916	-	10,311,646	202,200	-	168,070	10,681,916
Increase/(Decrease) in Required Reserves										
		11,000,000	(11,000,000)	-	-	-	-	-	-	-
Total General District Requirements										
		1,353,459,356	0	1,353,459,356	83,328,211	747,885,552	193,404,884	322,206,107	6,634,601	1,353,459,356
REQUIREMENTS BEFORE OFFSETS:										
		1,519,971,762	428,040,660	1,948,012,422	83,328,211	1,305,474,484	193,404,884	349,416,853	16,387,989	1,948,012,422
Revenue Offsets										
	Property Taxes - MWD Portion of SWC GO Debt Service	564,249	-	564,249	47,017	276,569	240,664	-	-	564,249
	Property Taxes - MWD GO Debt Service	1,968,750	-	1,968,750	494,766	588,975	885,009	-	-	1,968,750
	Interest on Investments	6,421,762	-	6,421,762	635,304	3,405,590	1,129,614	1,202,800	48,453	6,421,762
	Hydro-Power Revenue	12,611,274	-	12,611,274	-	-	-	-	12,611,274	12,611,274
	CRA Power Revenue	3,376,627	-	3,376,627	-	-	-	3,376,627	-	3,376,627
	Wadsworth Pumping Plant (DVL) Power Revenue	679,733	-	679,733	-	-	-	-	679,733	679,733
	Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)	42,991,971	0	42,991,971	2,141,531	27,154,254	4,970,497	316,987	-	42,991,971
	Misc. allocated to supply (PVID Lease)	5,930,280	-	5,930,280	-	5,930,280	-	-	-	5,930,280
	Property Taxes - SWC	160,551,544	-	160,551,544	1,242,060	102,056,591	6,357,717	50,895,177	-	160,551,544
	Revenue Reserve used for Revenue Bonds - I&P	-	-	-	-	-	-	-	-	-
	Annexation	-	-	-	-	-	-	-	-	-
	Total Revenue Offsets	235,096,190	0	235,096,190	4,560,677	139,412,258	13,583,501	64,563,039	12,976,714	235,096,190
NET REVENUE REQUIREMENTS:										
		\$ 1,712,916,232	\$ 428,040,660	\$ 1,712,916,232	\$ 78,767,533	\$ 1,166,062,226	\$ 179,821,383	\$ 284,853,814	\$ 3,411,276	\$ 1,712,916,232

		Total to Be Allocated Excluding A&G and Negative Values	Line Item Costs by Allocation Category (w/o A&G)					Total Allocations
			Fixed			Variable Commodity	Hydro- Electric	
			Demand	Commodity	Standby			
Departmental O&M								
Group	Item							
Office of General Manager		4,977,065	-	4,898,756	-	-	78,309	4,977,065
Office of General Manager	Board of Directors	-	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	5,525,660	-	5,525,660	-	-	-	5,525,660
External Affairs	Legislative Services	-	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-	-
External Affairs	Conservation & Community Services	1,919,411	-	1,919,411	-	-	-	1,919,411
Human Resources		8,670,772	-	8,534,346	-	-	136,427	8,670,772
Water Systems Operations	Office of the Manager	7,776,843	-	7,606,107	-	-	170,736	7,776,843
Water Systems Operations	Office of the Manager, Conveyance & Treatment	835,167	-	822,918	-	-	12,249	835,167
Water Systems Operations	Office of the Manager, Treatment Services	427,676	-	427,676	-	-	-	427,676
Water Systems Operations	Office of the Manager, Operations & Maintenance	1,570,832	-	1,536,345	-	-	34,487	1,570,832
Water Systems Operations	Operations Support Services	6,888,890	-	6,780,269	-	-	108,622	6,888,890
Water Systems Operations	Desert Region / C&D CRA	27,049,712	-	27,049,712	-	-	-	27,049,712
Water Systems Operations	System Operations Unit	7,696,700	-	7,696,700	-	-	-	7,696,700
Water Systems Operations	Power Operations and Planning	2,918,405	-	2,131,564	-	-	786,841	2,918,405
Water Systems Operations	Operations Planning & Programs Unit	2,024,585	-	2,024,585	-	-	-	2,024,585
Water Systems Operations	Treatment Jensen	11,836,690	-	11,836,690	-	-	-	11,836,690
Water Systems Operations	Treatment Diemer	11,356,450	-	11,356,450	-	-	-	11,356,450
Water Systems Operations	Treatment Mills	10,774,027	-	10,774,027	-	-	-	10,774,027
Water Systems Operations	Treatment Skinner	10,562,878	-	10,562,878	-	-	-	10,562,878
Water Systems Operations	Treatment Weymouth	12,326,929	-	12,326,929	-	-	-	12,326,929
Water Systems Operations	Water Quality Section	22,642,690	-	22,642,690	-	-	-	22,642,690
Water Systems Operations	C&D, Eastern Unit	14,434,806	-	14,043,006	-	-	391,800	14,434,806
Water Systems Operations	C&D, Western Unit	12,012,185	-	11,619,390	-	-	392,795	12,012,185
Water Systems Operations	OSS, Manufacturing Services Unit	7,294,401	-	7,216,505	-	-	77,896	7,294,401
Water Systems Operations	Environmental Health & Safety Section	12,073,485	-	12,034,228	-	-	39,257	12,073,485
Water Systems Operations	OSS, Fleet Services Unit	6,977,909	-	6,977,909	-	-	-	6,977,909
Water Systems Operations	OSS, Power Support Unit	8,182,890	-	5,857,970	-	-	2,324,921	8,182,890
Water Systems Operations	Office of the Manager, Operations & Maintenance	698,462	-	683,127	-	-	15,334	698,462
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-	-
Sustainability, Resilience & Inclusion		-	-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-	-
Office of the Chief Financial Officer		-	-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-	-
Engineering Services		36,512,072	-	35,933,009	-	-	579,063	36,512,072
Business Technology	Administrative Services	-	-	-	-	-	-	-
Business Technology	Information Technology	24,205,397	-	23,824,548	-	-	380,849	24,205,397
Water Resources Management	Resource Planning & Development	4,251,421	-	4,251,421	-	-	-	4,251,421
Water Resources Management	Resource Implementation	10,879,342	-	10,879,342	-	-	-	10,879,342
Water Resources Management	Office of the Group Manager	2,502,635	-	2,502,635	-	-	-	2,502,635
Ethics Office		-	-	-	-	-	-	-
Real Property		7,220,515	-	7,220,515	-	-	-	7,220,515
General Counsel		-	-	-	-	-	-	-
General Auditor		-	-	-	-	-	-	-
Total Departmental O&M	-	305,026,904	-	299,497,318	-	-	5,529,586	305,026,904
GENERAL DISTRICT REQUIREMENTS								
State Water Contract*								
Supply - O&M		110,115,149	-	110,115,149	-	-	-	110,115,149
Supply - Capital		80,437,139	-	80,437,139	-	-	-	80,437,139
Power - O&M & Off-Aq Capital		211,574,465	-	-	-	211,574,465	-	211,574,465
Power - Capital (less Off-Aq)		-	-	-	-	-	-	-
Transmission - Capital - Commodity, Demand, & Standby		60,506,317	5,041,755	29,657,383	25,807,178	-	-	60,506,317
Transmission - O&M - Commodity only		194,057,356	-	194,057,356	-	-	-	194,057,356
Delta Conveyance - Supply		-	-	-	-	-	-	-
Delta Conveyance - Power		-	-	-	-	-	-	-
Delta Conveyance - Other		30,000,000	2,499,783	14,704,605	12,795,612	-	-	30,000,000
Total State Water Contract		686,690,426	7,541,538	428,971,633	38,602,790	211,574,465	-	686,690,426
Colorado River Aqueduct Power Costs		105,857,041	-	-	-	105,857,041	-	105,857,041
Supply Programs (cash funded portion)		66,659,522	-	66,659,522	-	-	-	66,659,522
Demand Management (cash funded portion)								
Local Resources Program		22,175,417	-	22,175,417	-	-	-	22,175,417
Future Supply Actions & Stormwater Pilot		3,639,900	-	3,639,900	-	-	-	3,639,900
Conservation Program (cash funded portion)		25,000,000	-	25,000,000	-	-	-	25,000,000
Total Demand Management Costs		50,815,317	-	50,815,317	-	-	-	50,815,317
Capital Financing								
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		266,127,113	48,877,173	113,293,022	99,736,275	-	4,220,643	266,127,113
G.O. Bond Debt Service		1,968,750	649,247	732,013	587,490	-	-	1,968,750
Debt Administration		2,621,297	481,430	1,115,913	982,382	-	41,572	2,621,297
Bond Defeasance		-	-	-	-	-	-	-
PAYGO		126,832,500	23,294,185	53,993,887	47,532,929	-	2,011,500	126,832,500
Total Capital Financing Costs		397,549,660	73,302,035	169,134,834	148,839,076	-	6,273,715	397,549,660
Other Operating Costs								
Operating Equipment		6,763,723	-	6,529,271	128,032	-	106,421	6,763,723
Succession Planning Labor Pool		3,599,684	-	3,474,908	68,139	-	56,638	3,599,684
OPEB/PERS Pre-Funding		-	-	-	-	-	-	-
Total Other Operating Costs		10,363,408	-	10,004,179	196,171	-	163,059	10,363,408
Increase/(Decrease) in Required Reserves		-	-	-	-	-	-	-
Total General District Requirements		1,317,935,374	80,843,573	725,585,484	187,638,037	317,431,506	6,436,774	1,317,935,374
REQUIREMENTS BEFORE OFFSETS:		1,622,962,278	80,843,573	1,025,082,803	187,638,037	317,431,506	11,966,359	1,622,962,278
Revenue Offsets								
Property Taxes - MWD Portion of SWC GO Debt Service		564,249	47,017	276,569	240,664	-	-	564,249
Property Taxes - MWD GO Debt Service		1,968,750	494,766	588,975	885,009	-	-	1,968,750
Interest on Investments		5,739,313	601,310	2,974,548	1,050,713	1,069,322	43,421	5,739,313
Hydro-Power Revenue		12,611,274	-	-	-	-	12,611,274	12,611,274
CRA Power Revenue		3,376,627	-	-	-	3,376,627	-	3,376,627
Wadsworth Pumping Plant (DVL) Power Revenue		679,733	-	-	-	679,733	-	679,733
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)		-	-	-	-	-	-	-
Misc. allocated to supply (PVID Lease)		5,930,280	-	5,930,280	-	-	-	5,930,280
Property Taxes - SWC		160,551,544	1,242,060	102,056,591	6,357,717	50,895,177	-	160,551,544
Revenue Reserve used for Revenue Bonds - I&P		-	-	-	-	-	-	-
Annexation		-	-	-	-	-	-	-
Total Revenue Offsets		191,421,770	2,385,152	111,826,961	8,534,104	56,020,858	12,654,695	191,421,770
NET REVENUE REQUIREMENTS:		\$ 1,431,540,507	\$ 78,458,421	\$ 913,255,841	\$ 179,103,933	\$ 261,410,647	\$ (688,336)	\$ 1,431,540,507

		A&G Line Item Allocators by Allocation Category						Total
		Fixed			Variable	Demand	Hydro-Electric	
		Demand	Commodity	Standby	Commodity	Management		
Departmental O&M								
Group	Item							
Office of General Manager		0.00%	1.61%	0.00%	0.00%	0.00%	0.03%	1.63%
Office of General Manager	Board of Directors	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Bay Delta Initiatives	Bay Delta Initiatives	0.00%	1.81%	0.00%	0.00%	0.00%	0.00%	1.81%
External Affairs	Legislative Services	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
External Affairs	Media Communications Services	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
External Affairs	Manager, External Affairs/Special Projects	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
External Affairs	Conservation & Community Services	0.00%	0.63%	0.00%	0.00%	0.00%	0.00%	0.63%
Human Resources		0.00%	2.80%	0.00%	0.00%	0.00%	0.04%	2.84%
Water Systems Operations	Office of the Manager	0.00%	2.49%	0.00%	0.00%	0.00%	0.06%	2.55%
Water Systems Operations	Office of the Manager, Conveyance & Dis	0.00%	0.27%	0.00%	0.00%	0.00%	0.00%	0.27%
Water Systems Operations	Office of the Manager, Treatment Section	0.00%	0.14%	0.00%	0.00%	0.00%	0.00%	0.14%
Water Systems Operations	Office of the Manager, Operations Support	0.00%	0.50%	0.00%	0.00%	0.00%	0.01%	0.51%
Water Systems Operations	Operations Support Services	0.00%	2.22%	0.00%	0.00%	0.00%	0.04%	2.26%
Water Systems Operations	Desert Region / C&D CRA	0.00%	8.87%	0.00%	0.00%	0.00%	0.00%	8.87%
Water Systems Operations	System Operations Unit	0.00%	2.52%	0.00%	0.00%	0.00%	0.00%	2.52%
Water Systems Operations	Power Operations and Planning	0.00%	0.70%	0.00%	0.00%	0.00%	0.26%	0.96%
Water Systems Operations	Operations Planning & Programs Unit	0.00%	0.66%	0.00%	0.00%	0.00%	0.00%	0.66%
Water Systems Operations	Treatment Jensen	0.00%	3.88%	0.00%	0.00%	0.00%	0.00%	3.88%
Water Systems Operations	Treatment Diemer	0.00%	3.72%	0.00%	0.00%	0.00%	0.00%	3.72%
Water Systems Operations	Treatment Mills	0.00%	3.53%	0.00%	0.00%	0.00%	0.00%	3.53%
Water Systems Operations	Treatment Skinner	0.00%	3.46%	0.00%	0.00%	0.00%	0.00%	3.46%
Water Systems Operations	Treatment Weymouth	0.00%	4.04%	0.00%	0.00%	0.00%	0.00%	4.04%
Water Systems Operations	Water Quality Section	0.00%	7.42%	0.00%	0.00%	0.00%	0.00%	7.42%
Water Systems Operations	C&D, Eastern Unit	0.00%	4.60%	0.00%	0.00%	0.00%	0.13%	4.73%
Water Systems Operations	C&D, Western Unit	0.00%	3.81%	0.00%	0.00%	0.00%	0.13%	3.94%
Water Systems Operations	OSS, Manufacturing Services Unit	0.00%	2.37%	0.00%	0.00%	0.00%	0.03%	2.39%
Water Systems Operations	Environmental Health & Safety Section	0.00%	3.95%	0.00%	0.00%	0.00%	0.01%	3.96%
Water Systems Operations	OSS, Fleet Services Unit	0.00%	2.29%	0.00%	0.00%	0.00%	0.00%	2.29%
Water Systems Operations	OSS, Power Support Unit	0.00%	1.92%	0.00%	0.00%	0.00%	0.76%	2.68%
Water Systems Operations	Office of the Manager, Operations & Planr	0.00%	0.22%	0.00%	0.00%	0.00%	0.01%	0.23%
Water Systems Operations	Security Team & Security Management	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Sustainability, Resilience & Innovati	-	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Diversity, Equity & Inclusion	-	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Equal Employment Opportunity	-	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Office of the Chief Financial Officer		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Business Technology	Office of Manager	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Engineering Services		0.00%	11.78%	0.00%	0.00%	0.00%	0.19%	11.97%
Business Technology	Administrative Services	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Business Technology	Information Technology	0.00%	7.81%	0.00%	0.00%	0.00%	0.12%	7.94%
Water Resources Management	Resource Planning & Development	0.00%	1.39%	0.00%	0.00%	0.00%	0.00%	1.39%
Water Resources Management	Resource Implementation	0.00%	3.57%	0.00%	0.00%	0.00%	0.00%	3.57%
Water Resources Management	Office of the Group Manager	0.00%	0.82%	0.00%	0.00%	0.00%	0.00%	0.82%
Ethics Office		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Real Property		0.00%	2.37%	0.00%	0.00%	0.00%	0.00%	2.37%
General Counsel		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
General Auditor		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Total Departmental O&M	-	0.00%	98.19%	0.00%	0.00%	0.00%	1.81%	100.00%
GENERAL DISTRICT REQUIREMENTS								
State Water Contract*								
Supply - O&M		0.00%	8.36%	0.00%	0.00%	0.00%	0.00%	8.36%
Supply - Capital		0.00%	6.10%	0.00%	0.00%	0.00%	0.00%	6.10%
Power - O&M & Off-Aq Capital		0.00%	0.00%	0.00%	16.05%	0.00%	0.00%	16.05%
Power - Capital (less Off-Aq)		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Transmission - Capital - Commodity, Demand, & Standby		0.38%	2.25%	1.96%	0.00%	0.00%	0.00%	4.59%
Transmission - O&M - Commodity only		0.00%	14.72%	0.00%	0.00%	0.00%	0.00%	14.72%
Delta Conveyance - Supply		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Delta Conveyance - Power		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Delta Conveyance - Other		0.19%	1.12%	0.97%	0.00%	0.00%	0.00%	2.28%
Total State Water Contract		0.57%	32.55%	2.93%	16.05%	0.00%	0.00%	52.10%
Colorado River Aqueduct Power Costs		0.00%	0.00%	0.00%	8.03%	0.00%	0.00%	8.03%
Supply Programs (cash funded portion)		0.00%	5.06%	0.00%	0.00%	0.00%	0.00%	5.06%
Demand Management (cash funded portion)								
Local Resources Program		0.00%	1.68%	0.00%	0.00%	0.00%	0.00%	1.68%
Future Supply Actions & Stormwater Pilot		0.00%	0.28%	0.00%	0.00%	0.00%	0.00%	0.28%
Conservation Program (cash funded portion)		0.00%	1.90%	0.00%	0.00%	0.00%	0.00%	1.90%
Total Demand Management Costs		0.00%	3.86%	0.00%	0.00%	0.00%	0.00%	3.86%
Capital Financing								
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		3.71%	8.60%	7.57%	0.00%	0.00%	0.32%	20.19%
G.O. Bond Debt Service		0.05%	0.06%	0.04%	0.00%	0.00%	0.00%	0.15%
Debt Administration		0.04%	0.08%	0.07%	0.00%	0.00%	0.00%	0.20%
Bond Defeasance		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
PAYGO		1.77%	4.10%	3.61%	0.00%	0.00%	0.15%	9.62%
Total Capital Financing Costs		5.56%	12.83%	11.29%	0.00%	0.00%	0.48%	30.16%
Other Operating Costs		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Operating Equipment		0.00%	0.50%	0.01%	0.00%	0.00%	0.01%	0.51%
Succession Planning Labor Pool		0.00%	0.26%	0.01%	0.00%	0.00%	0.00%	0.27%
OPEB/PERS Pre-Funding		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Total Other Operating Costs		0.00%	0.76%	0.01%	0.00%	0.00%	0.01%	0.79%
Increase/(Decrease) in Required Reserves		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Total General District Requirements		6.13%	55.05%	14.24%	24.09%	0.00%	0.49%	100.00%
REQUIREMENTS BEFORE OFFSETS:		4.98%	63.16%	11.56%	19.56%	0.00%	0.74%	100.00%

Functionalization of A&G Costs
 Summary of Allocation Results before Inclusion of Administrative and General Costs
 Fiscal Year Ending 2023

Functional Categories	Functional Costs Allocated for FY 2023	Allocation Categories (Costs Exclude Administrative and General)					Total Allocated Excluding A&G
		Demand	Fixed Commodity	Standby	Variable Commodity	Hydro-Electric	
Source of Supply							
CRA	\$ 56,756,070.23	\$ -	\$ 56,756,070	\$ -	\$ -	\$ -	\$ 56,756,070
SWP	153,950,377	-	153,950,377	-	-	-	153,950,377
Other Supply	32,809,186	-	32,809,186	-	-	-	32,809,186
Subtotal: Source of Supply	243,515,634	-	243,515,634	-	-	-	243,515,634
Conveyance & Aqueduct							
CRA							
CRA Power	114,015,857	-	11,923,715	-	102,092,142	-	114,015,857
CRA All Other	68,563,143	1,072,243	62,002,423	5,488,478	-	-	68,563,143
SWP*	-	-	-	-	-	-	-
SWP Power	155,016,934	-	-	-	155,016,934	-	155,016,934
SWP All Other	251,449,970	6,165,723	213,723,825	31,560,422	-	-	251,449,970
Other Conveyance & Aqueduct	71,500,164	5,026,242	39,535,658	26,938,264	-	-	71,500,164
Subtotal: Conveyance & Aqueduct	660,546,068	12,264,208	327,185,621	63,987,164	257,109,076	-	660,546,068
Storage							
Storage Costs Other Than Power							
Emergency	55,945,400	-	8,102,451	47,842,949	-	-	55,945,400
Drought	53,135,768	-	53,135,768	-	-	-	53,135,768
Regulatory	27,244,996	7,684,107	13,444,763	6,116,127	-	-	27,244,996
Storage Power	(679,733)	-	-	-	(679,733)	-	(679,733)
Subtotal: Storage	135,646,431	7,684,107	74,682,982	53,959,075	(679,733)	-	135,646,431
Treatment							
Jensen	52,631,539	6,956,296	31,055,840	8,617,853	6,001,550	-	52,631,539
Weymouth	53,757,077	7,314,324	31,433,922	9,061,424	5,947,408	-	53,757,077
Diemer	60,326,888	8,824,111	32,858,377	10,931,907	7,712,493	-	60,326,888
Mills	30,522,374	2,336,307	22,679,872	2,894,152	2,612,043	-	30,522,374
Skinner	51,447,958	7,502,978	29,712,532	9,295,196	4,937,252	-	51,447,958
Subtotal: Treatment	248,685,836	32,934,016	147,740,543	40,800,531	27,210,746	-	248,685,836
Distribution	197,712,180	25,576,091	151,778,927	20,357,163	-	-	197,712,180
Demand Management	62,949,910	-	62,949,910	-	-	-	62,949,910
Hydro-Electric	516,898	-	-	-	-	516,898	516,898
Total Costs Allocated	\$ 1,549,572,958	\$ 78,458,421	\$ 1,007,853,617	\$ 179,103,933	\$ 283,640,088	\$ 516,898	\$ 1,549,572,958
A&G Costs to be Functionalized		\$ 309,112	\$ 158,208,609	\$ 717,449,831	\$ 1,213,726	\$ 2,894,377	\$ 163,343,274

Percentages Used for Functionalization of A&G Costs

Allocation Categories				
Fixed			Variable Commodity	Hydro-Electric
Demand	Commodity	Standby		
0.0%	5.6%	0.0%	0.0%	0.0%
0.0%	15.3%	0.0%	0.0%	0.0%
0.0%	3.3%	0.0%	0.0%	0.0%
0.0%	24.2%	0.0%	0.0%	0.0%
0.0%	1.2%	0.0%	36.0%	0.0%
1.4%	6.2%	3.1%	0.0%	0.0%
0.0%	0.0%	0.0%	0.0%	0.0%
0.0%	0.0%	0.0%	54.7%	0.0%
7.9%	21.2%	17.6%	0.0%	0.0%
6.4%	3.9%	15.0%	0.0%	0.0%
15.6%	32.5%	35.7%	90.6%	0.0%
0.0%	0.8%	26.7%	0.0%	0.0%
0.0%	5.3%	0.0%	0.0%	0.0%
9.8%	1.3%	3.4%	0.0%	0.0%
0.0%	0.0%	0.0%	-0.2%	0.0%
9.8%	7.4%	30.1%	-0.2%	0.0%
8.9%	3.1%	4.8%	2.1%	0.0%
9.3%	3.1%	5.1%	2.1%	0.0%
11.2%	3.3%	6.1%	2.7%	0.0%
3.0%	2.3%	1.6%	0.9%	0.0%
9.6%	2.9%	5.2%	1.7%	0.0%
42.0%	14.7%	22.8%	9.6%	0.0%
32.6%	15.1%	11.4%	0.0%	0.0%
0.0%	6.2%	0.0%	0.0%	0.0%
0.0%	0.0%	0.0%	0.0%	100.0%
100.0%	100.0%	100.0%	100.0%	100.0%

Administrative and General Costs Redistributed Among Functional Categories

Administrative and General Costs by Allocation Categories						Total A&G Costs Allocated	Functional Categories
Fixed			Variable				
Demand	Commodity	Standby	Commodity	Hydro-Electric			
\$	-	\$ 8,909,328	\$ -	\$ -	\$ -	\$ 8,909,328	Source of Supply
	-	24,166,481	-	-	-	24,166,481	CRA
	-	5,150,248	-	-	-	5,150,248	SWP
	-	38,226,057	-	-	-	38,226,057	Other Supply
							Subtotal: Source of Supply
							Conveyance & Aqueduct
	-	1,871,735	-	436,863	-	2,308,598	CRA
	4,224	9,732,879	21,986	-	-	9,759,089	
	-	-	-	-	-	-	SWP*
	-	-	-	663,334	-	663,334	
	24,292	33,549,464	126,424	-	-	33,700,180	
	19,802	6,206,141	107,909	-	-	6,333,852	Other Conveyance & Aqueduct
	48,319	51,360,218	256,318	1,100,197	-	52,765,052	Subtotal: Conveyance & Aqueduct
							Storage
							Storage Costs Other Than Power
	-	1,271,889	191,648	-	-	1,463,537	
	-	8,341,029	-	-	-	8,341,029	
	30,274	2,110,502	24,500	-	-	2,165,276	
	-	-	-	(2,909)	-	(2,909)	Storage Power
	30,274	11,723,419	216,148	(2,909)	-	11,966,933	Subtotal: Storage
							Treatment
	27,407	4,875,015	34,521	25,681	-	4,962,624	Jensen
	28,817	4,934,364	36,298	25,450	-	5,024,929	Weymouth
	34,765	5,157,969	43,791	33,003	-	5,269,528	Diemer
	9,205	3,560,191	11,593	11,177	-	3,592,166	Mills
	29,560	4,664,148	37,234	21,127	-	4,752,070	Skinner
	129,754	23,191,687	163,438	116,438	-	23,601,317	Subtotal: Treatment
							Distribution
	100,765	23,825,616	81,546	-	-	24,007,927	Demand Management
	-	9,881,611	-	-	-	9,881,611	Hydro-Electric
	-	-	-	-	2,894,377	2,894,377	
\$	309,112	\$ 158,208,609	\$ 717,450	\$ 1,213,726	\$ 2,894,377	\$ 163,343,274	Total Costs Allocated

Summary of Functionalization Percentages

Fiscal Year Ending 2023

	Source of Supply	Conveyance & Aqueduct	Storage	Water Quality	Treatment	Distribution	Demand Management	Hydro-Electric	Administrative & General	Total Allocated
Departmental Operations & Maintenance										
Office of General Manager	5%	12%	2%	0%	19%	16%	1%	1%	43%	100%
Water Systems Operations	5%	17%	1%	0%	40%	33%	0%	2%	2%	100%
Water Resources Management	70%	0%	0%	0%	0%	2%	27%	0%	0%	100%
Engineering Services	4%	22%	24%	0%	25%	18%	0%	1%	6%	100%
Bay Delta Initiatives	0%	100%	0%	0%	0%	0%	0%	0%	0%	100%
Business Technology	4%	9%	2%	0%	14%	12%	1%	1%	57%	100%
Real Property	6%	33%	8%	0%	0%	12%	0%	0%	41%	100%
Human Resources	7%	15%	3%	0%	24%	20%	2%	1%	28%	100%
Office of the Chief Financial Officer	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%
External Affairs	0%	0%	0%	0%	0%	0%	10%	0%	90%	100%
General Counsel	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%
General Auditor	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%
Ethics Office	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%
Sustainability, Resilience & Innovation	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%
Diversity, Equity & Inclusion	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%
Equal Employment Opportunity	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%
Total Departmental O&M	7%	15%	3%	0%	24%	20%	2%	1%	28%	100%
General District Requirements										
State Water Contract*	28%	72%	0%	0%	0%	0%	0%	0%	0%	100%
Colorado River Aqueduct Power Costs	0%	100%	0%	0%	0%	0%	0%	0%	0%	100%
Supply Programs (cash funded portion)	73%	0%	27%	0%	0%	0%	0%	0%	0%	100%
Demand Management (cash funded portion)	0%	0%	0%	0%	0%	0%	100%	0%	0%	100%
Capital Financing	4%	21%	24%	0%	25%	18%	0%	1%	6%	100%
Other Operating Costs	7%	15%	3%	0%	24%	20%	2%	1%	28%	100%
Increase/(Decrease) in Required Reserves	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%
Total General District Requirements	19%	51%	9%	0%	8%	6%	4%	0%	3%	100%
Revenue Offsets	23%	51%	0%	0%	1%	1%	0%	5%	19%	100%
Net Revenue Requirements	14%	39%	8%	0%	15%	12%	4%	0%	10%	100%

* Includes Delta Conveyance planning costs net of California WaterFix refund

Cost Allocation Summary (by budget line item)

Fiscal Year Ending 2023

	Allocation Categories						Total Allocated
	Fixed			Variable	Other	Hydro-Electric	
	Demand	Commodity	Standby	Commodity			
Departmental Operations & Maintenance							
Office of General Manager	\$ -	\$ 8,237,032	\$ -	\$ -	\$ -	\$ 131,674	\$ 8,368,706
Water Systems Operations	-	345,926,234	-	27,210,746	-	7,558,709	380,695,689
Water Resources Management	-	34,575,126	-	-	-	-	34,575,126
Engineering Services	-	64,933,081	-	-	-	1,046,402	65,979,482
Bay Delta Initiatives	-	15,071,976	-	-	-	-	15,071,976
Business Technology	-	47,843,329	-	-	-	764,804	48,608,133
Real Property	-	21,314,016	-	-	-	-	21,314,016
Human Resources	-	15,751,716	-	-	-	251,800	16,003,516
Office of the Chief Financial Officer	-	-	-	-	-	-	-
External Affairs	-	3,936,422	-	-	-	-	3,936,422
General Counsel	-	-	-	-	-	-	-
General Auditor	-	-	-	-	-	-	-
Ethics Office	-	-	-	-	-	-	-
Sustainability, Resilience & Innovation	-	-	-	-	-	-	-
Diversity, Equity & Inclusion	-	-	-	-	-	-	-
Equal Employment Opportunity	-	-	-	-	-	-	-
Total Departmental O&M (including Administrative and General)	-	557,588,932	-	27,210,746	-	9,753,388	594,553,066
General District Requirements							
State Water Contract*	7,773,319	442,155,602	39,789,204	213,095,667	-	-	702,813,792
Colorado River Aqueduct Power Costs	-	-	-	109,110,440	-	-	109,110,440
Supply Programs (cash funded portion)	-	68,708,229	-	-	-	-	68,708,229
Demand Management (cash funded portion)	-	52,377,070	-	-	-	-	52,377,070
Capital Financing	75,554,892	174,333,006	153,413,480	-	-	6,466,531	409,767,909
Other Operating Costs	-	10,311,646	202,200	-	-	168,070	10,681,916
Increase/(Decrease) in Required Reserves	-	-	-	-	Other	-	-
Total General District Requirements (including Administrative and General)	83,328,211	747,885,552	193,404,884	322,206,107	-	6,634,601	1,353,459,356
Revenue Offsets	(4,560,677)	(139,412,258)	(13,583,501)	(64,563,039)	-	(12,976,714)	(235,096,190)
Net Revenue Requirements	\$ 78,767,533	\$ 1,166,062,226	\$ 179,821,383	\$ 284,853,814	\$ -	\$ 3,411,276	\$ 1,712,916,232

* Includes Delta Conveyance planning costs net of California WaterFix refund

Fiscal Year Ending 2023	Supply			Conveyance & Aqueduct					Storage				Treatment	Distribution	Demand Mgt.	Hydro	Total
	CRA	SWC	Other	CRA power	CRA other	SWC power	SWC other	Other C&A	Emergency	Drought	Regulatory	Power					
Dept. Operations & Maintenance	9,515,545	16,555,050	14,721,714	3,584,263	54,378,539	-	24,218,050	8,375,656	8,102,451	6,191,901	4,283,907	-	141,042,024	119,107,915	11,228,825	6,734,820	428,040,660
General District Requirements																	
State Water Contract*	-	-	-	-	-	(4,981,305)	90,506,317	-	-	-	-	-	-	-	-	-	165,962,151
Capital	-	80,437,139	-	-	-	-	194,057,356	-	-	-	-	-	-	-	-	-	515,746,970
O&M	-	110,115,149	-	-	-	211,574,465	-	-	-	-	-	-	-	-	-	-	105,857,041
Colorado River Aqueduct Power	-	-	-	105,857,041	-	-	-	-	-	-	-	-	-	-	-	-	66,659,522
Supply Programs (cash funded portion)	47,197,861	-	1,250,000	-	-	-	-	-	-	18,211,661	-	-	-	-	-	-	50,815,317
Demand Management (cash funded portion)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	50,815,317	-	397,549,660
Capital Financing Program	-	-	16,589,556	8,252,673	13,094,802	-	6,400,032	63,158,208	47,831,816	28,758,037	22,947,482	-	105,544,356	77,856,873	842,109	6,273,715	397,549,660
Other Operating Costs	230,383	400,819	356,431	86,780	1,316,573	-	586,350	202,785	196,171	149,914	103,719	-	3,414,806	2,883,754	271,864	163,059	10,363,408
Revenue Offsets	(187,719)	(53,557,779)	(108,516)	(3,764,899)	(226,771)	(51,576,226)	(64,318,135)	(236,485)	(185,038)	(175,745)	(90,112)	(679,733)	(1,315,350)	(2,136,362)	(208,205)	(12,654,695)	(191,421,770)
Admin. & General	8,909,328	24,166,481	5,150,248	2,308,598	9,759,089	663,334	33,700,180	6,333,852	1,463,537	8,341,029	2,165,276	(2,909)	23,601,317	24,007,927	9,881,611	2,894,377	163,343,274
Net Revenue Requirement	65,665,399	178,116,858	37,959,434	116,324,454	78,322,232	155,680,268	285,150,150	77,834,016	57,408,937	61,476,796	29,410,272	(682,642)	272,287,153	221,720,107	72,831,522	3,411,276	1,712,916,232
* Includes Delta Conveyance planning costs net of California WaterFix refund																	

Fiscal Year Ending 2023	Supply			Conveyance & Aqueduct					Storage				Treatment	Distribution	Demand Mgt.	Hydro	Total
	CRA	SWC	Other	CRA power	CRA other	SWC power	SWC other	Other C&A	Emergency	Drought	Regulatory	Power					
Fixed Demand																	
engineering factors	-	-	-	0.0%	8.3%	0.0%	8.3%	8.3%	0.0%	0.0%	33.5%	0.0%	31.4%	33.5%	-	-	-
SWC Capital	-	-	-	-	-	-	7,541,538	-	-	-	-	-	-	-	-	-	7,541,538
Capital Financing	-	-	-	-	1,091,139	-	533,290	5,262,727	-	-	7,684,107	-	33,193,206	26,070,857	-	-	73,835,324
A&G less Offsets	-	-	-	-	(14,671)	-	(1,884,813)	(216,682)	-	-	30,274	-	(129,436)	(394,000)	-	-	(2,609,329)
Total fixed demand	-	-	-	-	1,076,467	-	6,190,015	5,046,044	-	-	7,714,381	-	33,063,770	25,676,856	-	-	78,767,533
Fixed Commodity																	
engineering factors	100%	100%	100%	100%	49.0%	0%	49.0%	49.0%	0%	100%	39.9%	0%	29.1%	39.9%	1	-	-
Capital Financing	-	-	16,589,556	8,252,673	6,418,463	-	3,136,988	30,957,217	-	28,758,037	9,147,249	-	30,734,450	31,035,048	842,109	-	165,871,800
SWC Capital*	-	80,437,139	-	-	-	-	44,361,989	-	-	-	-	-	-	-	-	-	124,799,128
SWC O&M	-	110,115,149	-	-	-	-	194,057,356	-	-	-	-	-	-	-	-	-	304,172,505
Dept. O&M	9,515,545	16,555,050	14,721,714	3,584,263	54,378,539	-	24,218,050	8,375,656	8,102,451	6,191,901	4,283,907	-	108,577,733	119,107,915	11,228,825	-	388,841,549
Supply Programs (cash funded portion)	47,197,861	-	1,250,000	-	-	-	-	-	-	18,211,661	-	-	-	-	-	-	66,659,522
Demand Management (cash funded portion)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	50,815,317
Other Operating Costs	230,383	400,819	356,431	86,780	1,316,573	-	586,350	202,785	196,171	149,914	103,719	-	3,414,806	2,883,754	271,864	-	10,200,349
A&G less Offsets	8,721,609	(29,391,299)	5,041,732	1,871,735	9,621,726	-	(19,087,453)	6,206,141	1,075,718	8,165,283	2,020,390	-	28,205,241	22,577,826	9,673,406	-	54,702,056
Total fixed commodity	65,665,399	178,116,858	37,959,434	13,795,450	71,735,301	-	247,273,289	45,741,799	9,374,340	61,476,796	15,555,265	-	170,932,230	175,604,543	72,831,522	-	1,166,062,226
Fixed Standby																	
engineering factors	-	-	-	0%	43%	0%	42.7%	42.7%	100%	0%	26.7%	0%	39.4%	26.7%	-	-	-
SWC Capital	-	-	-	-	-	-	38,602,790	-	-	-	-	-	-	-	-	-	38,602,790
Capital Financing	-	-	-	-	5,585,200	-	2,729,744	26,938,264	47,831,816	-	6,116,127	-	41,616,700	20,750,969	-	-	151,568,820
A&G less Offsets	-	-	-	-	(74,737)	-	(9,645,688)	107,909	202,781	-	24,500	-	(652,731)	(312,260)	-	-	(10,350,227)
Total fixed standby	-	-	-	-	5,510,463	-	31,686,846	27,046,173	48,034,597	-	6,140,626	-	40,963,969	20,438,709	-	-	179,821,383
Variable Commodity																	
SWC Power	-	-	-	-	-	206,593,160	-	-	-	-	-	-	-	-	-	-	206,593,160
CRA Power	-	-	-	105,857,041	-	-	-	-	-	-	-	-	-	-	-	-	105,857,041
Variable Treatment	-	-	-	-	-	-	-	-	-	-	-	-	32,464,291	-	-	-	32,464,291
A&G less Offsets	-	-	-	(3,328,036)	-	(50,912,892)	-	-	-	-	-	(682,642)	(5,137,108)	-	-	-	(60,060,678)
Total variable commodity	-	-	-	102,529,005	-	155,680,268	-	-	-	-	-	(682,642)	27,327,183	-	-	-	284,853,814
Hydroelectric																	
A&G less Offsets	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13,171,594	13,171,594
Total hydroelectric	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	(9,760,318)	(9,760,318)
Total Costs	65,665,399	178,116,858	37,959,434	116,324,454	78,322,232	155,680,268	285,150,150	77,834,016	57,408,937	61,476,796	29,410,272	(682,642)	272,287,153	221,720,107	72,831,522	3,411,276	1,712,916,232

4/12/2022 Board Meeting

		1	2	3	4	5	6	7
		Labor And Labor Additive	Outside Services	Utilities	Chemicals	Other O&M	O&M Capitalization (pre-rated)	Projected Total To Be functionalized
Departmental O&M								
Group	Item							
Office of General Manager	Office of General Manager	7,145,080	1,000,000	-	-	226,300	(294,202)	8,077,178
Office of General Manager	Board of Directors	1,568,032	105,000	-	-	576,440	(79,055)	2,170,417
Bay Delta Initiatives	Bay Delta Initiatives	5,733,957	3,570,700	-	-	3,563,267	(452,228)	12,415,696
External Affairs	Legislative Services	4,175,907	1,340,500	5,250	-	1,091,368	(232,442)	6,381,583
External Affairs	Media Communications Services	5,249,177	351,599	-	-	544,255	(215,960)	5,929,071
External Affairs	Manager, External Affairs/Special Projects	6,885,886	377,195	-	-	2,935,073	(358,402)	9,639,752
External Affairs	Conservation & Community Services	3,970,034	1,154,500	-	-	1,091,960	(218,471)	5,996,023
Human Resources	Office of the Manager	12,551,381	1,935,692	-	-	2,012,460	(579,856)	15,919,677
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	8,547,673	245,000	3,000,000	-	250,475	(423,242)	11,619,906
Water Systems Operations	Office of the Manager, Treatment Section	881,266	-	-	-	51,830	(32,753)	900,303
Water Systems Operations	Operations Support Services	440,633	110,000	-	-	694,350	(43,753)	1,201,229
Water Systems Operations	System Operations Unit	1,728,275	329,500	6,500	-	275,150	(82,216)	2,257,209
Water Systems Operations	Desert Region / C&D CRA	7,398,352	195,900	45,600	-	812,950	(297,084)	8,155,736
Water Systems Operations	Power Operations and Planning	28,239,906	451,300	198,000	13,800	6,658,022	(1,249,750)	34,311,278
Water Systems Operations	Operations Planning & Programs Unit	7,944,926	69,700	66,580	-	1,934,787	(352,000)	9,663,993
Water Systems Operations	Treatment Jensen	3,390,199	223,000	-	-	443,500	(142,568)	3,914,131
Water Systems Operations	Treatment Mills	2,119,586	-	-	-	146,888	(79,656)	2,186,918
Water Systems Operations	Treatment Skinner	12,270,232	342,000	1,998,206	5,688,524	954,880	(782,719)	20,471,122
Water Systems Operations	Treatment Weymouth	11,786,758	223,600	3,217,571	6,663,578	562,550	(736,672)	21,717,385
Water Systems Operations	Water Quality Section	11,203,720	244,242	968,098	2,381,218	660,920	(552,017)	14,906,180
Water Systems Operations	C&D, Eastern Unit	10,938,551	144,070	2,286,296	4,039,661	605,824	(626,019)	17,388,382
Water Systems Operations	C&D, Western Unit	12,757,349	113,000	1,739,769	5,900,353	553,850	(756,323)	20,337,998
Water Systems Operations	CSS, Manufacturing Services Unit	23,633,039	2,078,896	461,000	-	3,420,548	(1,040,031)	28,553,552
Water Systems Operations	Environmental Health & Safety Section	15,564,426	2,757,700	1,963,099	-	2,438,705	(798,605)	21,925,325
Water Systems Operations	OSS, Fleet Services Unit	13,116,059	1,525,000	1,875,348	-	1,756,990	(635,168)	17,438,229
Water Systems Operations	OSS, Power Support Unit	8,160,099	226,750	255,350	-	547,950	(322,977)	8,867,172
Water Systems Operations	Office of the Manager, Operations & Planning Section	13,142,365	1,355,984	1,400,000	-	1,538,754	(612,806)	16,824,297
Water Systems Operations	Security Team & Security Management	8,184,742	455,100	13,100	-	5,169,800	(485,784)	13,336,958
Water Systems Operations		8,616,175	319,000	60,000	-	681,800	(346,482)	9,512,493
Water Systems Operations		768,412	23,000	-	-	81,922	(30,692)	842,642
Water Systems Operations		-	-	-	-	-	-	-
Sustainability, Resilience & Innovation		6,418,226	2,930,000	-	-	334,574	(340,290)	9,342,510
Diversity, Equity & Inclusion		1,095,149	400,000	-	-	42,540	(54,040)	1,483,649
Equal Employment Opportunity		1,727,442	400,000	-	-	18,820	(75,428)	2,070,834
Office of the Chief Financial Officer		14,146,653	1,665,600	-	-	10,817,574	(935,973)	25,693,953
Business Technology	Office of Manager	-	-	-	-	-	-	-
Engineering Services	Administrative Services	40,277,580	5,835,600	85,000	-	3,160,400	(1,734,648)	47,623,932
Business Technology	Information Technology	19,897,740	12,664,900	-	-	2,854,470	(1,244,652)	34,172,416
Business Technology	Resource Planning & Development	34,741,359	6,074,600	-	-	12,824,841	(1,885,141)	51,755,659
Water Resources Management	Resource Implementation	4,442,761	890,000	-	-	446,265	(203,097)	5,575,929
Water Resources Management	Office of the Group Manager	11,344,762	1,577,600	-	-	5,114,001	(633,966)	17,402,407
Ethics Office		2,614,246	75,000	-	-	77,349	(97,229)	2,669,366
Real Property		1,883,922	270,369	-	-	80,460	(78,538)	2,156,213
General Counsel		12,751,034	9,245,551	1,742,000	-	6719,460	(1,070,376)	29,386,669
General Auditor		13,540,273	2,180,000	-	-	569,000	(572,467)	15,716,806
Total Departmental O&M		4,256,013	550,000	-	-	104,500	(172,574)	4,737,939
		427,252,353	66,027,249	21,186,766	24,687,134	85,656,921	(21,958,211)	602,852,212
GENERAL DISTRICT REQUIREMENTS								
State Water Contract*								
Supply - O&M								107,000,290
Supply - Capital								85,494,959
Power - O&M & Off-Ag Capital								228,551,933
Power - Capital (less Off-Ag)								(3,654,765)
Transmission - Capital - Commodity, Demand, & Standby								80,660,127
Transmission - O&M - Commodity only								198,687,447
Delta Conveyance - Other								34,500,000
Total State Water Contract								761,239,991
Colorado River Aqueduct Power Costs								85,626,149
Supply Programs (cash funded portion)								64,100,985
Demand Management (cash funded portion)								
Local Resources Program								27,463,721
Future Supply Actions & Stormwater Pilot								2,422,500
Conservation Program (cash funded portion)								25,000,000
Total Demand Management Costs								54,886,221
Capital Financing								
Revenue Bond Debt Service net of BABs Interest Subsidy Payment								296,356,173
G.O. Bond Debt Service								1,965,750
Debt Administration								270,320
Bond Deleassance								
PAYGO								135,000,000
Total Capital Financing Costs								436,025,242
Other Operating Costs								
Operating Equipment								8,836,761
Succession Planning Labor Pool								5,000,000
OPEB/PEPS Pre-Funding								-
Total Other Operating Costs								13,836,761
Increase/(Decrease) in Required Reserves								7,900,000
Total General District Requirements								1,423,615,349
REQUIREMENTS BEFORE OFFSETS:								2,026,467,561
Revenue Offsets								
Property Taxes - MWD Portion of SWC GO Debt Service								36,010
Property Taxes - MWD GO Debt Service								1,965,750
Interest on Investments								9,533,126
Hydro-Power Revenue								10,710,879
CRA Power Revenue								2,989,504
Wadsworth Pumping Plant (DVL) Power Revenue								545,067
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)								27,575,443
Misc. allocated to supply (PVID Lease)								6,048,886
Property Taxes - SWC								166,313,250
Revenue Reserve used for Revenue Bonds - I&P								-
Annexation								-
Total Revenue Offsets								225,717,914
NET REVENUE REQUIREMENTS:								1,800,749,647

NET REVENUE REQUIREMENTS:

885

886

		Functionalization	Allocation Percentages					% Total
			Demand	Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		129,409	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Office of General Manager	Board of Directors	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Bay Delta Initiatives	Bay Delta Initiatives	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Legislative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Media Communications Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Manager, External Affairs/Special Projects	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Conservation & Community Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Human Resources		255,058	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager	215,755	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Treatment Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations Support Services	41,911	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Support Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Desert Region / C&D CRA	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	System Operations Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Power Operations and Planning	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Planning & Programs Unit	728,973	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Jensen	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Diemer	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Mills	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Skinner	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Weymouth	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Water Quality Section	3,835,694	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Eastern Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Western Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Manufacturing Services Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Environmental Health & Safety Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Fleet Services Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Power Support Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations & Planning Section	15,646	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Security Team & Security Management	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Sustainability, Resilience & Innovation		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Diversity, Equity & Inclusion		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Equal Employment Opportunity		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Office of the Chief Financial Officer		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Office of Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Engineering Services		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Administrative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Information Technology	829,208	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Planning & Development	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Implementation	2,626,037	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Office of the Group Manager	305,062	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Ethics Office		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Real Property		675,893	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
General Counsel		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
General Auditor		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Departmental O&M		9,658,647	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
GENERAL DISTRICT REQUIREMENTS								
State Water Contract*								
Supply - O&M		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Supply - Capital		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Power - O&M & Off-Aq Capital		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Power - Capital (less Off-Aq)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Transmission - Capital - Commodity, Demand, & Standby		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Transmission - O&M - Commodity only		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Supply		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Power		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Other		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total State Water Contract		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Colorado River Aqueduct Power Costs								
		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Supply Programs (cash funded portion)								
		51,129,998	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Demand Management (cash funded portion)								
Local Resources Program		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Future Supply Actions & Stormwater Pilot		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Conservation Program (cash funded portion)		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Demand Management Costs		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Capital Financing								
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
G.O. Bond Debt Service		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Debt Administration		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Bond Defeasance		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
PAYGO		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total Capital Financing Costs		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Other Operating Costs								
Operating Equipment		141,579	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Succession Planning Labor Pool		80,108	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
OPEB/PERS Pre-Funding		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Other Operating Costs		221,687	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Increase/(Decrease) in Required Reserves								
		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total General District Requirements								
		51,351,685	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
REQUIREMENTS BEFORE OFFSETS:								
		61,010,331	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Revenue Offsets								
Property Taxes - MWD Portion of SWC GO Debt Service		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Property Taxes - MWD GO Debt Service		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Interest on Investments		287,011	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Hydro-Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
CRA Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Wadsworth Pumping Plant (DVL) Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to supply (PVID Lease)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Property Taxes - SWC		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Revenue Reserve used for Revenue Bonds - I&P		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Annexation		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total Revenue Offsets		287,011	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
NET REVENUE REQUIREMENTS:								
		60,723,320	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

	Functionalization	Allocation Percentages					Total
		Demand	Fixed Commodity	Standby	Variable Commodity	Other	
Departmental O&M							
Group	Item						
Office of General Manager		129,409	-	129,409	-	-	129,409
Office of General Manager	Board of Directors	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-
Human Resources		255,058	-	255,058	-	-	255,058
Water Systems Operations	Office of the Manager	215,755	-	215,755	-	-	215,755
Water Systems Operations	Office of the Manager, Conveyance & Distribution S	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations Support Services	41,911	-	41,911	-	-	41,911
Water Systems Operations	Operations Support Services	-	-	-	-	-	-
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	728,973	-	728,973	-	-	728,973
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	3,835,694	-	3,835,694	-	-	3,835,694
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	-	-	-	-	-	-
Water Systems Operations	Environmental Health & Safety Section	-	-	-	-	-	-
Water Systems Operations	OSS, Fleet Services Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Power Support Unit	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations & Planning Sect	15,646	-	15,646	-	-	15,646
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-
Sustainability, Resilience & Innova		-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-
Office of the Chief Financial Office		-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-
Engineering Services		-	-	-	-	-	-
Business Technology	Administrative Services	-	-	-	-	-	-
Business Technology	Information Technology	829,208	-	829,208	-	-	829,208
Water Resources Management	Resource Planning & Development	-	-	-	-	-	-
Water Resources Management	Resource Implementation	2,626,037	-	2,626,037	-	-	2,626,037
Water Resources Management	Office of the Group Manager	305,062	-	305,062	-	-	305,062
Ethics Office		-	-	-	-	-	-
Real Property		675,893	-	675,893	-	-	675,893
General Counsel		-	-	-	-	-	-
General Auditor		-	-	-	-	-	-
Total Departmental O&M	-	9,658,647	-	9,658,647	-	-	9,658,647
GENERAL DISTRICT REQUIREMENTS							
State Water Contract*	-	-	-	-	-	-	-
Supply - O&M	-	-	-	-	-	-	-
Supply - Capital	-	-	-	-	-	-	-
Power - O&M & Off-Aq Capital	-	-	-	-	-	-	-
Power - Capital (less Off-Aq)	-	-	-	-	-	-	-
Transmission - Capital - Commodity, Demand, & Standby	-	-	-	-	-	-	-
Transmission - O&M - Commodity only	-	-	-	-	-	-	-
Delta Conveyance - Supply	-	-	-	-	-	-	-
Delta Conveyance - Power	-	-	-	-	-	-	-
Delta Conveyance - Other	-	-	-	-	-	-	-
Total State Water Contract	-	-	-	-	-	-	-
Colorado River Aqueduct Power Costs	-	-	-	-	-	-	-
Supply Programs (cash funded portion)	51,129,998	-	51,129,998	-	-	-	51,129,998
Demand Management (cash funded portion)	-	-	-	-	-	-	-
Local Resources Program	-	-	-	-	-	-	-
Future Supply Actions & Stormwater Pilot	-	-	-	-	-	-	-
Conservation Program (cash funded portion)	-	-	-	-	-	-	-
Total Demand Management Costs	-	-	-	-	-	-	-
Capital Financing	-	-	-	-	-	-	-
Revenue Bond Debt Service net of BABs Interest Subsidy Payment	-	-	-	-	-	-	-
G.O. Bond Debt Service	-	-	-	-	-	-	-
Debt Administration	-	-	-	-	-	-	-
Bond Defeasance	-	-	-	-	-	-	-
PAYGO	-	-	-	-	-	-	-
Total Capital Financing Costs	-	-	-	-	-	-	-
Other Operating Costs	-	-	-	-	-	-	-
Operating Equipment	141,579	-	141,579	-	-	-	141,579
Succession Planning Labor Pool	80,108	-	80,108	-	-	-	80,108
OPEB/PERS Pre-Funding	-	-	-	-	-	-	-
Total Other Operating Costs	221,687	-	221,687	-	-	-	221,687
Increase/(Decrease) in Required Reserves	-	-	-	-	-	-	-
Total General District Requirements	51,351,685	-	51,351,685	-	-	-	51,351,685
REQUIREMENTS BEFORE OFFSETS:	61,010,331	-	61,010,331	-	-	-	61,010,331
Revenue Offsets	-	-	-	-	-	-	-
Property Taxes - MWD Portion of SWC GO Debt Service	-	-	-	-	-	-	-
Property Taxes - MWD GO Debt Service	-	-	-	-	-	-	-
Interest on Investments	287,011	-	287,011	-	-	-	287,011
Hydro-Power Revenue	-	-	-	-	-	-	-
CRA Power Revenue	-	-	-	-	-	-	-
Wadsworth Pumping Plant (DVL) Power Revenue	-	-	-	-	-	-	-
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)	-	-	-	-	-	-	-
Misc. allocated to supply (PVID Lease)	-	-	-	-	-	-	-
Property Taxes - SWC	-	-	-	-	-	-	-
Revenue Reserve used for Revenue Bonds - I&P	-	-	-	-	-	-	-
Annexation	-	-	-	-	-	-	-
Total Revenue Offsets	287,011	-	287,011	-	-	-	287,011
NET REVENUE REQUIREMENTS:	60,723,320	-	60,723,320	-	-	-	60,723,320

		Functionalization	Allocation Percentages					Total	
			Fixed			Variable Commodity	Other		Hydroelectric
			Demand	Commodity	Standby				
Departmental O&M									
Group	Item								
Office of General Manager		114,475	-	114,475	-	-	-	114,475	
Office of General Manager	Board of Directors	-	-	-	-	-	-	-	
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-	-	
External Affairs	Legislative Services	-	-	-	-	-	-	-	
External Affairs	Media Communications Services	-	-	-	-	-	-	-	
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-	-	
External Affairs	Conservation & Community Services	-	-	-	-	-	-	-	
Human Resources		201,093	-	201,093	-	-	-	201,093	
Water Systems Operations	Office of the Manager	158,711	-	158,711	-	-	-	158,711	
Water Systems Operations	Office of the Manager, Conveyance & Distribution Sec	-	-	-	-	-	-	-	
Water Systems Operations	Office of the Manager, Treatment Section	-	-	-	-	-	-	-	
Water Systems Operations	Office of the Manager, Operations Support Services	32,090	-	32,090	-	-	-	32,090	
Water Systems Operations	Operations Support Services	-	-	-	-	-	-	-	
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-	-	
Water Systems Operations	System Operations Unit	-	-	-	-	-	-	-	
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-	-	
Water Systems Operations	Operations Planning & Programs Unit	706,529	-	706,529	-	-	-	706,529	
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-	-	
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-	-	
Water Systems Operations	Treatment Mills	-	-	-	-	-	-	-	
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-	-	
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-	-	
Water Systems Operations	Water Quality Section	3,174,705	-	3,174,705	-	-	-	3,174,705	
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-	-	
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-	-	
Water Systems Operations	OSS, Manufacturing Services Unit	-	-	-	-	-	-	-	
Water Systems Operations	Environmental Health & Safety Section	-	-	-	-	-	-	-	
Water Systems Operations	OSS, Fleet Services Unit	-	-	-	-	-	-	-	
Water Systems Operations	OSS, Power Support Unit	-	-	-	-	-	-	-	
Water Systems Operations	Office of the Manager, Operations & Planning Section	14,268	-	14,268	-	-	-	14,268	
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-	-	
Sustainability, Resilience & Innovati		-	-	-	-	-	-	-	
Diversity, Equity & Inclusion		-	-	-	-	-	-	-	
Equal Employment Opportunity		-	-	-	-	-	-	-	
Office of the Chief Financial Officer		-	-	-	-	-	-	-	
Business Technology	Office of Manager	-	-	-	-	-	-	-	
Engineering Services		-	-	-	-	-	-	-	
Business Technology	Administrative Services	-	-	-	-	-	-	-	
Business Technology	Information Technology	556,612	-	556,612	-	-	-	556,612	
Water Resources Management	Resource Planning & Development	-	-	-	-	-	-	-	
Water Resources Management	Resource Implementation	1,711,925	-	1,711,925	-	-	-	1,711,925	
Water Resources Management	Office of the Group Manager	298,763	-	298,763	-	-	-	298,763	
Ethics Office		-	-	-	-	-	-	-	
Real Property		293,274	-	293,274	-	-	-	293,274	
General Counsel		-	-	-	-	-	-	-	
General Auditor		-	-	-	-	-	-	-	
Total Departmental O&M	-	7,262,444	-	7,262,444	-	-	-	7,262,444	

		Functionalization	Allocation Percentages					% Total
			Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		226,773	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Office of General Manager	Board of Directors	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Bay Delta Initiatives	Bay Delta Initiatives	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Legislative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Media Communications Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Manager, External Affairs/Special Projects	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Conservation & Community Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Human Resources		446,957	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager	215,755	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Treatment Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations Support Services	41,911	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Support Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Desert Region / C&D CRA	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	System Operations Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Power Operations and Planning	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Planning & Programs Unit	728,973	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Jensen	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Diemer	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Mills	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Skinner	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Weymouth	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Water Quality Section	3,835,694	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Eastern Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Western Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Manufacturing Services Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Environmental Health & Safety Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Fleet Services Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Power Support Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations & Planning Section	15,646	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Security Team & Security Management	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Sustainability, Resilience & Innovation		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Diversity, Equity & Inclusion		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Equal Employment Opportunity		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Office of the Chief Financial Officer		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Office of Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Engineering Services		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Administrative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Information Technology	1,453,079	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Planning & Development	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Implementation	7,897,253	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Office of the Group Manager	917,411	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Ethics Office		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Real Property		1,146,080	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
General Counsel		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
General Auditor		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Departmental O&M		16,925,532	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
GENERAL DISTRICT REQUIREMENTS								
State Water Contract*								
Supply - O&M		107,000,290	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Supply - Capital		85,494,959	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Power - O&M & Off-Aq Capital		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Power - Capital (less Off-Aq)		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Transmission - Capital - Commodity, Demand, & Standby		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Transmission - O&M - Commodity only		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Delta Conveyance - Supply		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Delta Conveyance - Power		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Delta Conveyance - Other		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total State Water Contract		192,495,249	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Colorado River Aqueduct Power Costs								
		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Supply Programs (cash funded portion)								
		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Demand Management (cash funded portion)								
Local Resources Program		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Future Supply Actions & Stormwater Pilot		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Conservation Program (cash funded portion)		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Demand Management Costs		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Capital Financing								
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
G.O. Bond Debt Service		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Debt Administration		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Bond Defeasance		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
PAYGO		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total Capital Financing Costs		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Other Operating Costs								
Operating Equipment		248,099	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Succession Planning Labor Pool		140,379	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
OPEB/PERS Pre-Funding		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Other Operating Costs		388,478	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Increase/(Decrease) in Required Reserves								
		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total General District Requirements								
		192,883,727	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
REQUIREMENTS BEFORE OFFSETS:								
		209,809,259	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Revenue Offsets								
Property Taxes - MWD Portion of SWC GO Debt Service		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Property Taxes - MWD GO Debt Service		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Interest on Investments		987,007	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Hydro-Power Revenue		-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
CRA Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Wadsworth Pumping Plant (DVL) Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to supply (PVID Lease)		6,048,886	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Property Taxes - SWC		44,052,221	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Revenue Reserve used for Revenue Bonds - I&P		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Annexation		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total Revenue Offsets		51,088,113	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
NET REVENUE REQUIREMENTS:								
-		158,721,145	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

	Functionalization	Allocation Percentages					Total
		Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M							
Group	Item						
Office of General Manager		226,773	-	226,773	-	-	226,773
Office of General Manager	Board of Directors	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-
Human Resources		446,957	-	446,957	-	-	446,957
Water Systems Operations	Office of the Manager	215,755	-	215,755	-	-	215,755
Water Systems Operations	Office of the Manager, Conveyance & Distribution S	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations Support Services	41,911	-	41,911	-	-	41,911
Water Systems Operations	Operations Support Services	-	-	-	-	-	-
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	728,973	-	728,973	-	-	728,973
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	3,835,694	-	3,835,694	-	-	3,835,694
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	-	-	-	-	-	-
Water Systems Operations	Environmental Health & Safety Section	-	-	-	-	-	-
Water Systems Operations	OSS, Fleet Services Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Power Support Unit	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations & Planning Secti	15,646	-	15,646	-	-	15,646
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-
Sustainability, Resilience & Inn		-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-
Engineering Services		-	-	-	-	-	-
Business Technology	Administrative Services	-	-	-	-	-	-
Business Technology	Information Technology	1,453,079	-	1,453,079	-	-	1,453,079
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	7,897,253	-	7,897,253	-	-	7,897,253
Water Resources Managemen	Office of the Group Manager	917,411	-	917,411	-	-	917,411
Ethics Office		-	-	-	-	-	-
Real Property		1,146,080	-	1,146,080	-	-	1,146,080
General Counsel		-	-	-	-	-	-
General Auditor		-	-	-	-	-	-
Total Departmental O&M		16,925,532	-	16,925,532	-	-	16,925,532
GENERAL DISTRICT REQUIREMENTS		-	-	-	-	-	-
State Water Contract*		-	-	-	-	-	-
Supply - O&M		107,000,290	-	107,000,290	-	-	107,000,290
Supply - Capital		85,494,959	-	85,494,959	-	-	85,494,959
Power - O&M & Off-Aq Capital		-	-	-	-	-	-
Power - Capital (less Off-Aq)		-	-	-	-	-	-
Transmission - Capital - Commodity, Demand, & Standby		-	-	-	-	-	-
Transmission - O&M - Commodity only		-	-	-	-	-	-
Delta Conveyance - Supply		-	-	-	-	-	-
Delta Conveyance - Power		-	-	-	-	-	-
Delta Conveyance - Other		-	-	-	-	-	-
Total State Water Contract		192,495,249	-	192,495,249	-	-	192,495,249
Colorado River Aqueduct Power Costs		-	-	-	-	-	-
Supply Programs (cash funded portion)		-	-	-	-	-	-
Demand Management (cash funded portion)		-	-	-	-	-	-
Local Resources Program		-	-	-	-	-	-
Future Supply Actions & Stormwater Pilot		-	-	-	-	-	-
Conservation Program (cash funded portion)		-	-	-	-	-	-
Total Demand Management Costs		-	-	-	-	-	-
Capital Financing		-	-	-	-	-	-
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		-	-	-	-	-	-
G.O. Bond Debt Service		-	-	-	-	-	-
Debt Administration		-	-	-	-	-	-
Bond Defeasance		-	-	-	-	-	-
PAYGO		-	-	-	-	-	-
Total Capital Financing Costs		-	-	-	-	-	-
Other Operating Costs		-	-	-	-	-	-
Operating Equipment		248,099	-	248,099	-	-	248,099
Succession Planning Labor Pool		140,379	-	140,379	-	-	140,379
OPEB/PERS Pre-Funding		-	-	-	-	-	-
Total Other Operating Costs		388,478	-	388,478	-	-	388,478
Increase/(Decrease) in Required Reserves		-	-	-	-	-	-
Total General District Requirements		192,883,727	-	192,883,727	-	-	192,883,727
REQUIREMENTS BEFORE OFFSETS:		209,809,259	-	209,809,259	-	-	209,809,259
Revenue Offsets							
Property Taxes - MWD Portion of SWC GO Debt Service		-	-	-	-	-	-
Property Taxes - MWD GO Debt Service		-	-	-	-	-	-
Interest on Investments		987,007	-	987,007	-	-	987,007
Hydro-Power Revenue		-	-	-	-	-	-
CRA Power Revenue		-	-	-	-	-	-
Wadsworth Pumping Plant (DVL) Power Revenue		-	-	-	-	-	-
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)		-	-	-	-	-	-
Misc. allocated to supply (PVID Lease)		6,048,886	-	6,048,886	-	-	6,048,886
Property Taxes - SWC		44,052,221	-	44,052,221	-	-	44,052,221
Revenue Reserve used for Revenue Bonds - I&P		-	-	-	-	-	-
Annexation		-	-	-	-	-	-
Total Revenue Offsets		51,088,113	-	51,088,113	-	-	51,088,113
NET REVENUE REQUIREMENTS:		158,721,145	-	158,721,145	-	-	158,721,145

		Functionalization	Allocation Percentages					Total
			Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		200,604	-	200,604	-	-	-	200,604
Office of General Manager	Board of Directors	-	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-	-
Human Resources		352,390	-	352,390	-	-	-	352,390
Water Systems Operations	Office of the Manager	158,711	-	158,711	-	-	-	158,711
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations Support Services	32,090	-	32,090	-	-	-	32,090
Water Systems Operations	Operations Support Services	-	-	-	-	-	-	-
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	706,529	-	706,529	-	-	-	706,529
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	3,174,705	-	3,174,705	-	-	-	3,174,705
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	-	-	-	-	-	-	-
Water Systems Operations	Environmental Health & Safety Section	-	-	-	-	-	-	-
Water Systems Operations	OSS, Fleet Services Unit	-	-	-	-	-	-	-
Water Systems Operations	OSS, Power Support Unit	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations & Planning Section	14,268	-	14,268	-	-	-	14,268
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-	-
Sustainability, Resilience & Inr		-	-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-	-
Equal Employment Opportunit		-	-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-	-
Engineering Services		-	-	-	-	-	-	-
Business Technology	Administrative Services	-	-	-	-	-	-	-
Business Technology	Information Technology	975,390	-	975,390	-	-	-	975,390
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	5,148,253	-	5,148,253	-	-	-	5,148,253
Water Resources Managemen	Office of the Group Manager	898,467	-	898,467	-	-	-	898,467
Ethics Office		-	-	-	-	-	-	-
Real Property		497,290	-	497,290	-	-	-	497,290
General Counsel		-	-	-	-	-	-	-
General Auditor		-	-	-	-	-	-	-
Total Departmental O&M		-	12,158,696	12,158,696	-	-	-	12,158,696

		Functionalization	Allocation Percentages					% Total
			Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		199,054	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Office of General Manager	Board of Directors	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Bay Delta Initiatives	Bay Delta Initiatives	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Legislative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Media Communications Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Manager, External Affairs/Special Projects	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Conservation & Community Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Human Resources		392,324	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager	215,755	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Treatment Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations Support Services	41,911	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Support Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Desert Region / C&D CRA	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	System Operations Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Power Operations and Planning	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Planning & Programs Unit	728,973	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Jensen	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Diemer	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Mills	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Skinner	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Weymouth	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Water Quality Section	3,835,694	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Eastern Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Western Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Manufacturing Services Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Environmental Health & Safety Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Fleet Services Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Power Support Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations & Planning Section	15,646	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Security Team & Security Management	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Sustainability, Resilience & Innovation		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Diversity, Equity & Inclusion		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Equal Employment Opportunity		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Office of the Chief Financial Officer		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Office of Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Engineering Services		1,895,432	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Administrative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Information Technology	1,275,465	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Planning & Development	4,834,331	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Implementation	770,931	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Office of the Group Manager	651,154	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Ethics Office		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Real Property		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
General Counsel		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
General Auditor		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Departmental O&M		14,856,669	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
GENERAL DISTRICT REQUIREMENTS								
State Water Contract*								
Supply - O&M		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Supply - Capital		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Power - O&M & Off-Aq Capital		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Power - Capital (less Off-Aq)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Transmission - Capital - Commodity, Demand, & Standby		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Transmission - O&M - Commodity only		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Supply		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Power		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Other		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total State Water Contract		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Colorado River Aqueduct Power Costs								
		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Supply Programs (cash funded portion)								
		1,250,000	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Demand Management (cash funded portion)								
Local Resources Program		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Future Supply Actions & Stormwater Pilot		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Conservation Program (cash funded portion)		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Demand Management Costs		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Capital Financing								
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		11,794,976	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
G.O. Bond Debt Service		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Debt Administration		107,592	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Bond Defeasance		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
PAYGO		5,373,000	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Capital Financing Costs		17,275,568	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Other Operating Costs								
Operating Equipment		217,773	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Succession Planning Labor Pool		123,220	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
OPEB/PERS Pre-Funding		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Other Operating Costs		340,993	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Increase/(Decrease) in Required Reserves								
		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total General District Requirements								
		18,866,560	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
REQUIREMENTS BEFORE OFFSETS:								
		33,723,229	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Revenue Offsets								
Property Taxes - MWD Portion of SWC GO Debt Service		-	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Property Taxes - MWD GO Debt Service		-	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Interest on Investments		158,644	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Hydro-Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
CRA Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Wadsworth Pumping Plant (DVL) Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to supply (PVID Lease)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Property Taxes - SWC		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Revenue Reserve used for Revenue Bonds - I&P		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Annexation		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total Revenue Offsets		158,644	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
NET REVENUE REQUIREMENTS:								
		33,564,585	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

	Functionalization	Allocation Percentages					Total
		Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M							
Group	Item						
Office of General Manager		199,054	-	199,054	-	-	199,054
Office of General Manager	Board of Directors	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-
Human Resources		392,324	-	392,324	-	-	392,324
Water Systems Operations	Office of the Manager	215,755	-	215,755	-	-	215,755
Water Systems Operations	Office of the Manager, Conveyance & Distribution S	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations Support Services	41,911	-	41,911	-	-	41,911
Water Systems Operations	Operations Support Services	-	-	-	-	-	-
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	728,973	-	728,973	-	-	728,973
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	3,835,694	-	3,835,694	-	-	3,835,694
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	-	-	-	-	-	-
Water Systems Operations	Environmental Health & Safety Section	-	-	-	-	-	-
Water Systems Operations	OSS, Fleet Services Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Power Support Unit	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations & Planning Secti	15,646	-	15,646	-	-	15,646
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-
Sustainability, Resilience & Inn		-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-
Engineering Services		1,895,432	-	1,895,432	-	-	1,895,432
Business Technology	Administrative Services	-	-	-	-	-	-
Business Technology	Information Technology	1,275,465	-	1,275,465	-	-	1,275,465
Water Resources Managemen	Resource Planning & Development	4,834,331	-	4,834,331	-	-	4,834,331
Water Resources Managemen	Resource Implementation	770,931	-	770,931	-	-	770,931
Water Resources Managemen	Office of the Group Manager	651,154	-	651,154	-	-	651,154
Ethics Office		-	-	-	-	-	-
Real Property		-	-	-	-	-	-
General Counsel		-	-	-	-	-	-
General Auditor		-	-	-	-	-	-
Total Departmental O&M		14,856,669	-	14,856,669	-	-	14,856,669
GENERAL DISTRICT REQUIREMENTS		-	-	-	-	-	-
State Water Contract*		-	-	-	-	-	-
Supply - O&M		-	-	-	-	-	-
Supply - Capital		-	-	-	-	-	-
Power - O&M & Off-Aq Capital		-	-	-	-	-	-
Power - Capital (less Off-Aq)		-	-	-	-	-	-
Transmission - Capital - Commodity, Demand, & Standby		-	-	-	-	-	-
Transmission - O&M - Commodity only		-	-	-	-	-	-
Delta Conveyance - Supply		-	-	-	-	-	-
Delta Conveyance - Power		-	-	-	-	-	-
Delta Conveyance - Other		-	-	-	-	-	-
Total State Water Contract		-	-	-	-	-	-
Colorado River Aqueduct Power Costs		-	-	-	-	-	-
Supply Programs (cash funded portion)		1,250,000	-	1,250,000	-	-	1,250,000
Demand Management (cash funded portion)		-	-	-	-	-	-
Local Resources Program		-	-	-	-	-	-
Future Supply Actions & Stormwater Pilot		-	-	-	-	-	-
Conservation Program (cash funded portion)		-	-	-	-	-	-
Total Demand Management Costs		-	-	-	-	-	-
Capital Financing		-	-	-	-	-	-
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		11,794,976	-	11,794,976	-	-	11,794,976
G.O. Bond Debt Service		-	-	-	-	-	-
Debt Administration		107,592	-	107,592	-	-	107,592
Bond Defeasance		-	-	-	-	-	-
PAYGO		5,373,000	-	5,373,000	-	-	5,373,000
Total Capital Financing Costs		17,275,568	-	17,275,568	-	-	17,275,568
Other Operating Costs		-	-	-	-	-	-
Operating Equipment		217,773	-	217,773	-	-	217,773
Succession Planning Labor Pool		123,220	-	123,220	-	-	123,220
OPEB/PERS Pre-Funding		-	-	-	-	-	-
Total Other Operating Costs		340,993	-	340,993	-	-	340,993
Increase/(Decrease) in Required Reserves		-	-	-	-	-	-
Total General District Requirements		18,866,560	-	18,866,560	-	-	18,866,560
REQUIREMENTS BEFORE OFFSETS:		33,723,229	-	33,723,229	-	-	33,723,229
Revenue Offsets		-	-	-	-	-	-
Property Taxes - MWD Portion of SWC GO Debt Service		-	-	-	-	-	-
Property Taxes - MWD GO Debt Service		-	-	-	-	-	-
Interest on Investments		158,644	-	158,644	-	-	158,644
Hydro-Power Revenue		-	-	-	-	-	-
CRA Power Revenue		-	-	-	-	-	-
Wadsworth Pumping Plant (DVL) Power Revenue		-	-	-	-	-	-
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)		-	-	-	-	-	-
Misc. allocated to supply (PVID Lease)		-	-	-	-	-	-
Property Taxes - SWC		-	-	-	-	-	-
Revenue Reserve used for Revenue Bonds - I&P		-	-	-	-	-	-
Annexation		-	-	-	-	-	-
Total Revenue Offsets		158,644	-	158,644	-	-	158,644
NET REVENUE REQUIREMENTS:		33,564,585	-	33,564,585	-	-	33,564,585

		Functionalization	Allocation Percentages					Total
			Fixed			Variable		
			Demand	Commodity	Standby	Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		176,083	-	176,083	-	-	-	176,083
Office of General Manager	Board of Directors	-	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-	-
Human Resources		309,316	-	309,316	-	-	-	309,316
Water Systems Operations	Office of the Manager	158,711	-	158,711	-	-	-	158,711
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations Support Services	32,090	-	32,090	-	-	-	32,090
Water Systems Operations	Operations Support Services	-	-	-	-	-	-	-
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	706,529	-	706,529	-	-	-	706,529
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	3,174,705	-	3,174,705	-	-	-	3,174,705
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	-	-	-	-	-	-	-
Water Systems Operations	Environmental Health & Safety Section	-	-	-	-	-	-	-
Water Systems Operations	OSS, Fleet Services Unit	-	-	-	-	-	-	-
Water Systems Operations	OSS, Power Support Unit	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations & Planning Section	14,268	-	14,268	-	-	-	14,268
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-	-
Sustainability, Resilience & Inr		-	-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-	-
Engineering Services		1,603,048	-	1,603,048	-	-	-	1,603,048
Business Technology	Administrative Services	-	-	-	-	-	-	-
Business Technology	Information Technology	856,165	-	856,165	-	-	-	856,165
Water Resources Management	Resource Planning & Development	3,851,874	-	3,851,874	-	-	-	3,851,874
Water Resources Management	Resource Implementation	502,573	-	502,573	-	-	-	502,573
Water Resources Management	Office of the Group Manager	637,708	-	637,708	-	-	-	637,708
Ethics Office		-	-	-	-	-	-	-
Real Property		-	-	-	-	-	-	-
General Counsel		-	-	-	-	-	-	-
General Auditor		-	-	-	-	-	-	-
Total Departmental O&M		12,023,069	-	12,023,069	-	-	-	12,023,069

		Functionalization	Allocation Percentages					% Total
			Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		49,740	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Office of General Manager	Board of Directors	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Bay Delta Initiatives	Bay Delta Initiatives	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Legislative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Media Communications Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Manager, External Affairs/Special Projects	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Conservation & Community Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Human Resources		98,035	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager	104,794	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Treatment Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations Support Services	20,357	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Support Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Desert Region / C&D CRA	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	System Operations Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Power Operations and Planning	1,276,007	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Planning & Programs Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Jensen	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Diemer	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Mills	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Skinner	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Weymouth	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Water Quality Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Eastern Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Western Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Manufacturing Services Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Environmental Health & Safety Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Fleet Services Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Power Support Unit	860,881	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations & Planning Section	7,599	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Security Team & Security Management	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Sustainability, Resilience & Innovation		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Diversity, Equity & Inclusion		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Equal Employment Opportunity		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Office of the Chief Financial Officer		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Office of Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Engineering Services		976,291	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Administrative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Information Technology	318,716	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Planning & Development	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Implementation	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Office of the Group Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Ethics Office		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Real Property		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
General Counsel		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
General Auditor		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Departmental O&M		3,712,419	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
GENERAL DISTRICT REQUIREMENTS								
State Water Contract*								
Supply - O&M		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Supply - Capital		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Power - O&M & Off-Aq Capital		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Power - Capital (less Off-Aq)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Transmission - Capital - Commodity, Demand, & Standby		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Transmission - O&M - Commodity only		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Supply		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Power		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Other		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total State Water Contract		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Colorado River Aqueduct Power Costs		85,626,149	0.0%	0.0%	0.0%	100.0%	0.0%	100.0%
Supply Programs (cash funded portion)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Demand Management (cash funded portion)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Local Resources Program		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Future Supply Actions & Stormwater Pilot		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Conservation Program (cash funded portion)		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Demand Management Costs		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Capital Financing		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		6,075,302	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
G.O. Bond Debt Service		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Debt Administration		55,418	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Bond Defeasance		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
PAYGO		2,767,500	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Capital Financing Costs		8,898,220	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Other Operating Costs								
Operating Equipment		54,418	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Succession Planning Labor Pool		30,790	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
OPEB/PERS Pre-Funding		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Other Operating Costs		85,208	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Increase/(Decrease) in Required Reserves		-	0.0%	9.5%	0.0%	90.5%	0.0%	100.0%
Total General District Requirements		94,609,576	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
REQUIREMENTS BEFORE OFFSETS:			98,321,995	0.0%	0.0%	0.0%	0.0%	0.0%
Revenue Offsets								
Property Taxes - MWD Portion of SWC GO Debt Service		-	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Property Taxes - MWD GO Debt Service		-	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Interest on Investments		462,537	0.0%	0.0%	0.0%	100.0%	0.0%	100.0%
Hydro-Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
CRA Power Revenue		2,989,504	0.0%	0.0%	0.0%	100.0%	0.0%	100.0%
Wadsworth Pumping Plant (DVL) Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to supply (PVID Lease)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Property Taxes - SWC		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Revenue Reserve used for Revenue Bonds - I&P		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Annexation		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Revenue Offsets		3,452,041	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
NET REVENUE REQUIREMENTS:			-	94,869,954	0.0%	0.0%	0.0%	0.0%

	Functionalization	Allocation Percentages					Total
		Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M							
Group	Item						
Office of General Manager		49,740	-	49,740	-	-	49,740
Office of General Manager	Board of Directors	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-
Human Resources		98,035	-	98,035	-	-	98,035
Water Systems Operations	Office of the Manager	104,794	-	104,794	-	-	104,794
Water Systems Operations	Office of the Manager, Conveyance & Distribution S	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations Support Services	20,357	-	20,357	-	-	20,357
Water Systems Operations	Operations Support Services	-	-	-	-	-	-
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	1,276,007	-	1,276,007	-	-	1,276,007
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	-	-	-	-	-	-
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	-	-	-	-	-	-
Water Systems Operations	Environmental Health & Safety Section	-	-	-	-	-	-
Water Systems Operations	OSS, Fleet Services Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Power Support Unit	860,881	-	860,881	-	-	860,881
Water Systems Operations	Office of the Manager, Operations & Planning Secti	7,599	-	7,599	-	-	7,599
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-
Sustainability, Resilience & Inn		-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-
Engineering Services		976,291	-	976,291	-	-	976,291
Business Technology	Administrative Services	-	-	-	-	-	-
Business Technology	Information Technology	318,716	-	318,716	-	-	318,716
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	-	-	-	-	-	-
Water Resources Managemen	Office of the Group Manager	-	-	-	-	-	-
Ethics Office		-	-	-	-	-	-
Real Property		-	-	-	-	-	-
General Counsel		-	-	-	-	-	-
General Auditor		-	-	-	-	-	-
Total Departmental O&M	-	3,712,419	-	3,712,419	-	-	3,712,419
GENERAL DISTRICT REQUIREMENTS							
		-	-	-	-	-	-
State Water Contract*							
		-	-	-	-	-	-
Supply - O&M		-	-	-	-	-	-
Supply - Capital		-	-	-	-	-	-
Power - O&M & Off-Aq Capital		-	-	-	-	-	-
Power - Capital (less Off-Aq)		-	-	-	-	-	-
Transmission - Capital - Commodity, Demand, & Standby		-	-	-	-	-	-
Transmission - O&M - Commodity only		-	-	-	-	-	-
Delta Conveyance - Supply		-	-	-	-	-	-
Delta Conveyance - Power		-	-	-	-	-	-
Delta Conveyance - Other		-	-	-	-	-	-
Total State Water Contract		-	-	-	-	-	-
		-	-	-	-	-	-
Colorado River Aqueduct Power Costs	85,626,149	-	-	-	85,626,149	-	85,626,149
		-	-	-	-	-	-
Supply Programs (cash funded portion)	-	-	-	-	-	-	-
		-	-	-	-	-	-
Demand Management (cash funded portion)	-	-	-	-	-	-	-
Local Resources Program	-	-	-	-	-	-	-
Future Supply Actions & Stormwater Pilot	-	-	-	-	-	-	-
Conservation Program (cash funded portion)	-	-	-	-	-	-	-
Total Demand Management Costs	-	-	-	-	-	-	-
		-	-	-	-	-	-
Capital Financing	-	-	-	-	-	-	-
Revenue Bond Debt Service net of BABs Interest Subsidy Payment	6,075,302	-	6,075,302	-	-	-	6,075,302
G.O. Bond Debt Service	-	-	-	-	-	-	-
Debt Administration	55,418	-	55,418	-	-	-	55,418
Bond Defeasance	-	-	-	-	-	-	-
PAYGO	2,767,500	-	2,767,500	-	-	-	2,767,500
Total Capital Financing Costs	8,898,220	-	8,898,220	-	-	-	8,898,220
		-	-	-	-	-	-
Other Operating Costs	-	-	-	-	-	-	-
Operating Equipment	54,418	-	54,418	-	-	-	54,418
Succession Planning Labor Pool	30,790	-	30,790	-	-	-	30,790
OPEB/PERS Pre-Funding	-	-	-	-	-	-	-
Total Other Operating Costs	85,208	-	85,208	-	-	-	85,208
		-	-	-	-	-	-
Increase/(Decrease) in Required Reserves	-	-	-	-	-	-	-
		-	-	-	-	-	-
Total General District Requirements	94,609,576	-	8,983,428	-	85,626,149	-	94,609,576
		-	-	-	-	-	-
REQUIREMENTS BEFORE OFFSETS:	98,321,995	-	12,695,847	-	85,626,149	-	98,321,995
		-	-	-	-	-	-
Revenue Offsets							
Property Taxes - MWD Portion of SWC GO Debt Service	-	-	-	-	-	-	-
Property Taxes - MWD GO Debt Service	-	-	-	-	-	-	-
Interest on Investments	462,537	-	-	-	462,537	-	462,537
Hydro-Power Revenue	-	-	-	-	-	-	-
CRA Power Revenue	2,989,504	-	-	-	2,989,504	-	2,989,504
Wadsworth Pumping Plant (DVL) Power Revenue	-	-	-	-	-	-	-
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)	-	-	-	-	-	-	-
Misc. allocated to supply (PVID Lease)	-	-	-	-	-	-	-
Property Taxes - SWC	-	-	-	-	-	-	-
Revenue Reserve used for Revenue Bonds - I&P	-	-	-	-	-	-	-
Annexation	-	-	-	-	-	-	-
Total Revenue Offsets	3,452,041	-	-	-	3,452,041	-	3,452,041
		-	-	-	-	-	-
NET REVENUE REQUIREMENTS:	94,869,954	-	12,695,847	-	82,174,108	-	94,869,954

		Functionalization	Allocation Percentages					Total
			Fixed			Variable		
			Demand	Commodity	Standby	Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		44,000	-	44,000	-	-	-	44,000
Office of General Manager	Board of Directors	-	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-	-
Human Resources		77,293	-	77,293	-	-	-	77,293
Water Systems Operations	Office of the Manager	77,087	-	77,087	-	-	-	77,087
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations Support Services	15,586	-	15,586	-	-	-	15,586
Water Systems Operations	Operations Support Services	-	-	-	-	-	-	-
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	1,105,205	-	1,105,205	-	-	-	1,105,205
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	-	-	-	-	-	-	-
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	-	-	-	-	-	-	-
Water Systems Operations	Environmental Health & Safety Section	-	-	-	-	-	-	-
Water Systems Operations	OSS, Fleet Services Unit	-	-	-	-	-	-	-
Water Systems Operations	OSS, Power Support Unit	779,945	-	779,945	-	-	-	779,945
Water Systems Operations	Office of the Manager, Operations & Planning Section	6,930	-	6,930	-	-	-	6,930
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-	-
Sustainability, Resilience & Inr		-	-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-	-
Engineering Services		825,690	-	825,690	-	-	-	825,690
Business Technology	Administrative Services	-	-	-	-	-	-	-
Business Technology	Information Technology	213,940	-	213,940	-	-	-	213,940
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	-	-	-	-	-	-	-
Water Resources Managemen	Office of the Group Manager	-	-	-	-	-	-	-
Ethics Office		-	-	-	-	-	-	-
Real Property		-	-	-	-	-	-	-
General Counsel		-	-	-	-	-	-	-
General Auditor		-	-	-	-	-	-	-
Total Departmental O&M	-	3,145,677	-	3,145,677	-	-	-	3,145,677

		Functionalization	Allocation Percentages					% Total
			Demand	Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		750,516	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Office of General Manager	Board of Directors	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Bay Delta Initiatives	Bay Delta Initiatives	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Legislative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Media Communications Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Manager, External Affairs/Special Projects	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Conservation & Community Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Human Resources		1,479,225	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager	1,848,488	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	459,054	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Treatment Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations Support Services	359,075	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Support Services	215,311	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Desert Region / C&D CRA	34,311,278	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	System Operations Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Power Operations and Planning	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Planning & Programs Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Jensen	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Diemer	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Mills	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Skinner	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Weymouth	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Water Quality Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Eastern Unit	1,102,844	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Western Unit	349	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Manufacturing Services Unit	425,624	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Environmental Health & Safety Section	2,575,800	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Fleet Services Unit	1,924,523	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Power Support Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations & Planning Section	134,047	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Security Team & Security Management	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Sustainability, Resilience & Innovation		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Diversity, Equity & Inclusion		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Equal Employment Opportunity		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Office of the Chief Financial Officer		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Office of Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Engineering Services		1,447,768	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Administrative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Information Technology	4,809,034	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Planning & Development	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Implementation	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Office of the Group Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Ethics Office		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Real Property		4,172,907	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
General Counsel		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
General Auditor		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Departmental O&M		56,015,844	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
GENERAL DISTRICT REQUIREMENTS								
State Water Contract*								
Supply - O&M		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Supply - Capital		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Power - O&M & Off-Aq Capital		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Power - Capital (less Off-Aq)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Transmission - Capital - Commodity, Demand, & Standby		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Transmission - O&M - Commodity only		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Supply		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Power		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Other		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total State Water Contract		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Colorado River Aqueduct Power Costs								
		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Supply Programs (cash funded portion)								
		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Demand Management (cash funded portion)								
Local Resources Program		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Future Supply Actions & Stormwater Pilot		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Conservation Program (cash funded portion)		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Demand Management Costs		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Capital Financing								
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
G.O. Bond Debt Service	9,009,228	-	8.1%	47.5%	44.5%	0.0%	0.0%	100.0%
Debt Administration	-	-	8.1%	47.5%	44.5%	0.0%	0.0%	100.0%
Bond Defeasance	82,181	-	8.1%	47.5%	44.5%	0.0%	0.0%	100.0%
PAYGO	-	-	8.1%	47.5%	44.5%	0.0%	0.0%	100.0%
Total Capital Financing Costs	4,104,000	13,195,409	8.1%	47.5%	44.5%	0.0%	0.0%	100.0%
			0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Other Operating Costs								
Operating Equipment	821,094	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Succession Planning Labor Pool	464,590	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
OPEB/PERS Pre-Funding	-	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Other Operating Costs	1,285,685	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Increase/(Decrease) in Required Reserves								
		-	7.4%	52.1%	40.5%	0.0%	0.0%	100.0%
Total General District Requirements								
		14,481,093	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
REQUIREMENTS BEFORE OFFSETS:								
		70,496,937	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Revenue Offsets								
Property Taxes - MWD Portion of SWC GO Debt Service		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Property Taxes - MWD GO Debt Service		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Interest on Investments	331,639	-	8.1%	47.5%	44.5%	0.0%	0.0%	100.0%
Hydro-Power Revenue	-	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
CRA Power Revenue	-	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Wadsworth Pumping Plant (DVL) Power Revenue	-	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)	-	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to supply (PVID Lease)	-	-	1.5%	90.2%	8.3%	0.0%	0.0%	100.0%
Property Taxes - SWC	-	-	8.1%	47.5%	44.5%	0.0%	0.0%	100.0%
Revenue Reserve used for Revenue Bonds - I&P	-	-	50.0%	50.0%	0.0%	0.0%	0.0%	100.0%
Annexation	-	-	8.1%	47.5%	44.5%	0.0%	0.0%	100.0%
Total Revenue Offsets	331,639	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
NET REVENUE REQUIREMENTS:								
	-	70,165,298	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

	Functionalization	Allocation Percentages					Total
		Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M							
Group	Item						
Office of General Manager		750,516	-	750,516	-	-	750,516
Office of General Manager	Board of Directors	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-
Human Resources		1,479,225	-	1,479,225	-	-	1,479,225
Water Systems Operations	Office of the Manager	1,848,488	-	1,848,488	-	-	1,848,488
Water Systems Operations	Office of the Manager, Conveyance & Distribution S	459,054	-	459,054	-	-	459,054
Water Systems Operations	Office of the Manager, Treatment Section	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations Support Services	359,075	-	359,075	-	-	359,075
Water Systems Operations	Operations Support Services	215,311	-	215,311	-	-	215,311
Water Systems Operations	Desert Region / C&D CRA	34,311,278	-	34,311,278	-	-	34,311,278
Water Systems Operations	System Operations Unit	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	-	-	-	-	-	-
Water Systems Operations	C&D, Eastern Unit	1,102,844	-	1,102,844	-	-	1,102,844
Water Systems Operations	C&D, Western Unit	349	-	349	-	-	349
Water Systems Operations	OSS, Manufacturing Services Unit	425,624	-	425,624	-	-	425,624
Water Systems Operations	Environmental Health & Safety Section	2,575,800	-	2,575,800	-	-	2,575,800
Water Systems Operations	OSS, Fleet Services Unit	1,924,523	-	1,924,523	-	-	1,924,523
Water Systems Operations	OSS, Power Support Unit	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations & Planning Secti	-	-	-	-	-	-
Water Systems Operations	Security Team & Security Management	134,047	-	134,047	-	-	134,047
Sustainability, Resilience & Inn		-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-
Engineering Services		1,447,768	-	1,447,768	-	-	1,447,768
Business Technology	Administrative Services	-	-	-	-	-	-
Business Technology	Information Technology	4,809,034	-	4,809,034	-	-	4,809,034
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	-	-	-	-	-	-
Water Resources Managemen	Office of the Group Manager	-	-	-	-	-	-
Ethics Office		-	-	-	-	-	-
Real Property		4,172,907	-	4,172,907	-	-	4,172,907
General Counsel		-	-	-	-	-	-
General Auditor		-	-	-	-	-	-
Total Departmental O&M		56,015,844	-	56,015,844	-	-	56,015,844
GENERAL DISTRICT REQUIREMENTS		-	-	-	-	-	-
State Water Contract*		-	-	-	-	-	-
Supply - O&M		-	-	-	-	-	-
Supply - Capital		-	-	-	-	-	-
Power - O&M & Off-Aq Capital		-	-	-	-	-	-
Power - Capital (less Off-Aq)		-	-	-	-	-	-
Transmission - Capital - Commodity, Demand, & Standby		-	-	-	-	-	-
Transmission - O&M - Commodity only		-	-	-	-	-	-
Delta Conveyance - Supply		-	-	-	-	-	-
Delta Conveyance - Power		-	-	-	-	-	-
Delta Conveyance - Other		-	-	-	-	-	-
Total State Water Contract		-	-	-	-	-	-
Colorado River Aqueduct Power Costs		-	-	-	-	-	-
Supply Programs (cash funded portion)		-	-	-	-	-	-
Demand Management (cash funded portion)		-	-	-	-	-	-
Local Resources Program		-	-	-	-	-	-
Future Supply Actions & Stormwater Pilot		-	-	-	-	-	-
Conservation Program (cash funded portion)		-	-	-	-	-	-
Total Demand Management Costs		-	-	-	-	-	-
Capital Financing		-	-	-	-	-	-
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		9,009,228	726,896	4,275,857	4,006,475	-	9,009,228
G.O. Bond Debt Service		-	-	-	-	-	-
Debt Administration		82,181	6,631	39,004	36,547	-	82,181
Bond Defeasance		-	-	-	-	-	-
PAYGO		4,104,000	331,125	1,947,794	1,825,082	-	4,104,000
Total Capital Financing Costs		13,195,409	1,064,651	6,262,654	5,868,103	-	13,195,409
Other Operating Costs		-	-	-	-	-	-
Operating Equipment		821,094	-	821,094	-	-	821,094
Succession Planning Labor Pool		464,590	-	464,590	-	-	464,590
OPEB/PERS Pre-Funding		-	-	-	-	-	-
Total Other Operating Costs		1,285,685	-	1,285,685	-	-	1,285,685
Increase/(Decrease) in Required Reserves		-	-	-	-	-	-
Total General District Requirements		14,481,093	1,064,651	7,548,339	5,868,103	-	14,481,093
REQUIREMENTS BEFORE OFFSETS:		70,496,937	1,064,651	63,564,182	5,868,103	-	70,496,937
Revenue Offsets		-	-	-	-	-	-
Property Taxes - MWD Portion of SWC GO Debt Service		-	-	-	-	-	-
Property Taxes - MWD GO Debt Service		-	-	-	-	-	-
Interest on Investments		331,639	26,758	157,399	147,483	-	331,639
Hydro-Power Revenue		-	-	-	-	-	-
CRA Power Revenue		-	-	-	-	-	-
Wadsworth Pumping Plant (DVL) Power Revenue		-	-	-	-	-	-
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)		-	-	-	-	-	-
Misc. allocated to supply (PVID Lease)		-	-	-	-	-	-
Property Taxes - SWC		-	-	-	-	-	-
Revenue Reserve used for Revenue Bonds - I&P		-	-	-	-	-	-
Annexation		-	-	-	-	-	-
Total Revenue Offsets		331,639	26,758	157,399	147,483	-	331,639
NET REVENUE REQUIREMENTS:		70,165,298	1,037,893	63,406,783	5,720,621	-	70,165,298

		Functionalization	Allocation Percentages					Total
			Fixed			Variable		
			Demand	Commodity	Standby	Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		663,907	-	663,907	-	-	-	663,907
Office of General Manager	Board of Directors		-	-	-	-	-	
Bay Delta Initiatives	Bay Delta Initiatives		-	-	-	-	-	
External Affairs	Legislative Services		-	-	-	-	-	
External Affairs	Media Communications Services		-	-	-	-	-	
External Affairs	Manager, External Affairs/Special Projects		-	-	-	-	-	
External Affairs	Conservation & Community Services		-	-	-	-	-	
Human Resources		1,166,250	-	1,166,250	-	-	-	1,166,250
Water Systems Operations	Office of the Manager	1,359,759	-	1,359,759	-	-	-	1,359,759
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	449,347	-	449,347	-	-	-	449,347
Water Systems Operations	Office of the Manager, Treatment Section		-	-	-	-	-	
Water Systems Operations	Office of the Manager, Operations Support Services	274,933	-	274,933	-	-	-	274,933
Water Systems Operations	Operations Support Services		-	195,316	-	-	-	195,316
Water Systems Operations	Desert Region / C&D CRA	28,239,906	-	28,239,906	-	-	-	28,239,906
Water Systems Operations	System Operations Unit		-	-	-	-	-	
Water Systems Operations	Power Operations and Planning		-	-	-	-	-	
Water Systems Operations	Operations Planning & Programs Unit		-	-	-	-	-	
Water Systems Operations	Treatment Jensen		-	-	-	-	-	
Water Systems Operations	Treatment Diemer		-	-	-	-	-	
Water Systems Operations	Treatment Mills		-	-	-	-	-	
Water Systems Operations	Treatment Skinner		-	-	-	-	-	
Water Systems Operations	Treatment Weymouth		-	-	-	-	-	
Water Systems Operations	Water Quality Section		-	-	-	-	-	
Water Systems Operations	C&D, Eastern Unit	782,891	-	782,891	-	-	-	782,891
Water Systems Operations	C&D, Western Unit		-	262	-	-	-	262
Water Systems Operations	OSS, Manufacturing Services Unit	391,685	-	391,685	-	-	-	391,685
Water Systems Operations	Environmental Health & Safety Section	2,012,096	-	2,012,096	-	-	-	2,012,096
Water Systems Operations	OSS, Fleet Services Unit	1,181,058	-	1,181,058	-	-	-	1,181,058
Water Systems Operations	OSS, Power Support Unit		-	-	-	-	-	
Water Systems Operations	Office of the Manager, Operations & Planning Section	122,239	-	122,239	-	-	-	122,239
Water Systems Operations	Security Team & Security Management		-	-	-	-	-	
Sustainability, Resilience & Inr			-	-	-	-	-	
Diversity, Equity & Inclusion			-	-	-	-	-	
Equal Employment Opportunity			-	-	-	-	-	
Office of the Chief Financial O			-	-	-	-	-	
Business Technology	Office of Manager		-	-	-	-	-	
Engineering Services		1,224,438	-	1,224,438	-	-	-	1,224,438
Business Technology	Administrative Services		-	-	-	-	-	
Business Technology	Information Technology	3,228,099	-	3,228,099	-	-	-	3,228,099
Water Resources Managemen	Resource Planning & Development		-	-	-	-	-	
Water Resources Managemen	Resource Implementation		-	-	-	-	-	
Water Resources Managemen	Office of the Group Manager		-	-	-	-	-	
Ethics Office			-	-	-	-	-	
Real Property		1,810,647	-	1,810,647	-	-	-	1,810,647
General Counsel			-	-	-	-	-	
General Auditor			-	-	-	-	-	
Total Departmental O&M	-	43,102,833	-	43,102,833	-	-	-	43,102,833

		Functionalization	Allocation Percentages					% Total
			Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Office of General Manager	Board of Directors	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Bay Delta Initiatives	Bay Delta Initiatives	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Legislative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Media Communications Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Manager, External Affairs/Special Projects	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Conservation & Community Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Human Resources		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Treatment Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations Support Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Support Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Desert Region / C&D CRA	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	System Operations Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Power Operations and Planning	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Planning & Programs Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Jensen	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Diemer	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Mills	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Skinner	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Weymouth	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Water Quality Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Eastern Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Western Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Manufacturing Services Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Environmental Health & Safety Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Fleet Services Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Power Support Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations & Planning Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Security Team & Security Management	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Sustainability, Resilience & Innovation		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Diversity, Equity & Inclusion		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Equal Employment Opportunity		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Office of the Chief Financial Officer		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Office of Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Engineering Services		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Administrative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Information Technology	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Planning & Development	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Implementation	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Office of the Group Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Ethics Office		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Real Property		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
General Counsel		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
General Auditor		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Departmental O&M		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
GENERAL DISTRICT REQUIREMENTS								
State Water Contract*								
Supply - O&M		-	0.0%	0.0%	0.0%	100.0%	0.0%	100.0%
Supply - Capital		-	0.0%	0.0%	0.0%	100.0%	0.0%	100.0%
Power - O&M & Off-Aq Capital	258,551,933	-	0.0%	0.0%	0.0%	100.0%	0.0%	100.0%
Power - Capital (less Off-Aq)	(3,654,765)	-	0.0%	0.0%	0.0%	100.0%	0.0%	100.0%
Transmission - Capital - Commodity, Demand, & Standby		-	0.0%	0.0%	0.0%	100.0%	0.0%	100.0%
Transmission - O&M - Commodity only		-	0.0%	0.0%	0.0%	100.0%	0.0%	100.0%
Delta Conveyance - Supply		-	0.0%	0.0%	0.0%	100.0%	0.0%	100.0%
Delta Conveyance - Power		-	0.0%	0.0%	0.0%	100.0%	0.0%	100.0%
Delta Conveyance - Other		-	0.0%	0.0%	0.0%	100.0%	0.0%	100.0%
Total State Water Contract	254,897,168	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Colorado River Aqueduct Power Costs								
		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Supply Programs (cash funded portion)								
		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Demand Management (cash funded portion)								
Local Resources Program		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Future Supply Actions & Stormwater Pilot		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Conservation Program (cash funded portion)		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Demand Management Costs		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Capital Financing								
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
G.O. Bond Debt Service		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Debt Administration		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Bond Defeasance		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
PAYGO		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total Capital Financing Costs		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Other Operating Costs								
Operating Equipment		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Succession Planning Labor Pool		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
OPEB/PERS Pre-Funding		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Other Operating Costs		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Increase/(Decrease) in Required Reserves								
		-	0.0%	0.0%	0.0%	100.0%	0.0%	100.0%
Total General District Requirements								
	254,897,168		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
REQUIREMENTS BEFORE OFFSETS:								
	254,897,168		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Revenue Offsets								
Property Taxes - MWD Portion of SWC GO Debt Service		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Property Taxes - MWD GO Debt Service		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Interest on Investments	1,199,115	-	0.0%	0.0%	0.0%	100.0%	0.0%	100.0%
Hydro-Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
CRA Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Wadsworth Pumping Plant (DVL) Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to supply (PVID Lease)		-	0.0%	0.0%	0.0%	100.0%	0.0%	100.0%
Property Taxes - SWC	58,332,797	-	0.0%	0.0%	0.0%	100.0%	0.0%	100.0%
Revenue Reserve used for Revenue Bonds - I&P		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Annexation		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total Revenue Offsets	59,531,911		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
NET REVENUE REQUIREMENTS:								
-	195,365,256		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

	Functionalization	Allocation Percentages				Total
		Demand	Fixed Commodity	Standby	Variable Commodity	
Departmental O&M						
Group	Item					
Office of General Manager		-	-	-	-	-
Office of General Manager	Board of Directors	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-
Human Resources		-	-	-	-	-
Water Systems Operations	Office of the Manager	-	-	-	-	-
Water Systems Operations	Office of the Manager, Conveyance & Distribution S	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations Support Services	-	-	-	-	-
Water Systems Operations	Operations Support Services	-	-	-	-	-
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-
Water Systems Operations	Water Quality Section	-	-	-	-	-
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	-	-	-	-	-
Water Systems Operations	Environmental Health & Safety Section	-	-	-	-	-
Water Systems Operations	OSS, Fleet Services Unit	-	-	-	-	-
Water Systems Operations	OSS, Power Support Unit	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations & Planning Secti	-	-	-	-	-
Water Systems Operations	Security Team & Security Management	-	-	-	-	-
Sustainability, Resilience & Inn		-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-
Engineering Services		-	-	-	-	-
Business Technology	Administrative Services	-	-	-	-	-
Business Technology	Information Technology	-	-	-	-	-
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-
Water Resources Managemen	Resource Implementation	-	-	-	-	-
Water Resources Managemen	Office of the Group Manager	-	-	-	-	-
Ethics Office		-	-	-	-	-
Real Property		-	-	-	-	-
General Counsel		-	-	-	-	-
General Auditor		-	-	-	-	-
Total Departmental O&M	-	-	-	-	-	-
GENERAL DISTRICT REQUIREMENTS						
State Water Contract*		-	-	-	-	-
Supply - O&M		-	-	-	-	-
Supply - Capital		-	-	-	-	-
Power - O&M & Off-Aq Capital	258,551,933	-	-	-	258,551,933	258,551,933
Power - Capital (less Off-Aq)	(3,654,765)	-	-	-	(3,654,765)	(3,654,765)
Transmission - Capital - Commodity, Demand, & Standby		-	-	-	-	-
Transmission - O&M - Commodity only		-	-	-	-	-
Delta Conveyance - Supply		-	-	-	-	-
Delta Conveyance - Power		-	-	-	-	-
Delta Conveyance - Other		-	-	-	-	-
Total State Water Contract	254,897,168	-	-	-	254,897,168	254,897,168
Colorado River Aqueduct Power Costs		-	-	-	-	-
Supply Programs (cash funded portion)		-	-	-	-	-
Demand Management (cash funded portion)		-	-	-	-	-
Local Resources Program		-	-	-	-	-
Future Supply Actions & Stormwater Pilot		-	-	-	-	-
Conservation Program (cash funded portion)		-	-	-	-	-
Total Demand Management Costs		-	-	-	-	-
Capital Financing		-	-	-	-	-
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		-	-	-	-	-
G.O. Bond Debt Service		-	-	-	-	-
Debt Administration		-	-	-	-	-
Bond Defeasance		-	-	-	-	-
PAYGO		-	-	-	-	-
Total Capital Financing Costs		-	-	-	-	-
Other Operating Costs		-	-	-	-	-
Operating Equipment		-	-	-	-	-
Succession Planning Labor Pool		-	-	-	-	-
OPEB/PERS Pre-Funding		-	-	-	-	-
Total Other Operating Costs		-	-	-	-	-
Increase/(Decrease) in Required Reserves		-	-	-	-	-
Total General District Requirements	254,897,168	-	-	-	254,897,168	254,897,168
REQUIREMENTS BEFORE OFFSETS:	254,897,168	-	-	-	254,897,168	254,897,168
Revenue Offsets						
Property Taxes - MWD Portion of SWC GO Debt Service		-	-	-	-	-
Property Taxes - MWD GO Debt Service		-	-	-	-	-
Interest on Investments	1,199,115	-	-	-	1,199,115	1,199,115
Hydro-Power Revenue		-	-	-	-	-
CRA Power Revenue		-	-	-	-	-
Wadsworth Pumping Plant (DVL) Power Revenue		-	-	-	-	-
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)		-	-	-	-	-
Misc. allocated to supply (PVID Lease)		-	-	-	-	-
Property Taxes - SWC	58,332,797	-	-	-	58,332,797	58,332,797
Revenue Reserve used for Revenue Bonds - I&P		-	-	-	-	-
Annexation		-	-	-	-	-
Total Revenue Offsets	59,531,911	-	-	-	59,531,911	59,531,911
NET REVENUE REQUIREMENTS:	195,365,256	-	-	-	195,365,256	195,365,256

	Functionalization	Allocation Percentages					Total
		Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M							
Group	Item						
Office of General Manager		-	-	-	-	-	-
Office of General Manager	Board of Directors	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-
Human Resources		-	-	-	-	-	-
Water Systems Operations	Office of the Manager	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations Support Services	-	-	-	-	-	-
Water Systems Operations	Operations Support Services	-	-	-	-	-	-
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	-	-	-	-	-	-
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	-	-	-	-	-	-
Water Systems Operations	Environmental Health & Safety Section	-	-	-	-	-	-
Water Systems Operations	OSS, Fleet Services Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Power Support Unit	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations & Planning Section	-	-	-	-	-	-
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-
Sustainability, Resilience & Inr		-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-
Equal Employment Opportuniti		-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-
Engineering Services		-	-	-	-	-	-
Business Technology	Administrative Services	-	-	-	-	-	-
Business Technology	Information Technology	-	-	-	-	-	-
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	-	-	-	-	-	-
Water Resources Managemen	Office of the Group Manager	-	-	-	-	-	-
Ethics Office		-	-	-	-	-	-
Real Property		-	-	-	-	-	-
General Counsel		-	-	-	-	-	-
General Auditor		-	-	-	-	-	-
Total Departmental O&M	-	-	-	-	-	-	-

		Functionalization	Allocation Percentages					% Total
			Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		331,282	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Office of General Manager	Board of Directors	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Bay Delta Initiatives	Bay Delta Initiatives	12,415,696	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Legislative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Media Communications Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Manager, External Affairs/Special Projects	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Conservation & Community Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Human Resources		652,939	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager	115,194	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	32,276	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Treatment Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations Support Services	22,377	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Support Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Desert Region / C&D CRA	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	System Operations Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Power Operations and Planning	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Planning & Programs Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Jensen	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Diemer	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Mills	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Skinner	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Weymouth	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Water Quality Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Eastern Unit	2,264,886	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Western Unit	575,462	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Manufacturing Services Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Environmental Health & Safety Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Fleet Services Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Power Support Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations & Planning Section	8,354	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Security Team & Security Management	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Sustainability, Resilience & Innovation		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Diversity, Equity & Inclusion		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Equal Employment Opportunity		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Office of the Chief Financial Officer		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Office of Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Engineering Services		719,121	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Administrative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Information Technology	2,122,738	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Planning & Development	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Implementation	52,207	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Office of the Group Manager	6,065	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Ethics Office		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Real Property		5,407,147	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
General Counsel		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
General Auditor		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Departmental O&M		24,725,744	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
GENERAL DISTRICT REQUIREMENTS								
State Water Contract*								
Supply - O&M		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Supply - Capital		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Power - O&M & Off-Aq Capital		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Power - Capital (less Off-Aq)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Transmission - Capital - Commodity, Demand, & Standby		80,660,127	8.1%	47.5%	44.5%	0.0%	0.0%	100.0%
Transmission - O&M - Commodity only		198,687,447	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Delta Conveyance - Supply		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Delta Conveyance - Power		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Delta Conveyance - Other		34,500,000	8.1%	47.5%	44.5%	0.0%	0.0%	100.0%
Total State Water Contract		313,847,574	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Colorado River Aqueduct Power Costs								
		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Supply Programs (cash funded portion)								
		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Demand Management (cash funded portion)								
Local Resources Program		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Future Supply Actions & Stormwater Pilot		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Conservation Program (cash funded portion)		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Demand Management Costs		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Capital Financing								
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		4,474,978	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
G.O. Bond Debt Service		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Debt Administration		40,820	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Bond Defeasance		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
PAYGO		2,038,500	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Capital Financing Costs		6,554,298	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Other Operating Costs								
Operating Equipment		362,436	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Succession Planning Labor Pool		205,073	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
OPEB/PERS Pre-Funding		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Other Operating Costs		567,509	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Increase/(Decrease) in Required Reserves								
		-	2.9%	81.1%	16.0%	0.0%	0.0%	100.0%
Total General District Requirements								
		320,969,382	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
REQUIREMENTS BEFORE OFFSETS:								
		345,695,126	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Revenue Offsets								
Property Taxes - MWD Portion of SWC GO Debt Service		36,010	8.1%	47.5%	44.5%	0.0%	0.0%	100.0%
Property Taxes - MWD GO Debt Service		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Interest on Investments		1,626,256	8.1%	47.5%	44.5%	0.0%	0.0%	100.0%
Hydro-Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
CRA Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Wadsworth Pumping Plant (DVL) Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to supply (PVID Lease)		-	2.7%	82.5%	14.8%	0.0%	0.0%	100.0%
Property Taxes - SWC		63,928,232	2.3%	84.8%	12.8%	0.0%	0.0%	100.0%
Revenue Reserve used for Revenue Bonds - I&P		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Annexation		-	8.1%	47.5%	44.5%	0.0%	0.0%	100.0%
Total Revenue Offsets		65,590,498	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
NET REVENUE REQUIREMENTS:								
-		280,104,628	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

	Functionalization	Allocation Percentages					Total
		Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M							
Group	Item						
Office of General Manager		331,282	-	331,282	-	-	331,282
Office of General Manager	Board of Directors						
Bay Delta Initiatives	Bay Delta Initiatives	12,415,696	-	12,415,696	-	-	12,415,696
External Affairs	Legislative Services	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-
Human Resources		652,939	-	652,939	-	-	652,939
Water Systems Operations	Office of the Manager	115,194	-	115,194	-	-	115,194
Water Systems Operations	Office of the Manager, Conveyance & Distribution S	32,276	-	32,276	-	-	32,276
Water Systems Operations	Office of the Manager, Treatment Section	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations Support Services	22,377	-	22,377	-	-	22,377
Water Systems Operations	Operations Support Services	-	-	-	-	-	-
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	-	-	-	-	-	-
Water Systems Operations	C&D, Eastern Unit	2,264,886	-	2,264,886	-	-	2,264,886
Water Systems Operations	C&D, Western Unit	575,462	-	575,462	-	-	575,462
Water Systems Operations	OSS, Manufacturing Services Unit	-	-	-	-	-	-
Water Systems Operations	Environmental Health & Safety Section	-	-	-	-	-	-
Water Systems Operations	OSS, Fleet Services Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Power Support Unit	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations & Planning Secti	8,354	-	8,354	-	-	8,354
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-
Sustainability, Resilience & Inn		-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-
Engineering Services		719,121	-	719,121	-	-	719,121
Business Technology	Administrative Services	-	-	-	-	-	-
Business Technology	Information Technology	2,122,738	-	2,122,738	-	-	2,122,738
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	52,207	-	52,207	-	-	52,207
Water Resources Managemen	Office of the Group Manager	6,065	-	6,065	-	-	6,065
Ethics Office		-	-	-	-	-	-
Real Property		5,407,147	-	5,407,147	-	-	5,407,147
General Counsel		-	-	-	-	-	-
General Auditor		-	-	-	-	-	-
Total Departmental O&M	-	24,725,744	-	24,725,744	-	-	24,725,744
GENERAL DISTRICT REQUIREMENTS							
		-	-	-	-	-	-
State Water Contract*							
		-	-	-	-	-	-
Supply - O&M		-	-	-	-	-	-
Supply - Capital		-	-	-	-	-	-
Power - O&M & Off-Aq Capital		-	-	-	-	-	-
Power - Capital (less Off-Aq)		-	-	-	-	-	-
Transmission - Capital - Commodity, Demand, & Standby		80,660,127	6,507,938	38,281,988	35,870,201	-	80,660,127
Transmission - O&M - Commodity only		198,687,447	-	198,687,447	-	-	198,687,447
Delta Conveyance - Supply		-	-	-	-	-	-
Delta Conveyance - Power		-	-	-	-	-	-
Delta Conveyance - Other		34,500,000	2,783,579	16,373,996	15,342,425	-	34,500,000
Total State Water Contract		313,847,574	9,291,517	253,343,431	51,212,626	-	313,847,574
Colorado River Aqueduct Power Costs							
		-	-	-	-	-	-
Supply Programs (cash funded portion)							
		-	-	-	-	-	-
Demand Management (cash funded portion)							
		-	-	-	-	-	-
Local Resources Program		-	-	-	-	-	-
Future Supply Actions & Stormwater Pilot		-	-	-	-	-	-
Conservation Program (cash funded portion)		-	-	-	-	-	-
Total Demand Management Costs		-	-	-	-	-	-
Capital Financing							
		-	-	-	-	-	-
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		4,474,978	-	4,474,978	-	-	4,474,978
G.O. Bond Debt Service		-	-	-	-	-	-
Debt Administration		40,820	-	40,820	-	-	40,820
Bond Defeasance		-	-	-	-	-	-
PAYGO		2,038,500	-	2,038,500	-	-	2,038,500
Total Capital Financing Costs		6,554,298	-	6,554,298	-	-	6,554,298
Other Operating Costs							
		-	-	-	-	-	-
Operating Equipment		362,436	-	362,436	-	-	362,436
Succession Planning Labor Pool		205,073	-	205,073	-	-	205,073
OPEB/PERS Pre-Funding		-	-	-	-	-	-
Total Other Operating Costs		567,509	-	567,509	-	-	567,509
Increase/(Decrease) in Required Reserves							
		-	-	-	-	-	-
Total General District Requirements		320,969,382	9,291,517	260,465,238	51,212,626	-	320,969,382
REQUIREMENTS BEFORE OFFSETS:		345,695,126	9,291,517	285,190,983	51,212,626	-	345,695,126
Revenue Offsets							
		-	-	-	-	-	-
Property Taxes - MWD Portion of SWC GO Debt Service		36,010	2,905	17,091	16,014	-	36,010
Property Taxes - MWD GO Debt Service		-	-	-	-	-	-
Interest on Investments		1,626,256	131,212	771,835	723,209	-	1,626,256
Hydro-Power Revenue		-	-	-	-	-	-
CRA Power Revenue		-	-	-	-	-	-
Wadsworth Pumping Plant (DVL) Power Revenue		-	-	-	-	-	-
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)		-	-	-	-	-	-
Misc. allocated to supply (PVID Lease)		-	-	-	-	-	-
Property Taxes - SWC		63,928,232	1,489,331	54,230,065	8,208,836	-	63,928,232
Revenue Reserve used for Revenue Bonds - I&P		-	-	-	-	-	-
Annexation		-	-	-	-	-	-
Total Revenue Offsets		65,590,498	1,623,448	55,018,991	8,948,059	-	65,590,498
NET REVENUE REQUIREMENTS:		280,104,628	7,668,069	230,171,992	42,264,567	-	280,104,628

		Functionalization	Allocation Percentages					Total
			Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		293,053	-	293,053	-	-	-	293,053
Office of General Manager	Board of Directors	-	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	5,733,957	-	5,733,957	-	-	-	5,733,957
External Affairs	Legislative Services	-	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-	-
Human Resources		514,790	-	514,790	-	-	-	514,790
Water Systems Operations	Office of the Manager	84,737	-	84,737	-	-	-	84,737
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	31,594	-	31,594	-	-	-	31,594
Water Systems Operations	Office of the Manager, Treatment Section	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations Support Services	17,133	-	17,133	-	-	-	17,133
Water Systems Operations	Operations Support Services	-	-	-	-	-	-	-
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	-	-	-	-	-	-	-
Water Systems Operations	C&D, Eastern Unit	1,607,805	-	1,607,805	-	-	-	1,607,805
Water Systems Operations	C&D, Western Unit	432,830	-	432,830	-	-	-	432,830
Water Systems Operations	OSS, Manufacturing Services Unit	-	-	-	-	-	-	-
Water Systems Operations	Environmental Health & Safety Section	-	-	-	-	-	-	-
Water Systems Operations	OSS, Fleet Services Unit	-	-	-	-	-	-	-
Water Systems Operations	OSS, Power Support Unit	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations & Planning Section	7,618	-	7,618	-	-	-	7,618
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-	-
Sustainability, Resilience & Inr		-	-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-	-
Equal Employment Opportunit		-	-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-	-
Engineering Services		608,191	-	608,191	-	-	-	608,191
Business Technology	Administrative Services	-	-	-	-	-	-	-
Business Technology	Information Technology	1,424,903	-	1,424,903	-	-	-	1,424,903
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	34,034	-	34,034	-	-	-	34,034
Water Resources Managemen	Office of the Group Manager	5,940	-	5,940	-	-	-	5,940
Ethics Office		-	-	-	-	-	-	-
Real Property		2,346,190	-	2,346,190	-	-	-	2,346,190
General Counsel		-	-	-	-	-	-	-
General Auditor		-	-	-	-	-	-	-
Total Departmental O&M	-	13,142,775	-	13,142,775	-	-	-	13,142,775

		Functionalization	Allocation Percentages					% Total
			Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		107,205	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Office of General Manager	Board of Directors	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Bay Delta Initiatives	Bay Delta Initiatives	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Legislative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Media Communications Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Manager, External Affairs/Special Projects	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Conservation & Community Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Human Resources		211,295	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Treatment Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations Support Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Support Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Desert Region / C&D CRA	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	System Operations Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Power Operations and Planning	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Planning & Programs Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Jensen	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Diemer	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Mills	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Skinner	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Weymouth	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Water Quality Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Eastern Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Western Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Manufacturing Services Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Environmental Health & Safety Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Fleet Services Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Power Support Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations & Planning Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Security Team & Security Management	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Sustainability, Resilience & Innovation		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Diversity, Equity & Inclusion		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Equal Employment Opportunity		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Office of the Chief Financial Officer		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Office of Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Engineering Services		6,995,956	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Administrative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Information Technology	686,929	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Planning & Development	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Implementation	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Office of the Group Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Ethics Office		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Real Property		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
General Counsel		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
General Auditor		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Departmental O&M		8,001,384	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
GENERAL DISTRICT REQUIREMENTS								
State Water Contract*								
Supply - O&M		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Supply - Capital		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Power - O&M & Off-Aq Capital		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Power - Capital (less Off-Aq)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Transmission - Capital - Commodity, Demand, & Standby		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Transmission - O&M - Commodity only		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Supply		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Power		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Other		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total State Water Contract		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Colorado River Aqueduct Power Costs								
		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Supply Programs (cash funded portion)								
		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Demand Management (cash funded portion)								
Local Resources Program		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Future Supply Actions & Stormwater Pilot		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Conservation Program (cash funded portion)		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Demand Management Costs		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Capital Financing								
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
G.O. Bond Debt Service	43,534,722	-	8.1%	47.5%	44.5%	0.0%	0.0%	100.0%
Debt Administration	397,118	-	8.1%	47.5%	44.5%	0.0%	0.0%	100.0%
Bond Defeasance	-	-	8.1%	47.5%	44.5%	0.0%	0.0%	100.0%
PAYGO	19,831,500	-	8.1%	47.5%	44.5%	0.0%	0.0%	100.0%
Total Capital Financing Costs	63,763,339	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Other Operating Costs								
Operating Equipment	117,286	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Succession Planning Labor Pool	66,363	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
OPEB/PERS Pre-Funding	-	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Other Operating Costs	183,649	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Increase/(Decrease) in Required Reserves								
		-	8.0%	47.6%	44.3%	0.0%	0.0%	100.0%
Total General District Requirements								
		63,946,988	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
REQUIREMENTS BEFORE OFFSETS:								
		71,948,373	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Revenue Offsets								
Property Taxes - MWD Portion of SWC GO Debt Service		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Property Taxes - MWD GO Debt Service		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Interest on Investments	338,467	-	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Hydro-Power Revenue	-	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
CRA Power Revenue	-	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Wadsworth Pumping Plant (DVL) Power Revenue	-	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)	-	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to supply (PVID Lease)	-	-	8.1%	47.5%	44.5%	0.0%	0.0%	100.0%
Property Taxes - SWC	-	-	8.1%	47.5%	44.5%	0.0%	0.0%	100.0%
Revenue Reserve used for Revenue Bonds - I&P	-	-	8.1%	47.5%	44.5%	0.0%	0.0%	100.0%
Annexation	-	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total Revenue Offsets	338,467	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
NET REVENUE REQUIREMENTS:								
-		71,609,906	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

	Functionalization	Allocation Percentages					Total
		Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M							
Group	Item						
Office of General Manager		107,205	-	107,205	-	-	107,205
Office of General Manager	Board of Directors	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-
Human Resources		211,295	-	211,295	-	-	211,295
Water Systems Operations	Office of the Manager	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Conveyance & Distribution S	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations Support Services	-	-	-	-	-	-
Water Systems Operations	Operations Support Services	-	-	-	-	-	-
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	-	-	-	-	-	-
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	-	-	-	-	-	-
Water Systems Operations	Environmental Health & Safety Section	-	-	-	-	-	-
Water Systems Operations	OSS, Fleet Services Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Power Support Unit	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations & Planning Secti	-	-	-	-	-	-
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-
Sustainability, Resilience & Inn		-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-
Engineering Services		6,995,956	-	6,995,956	-	-	6,995,956
Business Technology	Administrative Services	-	-	-	-	-	-
Business Technology	Information Technology	686,929	-	686,929	-	-	686,929
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	-	-	-	-	-	-
Water Resources Managemen	Office of the Group Manager	-	-	-	-	-	-
Ethics Office		-	-	-	-	-	-
Real Property		-	-	-	-	-	-
General Counsel		-	-	-	-	-	-
General Auditor		-	-	-	-	-	-
Total Departmental O&M		8,001,384	-	8,001,384	-	-	8,001,384
GENERAL DISTRICT REQUIREMENTS		-	-	-	-	-	-
State Water Contract*		-	-	-	-	-	-
Supply - O&M		-	-	-	-	-	-
Supply - Capital		-	-	-	-	-	-
Power - O&M & Off-Aq Capital		-	-	-	-	-	-
Power - Capital (less Off-Aq)		-	-	-	-	-	-
Transmission - Capital - Commodity, Demand, & Standby		-	-	-	-	-	-
Transmission - O&M - Commodity only		-	-	-	-	-	-
Delta Conveyance - Supply		-	-	-	-	-	-
Delta Conveyance - Power		-	-	-	-	-	-
Delta Conveyance - Other		-	-	-	-	-	-
Total State Water Contract		-	-	-	-	-	-
Colorado River Aqueduct Power Costs		-	-	-	-	-	-
Supply Programs (cash funded portion)		-	-	-	-	-	-
Demand Management (cash funded portion)		-	-	-	-	-	-
Local Resources Program		-	-	-	-	-	-
Future Supply Actions & Stormwater Pilot		-	-	-	-	-	-
Conservation Program (cash funded portion)		-	-	-	-	-	-
Total Demand Management Costs		-	-	-	-	-	-
Capital Financing		-	-	-	-	-	-
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		43,534,722	3,512,532	20,661,952	19,360,238	-	43,534,722
G.O. Bond Debt Service		-	-	-	-	-	-
Debt Administration		397,118	32,041	188,475	176,601	-	397,118
Bond Defeasance		-	-	-	-	-	-
PAYGO		19,831,500	1,600,074	9,412,200	8,819,226	-	19,831,500
Total Capital Financing Costs		63,763,339	5,144,647	30,262,628	28,356,065	-	63,763,339
Other Operating Costs		-	-	-	-	-	-
Operating Equipment		117,286	-	117,286	-	-	117,286
Succession Planning Labor Pool		66,363	-	66,363	-	-	66,363
OPEB/PERS Pre-Funding		-	-	-	-	-	-
Total Other Operating Costs		183,649	-	183,649	-	-	183,649
Increase/(Decrease) in Required Reserves		-	-	-	-	-	-
Total General District Requirements		63,946,988	5,144,647	30,446,277	28,356,065	-	63,946,988
REQUIREMENTS BEFORE OFFSETS:		71,948,373	5,144,647	38,447,661	28,356,065	-	71,948,373
Revenue Offsets		-	-	-	-	-	-
Property Taxes - MWD Portion of SWC GO Debt Service		-	-	-	-	-	-
Property Taxes - MWD GO Debt Service		-	-	-	-	-	-
Interest on Investments		338,467	338,467	-	-	-	338,467
Hydro-Power Revenue		-	-	-	-	-	-
CRA Power Revenue		-	-	-	-	-	-
Wadsworth Pumping Plant (DVL) Power Revenue		-	-	-	-	-	-
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)		-	-	-	-	-	-
Misc. allocated to supply (PVID Lease)		-	-	-	-	-	-
Property Taxes - SWC		-	-	-	-	-	-
Revenue Reserve used for Revenue Bonds - I&P		-	-	-	-	-	-
Annexation		-	-	-	-	-	-
Total Revenue Offsets		338,467	338,467	-	-	-	338,467
NET REVENUE REQUIREMENTS:		71,609,906	4,806,179	38,447,661	28,356,065	-	71,609,906

	Functionalization	Allocation Percentages					Total
		Fixed			Variable		
		Demand	Commodity	Standby	Commodity	Hydroelectric	
Departmental O&M							
Group	Item						
Office of General Manager		94,833	-	94,833	-	-	94,833
Office of General Manager	Board of Directors	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-
Human Resources		166,589	-	166,589	-	-	166,589
Water Systems Operations	Office of the Manager	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations Support Services	-	-	-	-	-	-
Water Systems Operations	Operations Support Services	-	-	-	-	-	-
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	-	-	-	-	-	-
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	-	-	-	-	-	-
Water Systems Operations	Environmental Health & Safety Section	-	-	-	-	-	-
Water Systems Operations	OSS, Fleet Services Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Power Support Unit	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations & Planning Section	-	-	-	-	-	-
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-
Sustainability, Resilience & Inr		-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-
Engineering Services		5,916,776	-	5,916,776	-	-	5,916,776
Business Technology	Administrative Services	-	-	-	-	-	-
Business Technology	Information Technology	461,106	-	461,106	-	-	461,106
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	-	-	-	-	-	-
Water Resources Managemen	Office of the Group Manager	-	-	-	-	-	-
Ethics Office		-	-	-	-	-	-
Real Property		-	-	-	-	-	-
General Counsel		-	-	-	-	-	-
General Auditor		-	-	-	-	-	-
Total Departmental O&M	-	6,639,305	-	6,639,305	-	-	6,639,305

		Functionalization	Allocation Percentages					Total
			Demand	Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
	Office of General Manager	104,964	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Office of General Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Bay Delta Initiatives	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	External Affairs	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	External Affairs	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	External Affairs	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	External Affairs	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Human Resources	206,878	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	33,719	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	6,550	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-						

	Functionalization	Allocation Percentages					Total
		Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M							
Group	Item						
Office of General Manager	Office of General Manager	104,964	-	104,964	-	-	104,964
Office of General Manager	Board of Directors	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-
Human Resources	Human Resources	206,878	-	206,878	-	-	206,878
Water Systems Operations	Office of the Manager	33,719	-	33,719	-	-	33,719
Water Systems Operations	Office of the Manager, Conveyance & Distribution S	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations Support Services	6,550	-	6,550	-	-	6,550
Water Systems Operations	Operations Support Services	-	-	-	-	-	-
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	732,874	-	732,874	-	-	732,874
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	-	-	-	-	-	-
Water Systems Operations	Environmental Health & Safety Section	-	-	-	-	-	-
Water Systems Operations	OSS, Fleet Services Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Power Support Unit	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations & Planning Secti	2,445	-	2,445	-	-	2,445
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-
Sustainability, Resilience & Inn	Sustainability, Resilience & Inn	-	-	-	-	-	-
Diversity, Equity & Inclusion	Diversity, Equity & Inclusion	-	-	-	-	-	-
Equal Employment Opportunity	Equal Employment Opportunity	-	-	-	-	-	-
Office of the Chief Financial O	Office of the Chief Financial O	-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-
Engineering Services	Engineering Services	5,310,068	-	5,310,068	-	-	5,310,068
Business Technology	Administrative Services	-	-	-	-	-	-
Business Technology	Information Technology	672,570	-	672,570	-	-	672,570
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	-	-	-	-	-	-
Water Resources Managemen	Office of the Group Manager	-	-	-	-	-	-
Ethics Office	Ethics Office	-	-	-	-	-	-
Real Property	Real Property	764,053	-	764,053	-	-	764,053
General Counsel	General Counsel	-	-	-	-	-	-
General Auditor	General Auditor	-	-	-	-	-	-
Total Departmental O&M	-	7,834,122	-	7,834,122	-	-	7,834,122
GENERAL DISTRICT REQUIREMENTS		-	-	-	-	-	-
State Water Contract*		-	-	-	-	-	-
Supply - O&M	Supply - O&M	-	-	-	-	-	-
Supply - Capital	Supply - Capital	-	-	-	-	-	-
Power - O&M & Off-Aq Capital	Power - O&M & Off-Aq Capital	-	-	-	-	-	-
Power - Capital (less Off-Aq)	Power - Capital (less Off-Aq)	-	-	-	-	-	-
Transmission - Capital - Commodity, Demand, & Standby	Transmission - Capital - Commodity, Demand, & Standby	-	-	-	-	-	-
Transmission - O&M - Commodity only	Transmission - O&M - Commodity only	-	-	-	-	-	-
Delta Conveyance - Supply	Delta Conveyance - Supply	-	-	-	-	-	-
Delta Conveyance - Power	Delta Conveyance - Power	-	-	-	-	-	-
Delta Conveyance - Other	Delta Conveyance - Other	-	-	-	-	-	-
Total State Water Contract		-	-	-	-	-	-
Colorado River Aqueduct Power Costs		-	-	-	-	-	-
Supply Programs (cash funded portion)		-	-	-	-	-	-
Demand Management (cash funded portion)		-	-	-	-	-	-
Local Resources Program	Local Resources Program	-	-	-	-	-	-
Future Supply Actions & Stormwater Pilot	Future Supply Actions & Stormwater Pilot	-	-	-	-	-	-
Conservation Program (cash funded portion)	Conservation Program (cash funded portion)	-	-	-	-	-	-
Total Demand Management Costs		-	-	-	-	-	-
Capital Financing		-	-	-	-	-	-
Revenue Bond Debt Service net of BABs Interest Subsidy Payment	Revenue Bond Debt Service net of BABs Interest Subsidy Payment	33,043,713	-	33,043,713	-	-	33,043,713
G.O. Bond Debt Service	G.O. Bond Debt Service	-	-	-	-	-	-
Debt Administration	Debt Administration	301,420	-	301,420	-	-	301,420
Bond Defeasance	Bond Defeasance	-	-	-	-	-	-
PAYGO	PAYGO	15,052,500	-	15,052,500	-	-	15,052,500
Total Capital Financing Costs		48,397,633	-	48,397,633	-	-	48,397,633
Other Operating Costs		-	-	-	-	-	-
Operating Equipment	Operating Equipment	114,835	-	114,835	-	-	114,835
Succession Planning Labor Pool	Succession Planning Labor Pool	64,975	-	64,975	-	-	64,975
OPEB/PERS Pre-Funding	OPEB/PERS Pre-Funding	-	-	-	-	-	-
Total Other Operating Costs		179,810	-	179,810	-	-	179,810
Increase/(Decrease) in Required Reserves		-	-	-	-	-	-
Total General District Requirements		48,577,443	-	48,577,443	-	-	48,577,443
REQUIREMENTS BEFORE OFFSETS:		56,411,566	-	7,834,122	48,577,443	-	56,411,566
Revenue Offsets		-	-	-	-	-	-
Property Taxes - MWD Portion of SWC GO Debt Service	Property Taxes - MWD Portion of SWC GO Debt Service	-	-	-	-	-	-
Property Taxes - MWD GO Debt Service	Property Taxes - MWD GO Debt Service	-	-	-	-	-	-
Interest on Investments	Interest on Investments	265,377	-	265,377	-	-	265,377
Hydro-Power Revenue	Hydro-Power Revenue	-	-	-	-	-	-
CRA Power Revenue	CRA Power Revenue	-	-	-	-	-	-
Wadsworth Pumping Plant (DVL) Power Revenue	Wadsworth Pumping Plant (DVL) Power Revenue	-	-	-	-	-	-
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)	Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)	-	-	-	-	-	-
Misc. allocated to supply (PVID Lease)	Misc. allocated to supply (PVID Lease)	-	-	-	-	-	-
Property Taxes - SWC	Property Taxes - SWC	-	-	-	-	-	-
Revenue Reserve used for Revenue Bonds - I&P	Revenue Reserve used for Revenue Bonds - I&P	-	-	-	-	-	-
Annexation	Annexation	-	-	-	-	-	-
Total Revenue Offsets		265,377	-	265,377	-	-	265,377
NET REVENUE REQUIREMENTS:		56,146,188	-	7,834,122	48,312,066	-	56,146,188

		Functionalization	Allocation Percentages					Total
			Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		92,851	-	92,851	-	-	-	92,851
Office of General Manager	Board of Directors	-	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-	-
Human Resources		163,106	-	163,106	-	-	-	163,106
Water Systems Operations	Office of the Manager	24,804	-	24,804	-	-	-	24,804
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations Support Services	5,015	-	5,015	-	-	-	5,015
Water Systems Operations	Operations Support Services	-	-	-	-	-	-	-
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	606,581	-	606,581	-	-	-	606,581
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	-	-	-	-	-	-	-
Water Systems Operations	Environmental Health & Safety Section	-	-	-	-	-	-	-
Water Systems Operations	OSS, Fleet Services Unit	-	-	-	-	-	-	-
Water Systems Operations	OSS, Power Support Unit	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations & Planning Section	2,230	-	2,230	-	-	-	2,230
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-	-
Sustainability, Resilience & Inr		-	-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-	-
Equal Employment Opportuniti		-	-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-	-
Engineering Services		4,490,950	-	4,490,950	-	-	-	4,490,950
Business Technology	Administrative Services	-	-	-	-	-	-	-
Business Technology	Information Technology	451,467	-	451,467	-	-	-	451,467
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	-	-	-	-	-	-	-
Water Resources Managemen	Office of the Group Manager	-	-	-	-	-	-	-
Ethics Office		-	-	-	-	-	-	-
Real Property		331,527	-	331,527	-	-	-	331,527
General Counsel		-	-	-	-	-	-	-
General Auditor		-	-	-	-	-	-	-
Total Departmental O&M		6,168,532	-	6,168,532	-	-	-	6,168,532

		Functionalization	Allocation Percentages					% Total
			Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		84,468	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Office of General Manager	Board of Directors	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Bay Delta Initiatives	Bay Delta Initiatives	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Legislative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Media Communications Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Manager, External Affairs/Special Projects	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Conservation & Community Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Human Resources		166,482	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager	33,719	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Treatment Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations Support Services	6,550	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Support Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Desert Region / C&D CRA	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	System Operations Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Power Operations and Planning	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Planning & Programs Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Jensen	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Diemer	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Mills	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Skinner	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Weymouth	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Water Quality Section	732,874	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Eastern Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Western Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Manufacturing Services Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Environmental Health & Safety Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Fleet Services Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Power Support Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations & Planning Section	2,445	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Security Team & Security Management	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Sustainability, Resilience & Innovation		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Diversity, Equity & Inclusion		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Equal Employment Opportunity		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Office of the Chief Financial Officer		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Office of Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Engineering Services		3,428,923	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Administrative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Information Technology	541,242	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Planning & Development	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Implementation	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Office of the Group Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Ethics Office		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Real Property		1,307,707	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
General Counsel		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
General Auditor		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Departmental O&M		6,304,412	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
GENERAL DISTRICT REQUIREMENTS								
State Water Contract*								
Supply - O&M		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Supply - Capital		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Power - O&M & Off-Aq Capital		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Power - Capital (less Off-Aq)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Transmission - Capital - Commodity, Demand, & Standby		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Transmission - O&M - Commodity only		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Supply		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Power		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Other		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total State Water Contract		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Colorado River Aqueduct Power Costs								
		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Supply Programs (cash funded portion)								
		11,720,987	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Demand Management (cash funded portion)								
Local Resources Program		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Future Supply Actions & Stormwater Pilot		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Conservation Program (cash funded portion)		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Demand Management Costs		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Capital Financing								
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
G.O. Bond Debt Service	21,337,644	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Debt Administration	194,639	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Bond Defeasance	-	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
PAYGO	9,720,000	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Capital Financing Costs	31,252,283	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Other Operating Costs								
Operating Equipment	92,412	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Succession Planning Labor Pool	52,288	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
OPEB/PERS Pre-Funding	-	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Other Operating Costs	144,700	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Increase/(Decrease) in Required Reserves								
		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total General District Requirements								
		43,117,971	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
REQUIREMENTS BEFORE OFFSETS:								
		49,422,383	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Revenue Offsets								
Property Taxes - MWD Portion of SWC GO Debt Service	-	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Property Taxes - MWD GO Debt Service	-	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Interest on Investments	232,498	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Hydro-Power Revenue	-	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
CRA Power Revenue	-	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Wadsworth Pumping Plant (DVL) Power Revenue	-	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)	-	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to supply (PVID Lease)	-	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Property Taxes - SWC	-	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Revenue Reserve used for Revenue Bonds - I&P	-	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Annexation	-	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Revenue Offsets	232,498	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
NET REVENUE REQUIREMENTS:								
-		49,189,884	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

	Functionalization	Allocation Percentages					Total
		Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M							
Group	Item						
Office of General Manager		84,468	-	84,468	-	-	84,468
Office of General Manager	Board of Directors	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-
Human Resources		166,482	-	166,482	-	-	166,482
Water Systems Operations	Office of the Manager	33,719	-	33,719	-	-	33,719
Water Systems Operations	Office of the Manager, Conveyance & Distribution S	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations Support Services	6,550	-	6,550	-	-	6,550
Water Systems Operations	Operations Support Services	-	-	-	-	-	-
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	732,874	-	732,874	-	-	732,874
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	-	-	-	-	-	-
Water Systems Operations	Environmental Health & Safety Section	-	-	-	-	-	-
Water Systems Operations	OSS, Fleet Services Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Power Support Unit	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations & Planning Secti	2,445	-	2,445	-	-	2,445
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-
Sustainability, Resilience & Inn		-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-
Engineering Services		3,428,923	-	3,428,923	-	-	3,428,923
Business Technology	Administrative Services	-	-	-	-	-	-
Business Technology	Information Technology	541,242	-	541,242	-	-	541,242
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	-	-	-	-	-	-
Water Resources Managemen	Office of the Group Manager	-	-	-	-	-	-
Ethics Office		-	-	-	-	-	-
Real Property		1,307,707	-	1,307,707	-	-	1,307,707
General Counsel		-	-	-	-	-	-
General Auditor		-	-	-	-	-	-
Total Departmental O&M		6,304,412	-	6,304,412	-	-	6,304,412
GENERAL DISTRICT REQUIREMENTS		-	-	-	-	-	-
State Water Contract*		-	-	-	-	-	-
Supply - O&M		-	-	-	-	-	-
Supply - Capital		-	-	-	-	-	-
Power - O&M & Off-Aq Capital		-	-	-	-	-	-
Power - Capital (less Off-Aq)		-	-	-	-	-	-
Transmission - Capital - Commodity, Demand, & Standby		-	-	-	-	-	-
Transmission - O&M - Commodity only		-	-	-	-	-	-
Delta Conveyance - Supply		-	-	-	-	-	-
Delta Conveyance - Power		-	-	-	-	-	-
Delta Conveyance - Other		-	-	-	-	-	-
Total State Water Contract		-	-	-	-	-	-
Colorado River Aqueduct Power Costs		-	-	-	-	-	-
Supply Programs (cash funded portion)		11,720,987	-	11,720,987	-	-	11,720,987
Demand Management (cash funded portion)		-	-	-	-	-	-
Local Resources Program		-	-	-	-	-	-
Future Supply Actions & Stormwater Pilot		-	-	-	-	-	-
Conservation Program (cash funded portion)		-	-	-	-	-	-
Total Demand Management Costs		-	-	-	-	-	-
Capital Financing		-	-	-	-	-	-
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		21,337,644	-	21,337,644	-	-	21,337,644
G.O. Bond Debt Service		-	-	-	-	-	-
Debt Administration		194,639	-	194,639	-	-	194,639
Bond Defeasance		-	-	-	-	-	-
PAYGO		9,720,000	-	9,720,000	-	-	9,720,000
Total Capital Financing Costs		31,252,283	-	31,252,283	-	-	31,252,283
Other Operating Costs		-	-	-	-	-	-
Operating Equipment		92,412	-	92,412	-	-	92,412
Succession Planning Labor Pool		52,288	-	52,288	-	-	52,288
OPEB/PERS Pre-Funding		-	-	-	-	-	-
Total Other Operating Costs		144,700	-	144,700	-	-	144,700
Increase/(Decrease) in Required Reserves		-	-	-	-	-	-
Total General District Requirements		43,117,971	-	43,117,971	-	-	43,117,971
REQUIREMENTS BEFORE OFFSETS:		49,422,383	-	49,422,383	-	-	49,422,383
Revenue Offsets		-	-	-	-	-	-
Property Taxes - MWD Portion of SWC GO Debt Service		-	-	-	-	-	-
Property Taxes - MWD GO Debt Service		-	-	-	-	-	-
Interest on Investments		232,498	-	232,498	-	-	232,498
Hydro-Power Revenue		-	-	-	-	-	-
CRA Power Revenue		-	-	-	-	-	-
Wadsworth Pumping Plant (DVL) Power Revenue		-	-	-	-	-	-
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)		-	-	-	-	-	-
Misc. allocated to supply (PVID Lease)		-	-	-	-	-	-
Property Taxes - SWC		-	-	-	-	-	-
Revenue Reserve used for Revenue Bonds - I&P		-	-	-	-	-	-
Annexation		-	-	-	-	-	-
Total Revenue Offsets		232,498	-	232,498	-	-	232,498
NET REVENUE REQUIREMENTS:		49,189,884	-	49,189,884	-	-	49,189,884

		Functionalization	Allocation Percentages					Total
			Fixed			Variable		
			Demand	Commodity	Standby	Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		74,721	-	74,721	-	-	-	74,721
Office of General Manager	Board of Directors	-	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-	-
Human Resources		131,258	-	131,258	-	-	-	131,258
Water Systems Operations	Office of the Manager	24,804	-	24,804	-	-	-	24,804
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations Support Services	5,015	-	5,015	-	-	-	5,015
Water Systems Operations	Operations Support Services	-	-	-	-	-	-	-
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	606,581	-	606,581	-	-	-	606,581
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	-	-	-	-	-	-	-
Water Systems Operations	Environmental Health & Safety Section	-	-	-	-	-	-	-
Water Systems Operations	OSS, Fleet Services Unit	-	-	-	-	-	-	-
Water Systems Operations	OSS, Power Support Unit	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations & Planning Section	2,230	-	2,230	-	-	-	2,230
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-	-
Sustainability, Resilience & Inr		-	-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-	-
Engineering Services		2,899,986	-	2,899,986	-	-	-	2,899,986
Business Technology	Administrative Services	-	-	-	-	-	-	-
Business Technology	Information Technology	363,313	-	363,313	-	-	-	363,313
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	-	-	-	-	-	-	-
Water Resources Managemen	Office of the Group Manager	-	-	-	-	-	-	-
Ethics Office		-	-	-	-	-	-	-
Real Property		567,421	-	567,421	-	-	-	567,421
General Counsel		-	-	-	-	-	-	-
General Auditor		-	-	-	-	-	-	-
Total Departmental O&M	-	4,675,329	-	4,675,329	-	-	-	4,675,329

		Functionalization	Allocation Percentages					% Total
			Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		56,240	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Office of General Manager	Board of Directors	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Bay Delta Initiatives	Bay Delta Initiatives	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Legislative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Media Communications Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Manager, External Affairs/Special Projects	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Conservation & Community Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Human Resources		110,847	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager	33,719	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Treatment Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations Support Services	6,550	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Support Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Desert Region / C&D CRA	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	System Operations Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Power Operations and Planning	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Planning & Programs Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Jensen	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Diemer	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Mills	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Skinner	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Weymouth	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Water Quality Section	732,874	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Eastern Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Western Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Manufacturing Services Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Environmental Health & Safety Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Fleet Services Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Power Support Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations & Planning Section	2,445	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Security Team & Security Management	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Sustainability, Resilience & Innovation		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Diversity, Equity & Inclusion		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Equal Employment Opportunity		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Office of the Chief Financial Officer		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Office of Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Engineering Services		2,585,979	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Administrative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Information Technology	360,368	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Planning & Development	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Implementation	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Office of the Group Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Ethics Office		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Real Property		308,560	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
General Counsel		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
General Auditor		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Departmental O&M		4,197,584	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
GENERAL DISTRICT REQUIREMENTS								
State Water Contract*								
Supply - O&M		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Supply - Capital		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Power - O&M & Off-Aq Capital		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Power - Capital (less Off-Aq)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Transmission - Capital - Commodity, Demand, & Standby		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Transmission - O&M - Commodity only		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Supply		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Power		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Other		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total State Water Contract		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Colorado River Aqueduct Power Costs								
		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Supply Programs (cash funded portion)								
		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Demand Management (cash funded portion)								
Local Resources Program		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Future Supply Actions & Stormwater Pilot		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Conservation Program (cash funded portion)		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Demand Management Costs		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Capital Financing								
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
G.O. Bond Debt Service	16,092,140	-	34.7%	38.6%	26.7%	0.0%	0.0%	100.0%
Debt Administration	146,790	-	34.7%	38.6%	26.7%	0.0%	0.0%	100.0%
Bond Defeasance	-	-	34.7%	38.6%	26.7%	0.0%	0.0%	100.0%
PAYGO	7,330,500	-	34.7%	38.6%	26.7%	0.0%	0.0%	100.0%
Total Capital Financing Costs	23,569,430	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Other Operating Costs								
Operating Equipment	61,529	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Succession Planning Labor Pool	34,814	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
OPEB/PERS Pre-Funding	-	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Other Operating Costs	96,344	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Increase/(Decrease) in Required Reserves								
	-	-	34.6%	38.8%	26.5%	0.0%	0.0%	100.0%
Total General District Requirements								
	23,665,774	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
REQUIREMENTS BEFORE OFFSETS:								
	27,863,358	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Revenue Offsets								
Property Taxes - MWD Portion of SWC GO Debt Service	-	-	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Property Taxes - MWD GO Debt Service	-	-	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Interest on Investments	131,078	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Hydro-Power Revenue	-	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
CRA Power Revenue	-	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Wadsworth Pumping Plant (DVL) Power Revenue	-	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)	-	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to supply (PVID Lease)	-	-	29.4%	48.1%	22.5%	0.0%	0.0%	100.0%
Property Taxes - SWC	-	-	34.7%	38.6%	26.7%	0.0%	0.0%	100.0%
Revenue Reserve used for Revenue Bonds - I&P	-	-	34.7%	38.6%	26.7%	0.0%	0.0%	100.0%
Annexation	-	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total Revenue Offsets	131,078	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
NET REVENUE REQUIREMENTS:								
-	27,732,280	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

	Functionalization	Allocation Percentages					Total
		Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M							
Group	Item						
Office of General Manager	Office of General Manager	56,240	-	56,240	-	-	56,240
Office of General Manager	Board of Directors	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-
Human Resources	Human Resources	110,847	-	110,847	-	-	110,847
Water Systems Operations	Office of the Manager	33,719	-	33,719	-	-	33,719
Water Systems Operations	Office of the Manager, Conveyance & Distribution S	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations Support Services	6,550	-	6,550	-	-	6,550
Water Systems Operations	Operations Support Services	-	-	-	-	-	-
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	732,874	-	732,874	-	-	732,874
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	-	-	-	-	-	-
Water Systems Operations	Environmental Health & Safety Section	-	-	-	-	-	-
Water Systems Operations	OSS, Fleet Services Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Power Support Unit	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations & Planning Secti	2,445	-	2,445	-	-	2,445
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-
Sustainability, Resilience & Inn	Sustainability, Resilience & Inn	-	-	-	-	-	-
Diversity, Equity & Inclusion	Diversity, Equity & Inclusion	-	-	-	-	-	-
Equal Employment Opportunity	Equal Employment Opportunity	-	-	-	-	-	-
Office of the Chief Financial O	Office of the Chief Financial O	-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-
Engineering Services	Engineering Services	2,585,979	-	2,585,979	-	-	2,585,979
Business Technology	Administrative Services	-	-	-	-	-	-
Business Technology	Information Technology	360,368	-	360,368	-	-	360,368
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	-	-	-	-	-	-
Water Resources Managemen	Office of the Group Manager	-	-	-	-	-	-
Ethics Office	Ethics Office	-	-	-	-	-	-
Real Property	Real Property	308,560	-	308,560	-	-	308,560
General Counsel	General Counsel	-	-	-	-	-	-
General Auditor	General Auditor	-	-	-	-	-	-
Total Departmental O&M	-	4,197,584	-	4,197,584	-	-	4,197,584
GENERAL DISTRICT REQUIREMENTS							
State Water Contract*							
Supply - O&M	Supply - O&M	-	-	-	-	-	-
Supply - Capital	Supply - Capital	-	-	-	-	-	-
Power - O&M & Off-Aq Capital	Power - O&M & Off-Aq Capital	-	-	-	-	-	-
Power - Capital (less Off-Aq)	Power - Capital (less Off-Aq)	-	-	-	-	-	-
Transmission - Capital - Commodity, Demand, & Standby	Transmission - Capital - Commodity, Demand, & Standby	-	-	-	-	-	-
Transmission - O&M - Commodity only	Transmission - O&M - Commodity only	-	-	-	-	-	-
Delta Conveyance - Supply	Delta Conveyance - Supply	-	-	-	-	-	-
Delta Conveyance - Power	Delta Conveyance - Power	-	-	-	-	-	-
Delta Conveyance - Other	Delta Conveyance - Other	-	-	-	-	-	-
Total State Water Contract							
Colorado River Aqueduct Power Costs							
Supply Programs (cash funded portion)							
Demand Management (cash funded portion)							
Local Resources Program	Local Resources Program	-	-	-	-	-	-
Future Supply Actions & Stormwater Pilot	Future Supply Actions & Stormwater Pilot	-	-	-	-	-	-
Conservation Program (cash funded portion)	Conservation Program (cash funded portion)	-	-	-	-	-	-
Total Demand Management Costs							
Capital Financing							
Revenue Bond Debt Service net of BABs Interest Subsidy Payment	Revenue Bond Debt Service net of BABs Interest Subsidy Payment	16,092,140	5,591,988	6,211,160	4,288,992	-	16,092,140
G.O. Bond Debt Service	G.O. Bond Debt Service	-	-	-	-	-	-
Debt Administration	Debt Administration	146,790	51,009	56,657	39,124	-	146,790
Bond Defeasance	Bond Defeasance	-	-	-	-	-	-
PAYGO	PAYGO	7,330,500	2,547,335	2,829,388	1,953,777	-	7,330,500
Total Capital Financing Costs		23,569,430	8,190,332	9,097,206	6,281,893	-	23,569,430
Other Operating Costs							
Operating Equipment	Operating Equipment	61,529	-	61,529	-	-	61,529
Succession Planning Labor Pool	Succession Planning Labor Pool	34,814	-	34,814	-	-	34,814
OPEB/PERS Pre-Funding	OPEB/PERS Pre-Funding	-	-	-	-	-	-
Total Other Operating Costs		96,344	-	96,344	-	-	96,344
Increase/(Decrease) in Required Reserves							
Total General District Requirements		23,665,774	8,190,332	9,193,549	6,281,893	-	23,665,774
REQUIREMENTS BEFORE OFFSETS:		27,863,358	8,190,332	13,391,133	6,281,893	-	27,863,358
Revenue Offsets							
Property Taxes - MWD Portion of SWC GO Debt Service	Property Taxes - MWD Portion of SWC GO Debt Service	-	-	-	-	-	-
Property Taxes - MWD GO Debt Service	Property Taxes - MWD GO Debt Service	-	-	-	-	-	-
Interest on Investments	Interest on Investments	131,078	-	131,078	-	-	131,078
Hydro-Power Revenue	Hydro-Power Revenue	-	-	-	-	-	-
CRA Power Revenue	CRA Power Revenue	-	-	-	-	-	-
Wadsworth Pumping Plant (DVL) Power Revenue	Wadsworth Pumping Plant (DVL) Power Revenue	-	-	-	-	-	-
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)	Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)	-	-	-	-	-	-
Misc. allocated to supply (PVID Lease)	Misc. allocated to supply (PVID Lease)	-	-	-	-	-	-
Property Taxes - SWC	Property Taxes - SWC	-	-	-	-	-	-
Revenue Reserve used for Revenue Bonds - I&P	Revenue Reserve used for Revenue Bonds - I&P	-	-	-	-	-	-
Annexation	Annexation	-	-	-	-	-	-
Total Revenue Offsets		131,078	-	131,078	-	-	131,078
NET REVENUE REQUIREMENTS:		27,732,280	8,190,332	13,260,056	6,281,893	-	27,732,280

		Functionalization	Allocation Percentages					Total
			Fixed			Variable		
			Demand	Commodity	Standby	Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		49,750	-	49,750	-	-	-	49,750
Office of General Manager	Board of Directors	-	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-	-
Human Resources		87,394	-	87,394	-	-	-	87,394
Water Systems Operations	Office of the Manager	24,804	-	24,804	-	-	-	24,804
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations Support Services	5,015	-	5,015	-	-	-	5,015
Water Systems Operations	Operations Support Services	-	-	-	-	-	-	-
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	606,581	-	606,581	-	-	-	606,581
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	-	-	-	-	-	-	-
Water Systems Operations	Environmental Health & Safety Section	-	-	-	-	-	-	-
Water Systems Operations	OSS, Fleet Services Unit	-	-	-	-	-	-	-
Water Systems Operations	OSS, Power Support Unit	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations & Planning Section	2,230	-	2,230	-	-	-	2,230
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-	-
Sustainability, Resilience & Inr		-	-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-	-
Engineering Services		2,187,073	-	2,187,073	-	-	-	2,187,073
Business Technology	Administrative Services	-	-	-	-	-	-	-
Business Technology	Information Technology	241,900	-	241,900	-	-	-	241,900
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	-	-	-	-	-	-	-
Water Resources Managemen	Office of the Group Manager	-	-	-	-	-	-	-
Ethics Office		-	-	-	-	-	-	-
Real Property		133,886	-	133,886	-	-	-	133,886
General Counsel		-	-	-	-	-	-	-
General Auditor		-	-	-	-	-	-	-
Total Departmental O&M	-	3,338,633	-	3,338,633	-	-	-	3,338,633

	Functionalization	Allocation Percentages					% Total
		Demand	Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M							
Group	Item						
Office of General Manager		-	0.0%	100.0%	0.0%	0.0%	100.0%
Office of General Manager	Board of Directors	-	0.0%	100.0%	0.0%	0.0%	100.0%
Bay Delta Initiatives	Bay Delta Initiatives	-	0.0%	100.0%	0.0%	0.0%	100.0%
External Affairs	Legislative Services	-	0.0%	100.0%	0.0%	0.0%	100.0%
External Affairs	Media Communications Services	-	0.0%	100.0%	0.0%	0.0%	100.0%
External Affairs	Manager, External Affairs/Special Projects	-	0.0%	100.0%	0.0%	0.0%	100.0%
External Affairs	Conservation & Community Services	-	0.0%	100.0%	0.0%	0.0%	100.0%
Human Resources		-	0.0%	100.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager	-	0.0%	100.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	0.0%	100.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Treatment Section	-	0.0%	100.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations Support Services	-	0.0%	100.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Support Services	-	0.0%	100.0%	0.0%	0.0%	100.0%
Water Systems Operations	Desert Region / C&D CRA	-	0.0%	100.0%	0.0%	0.0%	100.0%
Water Systems Operations	System Operations Unit	-	0.0%	100.0%	0.0%	0.0%	100.0%
Water Systems Operations	Power Operations and Planning	-	0.0%	100.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Planning & Programs Unit	-	0.0%	100.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Jensen	-	0.0%	100.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Diemer	-	0.0%	100.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Mills	-	0.0%	100.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Skinner	-	0.0%	100.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Weymouth	-	0.0%	100.0%	0.0%	0.0%	100.0%
Water Systems Operations	Water Quality Section	-	0.0%	100.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Eastern Unit	-	0.0%	100.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Western Unit	-	0.0%	100.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Manufacturing Services Unit	-	0.0%	100.0%	0.0%	0.0%	100.0%
Water Systems Operations	Environmental Health & Safety Section	-	0.0%	100.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Fleet Services Unit	-	0.0%	100.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Power Support Unit	-	0.0%	100.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations & Planning Section	-	0.0%	100.0%	0.0%	0.0%	100.0%
Water Systems Operations	Security Team & Security Management	-	0.0%	100.0%	0.0%	0.0%	100.0%
Sustainability, Resilience & Innovation		-	0.0%	100.0%	0.0%	0.0%	100.0%
Diversity, Equity & Inclusion		-	0.0%	100.0%	0.0%	0.0%	100.0%
Equal Employment Opportunity		-	0.0%	100.0%	0.0%	0.0%	100.0%
Office of the Chief Financial Officer		-	0.0%	100.0%	0.0%	0.0%	100.0%
Business Technology	Office of Manager	-	0.0%	100.0%	0.0%	0.0%	100.0%
Engineering Services		-	0.0%	100.0%	0.0%	0.0%	100.0%
Business Technology	Administrative Services	-	0.0%	100.0%	0.0%	0.0%	100.0%
Business Technology	Information Technology	-	0.0%	100.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Planning & Development	-	0.0%	100.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Implementation	-	0.0%	100.0%	0.0%	0.0%	100.0%
Water Resources Management	Office of the Group Manager	-	0.0%	100.0%	0.0%	0.0%	100.0%
Ethics Office		-	0.0%	100.0%	0.0%	0.0%	100.0%
Real Property		-	0.0%	100.0%	0.0%	0.0%	100.0%
General Counsel		-	0.0%	100.0%	0.0%	0.0%	100.0%
General Auditor		-	0.0%	100.0%	0.0%	0.0%	100.0%
Total Departmental O&M		-	0.0%	0.0%	0.0%	0.0%	0.0%
GENERAL DISTRICT REQUIREMENTS							
State Water Contract*							
Supply - O&M		-	0.0%	100.0%	0.0%	0.0%	100.0%
Supply - Capital		-	0.0%	100.0%	0.0%	0.0%	100.0%
Power - O&M & Off-Aq Capital		-	0.0%	100.0%	0.0%	0.0%	100.0%
Power - Capital (less Off-Aq)		-	0.0%	100.0%	0.0%	0.0%	100.0%
Transmission - Capital - Commodity, Demand, & Standby		-	0.0%	100.0%	0.0%	0.0%	100.0%
Transmission - O&M - Commodity only		-	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Supply		-	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Power		-	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Other		-	0.0%	0.0%	0.0%	0.0%	0.0%
Total State Water Contract		-	0.0%	0.0%	0.0%	0.0%	0.0%
Colorado River Aqueduct Power Costs		-	0.0%	100.0%	0.0%	0.0%	100.0%
Supply Programs (cash funded portion)		-	0.0%	0.0%	0.0%	0.0%	0.0%
Demand Management (cash funded portion)							
Local Resources Program		-	0.0%	0.0%	0.0%	0.0%	0.0%
Future Supply Actions & Stormwater Pilot		-	0.0%	100.0%	0.0%	0.0%	100.0%
Conservation Program (cash funded portion)		-	0.0%	100.0%	0.0%	0.0%	100.0%
Total Demand Management Costs		-	0.0%	0.0%	0.0%	0.0%	0.0%
Capital Financing							
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		-	0.0%	0.0%	0.0%	0.0%	0.0%
G.O. Bond Debt Service		-	0.0%	0.0%	0.0%	0.0%	0.0%
Debt Administration		-	0.0%	0.0%	0.0%	0.0%	0.0%
Bond Defeasance		-	0.0%	0.0%	0.0%	0.0%	0.0%
PAYGO		-	0.0%	0.0%	0.0%	0.0%	0.0%
Total Capital Financing Costs		-	0.0%	0.0%	0.0%	0.0%	0.0%
Other Operating Costs							
Operating Equipment		-	0.0%	100.0%	0.0%	0.0%	100.0%
Succession Planning Labor Pool		-	0.0%	100.0%	0.0%	0.0%	100.0%
OP&B/P&RS Pre-Funding		-	0.0%	100.0%	0.0%	0.0%	100.0%
Total Other Operating Costs		-	0.0%	0.0%	0.0%	0.0%	0.0%
Increase/(Decrease) in Required Reserves		-	0.0%	0.0%	0.0%	0.0%	0.0%
Total General District Requirements		-	0.0%	0.0%	0.0%	0.0%	0.0%
REQUIREMENTS BEFORE OFFSETS:							
Revenue Offsets							
Property Taxes - MWD Portion of SWC GO Debt Service		-	0.0%	0.0%	0.0%	0.0%	0.0%
Property Taxes - MWD GO Debt Service		-	0.0%	0.0%	0.0%	0.0%	0.0%
Interest on Investments		-	0.0%	0.0%	0.0%	0.0%	0.0%
Hydro-Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%
CRA Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%
Wadsworth Pumping Plant (DVL) Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)	545,067	-	0.0%	0.0%	0.0%	100.0%	100.0%
Misc. allocated to supply (PVID Lease)		-	0.0%	0.0%	0.0%	0.0%	0.0%
Property Taxes - SWC		-	0.0%	100.0%	0.0%	0.0%	100.0%
Revenue Reserve used for Revenue Bonds - I&P		-	0.0%	0.0%	0.0%	0.0%	0.0%
Annexation		-	0.0%	0.0%	0.0%	0.0%	0.0%
Total Revenue Offsets	545,067	-	0.0%	0.0%	0.0%	0.0%	0.0%
NET REVENUE REQUIREMENTS:	(545,067)	-	0.0%	0.0%	0.0%	0.0%	0.0%

	Functionalization	Allocation Percentages					Total
		Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M							
Group	Item						
Office of General Manager		-	-	-	-	-	-
Office of General Manager	Board of Directors	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-
Human Resources		-	-	-	-	-	-
Water Systems Operations	Office of the Manager	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Conveyance & Distribution S	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations Support Services	-	-	-	-	-	-
Water Systems Operations	Operations Support Services	-	-	-	-	-	-
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	-	-	-	-	-	-
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	-	-	-	-	-	-
Water Systems Operations	Environmental Health & Safety Section	-	-	-	-	-	-
Water Systems Operations	OSS, Fleet Services Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Power Support Unit	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations & Planning Secti	-	-	-	-	-	-
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-
Sustainability, Resilience & Inn		-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-
Engineering Services		-	-	-	-	-	-
Business Technology	Administrative Services	-	-	-	-	-	-
Business Technology	Information Technology	-	-	-	-	-	-
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	-	-	-	-	-	-
Water Resources Managemen	Office of the Group Manager	-	-	-	-	-	-
Ethics Office		-	-	-	-	-	-
Real Property		-	-	-	-	-	-
General Counsel		-	-	-	-	-	-
General Auditor		-	-	-	-	-	-
Total Departmental O&M	-	-	-	-	-	-	-
GENERAL DISTRICT REQUIREMENTS		-	-	-	-	-	-
State Water Contract*		-	-	-	-	-	-
Supply - O&M		-	-	-	-	-	-
Supply - Capital		-	-	-	-	-	-
Power - O&M & Off-Aq Capital		-	-	-	-	-	-
Power - Capital (less Off-Aq)		-	-	-	-	-	-
Transmission - Capital - Commodity, Demand, & Standby		-	-	-	-	-	-
Transmission - O&M - Commodity only		-	-	-	-	-	-
Delta Conveyance - Supply		-	-	-	-	-	-
Delta Conveyance - Power		-	-	-	-	-	-
Delta Conveyance - Other		-	-	-	-	-	-
Total State Water Contract		-	-	-	-	-	-
Colorado River Aqueduct Power Costs		-	-	-	-	-	-
Supply Programs (cash funded portion)		-	-	-	-	-	-
Demand Management (cash funded portion)		-	-	-	-	-	-
Local Resources Program		-	-	-	-	-	-
Future Supply Actions & Stormwater Pilot		-	-	-	-	-	-
Conservation Program (cash funded portion)		-	-	-	-	-	-
Total Demand Management Costs		-	-	-	-	-	-
Capital Financing		-	-	-	-	-	-
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		-	-	-	-	-	-
G.O. Bond Debt Service		-	-	-	-	-	-
Debt Administration		-	-	-	-	-	-
Bond Defeasance		-	-	-	-	-	-
PAYGO		-	-	-	-	-	-
Total Capital Financing Costs		-	-	-	-	-	-
Other Operating Costs		-	-	-	-	-	-
Operating Equipment		-	-	-	-	-	-
Succession Planning Labor Pool		-	-	-	-	-	-
OPEB/PERS Pre-Funding		-	-	-	-	-	-
Total Other Operating Costs		-	-	-	-	-	-
Increase/(Decrease) in Required Reserves		-	-	-	-	-	-
Total General District Requirements		-	-	-	-	-	-
REQUIREMENTS BEFORE OFFSETS:		-	-	-	-	-	-
Revenue Offsets		-	-	-	-	-	-
Property Taxes - MWD Portion of SWC GO Debt Service		-	-	-	-	-	-
Property Taxes - MWD GO Debt Service		-	-	-	-	-	-
Interest on Investments		-	-	-	-	-	-
Hydro-Power Revenue		-	-	-	-	-	-
CRA Power Revenue		-	-	-	-	-	-
Wadsworth Pumping Plant (DVL) Power Revenue	545,067	-	-	-	545,067	-	545,067
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)		-	-	-	-	-	-
Misc. allocated to supply (PVID Lease)		-	-	-	-	-	-
Property Taxes - SWC		-	-	-	-	-	-
Revenue Reserve used for Revenue Bonds - I&P		-	-	-	-	-	-
Annexation		-	-	-	-	-	-
Total Revenue Offsets	545,067	-	-	-	545,067	-	545,067
NET REVENUE REQUIREMENTS:	(545,067)	-	-	-	(545,067)	-	(545,067)

	Functionalization	Allocation Percentages					Total
		Fixed			Variable		
		Demand	Commodity	Standby	Commodity	Hydroelectric	
Departmental O&M							
Group	Item						
Office of General Manager		-	-	-	-	-	-
Office of General Manager	Board of Directors	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-
Human Resources		-	-	-	-	-	-
Water Systems Operations	Office of the Manager	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations Support Services	-	-	-	-	-	-
Water Systems Operations	Operations Support Services	-	-	-	-	-	-
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	-	-	-	-	-	-
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	-	-	-	-	-	-
Water Systems Operations	Environmental Health & Safety Section	-	-	-	-	-	-
Water Systems Operations	OSS, Fleet Services Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Power Support Unit	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations & Planning Section	-	-	-	-	-	-
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-
Sustainability, Resilience & Inr		-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-
Engineering Services		-	-	-	-	-	-
Business Technology	Administrative Services	-	-	-	-	-	-
Business Technology	Information Technology	-	-	-	-	-	-
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	-	-	-	-	-	-
Water Resources Managemen	Office of the Group Manager	-	-	-	-	-	-
Ethics Office		-	-	-	-	-	-
Real Property		-	-	-	-	-	-
General Counsel		-	-	-	-	-	-
General Auditor		-	-	-	-	-	-
Total Departmental O&M	-	-	-	-	-	-	-

		Functionalization	Allocation Percentages					% Total
			Fixed			Variable	Hydroelectric	
			Demand	Commodity	Standby	Commodity		
Departmental O&M								
Group	Item							
	Office of General Manager	413,676	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Office of General Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Bay Delta Initiatives	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	External Affairs	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	External Affairs	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	External Affairs	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	External Affairs	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Human Resources	815,332	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	839,573	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	217,253	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	163,090	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	101,784	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-</						

		Functionalization	Allocation Percentages				Total
			Demand	Fixed Commodity	Standby	Variable Commodity	
Departmental O&M							
Group	Item						
Office of General Manager		413,676	-	413,676	-	-	413,676
Office of General Manager	Board of Directors	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-
Human Resources		815,332	-	815,332	-	-	815,332
Water Systems Operations	Office of the Manager	839,573	-	839,573	-	-	839,573
Water Systems Operations	Office of the Manager, Conveyance & Distribution S	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	217,253	-	217,253	-	-	217,253
Water Systems Operations	Office of the Manager, Operations Support Services	163,090	-	163,090	-	-	163,090
Water Systems Operations	Operations Support Services	101,784	-	101,784	-	-	101,784
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	17,789,405	-	11,355,634	-	6,433,771	17,789,405
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	2,969,569	-	2,969,569	-	-	2,969,569
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	150,068	-	150,068	-	-	150,068
Water Systems Operations	Environmental Health & Safety Section	1,349,982	-	1,349,982	-	-	1,349,982
Water Systems Operations	OSS, Fleet Services Unit	576,957	-	576,957	-	-	576,957
Water Systems Operations	OSS, Power Support Unit	291,082	-	291,082	-	-	291,082
Water Systems Operations	Office of the Manager, Operations & Planning Secti	60,883	-	60,883	-	-	60,883
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-
Sustainability, Resilience & Inn		-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-
Engineering Services		2,485,969	-	2,485,969	-	-	2,485,969
Business Technology	Administrative Services	-	-	-	-	-	-
Business Technology	Information Technology	2,650,686	-	2,650,686	-	-	2,650,686
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	-	-	-	-	-	-
Water Resources Managemen	Office of the Group Manager	-	-	-	-	-	-
Ethics Office		-	-	-	-	-	-
Real Property		-	-	-	-	-	-
General Counsel		-	-	-	-	-	-
General Auditor		-	-	-	-	-	-
Total Departmental O&M	-	30,875,310	-	24,441,538	-	6,433,771	30,875,310
GENERAL DISTRICT REQUIREMENTS		-	-	-	-	-	-
State Water Contract*		-	-	-	-	-	-
Supply - O&M		-	-	-	-	-	-
Supply - Capital		-	-	-	-	-	-
Power - O&M & Off-Aq Capital		-	-	-	-	-	-
Power - Capital (less Off-Aq)		-	-	-	-	-	-
Transmission - Capital - Commodity, Demand, & Standby		-	-	-	-	-	-
Transmission - O&M - Commodity only		-	-	-	-	-	-
Delta Conveyance - Supply		-	-	-	-	-	-
Delta Conveyance - Power		-	-	-	-	-	-
Delta Conveyance - Other		-	-	-	-	-	-
Total State Water Contract		-	-	-	-	-	-
Colorado River Aqueduct Power Costs		-	-	-	-	-	-
Supply Programs (cash funded portion)		-	-	-	-	-	-
Demand Management (cash funded portion)		-	-	-	-	-	-
Local Resources Program		-	-	-	-	-	-
Future Supply Actions & Stormwater Pilot		-	-	-	-	-	-
Conservation Program (cash funded portion)		-	-	-	-	-	-
Total Demand Management Costs		-	-	-	-	-	-
Capital Financing		-	-	-	-	-	-
Revenue Bond Debt Service net of BABs Interest Subsidy Payment	15,469,792	4,926,323	4,561,411	5,982,058	-	-	15,469,792
G.O. Bond Debt Service	102,612	32,677	30,256	39,679	-	-	102,612
Debt Administration	141,113	44,937	41,609	54,568	-	-	141,113
Bond Defeasance	-	-	-	-	-	-	-
PAYGO	7,047,000	2,244,103	2,077,873	2,725,025	-	-	7,047,000
Total Capital Financing Costs	22,760,518	7,248,040	6,711,148	8,801,330	-	-	22,760,518
Other Operating Costs		-	-	-	-	-	-
Operating Equipment	452,578	-	452,578	-	-	-	452,578
Succession Planning Labor Pool	256,077	-	256,077	-	-	-	256,077
OPEB/PERS Pre-Funding	-	-	-	-	-	-	-
Total Other Operating Costs	708,655	-	708,655	-	-	-	708,655
Increase/(Decrease) in Required Reserves		-	-	-	-	-	-
Total General District Requirements		23,469,173	7,248,040	7,419,803	8,801,330	-	23,469,173
REQUIREMENTS BEFORE OFFSETS:		54,344,482	7,248,040	31,861,342	8,801,330	6,433,771	54,344,482
Revenue Offsets							
Property Taxes - MWD Portion of SWC GO Debt Service	-	-	-	-	-	-	-
Property Taxes - MWD GO Debt Service	102,612	-	-	102,612	-	-	102,612
Interest on Investments	255,653	81,412	75,382	98,859	-	-	255,653
Hydro-Power Revenue	-	-	-	-	-	-	-
CRA Power Revenue	-	-	-	-	-	-	-
Wadsworth Pumping Plant (DVL) Power Revenue	-	-	-	-	-	-	-
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)	-	-	-	-	-	-	-
Misc. allocated to supply (PVID Lease)	-	-	-	-	-	-	-
Property Taxes - SWC	-	-	-	-	-	-	-
Revenue Reserve used for Revenue Bonds - I&P	-	-	-	-	-	-	-
Annexation	-	-	-	-	-	-	-
Total Revenue Offsets	358,265	81,412	75,382	201,471	-	-	358,265
NET REVENUE REQUIREMENTS:		53,986,217	7,166,628	31,785,960	8,599,858	6,433,771	53,986,217

		Functionalization	Allocation Percentages					Total
			Fixed			Variable		
			Demand	Commodity	Standby	Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		365,938	-	365,938	-	-	-	365,938
Office of General Manager	Board of Directors	-	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-	-
Human Resources		642,824	-	642,824	-	-	-	642,824
Water Systems Operations	Office of the Manager	617,595	-	617,595	-	-	-	617,595
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	79,692	-	79,692	-	-	-	79,692
Water Systems Operations	Office of the Manager, Operations Support Services	124,873	-	124,873	-	-	-	124,873
Water Systems Operations	Operations Support Services	92,331	-	92,331	-	-	-	92,331
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	10,662,831	-	10,662,831	-	-	-	10,662,831
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	2,457,836	-	2,457,836	-	-	-	2,457,836
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	138,102	-	138,102	-	-	-	138,102
Water Systems Operations	Environmental Health & Safety Section	1,054,543	-	1,054,543	-	-	-	1,054,543
Water Systems Operations	OSS, Fleet Services Unit	354,072	-	354,072	-	-	-	354,072
Water Systems Operations	OSS, Power Support Unit	263,716	-	263,716	-	-	-	263,716
Water Systems Operations	Office of the Manager, Operations & Planning Section	55,520	-	55,520	-	-	-	55,520
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-	-
Sustainability, Resilience & Inr		-	-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-	-
Engineering Services		2,102,490	-	2,102,490	-	-	-	2,102,490
Business Technology	Administrative Services	-	-	-	-	-	-	-
Business Technology	Information Technology	1,779,292	-	1,779,292	-	-	-	1,779,292
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	-	-	-	-	-	-	-
Water Resources Managemen	Office of the Group Manager	-	-	-	-	-	-	-
Ethics Office		-	-	-	-	-	-	-
Real Property		-	-	-	-	-	-	-
General Counsel		-	-	-	-	-	-	-
General Auditor		-	-	-	-	-	-	-
Total Departmental O&M	-	20,791,656	-	20,791,656	-	-	-	20,791,656

		Functionalization	Allocation Percentages					% Total
			Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		414,466	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Office of General Manager	Board of Directors	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Bay Delta Initiatives	Bay Delta Initiatives	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Legislative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Media Communications Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Manager, External Affairs/Special Projects	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Conservation & Community Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Human Resources		816,890	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager	863,280	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Treatment Section	225,878	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations Support Services	167,695	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Support Services	101,784	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Desert Region / C&D CRA	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	System Operations Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Power Operations and Planning	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Planning & Programs Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Jensen	-	0.0%	63.8%	0.0%	36.2%	0.0%	100.0%
Water Systems Operations	Treatment Diemer	-	0.0%	56.0%	0.0%	44.0%	0.0%	100.0%
Water Systems Operations	Treatment Mills	-	0.0%	78.3%	0.0%	21.7%	0.0%	100.0%
Water Systems Operations	Treatment Skinner	-	0.0%	64.9%	0.0%	35.1%	0.0%	100.0%
Water Systems Operations	Treatment Weymouth	17,673,721	0.0%	63.8%	0.0%	36.2%	0.0%	100.0%
Water Systems Operations	Water Quality Section	2,969,569	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Eastern Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Western Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Manufacturing Services Unit	150,068	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Environmental Health & Safety Section	1,349,982	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Fleet Services Unit	576,957	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Power Support Unit	291,082	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations & Planning Section	62,603	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Security Team & Security Management	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Sustainability, Resilience & Innovation		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Diversity, Equity & Inclusion		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Equal Employment Opportunity		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Office of the Chief Financial Officer		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Office of Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Engineering Services		2,614,554	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Administrative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Information Technology	2,655,748	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Planning & Development	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Implementation	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Office of the Group Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Ethics Office		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Real Property		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
General Counsel		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
General Auditor		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Departmental O&M		30,934,275	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
GENERAL DISTRICT REQUIREMENTS								
State Water Contract*								
Supply - O&M		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Supply - Capital		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Power - O&M & Off-Aq Capital		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Power - Capital (less Off-Aq)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Transmission - Capital - Commodity, Demand, & Standby		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Transmission - O&M - Commodity only		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Supply		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Power		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Other		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total State Water Contract		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Colorado River Aqueduct Power Costs								
		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Supply Programs (cash funded portion)								
		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Demand Management (cash funded portion)								
Local Resources Program		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Future Supply Actions & Stormwater Pilot		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Conservation Program (cash funded portion)		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Demand Management Costs		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Capital Financing								
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
G.O. Bond Debt Service	16,269,954	31.8%	29.5%	38.7%	0.0%	0.0%	0.0%	100.0%
Debt Administration	107,920	31.8%	29.5%	38.7%	0.0%	0.0%	0.0%	100.0%
Bond Defeasance	148,412	31.8%	29.5%	38.7%	0.0%	0.0%	0.0%	100.0%
PAYGO	7,411,500	31.8%	29.5%	38.7%	0.0%	0.0%	0.0%	100.0%
Total Capital Financing Costs	23,937,786	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Other Operating Costs								
Operating Equipment	453,442	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Succession Planning Labor Pool	256,566	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%
OPEB/PERS Pre-Funding	-	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Total Other Operating Costs	710,008	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Increase/(Decrease) in Required Reserves								
		-	30.9%	31.5%	37.6%	0.0%	0.0%	100.0%
Total General District Requirements								
		24,647,794	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
REQUIREMENTS BEFORE OFFSETS:								
		55,582,069	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Revenue Offsets								
Property Taxes - MWD Portion of SWC GO Debt Service		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Property Taxes - MWD GO Debt Service	107,920	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Interest on Investments	261,475	31.8%	29.5%	38.7%	0.0%	0.0%	0.0%	100.0%
Hydro-Power Revenue	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
CRA Power Revenue	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Wadsworth Pumping Plant (DVL) Power Revenue	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to supply (PVID Lease)	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Property Taxes - SWC	-	31.8%	29.5%	38.7%	0.0%	0.0%	0.0%	100.0%
Revenue Reserve used for Revenue Bonds - I&P	-	31.8%	29.5%	38.7%	0.0%	0.0%	0.0%	100.0%
Annexation	-	31.8%	29.5%	38.7%	0.0%	0.0%	0.0%	100.0%
Total Revenue Offsets	369,395	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
NET REVENUE REQUIREMENTS:								
-		55,212,675	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

	Functionalization	Allocation Percentages					Total
		Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M							
Group	Item						
Office of General Manager		414,466	-	414,466	-	-	414,466
Office of General Manager	Board of Directors	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-
Human Resources		816,890	-	816,890	-	-	816,890
Water Systems Operations	Office of the Manager	863,280	-	863,280	-	-	863,280
Water Systems Operations	Office of the Manager, Conveyance & Distribution S	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	225,878	-	225,878	-	-	225,878
Water Systems Operations	Office of the Manager, Operations Support Services	167,695	-	167,695	-	-	167,695
Water Systems Operations	Operations Support Services	101,784	-	101,784	-	-	101,784
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	17,673,721	-	11,272,501	6,401,220	-	17,673,721
Water Systems Operations	Water Quality Section	2,969,569	-	2,969,569	-	-	2,969,569
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	150,068	-	150,068	-	-	150,068
Water Systems Operations	Environmental Health & Safety Section	1,349,982	-	1,349,982	-	-	1,349,982
Water Systems Operations	OSS, Fleet Services Unit	576,957	-	576,957	-	-	576,957
Water Systems Operations	OSS, Power Support Unit	291,082	-	291,082	-	-	291,082
Water Systems Operations	Office of the Manager, Operations & Planning Secti	62,603	-	62,603	-	-	62,603
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-
Sustainability, Resilience & Inn		-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-
Engineering Services		2,614,554	-	2,614,554	-	-	2,614,554
Business Technology	Administrative Services	-	-	-	-	-	-
Business Technology	Information Technology	2,655,748	-	2,655,748	-	-	2,655,748
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	-	-	-	-	-	-
Water Resources Managemen	Office of the Group Manager	-	-	-	-	-	-
Ethics Office		-	-	-	-	-	-
Real Property		-	-	-	-	-	-
General Counsel		-	-	-	-	-	-
General Auditor		-	-	-	-	-	-
Total Departmental O&M		30,934,275	-	24,533,056	6,401,220	-	30,934,275
GENERAL DISTRICT REQUIREMENTS		-	-	-	-	-	-
State Water Contract*		-	-	-	-	-	-
Supply - O&M		-	-	-	-	-	-
Supply - Capital		-	-	-	-	-	-
Power - O&M & Off-Aq Capital		-	-	-	-	-	-
Power - Capital (less Off-Aq)		-	-	-	-	-	-
Transmission - Capital - Commodity, Demand, & Standby		-	-	-	-	-	-
Transmission - O&M - Commodity only		-	-	-	-	-	-
Delta Conveyance - Supply		-	-	-	-	-	-
Delta Conveyance - Power		-	-	-	-	-	-
Delta Conveyance - Other		-	-	-	-	-	-
Total State Water Contract		-	-	-	-	-	-
Colorado River Aqueduct Power Costs		-	-	-	-	-	-
Supply Programs (cash funded portion)		-	-	-	-	-	-
Demand Management (cash funded portion)		-	-	-	-	-	-
Local Resources Program		-	-	-	-	-	-
Future Supply Actions & Stormwater Pilot		-	-	-	-	-	-
Conservation Program (cash funded portion)		-	-	-	-	-	-
Total Demand Management Costs		-	-	-	-	-	-
Capital Financing		-	-	-	-	-	-
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		16,269,954	5,181,133	4,797,346	6,291,475	-	16,269,954
G.O. Bond Debt Service		107,920	34,367	31,821	41,732	-	107,920
Debt Administration		148,412	47,262	43,761	57,390	-	148,412
Bond Defeasance		-	-	-	-	-	-
PAYGO		7,411,500	2,360,177	2,185,349	2,865,974	-	7,411,500
Total Capital Financing Costs		23,937,786	7,622,938	7,058,276	9,256,571	-	23,937,786
Other Operating Costs		-	-	-	-	-	-
Operating Equipment		453,442	-	453,442	-	-	453,442
Succession Planning Labor Pool		256,566	-	256,566	-	-	256,566
OPEB/PERS Pre-Funding		-	-	-	-	-	-
Total Other Operating Costs		710,008	-	710,008	-	-	710,008
Increase/(Decrease) in Required Reserves		-	-	-	-	-	-
Total General District Requirements		24,647,794	7,622,938	7,768,285	9,256,571	-	24,647,794
REQUIREMENTS BEFORE OFFSETS:		55,582,069	7,622,938	32,301,340	9,256,571	6,401,220	55,582,069
Revenue Offsets		-	-	-	-	-	-
Property Taxes - MWD Portion of SWC GO Debt Service		-	-	-	-	-	-
Property Taxes - MWD GO Debt Service		107,920	-	-	107,920	-	107,920
Interest on Investments		261,475	83,266	77,098	101,111	-	261,475
Hydro-Power Revenue		-	-	-	-	-	-
CRA Power Revenue		-	-	-	-	-	-
Wadsworth Pumping Plant (DVL) Power Revenue		-	-	-	-	-	-
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)		-	-	-	-	-	-
Misc. allocated to supply (PVID Lease)		-	-	-	-	-	-
Property Taxes - SWC		-	-	-	-	-	-
Revenue Reserve used for Revenue Bonds - I&P		-	-	-	-	-	-
Annexation		-	-	-	-	-	-
Total Revenue Offsets		369,395	83,266	77,098	209,030	-	369,395
NET REVENUE REQUIREMENTS:		55,212,675	7,539,672	32,224,242	9,047,541	6,401,220	55,212,675

		Functionalization	Allocation Percentages					Total
			Fixed			Variable		
			Demand	Commodity	Standby	Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		366,637	-	366,637	-	-	-	366,637
Office of General Manager	Board of Directors	-	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-	-
Human Resources		644,052	-	644,052	-	-	-	644,052
Water Systems Operations	Office of the Manager	635,034	-	635,034	-	-	-	635,034
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	82,856	-	82,856	-	-	-	82,856
Water Systems Operations	Office of the Manager, Operations Support Services	128,399	-	128,399	-	-	-	128,399
Water Systems Operations	Operations Support Services	92,331	-	92,331	-	-	-	92,331
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	11,086,136	-	11,086,136	-	-	-	11,086,136
Water Systems Operations	Water Quality Section	2,457,836	-	2,457,836	-	-	-	2,457,836
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	138,102	-	138,102	-	-	-	138,102
Water Systems Operations	Environmental Health & Safety Section	1,054,543	-	1,054,543	-	-	-	1,054,543
Water Systems Operations	OSS, Fleet Services Unit	354,072	-	354,072	-	-	-	354,072
Water Systems Operations	OSS, Power Support Unit	263,716	-	263,716	-	-	-	263,716
Water Systems Operations	Office of the Manager, Operations & Planning Section	57,088	-	57,088	-	-	-	57,088
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-	-
Sustainability, Resilience & Inr		-	-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-	-
Engineering Services		2,211,239	-	2,211,239	-	-	-	2,211,239
Business Technology	Administrative Services	-	-	-	-	-	-	-
Business Technology	Information Technology	1,782,690	-	1,782,690	-	-	-	1,782,690
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	-	-	-	-	-	-	-
Water Resources Managemen	Office of the Group Manager	-	-	-	-	-	-	-
Ethics Office		-	-	-	-	-	-	-
Real Property		-	-	-	-	-	-	-
General Counsel		-	-	-	-	-	-	-
General Auditor		-	-	-	-	-	-	-
Total Departmental O&M	-	21,354,731	-	21,354,731	-	-	-	21,354,731

		Functionalization	Allocation Percentages					% Total
			Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		439,901	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Office of General Manager	Board of Directors	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Bay Delta Initiatives	Bay Delta Initiatives	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Legislative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Media Communications Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Manager, External Affairs/Special Projects	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Conservation & Community Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Human Resources		867,020	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager	816,043	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Treatment Section	208,693	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations Support Services	158,519	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Support Services	101,784	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Desert Region / C&D CRA	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	System Operations Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Power Operations and Planning	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Planning & Programs Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Jensen	-	0.0%	63.8%	0.0%	36.2%	0.0%	100.0%
Water Systems Operations	Treatment Diemer	18,872,408	0.0%	56.0%	0.0%	44.0%	0.0%	100.0%
Water Systems Operations	Treatment Mills	-	0.0%	78.3%	0.0%	21.7%	0.0%	100.0%
Water Systems Operations	Treatment Skinner	-	0.0%	64.9%	0.0%	35.1%	0.0%	100.0%
Water Systems Operations	Treatment Weymouth	-	0.0%	63.8%	0.0%	36.2%	0.0%	100.0%
Water Systems Operations	Water Quality Section	2,969,569	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Eastern Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Western Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Manufacturing Services Unit	150,068	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Environmental Health & Safety Section	1,349,982	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Fleet Services Unit	576,957	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Power Support Unit	291,082	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations & Planning Section	59,177	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Security Team & Security Management	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Sustainability, Resilience & Innovation		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Diversity, Equity & Inclusion		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Equal Employment Opportunity		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Office of the Chief Financial Officer		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Office of Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Engineering Services		3,152,704	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Administrative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Information Technology	2,818,725	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Planning & Development	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Implementation	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Office of the Group Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Ethics Office		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Real Property		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
General Counsel		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
General Auditor		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Departmental O&M		32,832,631	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
GENERAL DISTRICT REQUIREMENTS								
State Water Contract*								
Supply - O&M		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Supply - Capital		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Power - O&M & Off-Aq Capital		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Power - Capital (less Off-Aq)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Transmission - Capital - Commodity, Demand, & Standby		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Transmission - O&M - Commodity only		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Supply		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Power		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Other		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total State Water Contract		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Colorado River Aqueduct Power Costs								
		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Supply Programs (cash funded portion)								
		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Demand Management (cash funded portion)								
Local Resources Program		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Future Supply Actions & Stormwater Pilot		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Conservation Program (cash funded portion)		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Demand Management Costs		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Capital Financing								
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
G.O. Bond Debt Service		19,618,779	31.8%	29.5%	38.7%	0.0%	0.0%	100.0%
Debt Administration		130,133	31.8%	29.5%	38.7%	0.0%	0.0%	100.0%
Bond Defeasance		178,960	31.8%	29.5%	38.7%	0.0%	0.0%	100.0%
PAYGO		-	31.8%	29.5%	38.7%	0.0%	0.0%	100.0%
Total Capital Financing Costs		8,937,000	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
		28,864,871	0.0%					0.0%
Other Operating Costs								
Operating Equipment		481,269	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Succession Planning Labor Pool		272,311	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
OPEB/PERS Pre-Funding		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Other Operating Costs		753,580	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Increase/(Decrease) in Required Reserves								
		-	31.0%	31.3%	37.7%	0.0%	0.0%	100.0%
Total General District Requirements								
		29,618,451	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
REQUIREMENTS BEFORE OFFSETS:								
		62,451,082	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Revenue Offsets								
Property Taxes - MWD Portion of SWC GO Debt Service		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Property Taxes - MWD GO Debt Service		130,133	0.0%	0.0%	100.0%	0.0%	0.0%	100.0%
Interest on Investments		293,789	31.8%	29.5%	38.7%	0.0%	0.0%	100.0%
Hydro-Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
CRA Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Wadsworth Pumping Plant (DVL) Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to supply (PVID Lease)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Property Taxes - SWC		-	31.8%	29.5%	38.7%	0.0%	0.0%	100.0%
Revenue Reserve used for Revenue Bonds - I&P		-	31.8%	29.5%	38.7%	0.0%	0.0%	100.0%
Annexation		-	31.8%	29.5%	38.7%	0.0%	0.0%	100.0%
Total Revenue Offsets		423,922	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
NET REVENUE REQUIREMENTS:								
-		62,027,160	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

	Functionalization	Allocation Percentages					Total
		Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M							
Group	Item						
Office of General Manager		439,901	-	439,901	-	-	439,901
Office of General Manager	Board of Directors	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-
Human Resources		867,020	-	867,020	-	-	867,020
Water Systems Operations	Office of the Manager	816,043	-	816,043	-	-	816,043
Water Systems Operations	Office of the Manager, Conveyance & Distribution S	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	208,693	-	208,693	-	-	208,693
Water Systems Operations	Office of the Manager, Operations Support Services	158,519	-	158,519	-	-	158,519
Water Systems Operations	Operations Support Services	101,784	-	101,784	-	-	101,784
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	18,872,408	-	10,567,402	8,305,006	-	18,872,408
Water Systems Operations	Treatment Mills	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	2,969,569	-	2,969,569	-	-	2,969,569
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	150,068	-	150,068	-	-	150,068
Water Systems Operations	Environmental Health & Safety Section	1,349,982	-	1,349,982	-	-	1,349,982
Water Systems Operations	OSS, Fleet Services Unit	576,957	-	576,957	-	-	576,957
Water Systems Operations	OSS, Power Support Unit	291,082	-	291,082	-	-	291,082
Water Systems Operations	Office of the Manager, Operations & Planning Secti	59,177	-	59,177	-	-	59,177
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-
Sustainability, Resilience & Inn		-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-
Engineering Services		3,152,704	-	3,152,704	-	-	3,152,704
Business Technology	Administrative Services	-	-	-	-	-	-
Business Technology	Information Technology	2,818,725	-	2,818,725	-	-	2,818,725
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	-	-	-	-	-	-
Water Resources Managemen	Office of the Group Manager	-	-	-	-	-	-
Ethics Office		-	-	-	-	-	-
Real Property		-	-	-	-	-	-
General Counsel		-	-	-	-	-	-
General Auditor		-	-	-	-	-	-
Total Departmental O&M		32,832,631	-	24,527,625	8,305,006	-	32,832,631
GENERAL DISTRICT REQUIREMENTS		-	-	-	-	-	-
State Water Contract*		-	-	-	-	-	-
Supply - O&M		-	-	-	-	-	-
Supply - Capital		-	-	-	-	-	-
Power - O&M & Off-Aq Capital		-	-	-	-	-	-
Power - Capital (less Off-Aq)		-	-	-	-	-	-
Transmission - Capital - Commodity, Demand, & Standby		-	-	-	-	-	-
Transmission - O&M - Commodity only		-	-	-	-	-	-
Delta Conveyance - Supply		-	-	-	-	-	-
Delta Conveyance - Power		-	-	-	-	-	-
Delta Conveyance - Other		-	-	-	-	-	-
Total State Water Contract		-	-	-	-	-	-
Colorado River Aqueduct Power Costs		-	-	-	-	-	-
Supply Programs (cash funded portion)		-	-	-	-	-	-
Demand Management (cash funded portion)		-	-	-	-	-	-
Local Resources Program		-	-	-	-	-	-
Future Supply Actions & Stormwater Pilot		-	-	-	-	-	-
Conservation Program (cash funded portion)		-	-	-	-	-	-
Total Demand Management Costs		-	-	-	-	-	-
Capital Financing		-	-	-	-	-	-
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		19,618,779	6,247,560	5,784,777	7,586,442	-	19,618,779
G.O. Bond Debt Service		130,133	41,440	38,371	50,321	-	130,133
Debt Administration		178,960	56,989	52,768	69,202	-	178,960
Bond Defeasance		-	-	-	-	-	-
PAYGO		8,937,000	2,845,969	2,635,157	3,455,874	-	8,937,000
Total Capital Financing Costs		28,864,871	9,191,959	8,511,073	11,161,840	-	28,864,871
Other Operating Costs		-	-	-	-	-	-
Operating Equipment		481,269	-	481,269	-	-	481,269
Succession Planning Labor Pool		272,311	-	272,311	-	-	272,311
OPEB/PERS Pre-Funding		-	-	-	-	-	-
Total Other Operating Costs		753,580	-	753,580	-	-	753,580
Increase/(Decrease) in Required Reserves		-	-	-	-	-	-
Total General District Requirements		29,618,451	9,191,959	9,264,653	11,161,840	-	29,618,451
REQUIREMENTS BEFORE OFFSETS:		62,451,082	9,191,959	33,792,278	11,161,840	8,305,006	62,451,082
Revenue Offsets		-	-	-	-	-	-
Property Taxes - MWD Portion of SWC GO Debt Service		-	-	-	-	-	-
Property Taxes - MWD GO Debt Service		130,133	-	-	130,133	-	130,133
Interest on Investments		293,789	93,557	86,626	113,606	-	293,789
Hydro-Power Revenue		-	-	-	-	-	-
CRA Power Revenue		-	-	-	-	-	-
Wadsworth Pumping Plant (DVL) Power Revenue		-	-	-	-	-	-
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)		-	-	-	-	-	-
Misc. allocated to supply (PVID Lease)		-	-	-	-	-	-
Property Taxes - SWC		-	-	-	-	-	-
Revenue Reserve used for Revenue Bonds - I&P		-	-	-	-	-	-
Annexation		-	-	-	-	-	-
Total Revenue Offsets		423,922	93,557	86,626	243,739	-	423,922
NET REVENUE REQUIREMENTS:		62,027,160	9,098,402	33,705,651	10,918,101	8,305,006	62,027,160

		Functionalization	Allocation Percentages					Total
			Fixed			Variable		
			Demand	Commodity	Standby	Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		389,136	-	389,136	-	-	-	389,136
Office of General Manager	Board of Directors	-	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-	-
Human Resources		683,575	-	683,575	-	-	-	683,575
Water Systems Operations	Office of the Manager	600,286	-	600,286	-	-	-	600,286
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	76,552	-	76,552	-	-	-	76,552
Water Systems Operations	Office of the Manager, Operations Support Services	121,373	-	121,373	-	-	-	121,373
Water Systems Operations	Operations Support Services	92,331	-	92,331	-	-	-	92,331
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	10,242,693	-	10,242,693	-	-	-	10,242,693
Water Systems Operations	Treatment Mills	-	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	2,457,836	-	2,457,836	-	-	-	2,457,836
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	138,102	-	138,102	-	-	-	138,102
Water Systems Operations	Environmental Health & Safety Section	1,054,543	-	1,054,543	-	-	-	1,054,543
Water Systems Operations	OSS, Fleet Services Unit	354,072	-	354,072	-	-	-	354,072
Water Systems Operations	OSS, Power Support Unit	263,716	-	263,716	-	-	-	263,716
Water Systems Operations	Office of the Manager, Operations & Planning Section	53,964	-	53,964	-	-	-	53,964
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-	-
Sustainability, Resilience & Inr		-	-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-	-
Engineering Services		2,666,376	-	2,666,376	-	-	-	2,666,376
Business Technology	Administrative Services	-	-	-	-	-	-	-
Business Technology	Information Technology	1,892,089	-	1,892,089	-	-	-	1,892,089
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	-	-	-	-	-	-	-
Water Resources Managemen	Office of the Group Manager	-	-	-	-	-	-	-
Ethics Office		-	-	-	-	-	-	-
Real Property		-	-	-	-	-	-	-
General Counsel		-	-	-	-	-	-	-
General Auditor		-	-	-	-	-	-	-
Total Departmental O&M	-	21,086,646	-	21,086,646	-	-	-	21,086,646

		Functionalization	Allocation Percentages				% Total
			Demand	Fixed Commodity	Standby	Variable Commodity	
Departmental O&M							
Group	Item						
Office of General Manager		312,659	0.0%	100.0%	0.0%	0.0%	100.0%
Office of General Manager	Board of Directors	-	0.0%	100.0%	0.0%	0.0%	100.0%
Bay Delta Initiatives	Bay Delta Initiatives	-	0.0%	100.0%	0.0%	0.0%	100.0%
External Affairs	Legislative Services	-	0.0%	100.0%	0.0%	0.0%	100.0%
External Affairs	Media Communications Services	-	0.0%	100.0%	0.0%	0.0%	100.0%
External Affairs	Manager, External Affairs/Special Projects	-	0.0%	100.0%	0.0%	0.0%	100.0%
External Affairs	Conservation & Community Services	-	0.0%	100.0%	0.0%	0.0%	100.0%
Human Resources		616,233	0.0%	100.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager	787,667	0.0%	100.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	0.0%	100.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Treatment Section	198,370	0.0%	100.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations Support Services	153,007	0.0%	100.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Support Services	101,784	0.0%	100.0%	0.0%	0.0%	100.0%
Water Systems Operations	Desert Region / C&D CRA	-	0.0%	100.0%	0.0%	0.0%	100.0%
Water Systems Operations	System Operations Unit	-	0.0%	100.0%	0.0%	0.0%	100.0%
Water Systems Operations	Power Operations and Planning	-	0.0%	100.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Planning & Programs Unit	-	0.0%	100.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Jensen	-	0.0%	63.8%	0.0%	36.2%	100.0%
Water Systems Operations	Treatment Diemer	-	0.0%	56.0%	0.0%	44.0%	100.0%
Water Systems Operations	Treatment Mills	12,953,470	0.0%	78.3%	0.0%	21.7%	100.0%
Water Systems Operations	Treatment Skinner	-	0.0%	64.9%	0.0%	35.1%	100.0%
Water Systems Operations	Treatment Weymouth	-	0.0%	63.8%	0.0%	36.2%	100.0%
Water Systems Operations	Water Quality Section	2,969,569	0.0%	100.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Eastern Unit	-	0.0%	100.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Western Unit	-	0.0%	100.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Manufacturing Services Unit	150,068	0.0%	100.0%	0.0%	0.0%	100.0%
Water Systems Operations	Environmental Health & Safety Section	1,349,982	0.0%	100.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Fleet Services Unit	576,957	0.0%	100.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Power Support Unit	291,082	0.0%	100.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations & Planning Section	57,119	0.0%	100.0%	0.0%	0.0%	100.0%
Water Systems Operations	Security Team & Security Management	-	0.0%	100.0%	0.0%	0.0%	100.0%
Sustainability, Resilience & Innovation		-	0.0%	100.0%	0.0%	0.0%	100.0%
Diversity, Equity & Inclusion		-	0.0%	100.0%	0.0%	0.0%	100.0%
Equal Employment Opportunity		-	0.0%	100.0%	0.0%	0.0%	100.0%
Office of the Chief Financial Officer		-	0.0%	100.0%	0.0%	0.0%	100.0%
Business Technology	Office of Manager	-	0.0%	100.0%	0.0%	0.0%	100.0%
Engineering Services		814,369	0.0%	100.0%	0.0%	0.0%	100.0%
Business Technology	Administrative Services	-	0.0%	100.0%	0.0%	0.0%	100.0%
Business Technology	Information Technology	2,003,404	0.0%	100.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Planning & Development	-	0.0%	100.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Implementation	-	0.0%	100.0%	0.0%	0.0%	100.0%
Water Resources Management	Office of the Group Manager	-	0.0%	100.0%	0.0%	0.0%	100.0%
Ethics Office		-	0.0%	100.0%	0.0%	0.0%	100.0%
Real Property		-	0.0%	100.0%	0.0%	0.0%	100.0%
General Counsel		-	0.0%	100.0%	0.0%	0.0%	100.0%
General Auditor		-	0.0%	100.0%	0.0%	0.0%	100.0%
Total Departmental O&M		23,335,741	0.0%	0.0%	0.0%	0.0%	0.0%
GENERAL DISTRICT REQUIREMENTS							
State Water Contract*							
Supply - O&M		-	0.0%	0.0%	0.0%	0.0%	0.0%
Supply - Capital		-	0.0%	0.0%	0.0%	0.0%	0.0%
Power - O&M & Off-Aq Capital		-	0.0%	0.0%	0.0%	0.0%	0.0%
Power - Capital (less Off-Aq)		-	0.0%	0.0%	0.0%	0.0%	0.0%
Transmission - Capital - Commodity, Demand, & Standby		-	0.0%	0.0%	0.0%	0.0%	0.0%
Transmission - O&M - Commodity only		-	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Supply		-	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Power		-	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Other		-	0.0%	0.0%	0.0%	0.0%	0.0%
Total State Water Contract		-	0.0%	0.0%	0.0%	0.0%	0.0%
Colorado River Aqueduct Power Costs							
		-	0.0%	0.0%	0.0%	0.0%	0.0%
Supply Programs (cash funded portion)							
		-	0.0%	0.0%	0.0%	0.0%	0.0%
Demand Management (cash funded portion)							
Local Resources Program		-	0.0%	0.0%	0.0%	0.0%	0.0%
Future Supply Actions & Stormwater Pilot		-	0.0%	100.0%	0.0%	0.0%	100.0%
Conservation Program (cash funded portion)		-	0.0%	100.0%	0.0%	0.0%	100.0%
Total Demand Management Costs		-	0.0%	0.0%	0.0%	0.0%	0.0%
Capital Financing							
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		-	0.0%	0.0%	0.0%	0.0%	0.0%
G.O. Bond Debt Service	5,067,691	31.8%	29.5%	38.7%	0.0%	0.0%	100.0%
Debt Administration	33,614	31.8%	29.5%	38.7%	0.0%	0.0%	100.0%
Bond Defeasance	46,227	31.8%	29.5%	38.7%	0.0%	0.0%	100.0%
PAYGO	-	31.8%	29.5%	38.7%	0.0%	0.0%	100.0%
Total Capital Financing Costs	2,308,500	31.8%	29.5%	38.7%	0.0%	0.0%	100.0%
	7,456,032	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Other Operating Costs							
Operating Equipment	342,061	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Succession Planning Labor Pool	193,544	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
OPEB/PERS Pre-Funding	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Other Operating Costs	535,606	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Increase/(Decrease) in Required Reserves							
	-	29.7%	34.2%	36.1%	0.0%	0.0%	100.0%
Total General District Requirements							
	7,991,637	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
REQUIREMENTS BEFORE OFFSETS:							
	31,327,378	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Revenue Offsets							
Property Taxes - MWD Portion of SWC GO Debt Service	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Property Taxes - MWD GO Debt Service	33,614	0.0%	0.0%	100.0%	0.0%	0.0%	100.0%
Interest on Investments	147,374	31.8%	29.5%	38.7%	0.0%	0.0%	100.0%
Hydro-Power Revenue	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
CRA Power Revenue	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Wadsworth Pumping Plant (DVL) Power Revenue	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to supply (PVID Lease)	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Property Taxes - SWC	-	31.8%	29.5%	38.7%	0.0%	0.0%	100.0%
Revenue Reserve used for Revenue Bonds - I&P	-	31.8%	29.5%	38.7%	0.0%	0.0%	100.0%
Annexation	-	31.8%	29.5%	38.7%	0.0%	0.0%	100.0%
Total Revenue Offsets	180,988	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
NET REVENUE REQUIREMENTS:							
-	31,146,390	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

	Functionalization	Allocation Percentages					Total
		Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M							
Group	Item						
Office of General Manager		312,659	-	312,659	-	-	312,659
Office of General Manager	Board of Directors	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-
Human Resources		616,233	-	616,233	-	-	616,233
Water Systems Operations	Office of the Manager	787,667	-	787,667	-	-	787,667
Water Systems Operations	Office of the Manager, Conveyance & Distribution S	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	198,370	-	198,370	-	-	198,370
Water Systems Operations	Office of the Manager, Operations Support Services	153,007	-	153,007	-	-	153,007
Water Systems Operations	Operations Support Services	101,784	-	101,784	-	-	101,784
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	12,953,470	-	10,146,852	2,806,618	-	12,953,470
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	2,969,569	-	2,969,569	-	-	2,969,569
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	150,068	-	150,068	-	-	150,068
Water Systems Operations	Environmental Health & Safety Section	1,349,982	-	1,349,982	-	-	1,349,982
Water Systems Operations	OSS, Fleet Services Unit	576,957	-	576,957	-	-	576,957
Water Systems Operations	OSS, Power Support Unit	291,082	-	291,082	-	-	291,082
Water Systems Operations	Office of the Manager, Operations & Planning Secti	57,119	-	57,119	-	-	57,119
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-
Sustainability, Resilience & Inn		-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-
Engineering Services		814,369	-	814,369	-	-	814,369
Business Technology	Administrative Services	-	-	-	-	-	-
Business Technology	Information Technology	2,003,404	-	2,003,404	-	-	2,003,404
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	-	-	-	-	-	-
Water Resources Managemen	Office of the Group Manager	-	-	-	-	-	-
Ethics Office		-	-	-	-	-	-
Real Property		-	-	-	-	-	-
General Counsel		-	-	-	-	-	-
General Auditor		-	-	-	-	-	-
Total Departmental O&M		23,335,741	-	20,529,123	2,806,618	-	23,335,741
GENERAL DISTRICT REQUIREMENTS		-	-	-	-	-	-
State Water Contract*		-	-	-	-	-	-
Supply - O&M		-	-	-	-	-	-
Supply - Capital		-	-	-	-	-	-
Power - O&M & Off-Aq Capital		-	-	-	-	-	-
Power - Capital (less Off-Aq)		-	-	-	-	-	-
Transmission - Capital - Commodity, Demand, & Standby		-	-	-	-	-	-
Transmission - O&M - Commodity only		-	-	-	-	-	-
Delta Conveyance - Supply		-	-	-	-	-	-
Delta Conveyance - Power		-	-	-	-	-	-
Delta Conveyance - Other		-	-	-	-	-	-
Total State Water Contract		-	-	-	-	-	-
Colorado River Aqueduct Power Costs		-	-	-	-	-	-
Supply Programs (cash funded portion)		-	-	-	-	-	-
Demand Management (cash funded portion)		-	-	-	-	-	-
Local Resources Program		-	-	-	-	-	-
Future Supply Actions & Stormwater Pilot		-	-	-	-	-	-
Conservation Program (cash funded portion)		-	-	-	-	-	-
Total Demand Management Costs		-	-	-	-	-	-
Capital Financing		-	-	-	-	-	-
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		5,067,691	1,613,796	1,494,255	1,959,640	-	5,067,691
G.O. Bond Debt Service		33,614	10,704	9,911	12,998	-	33,614
Debt Administration		46,227	14,721	13,630	17,876	-	46,227
Bond Defeasance		-	-	-	-	-	-
PAYGO		2,308,500	735,137	680,682	892,680	-	2,308,500
Total Capital Financing Costs		7,456,032	2,374,358	2,198,480	2,883,194	-	7,456,032
Other Operating Costs		-	-	-	-	-	-
Operating Equipment		342,061	-	342,061	-	-	342,061
Succession Planning Labor Pool		193,544	-	193,544	-	-	193,544
OPEB/PERS Pre-Funding		-	-	-	-	-	-
Total Other Operating Costs		535,606	-	535,606	-	-	535,606
Increase/(Decrease) in Required Reserves		-	-	-	-	-	-
Total General District Requirements		7,991,637	2,374,358	2,734,085	2,883,194	-	7,991,637
REQUIREMENTS BEFORE OFFSETS:		31,327,378	2,374,358	23,263,208	2,883,194	2,806,618	31,327,378
Revenue Offsets		-	-	-	-	-	-
Property Taxes - MWD Portion of SWC GO Debt Service		-	-	-	-	-	-
Property Taxes - MWD GO Debt Service		33,614	-	-	33,614	-	33,614
Interest on Investments		147,374	46,931	43,454	56,988	-	147,374
Hydro-Power Revenue		-	-	-	-	-	-
CRA Power Revenue		-	-	-	-	-	-
Wadsworth Pumping Plant (DVL) Power Revenue		-	-	-	-	-	-
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)		-	-	-	-	-	-
Misc. allocated to supply (PVID Lease)		-	-	-	-	-	-
Property Taxes - SWC		-	-	-	-	-	-
Revenue Reserve used for Revenue Bonds - I&P		-	-	-	-	-	-
Annexation		-	-	-	-	-	-
Total Revenue Offsets		180,988	46,931	43,454	90,603	-	180,988
NET REVENUE REQUIREMENTS:		31,146,390	2,327,427	23,219,754	2,792,592	2,806,618	31,146,390

		Functionalization	Allocation Percentages					Total
			Fixed			Variable		
			Demand	Commodity	Standby	Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		276,578	-	276,578	-	-	-	276,578
Office of General Manager	Board of Directors		-		-	-	-	
Bay Delta Initiatives	Bay Delta Initiatives		-		-	-	-	
External Affairs	Legislative Services		-		-	-	-	
External Affairs	Media Communications Services		-		-	-	-	
External Affairs	Manager, External Affairs/Special Projects		-		-	-	-	
External Affairs	Conservation & Community Services		-		-	-	-	
Human Resources		485,850	-	485,850	-	-	-	485,850
Water Systems Operations	Office of the Manager	579,413	-	579,413	-	-	-	579,413
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section		-		-	-	-	
Water Systems Operations	Office of the Manager, Treatment Section	72,766	-	72,766	-	-	-	72,766
Water Systems Operations	Office of the Manager, Operations Support Services	117,153	-	117,153	-	-	-	117,153
Water Systems Operations	Operations Support Services	92,331	-	92,331	-	-	-	92,331
Water Systems Operations	Desert Region / C&D CRA		-		-	-	-	
Water Systems Operations	System Operations Unit		-		-	-	-	
Water Systems Operations	Power Operations and Planning		-		-	-	-	
Water Systems Operations	Operations Planning & Programs Unit		-		-	-	-	
Water Systems Operations	Treatment Jensen		-		-	-	-	
Water Systems Operations	Treatment Diemer		-		-	-	-	
Water Systems Operations	Treatment Mills	9,736,032	-	9,736,032	-	-	-	9,736,032
Water Systems Operations	Treatment Skinner		-		-	-	-	
Water Systems Operations	Treatment Weymouth		-		-	-	-	
Water Systems Operations	Water Quality Section	2,457,836	-	2,457,836	-	-	-	2,457,836
Water Systems Operations	C&D, Eastern Unit		-		-	-	-	
Water Systems Operations	C&D, Western Unit		-		-	-	-	
Water Systems Operations	OSS, Manufacturing Services Unit	138,102	-	138,102	-	-	-	138,102
Water Systems Operations	Environmental Health & Safety Section	1,054,543	-	1,054,543	-	-	-	1,054,543
Water Systems Operations	OSS, Fleet Services Unit	354,072	-	354,072	-	-	-	354,072
Water Systems Operations	OSS, Power Support Unit	263,716	-	263,716	-	-	-	263,716
Water Systems Operations	Office of the Manager, Operations & Planning Section	52,088	-	52,088	-	-	-	52,088
Water Systems Operations	Security Team & Security Management		-		-	-	-	
Sustainability, Resilience & Inr			-		-	-	-	
Diversity, Equity & Inclusion			-		-	-	-	
Equal Employment Opportunity			-		-	-	-	
Office of the Chief Financial O			-		-	-	-	
Business Technology	Office of Manager		-		-	-	-	
Engineering Services		688,747	-	688,747	-	-	-	688,747
Business Technology	Administrative Services		-		-	-	-	
Business Technology	Information Technology	1,344,800	-	1,344,800	-	-	-	1,344,800
Water Resources Managemen	Resource Planning & Development		-		-	-	-	
Water Resources Managemen	Resource Implementation		-		-	-	-	
Water Resources Managemen	Office of the Group Manager		-		-	-	-	
Ethics Office			-		-	-	-	
Real Property			-		-	-	-	
General Counsel			-		-	-	-	
General Auditor			-		-	-	-	
Total Departmental O&M	-	17,714,026	-	17,714,026	-	-	-	17,714,026

		Functionalization	Allocation Percentages					Total
			Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		373,122	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Office of General Manager	Board of Directors	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Bay Delta Initiatives	Bay Delta Initiatives	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Legislative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Media Communications Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Manager, External Affairs/Special Projects	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Conservation & Community Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Human Resources		735,403	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager	774,762	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Treatment Section	193,675	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations Support Services	150,500	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Support Services	101,784	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Desert Region / C&D CRA	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	System Operations Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Power Operations and Planning	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Planning & Programs Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Jensen	-	0.0%	63.8%	0.0%	36.2%	0.0%	100.0%
Water Systems Operations	Treatment Diemer	-	0.0%	56.0%	0.0%	44.0%	0.0%	100.0%
Water Systems Operations	Treatment Mills	-	0.0%	78.3%	0.0%	21.7%	0.0%	100.0%
Water Systems Operations	Treatment Skinner	15,110,504	0.0%	64.9%	0.0%	35.1%	0.0%	100.0%
Water Systems Operations	Treatment Weymouth	-	0.0%	63.8%	0.0%	36.2%	0.0%	100.0%
Water Systems Operations	Water Quality Section	2,969,569	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Eastern Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Western Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Manufacturing Services Unit	150,068	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Environmental Health & Safety Section	1,349,982	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Fleet Services Unit	576,957	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Power Support Unit	291,082	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations & Planning Section	56,184	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Security Team & Security Management	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Sustainability, Resilience & Innovation		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Diversity, Equity & Inclusion		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Equal Employment Opportunity		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Office of the Chief Financial Officer		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Office of Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Engineering Services		2,624,079	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Administrative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Information Technology	2,390,831	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Planning & Development	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Implementation	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Office of the Group Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Ethics Office		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Real Property		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
General Counsel		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
General Auditor		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Departmental O&M		27,848,501	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
GENERAL DISTRICT REQUIREMENTS								
State Water Contract*								
Supply - O&M		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Supply - Capital		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Power - O&M & Off-Aq Capital		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Power - Capital (less Off-Aq)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Transmission - Capital - Commodity, Demand, & Standby		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Transmission - O&M - Commodity only		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Supply		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Power		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Other		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total State Water Contract		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Colorado River Aqueduct Power Costs		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Supply Programs (cash funded portion)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Demand Management (cash funded portion)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Local Resources Program		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Future Supply Actions & Stormwater Pilot		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Conservation Program (cash funded portion)		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Demand Management Costs		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Capital Financing		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
G.O. Bond Debt Service	16,329,225	31.8%	29.5%	38.7%	0.0%	0.0%	0.0%	100.0%
Debt Administration	108,313	31.8%	29.5%	38.7%	0.0%	0.0%	0.0%	100.0%
Bond Defeasance	148,953	31.8%	29.5%	38.7%	0.0%	0.0%	0.0%	100.0%
PAYGO	-	31.8%	29.5%	38.7%	0.0%	0.0%	0.0%	100.0%
Total Capital Financing Costs	7,438,500	31.8%	29.5%	38.7%	0.0%	0.0%	0.0%	100.0%
	24,024,991	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Other Operating Costs								
Operating Equipment	408,210	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Succession Planning Labor Pool	230,973	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%
OPEB/PERS Pre-Funding	-	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Total Other Operating Costs	639,183	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Increase/(Decrease) in Required Reserves		-	31.0%	31.3%	37.7%	0.0%	0.0%	100.0%
Total General District Requirements		24,664,174	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
REQUIREMENTS BEFORE OFFSETS:		52,512,675	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Revenue Offsets								
Property Taxes - MWD Portion of SWC GO Debt Service		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Property Taxes - MWD GO Debt Service	108,313	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Interest on Investments	247,036	31.8%	29.5%	38.7%	0.0%	0.0%	0.0%	100.0%
Hydro-Power Revenue	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
CRA Power Revenue	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Wadsworth Pumping Plant (DVL) Power Revenue	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to supply (PVID Lease)	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Property Taxes - SWC	-	31.8%	29.5%	38.7%	0.0%	0.0%	0.0%	100.0%
Revenue Reserve used for Revenue Bonds - I&P	-	31.8%	29.5%	38.7%	0.0%	0.0%	0.0%	100.0%
Annexation	-	31.8%	29.5%	38.7%	0.0%	0.0%	0.0%	100.0%
Total Revenue Offsets	355,349	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
NET REVENUE REQUIREMENTS:	-	52,157,326	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

	Functionalization	Allocation Percentages					Total
		Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M							
Group	Item						
Office of General Manager		373,122	-	373,122	-	-	373,122
Office of General Manager	Board of Directors	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-
Human Resources		735,403	-	735,403	-	-	735,403
Water Systems Operations	Office of the Manager	774,762	-	774,762	-	-	774,762
Water Systems Operations	Office of the Manager, Conveyance & Distribution S	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	193,675	-	193,675	-	-	193,675
Water Systems Operations	Office of the Manager, Operations Support Services	150,500	-	150,500	-	-	150,500
Water Systems Operations	Operations Support Services	101,784	-	101,784	-	-	101,784
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	15,110,504	-	9,804,283	5,306,221	-	15,110,504
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	2,969,569	-	2,969,569	-	-	2,969,569
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	150,068	-	150,068	-	-	150,068
Water Systems Operations	Environmental Health & Safety Section	1,349,982	-	1,349,982	-	-	1,349,982
Water Systems Operations	OSS, Fleet Services Unit	576,957	-	576,957	-	-	576,957
Water Systems Operations	OSS, Power Support Unit	291,082	-	291,082	-	-	291,082
Water Systems Operations	Office of the Manager, Operations & Planning Secti	56,184	-	56,184	-	-	56,184
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-
Sustainability, Resilience & Inn		-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-
Engineering Services		2,624,079	-	2,624,079	-	-	2,624,079
Business Technology	Administrative Services	-	-	-	-	-	-
Business Technology	Information Technology	2,390,831	-	2,390,831	-	-	2,390,831
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	-	-	-	-	-	-
Water Resources Managemen	Office of the Group Manager	-	-	-	-	-	-
Ethics Office		-	-	-	-	-	-
Real Property		-	-	-	-	-	-
General Counsel		-	-	-	-	-	-
General Auditor		-	-	-	-	-	-
Total Departmental O&M		27,848,501	-	22,542,279	5,306,221	-	27,848,501
GENERAL DISTRICT REQUIREMENTS		-	-	-	-	-	-
State Water Contract*		-	-	-	-	-	-
Supply - O&M		-	-	-	-	-	-
Supply - Capital		-	-	-	-	-	-
Power - O&M & Off-Aq Capital		-	-	-	-	-	-
Power - Capital (less Off-Aq)		-	-	-	-	-	-
Transmission - Capital - Commodity, Demand, & Standby		-	-	-	-	-	-
Transmission - O&M - Commodity only		-	-	-	-	-	-
Delta Conveyance - Supply		-	-	-	-	-	-
Delta Conveyance - Power		-	-	-	-	-	-
Delta Conveyance - Other		-	-	-	-	-	-
Total State Water Contract		-	-	-	-	-	-
Colorado River Aqueduct Power Costs		-	-	-	-	-	-
Supply Programs (cash funded portion)		-	-	-	-	-	-
Demand Management (cash funded portion)		-	-	-	-	-	-
Local Resources Program		-	-	-	-	-	-
Future Supply Actions & Stormwater Pilot		-	-	-	-	-	-
Conservation Program (cash funded portion)		-	-	-	-	-	-
Total Demand Management Costs		-	-	-	-	-	-
Capital Financing		-	-	-	-	-	-
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		16,329,225	5,200,008	4,814,822	6,314,395	-	16,329,225
G.O. Bond Debt Service		108,313	34,492	31,937	41,884	-	108,313
Debt Administration		148,953	47,434	43,920	57,599	-	148,953
Bond Defeasance		-	-	-	-	-	-
PAYGO		7,438,500	2,368,775	2,193,310	2,876,415	-	7,438,500
Total Capital Financing Costs		24,024,991	7,650,709	7,083,990	9,290,293	-	24,024,991
Other Operating Costs		-	-	-	-	-	-
Operating Equipment		408,210	-	408,210	-	-	408,210
Succession Planning Labor Pool		230,973	-	230,973	-	-	230,973
OPEB/PERS Pre-Funding		-	-	-	-	-	-
Total Other Operating Costs		639,183	-	639,183	-	-	639,183
Increase/(Decrease) in Required Reserves		-	-	-	-	-	-
Total General District Requirements		24,664,174	7,650,709	7,723,173	9,290,293	-	24,664,174
REQUIREMENTS BEFORE OFFSETS:		52,512,675	7,650,709	30,265,452	9,290,293	5,306,221	52,512,675
Revenue Offsets		-	-	-	-	-	-
Property Taxes - MWD Portion of SWC GO Debt Service		-	-	-	-	-	-
Property Taxes - MWD GO Debt Service		108,313	-	-	108,313	-	108,313
Interest on Investments		247,036	78,668	72,841	95,527	-	247,036
Hydro-Power Revenue		-	-	-	-	-	-
CRA Power Revenue		-	-	-	-	-	-
Wadsworth Pumping Plant (DVL) Power Revenue		-	-	-	-	-	-
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)		-	-	-	-	-	-
Misc. allocated to supply (PVID Lease)		-	-	-	-	-	-
Property Taxes - SWC		-	-	-	-	-	-
Revenue Reserve used for Revenue Bonds - I&P		-	-	-	-	-	-
Annexation		-	-	-	-	-	-
Total Revenue Offsets		355,349	78,668	72,841	203,840	-	355,349
NET REVENUE REQUIREMENTS:		52,157,326	7,572,041	30,192,611	9,086,453	5,306,221	52,157,326

		Functionalization	Allocation Percentages					Total
			Fixed			Variable		
			Demand	Commodity	Standby	Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		330,064	-	330,064	-	-	-	330,064
Office of General Manager	Board of Directors	-	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-	-
Human Resources		579,806	-	579,806	-	-	-	579,806
Water Systems Operations	Office of the Manager	569,920	-	569,920	-	-	-	569,920
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	71,043	-	71,043	-	-	-	71,043
Water Systems Operations	Office of the Manager, Operations Support Services	115,233	-	115,233	-	-	-	115,233
Water Systems Operations	Operations Support Services	92,331	-	92,331	-	-	-	92,331
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	9,505,601	-	9,505,601	-	-	-	9,505,601
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	2,457,836	-	2,457,836	-	-	-	2,457,836
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	138,102	-	138,102	-	-	-	138,102
Water Systems Operations	Environmental Health & Safety Section	1,054,543	-	1,054,543	-	-	-	1,054,543
Water Systems Operations	OSS, Fleet Services Unit	354,072	-	354,072	-	-	-	354,072
Water Systems Operations	OSS, Power Support Unit	263,716	-	263,716	-	-	-	263,716
Water Systems Operations	Office of the Manager, Operations & Planning Section	51,234	-	51,234	-	-	-	51,234
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-	-
Sustainability, Resilience & Inr		-	-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-	-
Engineering Services		2,219,295	-	2,219,295	-	-	-	2,219,295
Business Technology	Administrative Services	-	-	-	-	-	-	-
Business Technology	Information Technology	1,604,862	-	1,604,862	-	-	-	1,604,862
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	-	-	-	-	-	-	-
Water Resources Managemen	Office of the Group Manager	-	-	-	-	-	-	-
Ethics Office		-	-	-	-	-	-	-
Real Property		-	-	-	-	-	-	-
General Counsel		-	-	-	-	-	-	-
General Auditor		-	-	-	-	-	-	-
Total Departmental O&M	-	19,407,658	-	19,407,658	-	-	-	19,407,658

		Functionalization	Allocation Percentages					% Total
			Demand	Fixed Commodity	Standby	Variable Commodity	Other	
Departmental O&M								
Group	Item							
	Office of General Manager	1,626,633	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Office of General Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Bay Delta Initiatives	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	External Affairs	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	External Affairs	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	External Affairs	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	External Affairs	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Human Resources	3,206,005	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	3,739,272	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	374,993	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	157,361	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	726,367	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	7,013,935	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	9,663,993	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	1,311,234	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	2,681,717	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	2,844,977	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	1,952,710	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	2,277,878	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	2,664,278	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	17,064,480	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	15,415,395	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	7,005,953	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	6,662,422	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	7,060,586	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	4,394,772	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	271,161	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Sustainability, Resilience & Innovation	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Diversity, Equity & Inclusion	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Equal Employment Opportunity	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Office of the Chief Financial Officer	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Business Technology	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Engineering Services	8,791,378	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Business Technology	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Business Technology	10,422,881	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Resources Management	423,771	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Resources Management	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Resources Management	49,229	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Ethics Office	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Real Property	3,602,806	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	General Counsel	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	General Auditor	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Total Departmental O&M	121,406,184	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
GENERAL DISTRICT REQUIREMENTS								
State Water Contract*								
	Supply - O&M	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Supply - Capital	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Power - O&M & Off-Aq Capital	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Power - Capital (less Off-Aq)	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Transmission - Capital - Commodity, Demand, & Standby	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Transmission - O&M - Commodity only	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Delta Conveyance - Supply	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Delta Conveyance - Power	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Delta Conveyance - Other	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Total State Water Contract	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Colorado River Aqueduct Power Costs		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Supply Programs (cash funded portion)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Demand Management (cash funded portion)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Local Resources Program	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Future Supply Actions & Stormwater Pilot	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Conservation Program (cash funded portion)	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Total Demand Management Costs	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Capital Financing		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Revenue Bond Debt Service net of BABs Interest Subsidy Payment	54,707,349	34.6%	38.9%	26.5%	0.0%	0.0%	100.0%
	G.O. Bond Debt Service	1,483,158	34.6%	38.9%	26.5%	0.0%	0.0%	100.0%
	Debt Administration	499,033	34.6%	38.9%	26.5%	0.0%	0.0%	100.0%
	Bond Defeasance	-	34.6%	38.9%	26.5%	0.0%	0.0%	100.0%
	PAYGO	24,921,000	34.6%	38.9%	26.5%	0.0%	0.0%	100.0%
	Total Capital Financing Costs	81,610,541	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Other Operating Costs								
	Operating Equipment	1,779,603	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Succession Planning Labor Pool	1,006,932	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	OPEB/PERS Pre-Funding	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Total Other Operating Costs	2,786,534	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Increase/(Decrease) in Required Reserves		-	33.4%	41.0%	25.6%	0.0%	0.0%	100.0%
Total General District Requirements		84,397,075	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
REQUIREMENTS BEFORE OFFSETS:		205,803,259	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Revenue Offsets								
	Property Taxes - MWD Portion of SWC GO Debt Service	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Property Taxes - MWD GO Debt Service	1,483,158	34.7%	38.6%	26.7%	0.0%	0.0%	100.0%
	Interest on Investments	968,162	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Hydro-Power Revenue	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	CRA Power Revenue	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Wadsworth Pumping Plant (DVL) Power Revenue	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Misc. allocated to supply (PVID Lease)	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Property Taxes - SWC	-	34.7%	38.6%	26.7%	0.0%	0.0%	100.0%
	Revenue Reserve used for Revenue Bonds - I&P	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Annexation	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Total Revenue Offsets	2,451,320	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
NET REVENUE REQUIREMENTS:		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

	Functionalization	Allocation Percentages					Total
		Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M							
Group	Item						
Office of General Manager		1,626,633	-	1,626,633	-	-	1,626,633
Office of General Manager	Board of Directors	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-
Human Resources		3,206,005	-	3,206,005	-	-	3,206,005
Water Systems Operations	Office of the Manager	3,739,272	-	3,739,272	-	-	3,739,272
Water Systems Operations	Office of the Manager, Conveyance & Distribution S	374,993	-	374,993	-	-	374,993
Water Systems Operations	Office of the Manager, Treatment Section	157,361	-	157,361	-	-	157,361
Water Systems Operations	Office of the Manager, Operations Support Services	726,367	-	726,367	-	-	726,367
Water Systems Operations	Operations Support Services	7,013,935	-	7,013,935	-	-	7,013,935
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	9,663,993	-	9,663,993	-	-	9,663,993
Water Systems Operations	Power Operations and Planning	1,311,234	-	1,311,234	-	-	1,311,234
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	2,681,717	-	2,681,717	-	-	2,681,717
Water Systems Operations	Treatment Diemer	2,844,977	-	2,844,977	-	-	2,844,977
Water Systems Operations	Treatment Mills	1,952,710	-	1,952,710	-	-	1,952,710
Water Systems Operations	Treatment Skinner	2,277,878	-	2,277,878	-	-	2,277,878
Water Systems Operations	Treatment Weymouth	2,664,278	-	2,664,278	-	-	2,664,278
Water Systems Operations	Water Quality Section	-	-	-	-	-	-
Water Systems Operations	C&D, Eastern Unit	17,064,480	-	17,064,480	-	-	17,064,480
Water Systems Operations	C&D, Western Unit	15,415,395	-	15,415,395	-	-	15,415,395
Water Systems Operations	OSS, Manufacturing Services Unit	7,005,953	-	7,005,953	-	-	7,005,953
Water Systems Operations	Environmental Health & Safety Section	6,662,422	-	6,662,422	-	-	6,662,422
Water Systems Operations	OSS, Fleet Services Unit	7,060,586	-	7,060,586	-	-	7,060,586
Water Systems Operations	OSS, Power Support Unit	4,394,772	-	4,394,772	-	-	4,394,772
Water Systems Operations	Office of the Manager, Operations & Planning Secti	271,161	-	271,161	-	-	271,161
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-
Sustainability, Resilience & Inn		-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-
Engineering Services		8,791,378	-	8,791,378	-	-	8,791,378
Business Technology	Administrative Services	-	-	-	-	-	-
Business Technology	Information Technology	10,422,881	-	10,422,881	-	-	10,422,881
Water Resources Managemen	Resource Planning & Development	423,771	-	423,771	-	-	423,771
Water Resources Managemen	Resource Implementation	-	-	-	-	-	-
Water Resources Managemen	Office of the Group Manager	49,229	-	49,229	-	-	49,229
Ethics Office		-	-	-	-	-	-
Real Property		3,602,806	-	3,602,806	-	-	3,602,806
General Counsel		-	-	-	-	-	-
General Auditor		-	-	-	-	-	-
Total Departmental O&M	-	121,406,184	-	121,406,184	-	-	121,406,184
GENERAL DISTRICT REQUIREMENTS							
		-	-	-	-	-	-
State Water Contract*							
Supply - O&M		-	-	-	-	-	-
Supply - Capital		-	-	-	-	-	-
Power - O&M & Off-Aq Capital		-	-	-	-	-	-
Power - Capital (less Off-Aq)		-	-	-	-	-	-
Transmission - Capital - Commodity, Demand, & Standby		-	-	-	-	-	-
Transmission - O&M - Commodity only		-	-	-	-	-	-
Delta Conveyance - Supply		-	-	-	-	-	-
Delta Conveyance - Power		-	-	-	-	-	-
Delta Conveyance - Other		-	-	-	-	-	-
Total State Water Contract		-	-	-	-	-	-
Colorado River Aqueduct Power Costs							
		-	-	-	-	-	-
Supply Programs (cash funded portion)							
		-	-	-	-	-	-
Demand Management (cash funded portion)							
Local Resources Program		-	-	-	-	-	-
Future Supply Actions & Stormwater Pilot		-	-	-	-	-	-
Conservation Program (cash funded portion)		-	-	-	-	-	-
Total Demand Management Costs		-	-	-	-	-	-
Capital Financing							
		-	-	-	-	-	-
Revenue Bond Debt Service net of BABs Interest Subsidy Payment	54,707,349	18,904,255	21,303,743	14,499,351	-	-	54,707,349
G.O. Bond Debt Service	1,483,158	512,509	577,561	393,089	-	-	1,483,158
Debt Administration	499,033	172,442	194,330	132,261	-	-	499,033
Bond Defeasance	-	-	-	-	-	-	-
PAYGO	24,921,000	8,611,511	9,704,557	6,604,932	-	-	24,921,000
Total Capital Financing Costs	81,610,541	28,200,717	31,780,191	21,629,633	-	-	81,610,541
Other Operating Costs							
Operating Equipment	1,779,603	-	1,779,603	-	-	-	1,779,603
Succession Planning Labor Pool	1,006,932	-	1,006,932	-	-	-	1,006,932
OPEB/PERS Pre-Funding	-	-	-	-	-	-	-
Total Other Operating Costs	2,786,534	-	2,786,534	-	-	-	2,786,534
Increase/(Decrease) in Required Reserves							
	-	-	-	-	-	-	-
Total General District Requirements	84,397,075	28,200,717	34,566,725	21,629,633	-	-	84,397,075
REQUIREMENTS BEFORE OFFSETS:	205,803,259	28,200,717	155,972,909	21,629,633	-	-	205,803,259
Revenue Offsets							
Property Taxes - MWD Portion of SWC GO Debt Service	-	-	-	-	-	-	-
Property Taxes - MWD GO Debt Service	1,483,158	515,395	572,462	395,302	-	-	1,483,158
Interest on Investments	968,162	-	968,162	-	-	-	968,162
Hydro-Power Revenue	-	-	-	-	-	-	-
CRA Power Revenue	-	-	-	-	-	-	-
Wadsworth Pumping Plant (DVL) Power Revenue	-	-	-	-	-	-	-
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)	-	-	-	-	-	-	-
Misc. allocated to supply (PVID Lease)	-	-	-	-	-	-	-
Property Taxes - SWC	-	-	-	-	-	-	-
Revenue Reserve used for Revenue Bonds - I&P	-	-	-	-	-	-	-
Annexation	-	-	-	-	-	-	-
Total Revenue Offsets	2,451,320	515,395	1,540,623	395,302	-	-	2,451,320
NET REVENUE REQUIREMENTS:	203,351,939	27,685,323	154,432,285	21,234,331	-	-	203,351,939

		Functionalization	Allocation Percentages					Total
			Fixed			Variable		
			Demand	Commodity	Standby	Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		1,438,921	-	1,438,921	-	-	-	1,438,921
Office of General Manager	Board of Directors	-	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-	-
Human Resources		2,527,676	-	2,527,676	-	-	-	2,527,676
Water Systems Operations	Office of the Manager	2,750,631	-	2,750,631	-	-	-	2,750,631
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	367,063	-	367,063	-	-	-	367,063
Water Systems Operations	Office of the Manager, Treatment Section	57,723	-	57,723	-	-	-	57,723
Water Systems Operations	Office of the Manager, Operations Support Services	556,157	-	556,157	-	-	-	556,157
Water Systems Operations	Operations Support Services	6,362,583	-	6,362,583	-	-	-	6,362,583
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	7,944,926	-	7,944,926	-	-	-	7,944,926
Water Systems Operations	Power Operations and Planning	1,135,717	-	1,135,717	-	-	-	1,135,717
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	1,607,400	-	1,607,400	-	-	-	1,607,400
Water Systems Operations	Treatment Diemer	1,544,065	-	1,544,065	-	-	-	1,544,065
Water Systems Operations	Treatment Mills	1,467,687	-	1,467,687	-	-	-	1,467,687
Water Systems Operations	Treatment Skinner	1,432,950	-	1,432,950	-	-	-	1,432,950
Water Systems Operations	Treatment Weymouth	1,671,213	-	1,671,213	-	-	-	1,671,213
Water Systems Operations	Water Quality Section	-	-	-	-	-	-	-
Water Systems Operations	C&D, Eastern Unit	12,113,793	-	12,113,793	-	-	-	12,113,793
Water Systems Operations	C&D, Western Unit	11,594,596	-	11,594,596	-	-	-	11,594,596
Water Systems Operations	OSS, Manufacturing Services Unit	6,447,294	-	6,447,294	-	-	-	6,447,294
Water Systems Operations	Environmental Health & Safety Section	5,204,376	-	5,204,376	-	-	-	5,204,376
Water Systems Operations	OSS, Fleet Services Unit	4,333,002	-	4,333,002	-	-	-	4,333,002
Water Systems Operations	OSS, Power Support Unit	3,981,597	-	3,981,597	-	-	-	3,981,597
Water Systems Operations	Office of the Manager, Operations & Planning Section	247,274	-	247,274	-	-	-	247,274
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-	-
Sustainability, Resilience & Inr		-	-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-	-
Engineering Services		7,435,241	-	7,435,241	-	-	-	7,435,241
Business Technology	Administrative Services	-	-	-	-	-	-	-
Business Technology	Information Technology	6,996,434	-	6,996,434	-	-	-	6,996,434
Water Resources Managemen	Resource Planning & Development	337,650	-	337,650	-	-	-	337,650
Water Resources Managemen	Resource Implementation	-	-	-	-	-	-	-
Water Resources Managemen	Office of the Group Manager	48,212	-	48,212	-	-	-	48,212
Ethics Office		-	-	-	-	-	-	-
Real Property		1,563,277	-	1,563,277	-	-	-	1,563,277
General Counsel		-	-	-	-	-	-	-
General Auditor		-	-	-	-	-	-	-
Total Departmental O&M		91,167,459	-	91,167,459	-	-	-	91,167,459

	Functionalization	Allocation Percentages					% Total
		Fixed			Variable	Hydroelectric	
		Demand	Commodity	Standby	Commodity		
Departmental O&M							
Group	Item						
Office of General Manager		91,647	0.0%	0.0%	0.0%	0.0%	100.0%
Office of General Manager	Board of Directors	-	0.0%	0.0%	0.0%	0.0%	100.0%
Bay Delta Initiatives	Bay Delta Initiatives	-	0.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Legislative Services	-	0.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Media Communications Services	-	0.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Manager, External Affairs/Special Projects	-	0.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Conservation & Community Services	-	0.0%	0.0%	0.0%	0.0%	100.0%
Human Resources		180,630	0.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager	238,956	0.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	12,832	0.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Treatment Section	-	0.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations Support Services	46,418	0.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Support Services	123,967	0.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Desert Region / C&D CRA	-	0.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	System Operations Unit	-	0.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Power Operations and Planning	955,048	0.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Planning & Programs Unit	-	0.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Jensen	-	0.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Diemer	-	0.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Mills	-	0.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Skinner	-	0.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Weymouth	-	0.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Water Quality Section	-	0.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Eastern Unit	570,058	0.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Western Unit	540,585	0.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Manufacturing Services Unit	88,317	0.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Environmental Health & Safety Section	52,155	0.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Fleet Services Unit	-	0.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Power Support Unit	2,663,498	0.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations & Planning Section	17,328	0.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Security Team & Security Management	-	0.0%	0.0%	0.0%	0.0%	100.0%
Sustainability, Resilience & Innovation		-	0.0%	0.0%	0.0%	0.0%	100.0%
Diversity, Equity & Inclusion		-	0.0%	0.0%	0.0%	0.0%	100.0%
Equal Employment Opportunity		-	0.0%	0.0%	0.0%	0.0%	100.0%
Office of the Chief Financial Officer		-	0.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Office of Manager	-	0.0%	0.0%	0.0%	0.0%	100.0%
Engineering Services		671,497	0.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Administrative Services	-	0.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Information Technology	587,238	0.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Planning & Development	-	0.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Implementation	-	0.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Office of the Group Manager	-	0.0%	0.0%	0.0%	0.0%	100.0%
Ethics Office		-	0.0%	0.0%	0.0%	0.0%	100.0%
Real Property		-	0.0%	0.0%	0.0%	0.0%	100.0%
General Counsel		-	0.0%	0.0%	0.0%	0.0%	100.0%
General Auditor		-	0.0%	0.0%	0.0%	0.0%	100.0%
Total Departmental O&M		6,840,176	0.0%	0.0%	0.0%	0.0%	0.0%
GENERAL DISTRICT REQUIREMENTS							
State Water Contract*							
Supply - O&M		-	0.0%	0.0%	0.0%	0.0%	0.0%
Supply - Capital		-	0.0%	0.0%	0.0%	0.0%	0.0%
Power - O&M & Off-Aq Capital		-	0.0%	0.0%	0.0%	0.0%	0.0%
Power - Capital (less Off-Aq)		-	0.0%	0.0%	0.0%	0.0%	0.0%
Transmission - Capital - Commodity, Demand, & Standby		-	0.0%	0.0%	0.0%	0.0%	0.0%
Transmission - O&M - Commodity only		-	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Supply		-	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Power		-	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Other		-	0.0%	0.0%	0.0%	0.0%	0.0%
Total State Water Contract		-	0.0%	0.0%	0.0%	0.0%	0.0%
Colorado River Aqueduct Power Costs							
		-	0.0%	0.0%	0.0%	0.0%	0.0%
Supply Programs (cash funded portion)							
		-	0.0%	0.0%	0.0%	0.0%	0.0%
Demand Management (cash funded portion)							
Local Resources Program		-	0.0%	0.0%	0.0%	0.0%	0.0%
Future Supply Actions & Stormwater Pilot		-	0.0%	0.0%	0.0%	0.0%	0.0%
Conservation Program (cash funded portion)		-	0.0%	0.0%	0.0%	0.0%	0.0%
Total Demand Management Costs		-	0.0%	0.0%	0.0%	0.0%	0.0%
Capital Financing							
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		-	0.0%	0.0%	0.0%	0.0%	0.0%
G.O. Bond Debt Service	4,178,622	-	0.0%	0.0%	0.0%	0.0%	100.0%
Debt Administration	38,117	-	0.0%	0.0%	0.0%	0.0%	100.0%
Bond Defeasance	-	-	0.0%	0.0%	0.0%	0.0%	100.0%
PAYGO	1,903,500	-	0.0%	0.0%	0.0%	0.0%	100.0%
Total Capital Financing Costs	6,120,239	-	0.0%	0.0%	0.0%	0.0%	0.0%
Other Operating Costs							
Operating Equipment	100,265	-	0.0%	0.0%	0.0%	0.0%	100.0%
Succession Planning Labor Pool	56,732	-	0.0%	0.0%	0.0%	0.0%	100.0%
OPEB/PERS Pre-Funding	-	-	0.0%	0.0%	0.0%	0.0%	100.0%
Total Other Operating Costs	156,997	-	0.0%	0.0%	0.0%	0.0%	0.0%
Increase/(Decrease) in Required Reserves							
	-	-	0.0%	0.0%	0.0%	0.0%	100.0%
Total General District Requirements							
	6,277,236	-	0.0%	0.0%	0.0%	0.0%	0.0%
REQUIREMENTS BEFORE OFFSETS:							
	13,117,412	-	0.0%	0.0%	0.0%	0.0%	0.0%
Revenue Offsets							
Property Taxes - MWD Portion of SWC GO Debt Service	-	-	0.0%	0.0%	0.0%	0.0%	100.0%
Property Taxes - MWD GO Debt Service	-	-	0.0%	0.0%	0.0%	0.0%	100.0%
Interest on Investments	61,708	-	0.0%	0.0%	0.0%	0.0%	100.0%
Hydro-Power Revenue	10,710,879	-	0.0%	0.0%	0.0%	0.0%	100.0%
CRA Power Revenue	-	-	0.0%	0.0%	0.0%	0.0%	100.0%
Wadsworth Pumping Plant (DVL) Power Revenue	-	-	0.0%	0.0%	0.0%	0.0%	100.0%
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)	-	-	0.0%	0.0%	0.0%	0.0%	100.0%
Misc. allocated to supply (PVID Lease)	-	-	0.0%	0.0%	0.0%	0.0%	100.0%
Property Taxes - SWC	-	-	0.0%	0.0%	0.0%	0.0%	100.0%
Revenue Reserve used for Revenue Bonds - I&P	-	-	0.0%	0.0%	0.0%	0.0%	100.0%
Annexation	-	-	0.0%	0.0%	0.0%	0.0%	100.0%
Total Revenue Offsets	10,772,587	-	0.0%	0.0%	0.0%	0.0%	0.0%
NET REVENUE REQUIREMENTS:							
-	2,344,825	-	0.0%	0.0%	0.0%	0.0%	0.0%

	Functionalization	Allocation Percentages					Total
		Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M							
Group	Item						
Office of General Manager		91,647	-	-	-	91,647	91,647
Office of General Manager	Board of Directors	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-
Human Resources		180,630	-	-	-	180,630	180,630
Water Systems Operations	Office of the Manager	238,956	-	-	-	238,956	238,956
Water Systems Operations	Office of the Manager, Conveyance & Distribution S	12,832	-	-	-	12,832	12,832
Water Systems Operations	Office of the Manager, Treatment Section	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations Support Services	46,418	-	-	-	46,418	46,418
Water Systems Operations	Operations Support Services	123,967	-	-	-	123,967	123,967
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	955,048	-	-	-	955,048	955,048
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	-	-	-	-	-	-
Water Systems Operations	C&D, Eastern Unit	570,058	-	-	-	570,058	570,058
Water Systems Operations	C&D, Western Unit	540,585	-	-	-	540,585	540,585
Water Systems Operations	OSS, Manufacturing Services Unit	88,317	-	-	-	88,317	88,317
Water Systems Operations	Environmental Health & Safety Section	52,155	-	-	-	52,155	52,155
Water Systems Operations	OSS, Fleet Services Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Power Support Unit	2,663,498	-	-	-	2,663,498	2,663,498
Water Systems Operations	Office of the Manager, Operations & Planning Sect	17,328	-	-	-	17,328	17,328
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-
Sustainability, Resilience & Inr		-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-
Equal Employment Opportunit		-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-
Engineering Services		671,497	-	-	-	671,497	671,497
Business Technology	Administrative Services	-	-	-	-	-	-
Business Technology	Information Technology	587,238	-	-	-	587,238	587,238
Water Resources Management	Resource Planning & Development	-	-	-	-	-	-
Water Resources Management	Resource Implementation	-	-	-	-	-	-
Water Resources Management	Office of the Group Manager	-	-	-	-	-	-
Ethics Office		-	-	-	-	-	-
Real Property		-	-	-	-	-	-
General Counsel		-	-	-	-	-	-
General Auditor		-	-	-	-	-	-
Total Departmental O&M	-	6,840,176	-	-	-	6,840,176	6,840,176
GENERAL DISTRICT REQUIREMENTS		-	-	-	-	-	-
State Water Contract*		-	-	-	-	-	-
Supply - O&M		-	-	-	-	-	-
Supply - Capital		-	-	-	-	-	-
Power - O&M & Off-Aq Capital		-	-	-	-	-	-
Power - Capital (less Off-Aq)		-	-	-	-	-	-
Transmission - Capital - Commodity, Demand, & Standby		-	-	-	-	-	-
Transmission - O&M - Commodity only		-	-	-	-	-	-
Delta Conveyance - Supply		-	-	-	-	-	-
Delta Conveyance - Power		-	-	-	-	-	-
Delta Conveyance - Other		-	-	-	-	-	-
Total State Water Contract		-	-	-	-	-	-
Colorado River Aqueduct Power Costs		-	-	-	-	-	-
Supply Programs (cash funded portion)		-	-	-	-	-	-
Demand Management (cash funded portion)		-	-	-	-	-	-
Local Resources Program		-	-	-	-	-	-
Future Supply Actions & Stormwater Pilot		-	-	-	-	-	-
Conservation Program (cash funded portion)		-	-	-	-	-	-
Total Demand Management Costs		-	-	-	-	-	-
Capital Financing		-	-	-	-	-	-
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		4,178,622	-	-	-	4,178,622	4,178,622
G.O. Bond Debt Service		-	-	-	-	-	-
Debt Administration		38,117	-	-	-	38,117	38,117
Bond Defeasance		-	-	-	-	-	-
PAYGO		1,903,500	-	-	-	1,903,500	1,903,500
Total Capital Financing Costs		6,120,239	-	-	-	6,120,239	6,120,239
Other Operating Costs		-	-	-	-	-	-
Operating Equipment		100,265	-	-	-	100,265	100,265
Succession Planning Labor Pool		56,732	-	-	-	56,732	56,732
OPEB/PERS Pre-Funding		-	-	-	-	-	-
Total Other Operating Costs		156,997	-	-	-	156,997	156,997
Increase/(Decrease) in Required Reserves		-	-	-	-	-	-
Total General District Requirements		6,277,236	-	-	-	6,277,236	6,277,236
REQUIREMENTS BEFORE OFFSETS:		13,117,412	-	-	-	13,117,412	13,117,412
Revenue Offsets		-	-	-	-	-	-
Property Taxes - MWD Portion of SWC GO Debt Service		-	-	-	-	-	-
Property Taxes - MWD GO Debt Service		-	-	-	-	-	-
Interest on Investments		61,708	-	-	-	61,708	61,708
Hydro-Power Revenue		10,710,879	-	-	-	10,710,879	10,710,879
CRA Power Revenue		-	-	-	-	-	-
Wadsworth Pumping Plant (DVL) Power Revenue		-	-	-	-	-	-
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)		-	-	-	-	-	-
Misc. allocated to supply (PVID Lease)		-	-	-	-	-	-
Property Taxes - SWC		-	-	-	-	-	-
Revenue Reserve used for Revenue Bonds - I&P		-	-	-	-	-	-
Annexation		-	-	-	-	-	-
Total Revenue Offsets		10,772,587	-	-	-	10,772,587	10,772,587
NET REVENUE REQUIREMENTS:		2,344,825	-	-	-	2,344,825	2,344,825

		Functionalization	Allocation Percentages					Total	
			Fixed			Variable Commodity	Other		Hydroelectric
			Demand	Commodity	Standby				
Departmental O&M									
Group	Item								
	Office of General Manager	81,071	-	-	-	-	-	81,071	81,071
	Office of General Manager								
	Bay Delta Initiatives								
	External Affairs								
	External Affairs								
	External Affairs								
	External Affairs								
	Human Resources	142,412						142,412	142,412
	Water Systems Operations								
	Water Systems Operations								
	Water Systems Operations								
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		Functionalization	Allocation Percentages					% Total
			Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		157,123	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Office of General Manager	Board of Directors	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Bay Delta Initiatives	Bay Delta Initiatives	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Legislative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Media Communications Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Manager, External Affairs/Special Projects	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Conservation & Community Services	2,999,011	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Human Resources		309,681	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Treatment Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations Support Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Support Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Desert Region / C&D CRA	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	System Operations Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Power Operations and Planning	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Planning & Programs Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Jensen	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Diemer	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Mills	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Skinner	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Weymouth	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Water Quality Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Eastern Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Western Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Manufacturing Services Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Environmental Health & Safety Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Fleet Services Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Power Support Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations & Planning Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Security Team & Security Management	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Sustainability, Resilience & Innovation		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Diversity, Equity & Inclusion		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Equal Employment Opportunity		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Office of the Chief Financial Officer		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Office of Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Engineering Services		180,971	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Administrative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Information Technology	1,006,789	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Planning & Development	317,828	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Implementation	6,019,524	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Office of the Group Manager	736,200	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Ethics Office		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Real Property		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
General Counsel		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
General Auditor		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Departmental O&M		11,727,128	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
GENERAL DISTRICT REQUIREMENTS								
State Water Contract*								
Supply - O&M		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Supply - Capital		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Power - O&M & Off-Aq Capital		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Power - Capital (less Off-Aq)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Transmission - Capital - Commodity, Demand, & Standby		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Transmission - O&M - Commodity only		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Supply		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Power		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Other		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total State Water Contract		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Colorado River Aqueduct Power Costs		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Supply Programs (cash funded portion)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Demand Management (cash funded portion)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Local Resources Program		27,463,721	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Future Supply Actions & Stormwater Pilot		2,422,500	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Conservation Program (cash funded portion)		25,000,000	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Demand Management Costs		54,886,221	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Capital Financing		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		1,126,153	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
G.O. Bond Debt Service		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Debt Administration		10,273	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Bond Defeasance		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
PAYGO		513,000	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Capital Financing Costs		1,649,426	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%
Other Operating Costs								
Operating Equipment		171,899	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Succession Planning Labor Pool		97,264	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
OPEB/PERS Pre-Funding		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Other Operating Costs		269,163	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Increase/(Decrease) in Required Reserves		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total General District Requirements		56,804,810	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
REQUIREMENTS BEFORE OFFSETS:		68,531,937	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Revenue Offsets								
Property Taxes - MWD Portion of SWC GO Debt Service		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Property Taxes - MWD GO Debt Service		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Interest on Investments		322,395	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Hydro-Power Revenue		-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
CRA Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Wadsworth Pumping Plant (DVL) Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to supply (PVID Lease)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Property Taxes - SWC		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Revenue Reserve used for Revenue Bonds - I&P		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Annexation		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total Revenue Offsets		322,395	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
NET REVENUE REQUIREMENTS:		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

	Functionalization	Allocation Percentages					Total
		Demand	Commodity	Standby	Variable Commodity	Other	
Departmental O&M							
Group	Item						
Office of General Manager		157,123	-	157,123	-	-	157,123
Office of General Manager	Board of Directors	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-
External Affairs	Conservation & Community Services	2,999,011	-	2,999,011	-	-	2,999,011
Human Resources		309,681	-	309,681	-	-	309,681
Water Systems Operations	Office of the Manager	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Conveyance & Distribution S	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations Support Services	-	-	-	-	-	-
Water Systems Operations	Operations Support Services	-	-	-	-	-	-
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	-	-	-	-	-	-
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	-	-	-	-	-	-
Water Systems Operations	Environmental Health & Safety Section	-	-	-	-	-	-
Water Systems Operations	OSS, Fleet Services Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Power Support Unit	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations & Planning Sect	-	-	-	-	-	-
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-
Sustainability, Resilience & Inr		-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-
Engineering Services		180,971	-	180,971	-	-	180,971
Business Technology	Administrative Services	-	-	-	-	-	-
Business Technology	Information Technology	1,006,789	-	1,006,789	-	-	1,006,789
Water Resources Managemen	Resource Planning & Development	317,828	-	317,828	-	-	317,828
Water Resources Managemen	Resource Implementation	6,019,524	-	6,019,524	-	-	6,019,524
Water Resources Managemen	Office of the Group Manager	736,200	-	736,200	-	-	736,200
Ethics Office		-	-	-	-	-	-
Real Property		-	-	-	-	-	-
General Counsel		-	-	-	-	-	-
General Auditor		-	-	-	-	-	-
Total Departmental O&M	-	11,727,128	-	11,727,128	-	-	11,727,128
GENERAL DISTRICT REQUIREMENTS							
		-	-	-	-	-	-
State Water Contract*		-	-	-	-	-	-
Supply - O&M		-	-	-	-	-	-
Supply - Capital		-	-	-	-	-	-
Power - O&M & Off-Aq Capital		-	-	-	-	-	-
Power - Capital (less Off-Aq)		-	-	-	-	-	-
Transmission - Capital - Commodity, Demand, & Standby		-	-	-	-	-	-
Transmission - O&M - Commodity only		-	-	-	-	-	-
Delta Conveyance - Supply		-	-	-	-	-	-
Delta Conveyance - Power		-	-	-	-	-	-
Delta Conveyance - Other		-	-	-	-	-	-
Total State Water Contract		-	-	-	-	-	-
		-	-	-	-	-	-
Colorado River Aqueduct Power Costs		-	-	-	-	-	-
		-	-	-	-	-	-
Supply Programs (cash funded portion)		-	-	-	-	-	-
		-	-	-	-	-	-
Demand Management (cash funded portion)		-	-	-	-	-	-
Local Resources Program		27,463,721	-	27,463,721	-	-	27,463,721
Future Supply Actions & Stormwater Pilot		2,422,500	-	2,422,500	-	-	2,422,500
Conservation Program (cash funded portion)		25,000,000	-	25,000,000	-	-	25,000,000
Total Demand Management Costs		54,886,221	-	54,886,221	-	-	54,886,221
		-	-	-	-	-	-
Capital Financing		-	-	-	-	-	-
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		1,126,153	-	1,126,153	-	-	1,126,153
G.O. Bond Debt Service		-	-	-	-	-	-
Debt Administration		10,273	-	10,273	-	-	10,273
Bond Defeasance		-	-	-	-	-	-
PAYGO		513,000	-	513,000	-	-	513,000
Total Capital Financing Costs		1,649,426	-	1,649,426	-	-	1,649,426
		-	-	-	-	-	-
Other Operating Costs		-	-	-	-	-	-
Operating Equipment		171,899	-	171,899	-	-	171,899
Succession Planning Labor Pool		97,264	-	97,264	-	-	97,264
OPEB/PERS Pre-Funding		-	-	-	-	-	-
Total Other Operating Costs		269,163	-	269,163	-	-	269,163
		-	-	-	-	-	-
Increase/(Decrease) in Required Reserves		-	-	-	-	-	-
		-	-	-	-	-	-
Total General District Requirements		56,804,810	-	56,804,810	-	-	56,804,810
		-	-	-	-	-	-
REQUIREMENTS BEFORE OFFSETS:		68,531,937	-	68,531,937	-	-	68,531,937
		-	-	-	-	-	-
Revenue Offsets		-	-	-	-	-	-
Property Taxes - MWD Portion of SWC GO Debt Service		-	-	-	-	-	-
Property Taxes - MWD GO Debt Service		-	-	-	-	-	-
Interest on Investments		322,395	-	322,395	-	-	322,395
Hydro-Power Revenue		-	-	-	-	-	-
CRA Power Revenue		-	-	-	-	-	-
Wadsworth Pumping Plant (DVL) Power Revenue		-	-	-	-	-	-
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)		-	-	-	-	-	-
Misc. allocated to supply (PVID Lease)		-	-	-	-	-	-
Property Taxes - SWC		-	-	-	-	-	-
Revenue Reserve used for Revenue Bonds - I&P		-	-	-	-	-	-
Annexation		-	-	-	-	-	-
Total Revenue Offsets		322,395	-	322,395	-	-	322,395
		-	-	-	-	-	-
NET REVENUE REQUIREMENTS:		68,209,542	-	68,209,542	-	-	68,209,542

		Functionalization	Allocation Percentages					Total
			Fixed			Variable		
			Demand	Commodity	Standby	Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		138,991	-	138,991	-	-	-	138,991
Office of General Manager	Board of Directors	-	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-	-
External Affairs	Conservation & Community Services	1,985,017	-	1,985,017	-	-	-	1,985,017
Human Resources		244,159	-	244,159	-	-	-	244,159
Water Systems Operations	Office of the Manager	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations Support Services	-	-	-	-	-	-	-
Water Systems Operations	Operations Support Services	-	-	-	-	-	-	-
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	-	-	-	-	-	-	-
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	-	-	-	-	-	-	-
Water Systems Operations	Environmental Health & Safety Section	-	-	-	-	-	-	-
Water Systems Operations	OSS, Fleet Services Unit	-	-	-	-	-	-	-
Water Systems Operations	OSS, Power Support Unit	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations & Planning Section	-	-	-	-	-	-	-
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-	-
Sustainability, Resilience & Inr		-	-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-	-
Equal Employment Opportunit		-	-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-	-
Engineering Services		153,055	-	153,055	-	-	-	153,055
Business Technology	Administrative Services	-	-	-	-	-	-	-
Business Technology	Information Technology	675,815	-	675,815	-	-	-	675,815
Water Resources Managemen	Resource Planning & Development	253,237	-	253,237	-	-	-	253,237
Water Resources Managemen	Resource Implementation	3,924,153	-	3,924,153	-	-	-	3,924,153
Water Resources Managemen	Office of the Group Manager	720,998	-	720,998	-	-	-	720,998
Ethics Office		-	-	-	-	-	-	-
Real Property		-	-	-	-	-	-	-
General Counsel		-	-	-	-	-	-	-
General Auditor		-	-	-	-	-	-	-
Total Departmental O&M		8,095,425	-	8,095,425	-	-	-	8,095,425

		Functionalization	Allocation Percentages					% Total	
			Demand	Fixed Commodity	Standby	Variable Commodity	Other		Hydroelectric
Departmental O&M									
Group	Item								
Office of General Manager		2,208,302	0.0%	1.6%	0.0%	0.0%	0.0%	0.0%	1.6%
Office of General Manager	Board of Directors	2,170,417	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Bay Delta Initiatives	Bay Delta Initiatives	-	0.0%	1.8%	0.0%	0.0%	0.0%	0.0%	1.8%
External Affairs	Legislative Services	6,381,583	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
External Affairs	Media Communications Services	5,929,071	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
External Affairs	Manager, External Affairs/Special Projects	9,839,752	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
External Affairs	Conservation & Community Services	2,999,011	0.0%	0.6%	0.0%	0.0%	0.0%	0.0%	0.6%
Human Resources		4,352,443	0.0%	2.8%	0.0%	0.0%	0.0%	0.0%	2.9%
Water Systems Operations	Office of the Manager	743,453	0.0%	2.5%	0.0%	0.0%	0.0%	0.1%	2.5%
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	21,148	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.3%
Water Systems Operations	Office of the Manager, Treatment Section	-	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.1%
Water Systems Operations	Office of the Manager, Operations Support Services	144,418	0.0%	0.5%	0.0%	0.0%	0.0%	0.0%	0.5%
Water Systems Operations	Operations Support Services	293,607	0.0%	2.2%	0.0%	0.0%	0.0%	0.0%	2.2%
Water Systems Operations	Desert Region / C&D CRA	-	0.0%	8.9%	0.0%	0.0%	0.0%	0.0%	8.9%
Water Systems Operations	System Operations Unit	-	0.0%	2.5%	0.0%	0.0%	0.0%	0.0%	2.5%
Water Systems Operations	Power Operations and Planning	371,842	0.0%	0.7%	0.0%	0.0%	0.0%	0.3%	1.0%
Water Systems Operations	Operations Planning & Programs Unit	-	0.0%	0.7%	0.0%	0.0%	0.0%	0.0%	0.7%
Water Systems Operations	Treatment Jensen	-	0.0%	3.9%	0.0%	0.0%	0.0%	0.0%	3.9%
Water Systems Operations	Treatment Diemer	-	0.0%	3.7%	0.0%	0.0%	0.0%	0.0%	3.7%
Water Systems Operations	Treatment Mills	-	0.0%	3.5%	0.0%	0.0%	0.0%	0.0%	3.5%
Water Systems Operations	Treatment Skinner	-	0.0%	3.5%	0.0%	0.0%	0.0%	0.0%	3.5%
Water Systems Operations	Treatment Weymouth	-	0.0%	4.0%	0.0%	0.0%	0.0%	0.0%	4.0%
Water Systems Operations	Water Quality Section	-	0.0%	7.5%	0.0%	0.0%	0.0%	0.0%	7.5%
Water Systems Operations	C&D, Eastern Unit	923,056	0.0%	4.6%	0.0%	0.0%	0.0%	0.1%	4.7%
Water Systems Operations	C&D, Western Unit	906,439	0.0%	3.8%	0.0%	0.0%	0.0%	0.1%	3.9%
Water Systems Operations	OSS, Manufacturing Services Unit	596,938	0.0%	2.4%	0.0%	0.0%	0.0%	0.0%	2.4%
Water Systems Operations	Environmental Health & Safety Section	784,012	0.0%	3.9%	0.0%	0.0%	0.0%	0.0%	4.0%
Water Systems Operations	OSS, Fleet Services Unit	1,467,065	0.0%	2.3%	0.0%	0.0%	0.0%	0.0%	2.3%
Water Systems Operations	OSS, Power Support Unit	137,931	0.0%	1.9%	0.0%	0.0%	0.0%	0.8%	2.7%
Water Systems Operations	Office of the Manager, Operations & Planning Section	53,913	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.2%
Water Systems Operations	Security Team & Security Management	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Sustainability, Resilience & Innovation		9,342,510	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Diversity, Equity & Inclusion		1,483,649	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Equal Employment Opportunity		2,070,834	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Office of the Chief Financial Officer		25,693,953	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Business Technology	Office of Manager	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Engineering Services		2,928,872	0.0%	11.7%	0.0%	0.0%	0.0%	0.2%	11.9%
Business Technology	Administrative Services	34,172,418	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Business Technology	Information Technology	14,150,007	0.0%	7.8%	0.0%	0.0%	0.0%	0.1%	8.0%
Water Resources Management	Resource Planning & Development	-	0.0%	1.4%	0.0%	0.0%	0.0%	0.0%	1.4%
Water Resources Management	Resource Implementation	36,545	0.0%	3.6%	0.0%	0.0%	0.0%	0.0%	3.6%
Water Resources Management	Office of the Group Manager	4,245	0.0%	0.8%	0.0%	0.0%	0.0%	0.0%	0.8%
Ethics Office		2,156,213	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Real Property		12,001,516	0.0%	2.4%	0.0%	0.0%	0.0%	0.0%	2.4%
General Counsel		15,716,806	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
General Auditor		4,737,939	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total Departmental O&M		164,819,910	0.0%	98.2%	0.0%	0.0%	0.0%	1.8%	100.0%
GENERAL DISTRICT REQUIREMENTS									
State Water Contract*									
Supply - O&M		-	0.0%	7.7%	0.0%	0.0%	0.0%	0.0%	7.7%
Supply - Capital		-	0.0%	6.2%	0.0%	0.0%	0.0%	0.0%	6.2%
Power - O&M & Off-Aq Capital		-	0.0%	0.0%	0.0%	18.6%	0.0%	0.0%	18.6%
Power - Capital (less Off-Aq)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Transmission - Capital - Commodity, Demand, & Standby		-	0.5%	2.8%	2.6%	0.0%	0.0%	0.0%	5.8%
Transmission - O&M - Commodity only		-	0.0%	14.3%	0.0%	0.0%	0.0%	0.0%	14.3%
Delta Conveyance - Supply		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Power		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Other		-	0.2%	1.2%	1.1%	0.0%	0.0%	0.0%	2.5%
Total State Water Contract		-	0.7%	32.1%	3.7%	18.6%	0.0%	0.0%	55.1%
Colorado River Aqueduct Power Costs		-	0.0%	0.0%	0.0%	6.2%	0.0%	0.0%	6.2%
Supply Programs (cash funded portion)		-	0.0%	4.6%	0.0%	0.0%	0.0%	0.0%	4.6%
Demand Management (cash funded portion)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Local Resources Program		-	0.0%	2.0%	0.0%	0.0%	0.0%	0.0%	2.0%
Future Supply Actions & Stormwater Pilot		-	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.2%
Conservation Program (cash funded portion)		-	0.0%	1.8%	0.0%	0.0%	0.0%	0.0%	1.8%
Total Demand Management Costs		-	0.0%	4.0%	0.0%	0.0%	0.0%	0.0%	4.0%
Capital Financing		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		18,225,905	3.7%	8.5%	7.4%	0.0%	0.0%	0.3%	20.0%
G.O. Bond Debt Service		-	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.1%
Debt Administration		166,254	0.0%	0.1%	0.1%	0.0%	0.0%	0.0%	0.2%
Bond Defeasance		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
PAYGO		8,302,500	1.7%	3.9%	3.4%	0.0%	0.0%	0.1%	9.1%
Total Capital Financing Costs		26,694,659	5.5%	12.6%	10.9%	0.0%	0.0%	0.4%	29.5%
Other Operating Costs		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Operating Equipment		2,415,972	0.0%	0.4%	0.0%	0.0%	0.0%	0.0%	0.5%
Succession Planning Labor Pool		1,367,001	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.3%
OPEB/PERS Pre-Funding		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total Other Operating Costs		3,782,973	0.0%	0.7%	0.0%	0.0%	0.0%	0.0%	0.7%
Increase/(Decrease) in Required Reserves		7,900,000	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total General District Requirements		38,377,632	6.2%	53.9%	14.6%	24.8%	0.0%	0.5%	100.0%
REQUIREMENTS BEFORE OFFSETS:		203,197,542	5.0%	62.2%	11.9%	20.2%	0.0%	0.7%	100.0%
Revenue Offsets									
Property Taxes - MWD Portion of SWC GO Debt Service		-	5.0%	62.2%	11.9%	20.2%	0.0%	0.7%	100.0%
Property Taxes - MWD GO Debt Service		-	5.0%	62.2%	11.9%	20.2%	0.0%	0.7%	100.0%
Interest on Investments		955,904	5.0%	62.2%	11.9%	20.2%	0.0%	0.7%	100.0%
Hydro-Power Revenue		-	5.0%	62.2%	11.9%	20.2%	0.0%	0.7%	100.0%
CRA Power Revenue		-	5.0%	62.2%	11.9%	20.2%	0.0%	0.7%	100.0%
Wadsworth Pumping Plant (DVL) Power Revenue		-	5.0%	62.2%	11.9%	20.2%	0.0%	0.7%	100.0%
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)		27,575,443	5.0%	62.2%	11.9%	20.2%	0.0%	0.7%	100.0%
Misc. allocated to supply (PVID Lease)		-	5.0%	62.2%	11.9%	20.2%	0.0%	0.7%	100.0%
Property Taxes - SWC		-	5.0%	62.2%	11.9%	20.2%	0.0%	0.7%	100.0%
Revenue Reserve used for Revenue Bonds - I&P		-	5.0%	62.2%	11.9%	20.2%	0.0%	0.7%	100.0%
Annexation		-	5.0%	62.2%	11.9%	20.2%	0.0%	0.7%	100.0%
Total Revenue Offsets		28,531,347	5.0%	62.2%	11.9%	20.2%	0.0%	0.7%	100.0%
NET REVENUE REQUIREMENTS:	-	174,666,195	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

	Functionalization	Allocation Percentages						Total
		Demand	Fixed Commodity	Standby	Variable Commodity	Other	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		-	2,657,274	-	-	-	42,153	2,699,428
Office of General Manager	Board of Directors	-	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	2,981,424	-	-	-	-	2,981,424
External Affairs	Legislative Services	-	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	1,032,128	-	-	-	-	1,032,128
Human Resources		-	4,667,892	-	-	-	74,049	4,741,941
Water Systems Operations	Office of the Manager	-	4,068,685	-	-	-	91,397	4,160,082
Water Systems Operations	Office of the Manager, Conveyance & Distribution S	-	440,928	-	-	-	6,531	447,459
Water Systems Operations	Office of the Manager, Treatment Section	-	229,111	-	-	-	-	229,111
Water Systems Operations	Office of the Manager, Operations Support Services	-	822,657	-	-	-	18,480	841,137
Water Systems Operations	Operations Support Services	-	3,649,883	-	-	-	58,472	3,708,355
Water Systems Operations	Desert Region / C&D CRA	-	14,683,601	-	-	-	-	14,683,601
Water Systems Operations	System Operations Unit	-	4,131,038	-	-	-	-	4,131,038
Water Systems Operations	Power Operations and Planning	-	1,165,188	-	-	-	430,115	1,595,302
Water Systems Operations	Operations Planning & Programs Unit	-	1,102,098	-	-	-	-	1,102,098
Water Systems Operations	Treatment Jensen	-	6,380,021	-	-	-	-	6,380,021
Water Systems Operations	Treatment Diemer	-	6,128,634	-	-	-	-	6,128,634
Water Systems Operations	Treatment Mills	-	5,825,478	-	-	-	-	5,825,478
Water Systems Operations	Treatment Skinner	-	5,687,601	-	-	-	-	5,687,601
Water Systems Operations	Treatment Weymouth	-	6,633,302	-	-	-	-	6,633,302
Water Systems Operations	Water Quality Section	-	12,288,217	-	-	-	-	12,288,217
Water Systems Operations	C&D, Eastern Unit	-	7,541,743	-	-	-	210,415	7,752,158
Water Systems Operations	C&D, Western Unit	-	6,253,908	-	-	-	211,414	6,465,322
Water Systems Operations	OSS, Manufacturing Services Unit	-	3,915,026	-	-	-	42,259	3,957,286
Water Systems Operations	Environmental Health & Safety Section	-	6,493,870	-	-	-	21,184	6,515,053
Water Systems Operations	OSS, Fleet Services Unit	-	3,787,602	-	-	-	-	3,787,602
Water Systems Operations	OSS, Power Support Unit	-	3,161,416	-	-	-	1,254,708	4,416,124
Water Systems Operations	Office of the Manager, Operations & Planning Secti	-	365,764	-	-	-	8,216	373,980
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-	-
Sustainability, Resilience & Inn		-	-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-	-
Engineering Services		-	19,359,432	-	-	-	295,292	19,654,724
Business Technology	Administrative Services	-	-	-	-	-	-	-
Business Technology	Information Technology	-	12,920,404	-	-	-	204,962	13,125,365
Water Resources Managemen	Resource Planning & Development	-	2,310,055	-	-	-	-	2,310,055
Water Resources Managemen	Resource Implementation	-	5,886,427	-	-	-	-	5,886,427
Water Resources Managemen	Office of the Group Manager	-	1,357,139	-	-	-	-	1,357,139
Ethics Office		-	-	-	-	-	-	-
Real Property		-	3,922,319	-	-	-	-	3,922,319
General Counsel		-	-	-	-	-	-	-
General Auditor		-	-	-	-	-	-	-
Total Departmental O&M	-	-	161,850,263	-	-	-	2,969,647	164,819,910
GENERAL DISTRICT REQUIREMENTS		-	-	-	-	-	-	-
State Water Contract*		-	-	-	-	-	-	-
Supply - O&M		-	2,956,613	-	-	-	-	2,956,613
Supply - Capital		-	2,362,382	-	-	-	-	2,362,382
Power - O&M & Off-Aq Capital		-	-	-	7,144,261	-	-	7,144,261
Power - Capital (less Off-Aq)		-	-	-	-	-	-	-
Transmission - Capital - Commodity, Demand, & Standby		179,826	1,057,801	991,159	-	-	-	2,228,786
Transmission - O&M - Commodity only		-	5,490,096	-	-	-	-	5,490,096
Delta Conveyance - Supply		-	-	-	-	-	-	-
Delta Conveyance - Power		-	-	-	-	-	-	-
Delta Conveyance - Other		76,915	452,443	423,939	-	-	-	953,298
Total State Water Contract		256,742	12,319,336	1,415,098	7,144,261	-	-	21,135,437
Colorado River Aqueduct Power Costs		-	-	-	2,366,007	-	-	2,366,007
Supply Programs (cash funded portion)		-	1,771,227	-	-	-	-	1,771,227
Demand Management (cash funded portion)		-	-	-	-	-	-	-
Local Resources Program		-	758,873	-	-	-	-	758,873
Future Supply Actions & Stormwater Pilot		-	66,938	-	-	-	-	66,938
Conservation Program (cash funded portion)		-	690,796	-	-	-	-	690,796
Total Demand Management Costs		-	1,516,606	-	-	-	-	1,516,606
Capital Financing		-	-	-	-	-	-	-
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		1,434,216	3,280,295	2,855,273	-	-	115,463	7,685,246
G.O. Bond Debt Service		18,408	19,891	16,018	-	-	-	54,317
Debt Administration		13,083	29,922	26,045	-	-	1,053	70,104
Bond Defeasance		-	-	-	-	-	-	-
PAYGO		653,333	1,494,282	1,300,671	-	-	52,597	3,500,883
Total Capital Financing Costs		2,119,039	4,824,390	4,198,008	-	-	169,113	11,310,550
Other Operating Costs		-	-	-	-	-	-	-
Operating Equipment		-	171,475	3,173	-	-	2,771	177,418
Succession Planning Labor Pool		-	97,023	1,795	-	-	1,568	100,386
OPEB/PERS Pre-Funding		-	-	-	-	-	-	-
Total Other Operating Costs		-	268,498	4,968	-	-	4,338	277,804
Increase/(Decrease) in Required Reserves		-	-	-	-	-	-	-
Total General District Requirements		-	2,375,781	20,700,057	5,618,074	9,510,268	173,451	38,377,632
REQUIREMENTS BEFORE OFFSETS:	203,197,542	2,375,781	182,550,320	5,618,074	9,510,268	-	3,143,099	203,197,542
Revenue Offsets								
Property Taxes - MWD Portion of SWC GO Debt Service		-	-	-	-	-	-	-
Property Taxes - MWD GO Debt Service		-	-	-	-	-	-	-
Interest on Investments	955,904	48,180	594,212	113,932	192,863	-	6,718	955,904
Hydro-Power Revenue		-	-	-	-	-	-	-
CRA Power Revenue		-	-	-	-	-	-	-
Wadsworth Pumping Plant (DVL) Power Revenue		-	-	-	-	-	-	-
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)	27,575,443	1,389,860	17,141,526	3,286,641	5,563,621	-	193,794	27,575,443
Misc. allocated to supply (PVID Lease)		-	-	-	-	-	-	-
Property Taxes - SWC		-	-	-	-	-	-	-
Revenue Reserve used for Revenue Bonds - I&P		-	-	-	-	-	-	-
Annexation		-	-	-	-	-	-	-
Total Revenue Offsets	28,531,347	1,438,040	17,735,738	3,400,573	5,756,485	-	200,512	28,531,347
NET REVENUE REQUIREMENTS:	174,666,195	937,741	164,814,582	2,217,502	3,753,783	-	2,942,586	174,666,195

		Total Costs to Be Allocated	A&G Cost Redistribution	Adjusted Costs	Allocation Categories					Total
					Fixed			Variable		
					Demand	Commodity	Standby	Commodity	Hydroelectric	
Departmental O&M										
Group	Item									
	Office of General Manager	2,208,302	6,360,002	8,568,304	-	8,434,504	-	-	133,800	8,568,304
	Office of General Manager	2,170,417	(2,170,417)	-	-	-	-	-	-	-
	Bay Delta Initiatives	-	15,397,120	15,397,120	-	15,397,120	-	-	-	15,397,120
	External Affairs	6,381,583	(6,381,583)	-	-	-	-	-	-	-
	External Affairs	5,929,071	(5,929,071)	-	-	-	-	-	-	-
	External Affairs	9,839,752	(9,839,752)	-	-	-	-	-	-	-
	External Affairs	2,999,011	1,032,128	4,031,139	-	4,031,139	-	-	-	4,031,139
	Human Resources	4,352,443	11,956,732	16,309,175	-	16,054,496	-	-	254,679	16,309,175
	Water Systems Operations	743,453	14,293,082	15,036,535	-	14,706,181	-	-	330,354	15,036,535
	Water Systems Operations	21,148	1,305,466	1,326,614	-	1,307,251	-	-	19,363	1,326,614
	Water Systems Operations	-	1,430,340	1,430,340	-	1,430,340	-	-	-	1,430,340
	Water Systems Operations	144,418	2,809,509	2,953,927	-	2,889,029	-	-	64,898	2,953,927
	Water Systems Operations	293,607	11,276,880	11,570,487	-	11,388,048	-	-	182,439	11,570,487
	Water Systems Operations	-	48,994,879	48,994,879	-	48,994,879	-	-	-	48,994,879
	Water Systems Operations	-	13,795,031	13,795,031	-	13,795,031	-	-	-	13,795,031
	Water Systems Operations	371,842	4,765,748	5,137,591	-	3,752,428	-	-	1,385,163	5,137,591
	Water Systems Operations	-	3,289,017	3,289,017	-	-	-	-	-	3,289,017
	Water Systems Operations	-	26,851,143	26,851,143	-	20,417,372	-	6,433,771	-	26,851,143
	Water Systems Operations	-	27,846,019	27,846,019	-	19,541,013	-	8,305,006	-	27,846,019
	Water Systems Operations	-	20,731,658	20,731,658	-	17,925,040	-	2,806,618	-	20,731,658
	Water Systems Operations	-	23,075,983	23,075,983	-	17,769,762	-	5,306,221	-	23,075,983
	Water Systems Operations	-	26,971,300	26,971,300	-	20,570,080	-	6,401,220	-	26,971,300
	Water Systems Operations	-	40,841,769	40,841,769	-	40,841,769	-	-	-	40,841,769
	Water Systems Operations	923,056	27,831,370	28,754,426	-	27,973,953	-	-	780,473	28,754,426
	Water Systems Operations	906,439	22,090,673	22,997,112	-	22,245,113	-	-	751,999	22,997,112
	Water Systems Operations	596,938	11,630,582	12,227,520	-	12,096,943	-	-	130,577	12,227,520
	Water Systems Operations	784,012	21,771,326	22,555,338	-	22,481,999	-	-	73,339	22,555,338
	Water Systems Operations	1,467,065	14,190,429	15,657,494	-	15,657,494	-	-	-	15,657,494
	Water Systems Operations	137,931	13,652,755	13,790,686	-	9,872,480	-	-	3,918,206	13,790,686
	Water Systems Operations	53,913	1,108,796	1,162,709	-	1,137,164	-	-	25,545	1,162,709
	Water Systems Operations	-	-	-	-	-	-	-	-	-
	Sustainability, Resilience & Innovation	9,342,510	(9,342,510)	-	-	-	-	-	-	-
	Diversity, Equity & Inclusion	1,483,649	(1,483,649)	-	-	-	-	-	-	-
	Equal Employment Opportunity	2,070,834	(2,070,834)	-	-	-	-	-	-	-
	Office of the Chief Financial Officer	25,693,953	(25,693,953)	-	-	-	-	-	-	-
	Business Technology	-	-	-	-	-	-	-	-	-
	Engineering Services	2,928,872	61,420,912	64,349,784	-	63,382,995	-	-	966,790	64,349,784
	Business Technology	34,172,418	(34,172,418)	-	-	-	-	-	-	-
	Business Technology	14,150,007	36,581,010	50,731,017	-	49,938,817	-	-	792,200	50,731,017
	Water Resources Management	-	7,885,984	7,885,984	-	7,885,984	-	-	-	7,885,984
	Water Resources Management	36,545	23,215,833	23,252,379	-	23,252,379	-	-	-	23,252,379
	Water Resources Management	4,245	4,018,014	4,022,260	-	4,022,260	-	-	-	4,022,260
	Ethics Office	2,156,213	(2,156,213)	-	-	-	-	-	-	-
	Real Property	12,001,516	9,305,956	21,307,472	-	21,307,472	-	-	-	21,307,472
	General Counsel	15,716,806	(15,716,806)	-	-	-	-	-	-	-
	General Auditor	4,737,939	(4,737,939)	-	-	-	-	-	-	-
	Total Departmental O&M	164,819,910	438,032,302	602,852,212	-	563,789,553	-	29,252,836	9,809,824	602,852,212
GENERAL DISTRICT REQUIREMENTS										
State Water Contract*										
	Supply - O&M	107,000,290	2,956,613	109,956,903	-	109,956,903	-	-	-	109,956,903
	Supply - Capital	85,494,959	2,362,362	87,857,340	-	87,857,340	-	-	-	87,857,340
	Power - O&M & Off-Aq Capital	258,551,933	7,144,261	265,696,194	-	-	265,696,194	-	-	265,696,194
	Power - Capital (less Off-Aq)	(3,654,765)	-	(3,654,765)	-	-	(3,654,765)	-	-	(3,654,765)
	Transmission - Capital - Commodity, Demand, & Standby	80,660,127	2,228,786	82,888,913	6,687,764	39,339,789	36,861,360	-	-	82,888,913
	Transmission - O&M - Commodity only	198,687,447	5,490,096	204,177,544	-	204,177,544	-	-	-	204,177,544
	Delta Conveyance - Supply	-	-	-	-	-	-	-	-	-
	Delta Conveyance - Power	-	-	-	-	-	-	-	-	-
	Delta Conveyance - Other	-	-	-	-	-	-	-	-	-
	Total State Water Contract	34,500,000	953,298	35,453,298	2,860,495	16,826,439	15,766,364	-	-	35,453,298
		761,239,991	21,135,437	782,375,428	9,548,259	458,158,016	52,627,724	262,041,429	-	782,375,428
Colorado River Aqueduct Power Costs										
		85,626,149	2,366,007	87,992,155	-	-	-	87,992,155	-	87,992,155
Supply Programs (cash funded portion)										
		64,100,985	1,771,227	65,872,212	-	65,872,212	-	-	-	65,872,212
Demand Management (cash funded portion)										
	Local Resources Program	27,463,721	758,873	28,222,593	-	28,222,593	-	-	-	28,222,593
	Future Supply Actions & Stormwater Pilot	2,422,500	66,938	2,489,438	-	2,489,438	-	-	-	2,489,438
	Conservation Program (cash funded portion)	25,000,000	690,796	25,690,796	-	25,690,796	-	-	-	25,690,796
	Total Demand Management Costs	54,886,221	1,516,606	56,402,827	-	56,402,827	-	-	-	56,402,827
Capital Financing										
	Revenue Bond Debt Service net of BABs Interest Subsidy Payment	296,356,173	(10,540,658)	285,815,515	53,338,706	121,994,671	106,188,052	-	4,294,085	285,815,515
	G.O. Bond Debt Service	1,965,750	54,317	2,020,067	684,597	739,748	595,722	-	-	2,020,067
	Debt Administration	2,703,320	(96,150)	2,607,169	486,548	1,112,818	968,633	-	39,170	2,607,169
	Bond Defeasance	-	-	-	-	-	-	-	-	-
	PAYGO	135,000,000	(4,801,617)	130,198,383	24,297,538	55,572,592	48,372,156	-	1,956,097	130,198,383
	Total Capital Financing Costs	436,025,242	(15,384,108)	420,641,134	78,807,390	179,419,830	156,124,563	-	6,289,352	420,641,134
Other Operating Costs										
	Operating Equipment	8,836,761	(2,238,554)	6,598,207	-	6,377,164	118,008	-	103,036	6,598,207
	Succession Planning Labor Pool	5,000,000	(1,266,615)	3,733,385	-	3,608,315	66,771	-	58,299	3,733,385
	OPEB/PERS Pre-Funding	-	-	-	-	-	-	-	-	-
	Total Other Operating Costs	13,836,761	(3,505,169)	10,331,592	-	9,985,479	184,779	-	161,335	10,331,592
Increase/(Decrease) in Required Reserves										
		7,900,000	(7,900,000)	-	-	-	-	-	-	-
Total General District Requirements										
		1,423,615,349	0	1,423,615,349	88,355,648	769,838,364	208,937,065	350,033,584	6,450,687	1,423,615,349
REQUIREMENTS BEFORE OFFSETS:										
		1,588,435,258	438,032,302	2,026,467,561	88,355,648	1,333,627,916	208,937,065	379,286,420	16,260,511	2,026,467,561
Revenue Offsets										
	Property Taxes - MWD Portion of SWC GO Debt Service	36,010	-	36,010	2,905	17,091	16,014	-	-	36,010
	Property Taxes - MWD GO Debt Service	1,965,750	(0)	1,965,750	515,395	572,462	877,894	-	-	1,965,750
	Interest on Investments	9,533,126	0	9,533,126	928,450	4,965,643	1,716,092	1,854,515	68,426	9,533,126
	Hydro-Power Revenue	10,710,879	-	10,710,879	-	-	-	-	10,710,879	10,710,879
	CRA Power Revenue	2,989,504	-	2,989,504	-	-	-	2,989,504	-	2,989,504
	Wadsworth Pumping Plant (DVL) Power Revenue	545,067	-	545,067	-	-	-	545,067	-	545,067
	Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)	27,575,443	-	27,575,443	1,389,860	17,141,526	3,286,641	5,563,621	193,794	27,575,443
	Misc. allocated to supply (PVID Lease)	6,048,886	-	6,048,886	-	6,048,886	-	-	-	6,048,886
	Property Taxes - SWC	166,313,250	-	166,313,250	1,489,331	98,282,285	8,208,836	58,332,797	-	166,313,250
	Revenue Reserve used for Revenue Bonds - I&P	-	-	-	-	-	-	-	-	-
	Annexation	-	-	-	-	-	-	-	-	-
	Total Revenue Offsets	225,717,914	0	225,717,914	4,325,942	127,027,893	14,105,477	69,285,504	10,973,099	225,717,914
NET REVENUE REQUIREMENTS:										
		\$ 1,800,749,647	\$ 438,032,302	\$ 1,800,749,647	\$ 84,029,707	\$ 1,206,600,024	\$ 194,831,588	\$ 310,000,916	\$ 5,287,412	\$ 1,800,749,647

		Total to Be Allocated Excluding A&G and Negative Values	Line Item Costs by Allocation Category (w/o A&G)					Total Allocations
			Fixed			Variable Commodity	Hydro- Electric	
			Demand	Commodity	Standby			
Departmental O&M								
Group	Item							
Office of General Manager		5,191,614	-	5,110,543	-	-	81,071	5,191,614
Office of General Manager	Board of Directors	-	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	5,733,957	-	5,733,957	-	-	-	5,733,957
External Affairs	Legislative Services	-	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-	-
External Affairs	Conservation & Community Services	1,985,017	-	1,985,017	-	-	-	1,985,017
Human Resources		9,119,831	-	8,977,419	-	-	142,412	9,119,831
Water Systems Operations	Office of the Manager	8,000,784	-	7,825,007	-	-	175,778	8,000,784
Water Systems Operations	Office of the Manager, Conveyance & Treatment	860,565	-	848,004	-	-	12,560	860,565
Water Systems Operations	Office of the Manager, Treatment Services	440,633	-	440,633	-	-	-	440,633
Water Systems Operations	Office of the Manager, Operations Support Services	1,617,698	-	1,582,157	-	-	35,541	1,617,698
Water Systems Operations	Operations Support Services	7,132,011	-	7,019,556	-	-	112,455	7,132,011
Water Systems Operations	Desert Region / C&D CRA	28,239,906	-	28,239,906	-	-	-	28,239,906
Water Systems Operations	System Operations Unit	7,944,926	-	7,944,926	-	-	-	7,944,926
Water Systems Operations	Power Operations and Planning	3,068,130	-	2,240,921	-	-	827,208	3,068,130
Water Systems Operations	Operations Planning & Programs Unit	2,119,586	-	2,119,586	-	-	-	2,119,586
Water Systems Operations	Treatment Jensen	12,270,232	-	12,270,232	-	-	-	12,270,232
Water Systems Operations	Treatment Diemer	11,786,758	-	11,786,758	-	-	-	11,786,758
Water Systems Operations	Treatment Mills	11,203,720	-	11,203,720	-	-	-	11,203,720
Water Systems Operations	Treatment Skinner	10,938,551	-	10,938,551	-	-	-	10,938,551
Water Systems Operations	Treatment Weymouth	12,757,349	-	12,757,349	-	-	-	12,757,349
Water Systems Operations	Water Quality Section	23,633,039	-	23,633,039	-	-	-	23,633,039
Water Systems Operations	C&D, Eastern Unit	14,909,163	-	14,504,488	-	-	404,675	14,909,163
Water Systems Operations	C&D, Western Unit	12,434,286	-	12,027,688	-	-	406,598	12,434,286
Water Systems Operations	OSS, Manufacturing Services Unit	7,610,761	-	7,529,486	-	-	81,275	7,610,761
Water Systems Operations	Environmental Health & Safety Section	12,529,931	-	12,489,189	-	-	40,741	12,529,931
Water Systems Operations	OSS, Fleet Services Unit	7,284,420	-	7,284,420	-	-	-	7,284,420
Water Systems Operations	OSS, Power Support Unit	8,493,212	-	6,080,123	-	-	2,413,089	8,493,212
Water Systems Operations	Office of the Manager, Operations & Security Team & Security Management	719,248	-	703,447	-	-	15,802	719,248
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-	-
Sustainability, Resilience & Inclusion		-	-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-	-
Office of the Chief Financial Officer		-	-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-	-
Engineering Services		37,800,508	-	37,232,595	-	-	567,914	37,800,508
Business Technology	Administrative Services	-	-	-	-	-	-	-
Business Technology	Information Technology	25,243,065	-	24,848,877	-	-	394,188	25,243,065
Water Resources Management	Resource Planning & Development	4,442,761	-	4,442,761	-	-	-	4,442,761
Water Resources Management	Resource Implementation	11,320,938	-	11,320,938	-	-	-	11,320,938
Water Resources Management	Office of the Group Manager	2,610,088	-	2,610,088	-	-	-	2,610,088
Ethics Office		-	-	-	-	-	-	-
Real Property		7,543,512	-	7,543,512	-	-	-	7,543,512
General Counsel		-	-	-	-	-	-	-
General Auditor		-	-	-	-	-	-	-
Total Departmental O&M	-	316,986,200	-	311,274,893	-	-	5,711,307	316,986,200
GENERAL DISTRICT REQUIREMENTS								
State Water Contract*								
Supply - O&M		107,000,290	-	107,000,290	-	-	-	107,000,290
Supply - Capital		85,494,959	-	85,494,959	-	-	-	85,494,959
Power - O&M & Off-Aq Capital		258,551,933	-	-	-	258,551,933	-	258,551,933
Power - Capital (less Off-Aq)		-	-	-	-	-	-	-
Transmission - Capital - Commodity, Demand, & Standby		80,660,127	6,507,938	38,281,988	35,870,201	-	-	80,660,127
Transmission - O&M - Commodity only		198,687,447	-	198,687,447	-	-	-	198,687,447
Delta Conveyance - Supply		-	-	-	-	-	-	-
Delta Conveyance - Power		-	-	-	-	-	-	-
Delta Conveyance - Other		34,500,000	2,783,579	16,373,996	15,342,425	-	-	34,500,000
Total State Water Contract		764,894,756	9,291,517	445,838,680	51,212,626	258,551,933	-	764,894,756
Colorado River Aqueduct Power Costs		85,626,149	-	-	-	85,626,149	-	85,626,149
Supply Programs (cash funded portion)		64,100,985	-	64,100,985	-	-	-	64,100,985
Demand Management (cash funded portion)								
Local Resources Program		27,463,721	-	27,463,721	-	-	-	27,463,721
Future Supply Actions & Stormwater Pilot		2,422,500	-	2,422,500	-	-	-	2,422,500
Conservation Program (cash funded portion)		25,000,000	-	25,000,000	-	-	-	25,000,000
Total Demand Management Costs		54,886,221	-	54,886,221	-	-	-	54,886,221
Capital Financing								
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		278,130,268	51,904,491	118,714,376	103,332,779	-	4,178,622	278,130,268
G.O. Bond Debt Service		1,965,750	666,189	719,857	579,703	-	-	1,965,750
Debt Administration		2,537,065	473,466	1,082,896	942,587	-	38,117	2,537,065
Bond Defeasance		-	-	-	-	-	-	-
PAYGO		126,697,500	23,644,205	54,078,309	47,071,485	-	1,903,500	126,697,500
Total Capital Financing Costs		409,330,584	76,688,351	174,595,439	151,926,555	-	6,120,239	409,330,584
Other Operating Costs								
Operating Equipment		6,420,789	-	6,205,689	114,835	-	100,265	6,420,789
Succession Planning Labor Pool		3,632,999	-	3,511,292	64,975	-	56,732	3,632,999
OPEB/PERS Pre-Funding		-	-	-	-	-	-	-
Total Other Operating Costs		10,053,788	-	9,716,981	179,810	-	156,997	10,053,788
Increase/(Decrease) in Required Reserves		-	-	-	-	-	-	-
Total General District Requirements		1,388,892,482	85,979,868	749,138,306	203,318,991	344,178,081	6,277,236	1,388,892,482
REQUIREMENTS BEFORE OFFSETS:		1,705,878,682	85,979,868	1,060,413,199	203,318,991	344,178,081	11,988,543	1,705,878,682
Revenue Offsets								
Property Taxes - MWD Portion of SWC GO Debt Service		36,010	2,905	17,091	16,014	-	-	36,010
Property Taxes - MWD GO Debt Service		1,965,750	515,395	572,462	877,894	-	-	1,965,750
Interest on Investments		8,577,222	880,271	4,371,432	1,602,160	1,661,651	61,708	8,577,222
Hydro-Power Revenue		10,710,879	-	-	-	-	10,710,879	10,710,879
CRA Power Revenue		2,989,504	-	-	-	2,989,504	-	2,989,504
Wadsworth Pumping Plant (DVL) Power Revenue		545,067	-	-	-	545,067	-	545,067
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)		-	-	-	-	-	-	-
Misc. allocated to supply (PVID Lease)		6,048,886	-	6,048,886	-	-	-	6,048,886
Property Taxes - SWC		166,313,250	1,489,331	98,282,285	8,208,836	58,332,797	-	166,313,250
Revenue Reserve used for Revenue Bonds - I&P		-	-	-	-	-	-	-
Annexation		-	-	-	-	-	-	-
Total Revenue Offsets		197,186,567	2,887,902	109,292,155	10,704,904	63,529,019	10,772,587	197,186,567
NET REVENUE REQUIREMENTS:		\$ 1,508,692,115	\$ 83,091,966	\$ 951,121,044	\$ 192,614,087	\$ 280,649,062	\$ 1,215,956	\$ 1,508,692,115

		A&G Line Item Allocators by Allocation Category						Total
		Demand	Fixed Commodity	Standby	Variable Commodity	Demand Management	Hydro-Electric	
Departmental O&M								
Group	Item							
Office of General Manager		0.00%	1.61%	0.00%	0.00%	0.00%	0.03%	1.64%
Office of General Manager	Board of Directors	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Bay Delta Initiatives	Bay Delta Initiatives	0.00%	1.81%	0.00%	0.00%	0.00%	0.00%	1.81%
External Affairs	Legislative Services	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
External Affairs	Media Communications Services	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
External Affairs	Manager, External Affairs/Special Projects	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
External Affairs	Conservation & Community Services	0.00%	0.63%	0.00%	0.00%	0.00%	0.00%	0.63%
Human Resources		0.00%	2.83%	0.00%	0.00%	0.00%	0.04%	2.88%
Water Systems Operations	Office of the Manager	0.00%	2.47%	0.00%	0.00%	0.00%	0.06%	2.52%
Water Systems Operations	Office of the Manager, Conveyance & Dis	0.00%	0.27%	0.00%	0.00%	0.00%	0.00%	0.27%
Water Systems Operations	Office of the Manager, Treatment Section	0.00%	0.14%	0.00%	0.00%	0.00%	0.00%	0.14%
Water Systems Operations	Office of the Manager, Operations Support	0.00%	0.50%	0.00%	0.00%	0.00%	0.01%	0.51%
Water Systems Operations	Operations Support Services	0.00%	2.21%	0.00%	0.00%	0.00%	0.04%	2.25%
Water Systems Operations	Desert Region / C&D CRA	0.00%	8.91%	0.00%	0.00%	0.00%	0.00%	8.91%
Water Systems Operations	System Operations Unit	0.00%	2.51%	0.00%	0.00%	0.00%	0.00%	2.51%
Water Systems Operations	Power Operations and Planning	0.00%	0.71%	0.00%	0.00%	0.00%	0.26%	0.97%
Water Systems Operations	Operations Planning & Programs Unit	0.00%	0.67%	0.00%	0.00%	0.00%	0.00%	0.67%
Water Systems Operations	Treatment Jensen	0.00%	3.87%	0.00%	0.00%	0.00%	0.00%	3.87%
Water Systems Operations	Treatment Diemer	0.00%	3.72%	0.00%	0.00%	0.00%	0.00%	3.72%
Water Systems Operations	Treatment Mills	0.00%	3.53%	0.00%	0.00%	0.00%	0.00%	3.53%
Water Systems Operations	Treatment Skinner	0.00%	3.45%	0.00%	0.00%	0.00%	0.00%	3.45%
Water Systems Operations	Treatment Weymouth	0.00%	4.02%	0.00%	0.00%	0.00%	0.00%	4.02%
Water Systems Operations	Water Quality Section	0.00%	7.46%	0.00%	0.00%	0.00%	0.00%	7.46%
Water Systems Operations	C&D, Eastern Unit	0.00%	4.58%	0.00%	0.00%	0.00%	0.13%	4.70%
Water Systems Operations	C&D, Western Unit	0.00%	3.79%	0.00%	0.00%	0.00%	0.13%	3.92%
Water Systems Operations	OSS, Manufacturing Services Unit	0.00%	2.38%	0.00%	0.00%	0.00%	0.03%	2.40%
Water Systems Operations	Environmental Health & Safety Section	0.00%	3.94%	0.00%	0.00%	0.00%	0.01%	3.95%
Water Systems Operations	OSS, Fleet Services Unit	0.00%	2.30%	0.00%	0.00%	0.00%	0.00%	2.30%
Water Systems Operations	OSS, Power Support Unit	0.00%	1.92%	0.00%	0.00%	0.00%	0.76%	2.68%
Water Systems Operations	Office of the Manager, Operations & Planr	0.00%	0.22%	0.00%	0.00%	0.00%	0.00%	0.23%
Water Systems Operations	Security Team & Security Management	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Sustainability, Resilience & Innovati	-	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Diversity, Equity & Inclusion	-	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Equal Employment Opportunity	-	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Office of the Chief Financial Officer		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Business Technology	Office of Manager	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Engineering Services		0.00%	11.75%	0.00%	0.00%	0.00%	0.18%	11.92%
Business Technology	Administrative Services	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Business Technology	Information Technology	0.00%	7.84%	0.00%	0.00%	0.00%	0.12%	7.96%
Water Resources Management	Resource Planning & Development	0.00%	1.40%	0.00%	0.00%	0.00%	0.00%	1.40%
Water Resources Management	Resource Implementation	0.00%	3.57%	0.00%	0.00%	0.00%	0.00%	3.57%
Water Resources Management	Office of the Group Manager	0.00%	0.82%	0.00%	0.00%	0.00%	0.00%	0.82%
Ethics Office		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Real Property		0.00%	2.38%	0.00%	0.00%	0.00%	0.00%	2.38%
General Counsel		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
General Auditor		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Total Departmental O&M	-	0.00%	98.20%	0.00%	0.00%	0.00%	1.80%	100.00%
GENERAL DISTRICT REQUIREMENTS								
State Water Contract*								
Supply - O&M		0.00%	7.70%	0.00%	0.00%	0.00%	0.00%	7.70%
Supply - Capital		0.00%	6.16%	0.00%	0.00%	0.00%	0.00%	6.16%
Power - O&M & Off-Aq Capital		0.00%	0.00%	0.00%	18.62%	0.00%	0.00%	18.62%
Power - Capital (less Off-Aq)		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Transmission - Capital - Commodity, Demand, & Standby		0.47%	2.76%	2.58%	0.00%	0.00%	0.00%	5.81%
Transmission - O&M - Commodity only		0.00%	14.31%	0.00%	0.00%	0.00%	0.00%	14.31%
Delta Conveyance - Supply		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Delta Conveyance - Power		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Delta Conveyance - Other		0.20%	1.18%	1.10%	0.00%	0.00%	0.00%	2.48%
Total State Water Contract		0.67%	32.10%	3.69%	18.62%	0.00%	0.00%	55.07%
Colorado River Aqueduct Power Costs		0.00%	0.00%	0.00%	6.17%	0.00%	0.00%	6.17%
Supply Programs (cash funded portion)		0.00%	4.62%	0.00%	0.00%	0.00%	0.00%	4.62%
Demand Management (cash funded portion)								
Local Resources Program		0.00%	1.98%	0.00%	0.00%	0.00%	0.00%	1.98%
Future Supply Actions & Stormwater Pilot		0.00%	0.17%	0.00%	0.00%	0.00%	0.00%	0.17%
Conservation Program (cash funded portion)		0.00%	1.80%	0.00%	0.00%	0.00%	0.00%	1.80%
Total Demand Management Costs		0.00%	3.95%	0.00%	0.00%	0.00%	0.00%	3.95%
Capital Financing								
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		3.74%	8.55%	7.44%	0.00%	0.00%	0.30%	20.03%
G.O. Bond Debt Service		0.05%	0.05%	0.04%	0.00%	0.00%	0.00%	0.14%
Debt Administration		0.03%	0.08%	0.07%	0.00%	0.00%	0.00%	0.18%
Bond Defeasance		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
PAYGO		1.70%	3.89%	3.39%	0.00%	0.00%	0.14%	9.12%
Total Capital Financing Costs		5.52%	12.57%	10.94%	0.00%	0.00%	0.44%	29.47%
Other Operating Costs		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Operating Equipment		0.00%	0.45%	0.01%	0.00%	0.00%	0.01%	0.46%
Succession Planning Labor Pool		0.00%	0.25%	0.00%	0.00%	0.00%	0.00%	0.25%
OPEB/PERS Pre-Funding		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Total Other Operating Costs		0.00%	0.70%	0.01%	0.00%	0.00%	0.01%	0.72%
Increase/(Decrease) in Required Reserves		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Total General District Requirements		6.19%	53.94%	14.64%	24.78%	0.00%	0.45%	100.00%
REQUIREMENTS BEFORE OFFSETS:		5.04%	62.16%	11.92%	20.18%	0.00%	0.70%	100.00%

Functionalization of A&G Costs
 Summary of Allocation Results before Inclusion of Administrative and General Costs
 Fiscal Year Ending 2024

Functional Categories	Functional Costs Allocated for FY 2024	Allocation Categories (Costs Exclude Administrative and General)					Total Allocated Excluding A&G
		Demand	Commodity	Standby	Variable Commodity	Hydro-Electric	
Source of Supply							
CRA	\$ 60,723,319.84	\$ -	\$ 60,723,320	\$ -	\$ -	\$ -	\$ 60,723,320
SWP	158,721,145	-	158,721,145	-	-	-	158,721,145
Other Supply	33,564,585	-	33,564,585	-	-	-	33,564,585
Subtotal: Source of Supply	253,009,050	-	253,009,050	-	-	-	253,009,050
Conveyance & Aqueduct							
CRA							
CRA Power	94,869,954	-	12,695,847	-	82,174,108	-	94,869,954
CRA All Other	70,165,298	1,037,893	63,406,783	5,720,621	-	-	70,165,298
SWP*	-	-	-	-	-	-	-
SWP Power	195,365,256	-	-	-	195,365,256	-	195,365,256
SWP All Other	280,104,628	7,668,069	230,171,992	42,264,567	-	-	280,104,628
Other Conveyance & Aqueduct	71,609,906	4,806,179	38,447,661	28,356,065	-	-	71,609,906
Subtotal: Conveyance & Aqueduct	712,115,042	13,512,142	344,722,283	76,341,252	277,539,364	-	712,115,042
Storage							
Storage Costs Other Than Power							
Emergency	56,146,188	-	7,834,122	48,312,066	-	-	56,146,188
Drought	49,189,884	-	49,189,884	-	-	-	49,189,884
Regulatory	27,732,280	8,190,332	13,260,056	6,281,893	-	-	27,732,280
Storage Power	(545,067)	-	-	-	(545,067)	-	(545,067)
Subtotal: Storage	132,523,286	8,190,332	70,284,062	54,593,959	(545,067)	-	132,523,286
Treatment							
Jensen	53,986,217	7,166,628	31,785,960	8,599,858	6,433,771	-	53,986,217
Weymouth	55,212,675	7,539,672	32,224,242	9,047,541	6,401,220	-	55,212,675
Diemer	62,027,160	9,098,402	33,705,651	10,918,101	8,305,006	-	62,027,160
Mills	31,146,390	2,327,427	23,219,754	2,792,592	2,806,618	-	31,146,390
Skinner	52,157,326	7,572,041	30,192,611	9,086,453	5,306,221	-	52,157,326
Subtotal: Treatment	254,529,768	33,704,170	151,128,218	40,444,545	29,252,836	-	254,529,768
Distribution	203,351,939	27,685,323	154,432,285	21,234,331	-	-	203,351,939
Demand Management	68,209,542	-	68,209,542	-	-	-	68,209,542
Hydro-Electric	2,344,825	-	-	-	-	2,344,825	2,344,825
Total Costs Allocated	\$ 1,626,083,452	\$ 83,091,966	\$ 1,041,785,441	\$ 192,614,087	\$ 306,247,133	\$ 2,344,825	\$ 1,626,083,452
A&G Costs to be Functionalized		\$ 937,741	\$ 164,814,582	\$ 2,217,501,658	\$ 3,753,783	\$ 2,942,586	\$ 174,666,195

Percentages Used for Functionalization of A&G Costs

Allocation Categories				
Fixed			Variable Commodity	Hydro-Electric
Demand	Commodity	Standby		
0.0%	5.8%	0.0%	0.0%	0.0%
0.0%	15.2%	0.0%	0.0%	0.0%
0.0%	3.2%	0.0%	0.0%	0.0%
0.0%	24.3%	0.0%	0.0%	0.0%
0.0%	1.2%	0.0%	26.8%	0.0%
1.2%	6.1%	3.0%	0.0%	0.0%
0.0%	0.0%	0.0%	0.0%	0.0%
0.0%	0.0%	0.0%	63.8%	0.0%
9.2%	22.1%	21.9%	0.0%	0.0%
5.8%	3.7%	14.7%	0.0%	0.0%
16.3%	33.1%	39.6%	90.6%	0.0%
0.0%	0.8%	25.1%	0.0%	0.0%
0.0%	4.7%	0.0%	0.0%	0.0%
9.9%	1.3%	3.3%	0.0%	0.0%
0.0%	0.0%	0.0%	-0.2%	0.0%
9.9%	6.7%	28.3%	-0.2%	0.0%
8.6%	3.1%	4.5%	2.1%	0.0%
9.1%	3.1%	4.7%	2.1%	0.0%
10.9%	3.2%	5.7%	2.7%	0.0%
2.8%	2.2%	1.4%	0.9%	0.0%
9.1%	2.9%	4.7%	1.7%	0.0%
40.6%	14.5%	21.0%	9.6%	0.0%
33.3%	14.8%	11.0%	0.0%	0.0%
0.0%	6.5%	0.0%	0.0%	0.0%
0.0%	0.0%	0.0%	0.0%	100.0%
100.0%	100.0%	100.0%	100.0%	100.0%

Administrative and General Costs Redistributed Among Functional Categories

Administrative and General Costs by Allocation Categories						Total A&G Costs Allocated	Functional Categories
Fixed			Variable Commodity	Hydro-Electric			
Demand	Commodity	Standby					
\$	-	\$ 9,606,670	\$ -	\$ -	\$ -	\$ 9,606,670	Source of Supply
-	-	25,110,314	-	-	-	25,110,314	CRA
-	-	5,310,050	-	-	-	5,310,050	SWP
-	-	40,027,034	-	-	-	40,027,034	Other Supply
							Subtotal: Source of Supply
							Conveyance & Aqueduct
-	-	2,008,533	-	1,007,238	-	3,015,771	CRA
11,713	10,031,204	65,860	-	-	-	10,108,777	
-	-	-	-	-	-	-	SWP*
-	-	-	-	2,394,664	-	2,394,664	
86,539	36,414,121	486,578	-	-	-	36,987,237	
54,241	6,082,572	326,454	-	-	-	6,463,267	Other Conveyance & Aqueduct
152,492	54,536,430	878,891	3,401,902	-	-	58,969,716	Subtotal: Conveyance & Aqueduct
							Storage
							Storage Costs Other Than Power
-	1,239,389	556,201	-	-	-	1,795,590	
-	7,782,035	-	-	-	-	7,782,035	
92,433	2,097,793	72,321	-	-	-	2,262,547	
-	-	-	-	(6,681)	-	(6,681)	Storage Power
92,433	11,119,217	628,522	(6,681)	-	-	11,833,491	Subtotal: Storage
							Treatment
80,880	5,028,665	99,007	78,861	-	-	5,287,413	Jensen
85,090	5,098,003	104,161	78,462	-	-	5,365,716	Weymouth
102,681	5,332,368	125,696	101,798	-	-	5,662,542	Diemer
26,266	3,673,457	32,150	34,402	-	-	3,766,275	Mills
85,455	4,776,591	104,609	65,040	-	-	5,031,695	Skinner
380,371	23,909,083	465,625	358,563	-	-	25,113,641	Subtotal: Treatment
							Distribution
312,445	24,431,799	244,464	-	-	-	24,988,708	Demand Management
-	10,791,020	-	-	-	-	10,791,020	Hydro-Electric
-	-	-	-	2,942,586	-	2,942,586	
\$ 937,741	\$ 164,814,582	\$ 2,217,502	\$ 3,753,783	\$ 2,942,586	\$ -	\$ 174,666,195	Total Costs Allocated

Summary of Functionalization Percentages

Fiscal Year Ending 2024

	Source of Supply	Conveyance & Aqueduct	Storage	Water Quality	Treatment	Distribution	Demand Management	Hydro-Electric	Administrative & General	Total Allocated
Departmental Operations & Maintenance										
Office of General Manager	5%	12%	2%	0%	19%	16%	2%	1%	43%	100%
Water Systems Operations	5%	17%	1%	0%	40%	33%	0%	2%	2%	100%
Water Resources Management	70%	0%	0%	0%	0%	2%	28%	0%	0%	100%
Engineering Services	4%	21%	24%	0%	25%	18%	0%	1%	6%	100%
Bay Delta Initiatives	0%	100%	0%	0%	0%	0%	0%	0%	0%	100%
Business Technology	4%	9%	2%	0%	15%	12%	1%	1%	56%	100%
Real Property	6%	33%	8%	0%	0%	12%	0%	0%	41%	100%
Human Resources	7%	15%	3%	0%	24%	20%	2%	1%	27%	100%
Office of the Chief Financial Officer	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%
External Affairs	0%	0%	0%	0%	0%	0%	11%	0%	89%	100%
General Counsel	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%
General Auditor	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%
Ethics Office	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%
Sustainability, Resilience & Innovation	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%
Diversity, Equity & Inclusion	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%
Equal Employment Opportunity	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%
Total Departmental O&M	7%	15%	3%	0%	24%	20%	2%	1%	27%	100%
General District Requirements										
State Water Contract*	25%	75%	0%	0%	0%	0%	0%	0%	0%	100%
Colorado River Aqueduct Power Costs	0%	100%	0%	0%	0%	0%	0%	0%	0%	100%
Supply Programs (cash funded portion)	82%	0%	18%	0%	0%	0%	0%	0%	0%	100%
Demand Management (cash funded portion)	0%	0%	0%	0%	0%	0%	100%	0%	0%	100%
Capital Financing	4%	21%	24%	0%	25%	19%	0%	1%	6%	100%
Other Operating Costs	7%	15%	3%	0%	24%	20%	2%	1%	27%	100%
Increase/(Decrease) in Required Reserves	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%
Total General District Requirements	18%	53%	8%	0%	8%	6%	4%	0%	3%	100%
Revenue Offsets	23%	57%	1%	0%	1%	1%	0%	5%	13%	100%
Net Revenue Requirements	14%	40%	7%	0%	14%	11%	4%	0%	10%	100%

* Includes Delta Conveyance planning costs net of California WaterFix refund

Cost Allocation Summary (by budget line item)

Fiscal Year Ending 2024

	Allocation Categories						Total Allocated
	Fixed			Variable	Other	Hydro-Electric	
	Demand	Commodity	Standby	Commodity			
Departmental Operations & Maintenance							
Office of General Manager	\$ -	\$ 8,434,504	\$ -	\$ -	\$ -	\$ 133,800	\$ 8,568,304
Water Systems Operations	-	350,082,387	-	29,252,836	-	7,662,355	386,997,578
Water Resources Management	-	35,160,622	-	-	-	-	35,160,622
Engineering Services	-	63,382,995	-	-	-	966,790	64,349,784
Bay Delta Initiatives	-	15,397,120	-	-	-	-	15,397,120
Business Technology	-	49,938,817	-	-	-	792,200	50,731,017
Real Property	-	21,307,472	-	-	-	-	21,307,472
Human Resources	-	16,054,496	-	-	-	254,679	16,309,175
Office of the Chief Financial Officer	-	-	-	-	-	-	-
External Affairs	-	4,031,139	-	-	-	-	4,031,139
General Counsel	-	-	-	-	-	-	-
General Auditor	-	-	-	-	-	-	-
Ethics Office	-	-	-	-	-	-	-
Sustainability, Resilience & Innovation	-	-	-	-	-	-	-
Diversity, Equity & Inclusion	-	-	-	-	-	-	-
Equal Employment Opportunity	-	-	-	-	-	-	-
Total Departmental O&M (including Administrative and General)	-	563,789,553	-	29,252,836	-	9,809,824	602,852,212
General District Requirements							
State Water Contract*	9,548,259	458,158,016	52,627,724	262,041,429	-	-	782,375,428
Colorado River Aqueduct Power Costs	-	-	-	87,992,155	-	-	87,992,155
Supply Programs (cash funded portion)	-	65,872,212	-	-	-	-	65,872,212
Demand Management (cash funded portion)	-	56,402,827	-	-	-	-	56,402,827
Capital Financing	78,807,390	179,419,830	156,124,563	-	-	6,289,352	420,641,134
Other Operating Costs	-	9,985,479	184,779	-	-	161,335	10,331,592
Increase/(Decrease) in Required Reserves	-	-	-	-	Other	-	-
Total General District Requirements (including Administrative and General)	88,355,648	769,838,364	208,937,065	350,033,584	-	6,450,687	1,423,615,349
Revenue Offsets	(4,325,942)	(127,027,893)	(14,105,477)	(69,285,504)	-	(10,973,099)	(225,717,914)
Net Revenue Requirements	\$ 84,029,707	\$ 1,206,600,024	\$ 194,831,588	\$ 310,000,916	\$ -	\$ 5,287,412	\$ 1,800,749,647

* Includes Delta Conveyance planning costs net of California WaterFix refund

Fiscal Year Ending 2024	Supply			Conveyance & Aqueduct					Storage				Treatment	Distribution	Demand Mgt.	Hydro	Total
	CRA	SWC	Other	CRA power	CRA other	SWC power	SWC other	Other C&A	Emergency	Drought	Regulatory	Power					
Dept. Operations & Maintenance	9,658,647	16,925,532	14,856,669	3,712,419	56,015,844	-	24,725,744	8,001,384	7,834,122	6,304,412	4,197,584	-	145,826,457	121,406,184	11,727,128	6,840,176	438,032,302
General District Requirements																	
State Water Contract*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Capital	-	85,494,959	-	-	-	(3,654,765)	115,160,127	-	-	-	-	-	-	-	-	-	197,000,320
O&M	-	107,000,290	-	-	-	258,551,933	198,687,447	-	-	-	-	-	-	-	-	-	564,239,670
Colorado River Aqueduct Power	-	-	-	85,626,149	-	-	-	-	-	-	-	-	-	-	-	-	85,626,149
Supply Programs (cash funded portion)	51,129,998	-	1,250,000	-	-	-	-	-	-	11,720,987	-	-	-	-	-	-	64,100,985
Demand Management (cash funded portion)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	54,886,221
Capital Financing Program	-	-	17,275,568	8,898,220	13,195,409	-	6,554,298	63,763,339	48,397,633	31,252,283	23,569,430	-	107,044,197	81,610,541	1,649,426	6,120,239	409,330,584
Other Operating Costs	221,687	388,478	340,993	85,208	1,285,685	-	567,509	183,649	179,810	144,700	96,344	-	3,347,032	2,786,534	269,163	156,997	10,053,788
Revenue Offsets	(287,011)	(51,088,113)	(158,644)	(3,452,041)	(331,639)	(59,531,911)	(65,590,498)	(338,467)	(265,377)	(232,498)	(131,078)	(545,067)	(1,687,918)	(2,451,320)	(322,395)	(10,772,587)	(197,186,567)
Admin. & General	9,606,670	25,110,314	5,310,050	3,015,771	10,108,777	2,394,664	36,987,237	6,463,267	1,795,590	7,782,035	2,262,547	(6,681)	25,113,641	24,988,708	10,791,020	2,942,586	174,666,195
Net Revenue Requirement	70,329,990	183,831,459	38,874,635	97,885,726	80,274,075	197,759,920	317,091,865	78,073,172	57,941,778	56,971,919	29,994,828	(551,748)	279,643,409	228,340,646	79,000,562	5,287,412	1,800,749,647
* Includes Delta Conveyance planning costs net of California WaterFix refund																	

Fiscal Year Ending 2024	Supply			Conveyance & Aqueduct					Storage				Treatment	Distribution	Demand Mgt.	Hydro	Total
	CRA	SWC	Other	CRA power	CRA other	SWC power	SWC other	Other C&A	Emergency	Drought	Regulatory	Power					
Fixed Demand																	
engineering factors	-	-	-	0.0%	8.1%	0.0%	8.1%	8.1%	0.0%	0.0%	34.7%	0.0%	31.8%	34.7%	-	-	-
SWC Capital	-	-	-	-	-	-	9,291,517	-	-	-	-	-	-	-	-	-	9,291,517
Capital Financing	-	-	-	-	1,064,651	-	528,823	5,144,647	-	-	8,190,332	-	34,088,003	28,359,507	-	-	77,375,964
A&G less Offsets	-	-	-	-	(15,045)	-	(2,065,733)	(284,227)	-	-	92,433	-	(3,463)	(361,740)	-	-	(2,637,775)
Total fixed demand	-	-	-	-	1,049,607	-	7,754,608	4,860,420	-	-	8,282,765	-	34,084,541	27,997,767	-	-	84,029,707
Fixed Commodity																	
engineering factors	100%	100%	100%	100%	47.5%	0%	47.5%	47.5%	0%	100%	38.6%	0%	29.5%	38.6%	1	-	-
Capital Financing	-	-	17,275,568	8,898,220	6,262,654	-	3,110,726	30,262,628	-	31,252,283	9,097,206	-	31,562,966	31,499,610	1,649,426	-	170,871,287
SWC Capital*	-	85,494,959	-	-	-	-	54,655,984	-	-	-	-	-	-	-	-	-	140,150,942
SWC O&M	-	107,000,290	-	-	-	-	198,687,447	-	-	-	-	-	-	-	-	-	305,687,738
Dept. O&M	9,658,647	16,925,532	14,856,669	3,712,419	56,015,844	-	24,725,744	8,001,384	7,834,122	6,304,412	4,197,584	-	110,943,184	121,406,184	11,727,128	-	396,308,853
Supply Programs (cash funded portion)	51,129,998	-	1,250,000	-	-	-	-	-	-	11,720,987	-	-	-	-	-	-	64,100,985
Demand Management (cash funded portion)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	54,886,221
Other Operating Costs	221,687	388,478	340,993	85,208	1,285,685	-	567,509	183,649	179,810	144,700	96,344	-	3,347,032	2,786,534	269,163	-	9,896,791
A&G less Offsets	9,319,658	(25,977,800)	5,151,406	2,008,533	9,873,805	-	(15,161,298)	6,082,572	1,059,579	7,549,536	1,966,715	-	29,184,118	23,171,756	10,468,624	-	64,697,207
Total fixed commodity	70,329,990	183,831,459	38,874,635	14,704,380	73,437,988	-	266,586,113	44,530,233	9,073,511	56,971,919	15,357,849	-	175,037,301	178,864,084	79,000,562	-	1,206,600,024
Fixed Standby																	
engineering factors	-	-	-	0%	44%	0%	44.5%	44.5%	100%	0%	26.7%	0%	38.7%	26.7%	-	-	-
SWC Capital	-	-	-	-	-	-	51,212,626	-	-	-	-	-	-	-	-	-	51,212,626
Capital Financing	-	-	-	-	5,868,103	-	2,914,749	28,356,065	48,397,633	-	6,281,893	-	41,393,227	21,751,423	-	-	154,963,094
A&G less Offsets	-	-	-	-	(81,623)	-	(11,376,230)	326,454	470,633	-	72,321	-	(483,058)	(272,628)	-	-	(11,344,131)
Total fixed standby	-	-	-	-	5,786,480	-	42,751,144	28,682,519	48,868,267	-	6,354,214	-	40,910,169	21,478,795	-	-	194,831,588
Variable Commodity																	
SWC Power	-	-	-	-	-	254,897,168	-	-	-	-	-	-	-	-	-	-	254,897,168
CRA Power	-	-	-	85,626,149	-	-	-	-	-	-	-	-	-	-	-	-	85,626,149
Variable Treatment	-	-	-	-	-	-	-	-	-	-	-	-	34,883,273	-	-	-	34,883,273
A&G less Offsets	-	-	-	(2,444,803)	-	(57,137,248)	-	-	-	-	-	(551,748)	(5,271,875)	-	-	-	(65,405,673)
Total variable commodity	-	-	-	83,181,346	-	197,759,920	-	-	-	-	-	(551,748)	29,611,398	-	-	-	310,000,916
Hydroelectric																	
A&G less Offsets	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13,117,412	13,117,412
Total hydroelectric	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	(7,830,000)	(7,830,000)
Total Costs	70,329,990	183,831,459	38,874,635	97,885,726	80,274,075	197,759,920	317,091,865	78,073,172	57,941,778	56,971,919	29,994,828	(551,748)	279,643,409	228,340,646	79,000,562	5,287,412	1,800,749,647

*Option 2- 6.5% / 6.5%

Metropolitan Water District of Southern California

FISCAL YEARS 2022/23 and 2023/24 COST OF SERVICE REPORT FOR PROPOSED WATER RATES AND CHARGES



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EXECUTIVE SUMMARY

Metropolitan's current rate design was adopted by its Board of Directors on October 16, 2001 following a lengthy and open process. Metropolitan is required to adopt rates and charges that are reasonable, and cost of service is one reasonable method. In 2001, Metropolitan chose to adopt a cost of service rate structure that it found reasonable for recovering the costs of providing full-service water service (treated and untreated) and wheeling service to its 26 member agencies, as previously defined in Metropolitan's Administrative Code Section 4405. The rate structure is designed in accordance with the Rate Structure Action Plan of December 12, 2000; the Composite Rate Structure framework of April 11, 2000; the Strategic Plan Policy Principles of December 14, 1999; and the Strategic Plan Steering Committee Guidelines of January 6, 2000. The Board adopted the rate structure on October 16, 2001. On August 18, 2020, the Board of Directors repealed the Administrative Code sections that established the wheeling service it previously made available to its member agencies (short-term wheeling service under one year) and the pre-set wheeling rate for that wheeling service. As a result of the Board's action, short-term wheeling to member agencies is now determined on a case by case basis and is set by contract, as has been done for wheeling service for member agencies lasting more than one year and wheeling for third parties. Additionally, on November 23, 2021, the Board took an action to direct staff to incorporate all demand management costs in Metropolitan's supply rate elements for future rates and charges proposals, eliminating the Water Stewardship Rate element.

This report describes the updated rate structure in detail including the cost of service process that supports the proposed rates and charges for calendar years 2023 and 2024, which are based on the Proposed Biennial Budget for Fiscal Years 2022/23 and 2023/24 prepared for the Board and committee meetings scheduled in February 2022 (the "Biennial Budget") through April 2022.

The rate structure supports the strategic planning vision that Metropolitan is a regional provider of services, encourages the development of additional local supplies by member agencies through programs such as recycling, encourages conservation, and accommodates a water transfer market. Through its regional services, Metropolitan ensures a baseline of reliability and quality for imported water deliveries in its service area. Metropolitan's rate structure recognizes the foregoing and other unique aspects of Metropolitan's services, governance structure, and operational circumstances. Although there are general tenants that are important in cost of service industry guidelines, all guidelines recognize that customization of cost of service is necessary to reflect the service being provided. Accordingly, Metropolitan's cost of service and the rate structure developed therefrom is in line with industry guidelines and Metropolitan's unique operational circumstances.

Objectives

In accordance with the Strategic Plan Policy Principles adopted in 1999, the rate structure is designed to accomplish the following:

Accountability. Define the linkage among costs, charges, and benefits through a cost of service approach consistent with industry guidelines.

Regional Provider. Ensure that regional services are provided to meet the existing and growth needs of member agencies.

Equity. Ensure that users, including member agencies and other entities, pay the same rates and charges for like classes of services and provide fair and reasonable allocation of costs through rates and charges.

Environmental Responsibility. Encourage wise environmental stewardship and effective demand management by funding conservation and recycling projects and programs and using pricing¹ to encourage investments in conservation, recycling, and other economical local supplies.

Choice and Competition. Offer choices for services to member agencies and accommodate the development of a water transfer market.

Water Quality. Support source quality improvements and water treatment systems that are required to ensure safe drinking water and the feasibility of water recycling and groundwater management programs.

Financial Integrity. Establish a financial commitment from the member agencies that provides financial security for Metropolitan and does not transfer undue risk to member agencies, individually or as a whole.

¹ Metropolitan's rates reflect the cost of providing its services and the impact of those costs may have an impact on member agencies' conservation and local resource development. Metropolitan invests in demand management, by providing incentives to those conserving and developing local resource projects that reduce the price of those projects for the participants. Those demand management investments lower system costs and reduce the need for Metropolitan to import additional supplies into the service area.

DISTRICT OVERVIEW

This Report provides an overview of Metropolitan generally, its governance structure, operational characteristics, and the services it provides to its member agencies. The District Overview provides context for the cost of service process applied, which result in the proposed rates and charges.

District Profile

The Metropolitan Water District of Southern California (Metropolitan) is a metropolitan water district created in 1928 under authority of the Metropolitan Water District Act (California Statutes 1927, Chapter 429, as reenacted in 1969 as Chapter 209, as amended (the Act)). Metropolitan has 26 member public agencies and its primary purpose is to provide its members with a reliable wholesale water supply service for domestic and municipal uses. To do so, Metropolitan imports water from the Colorado River and Northern California. Metropolitan also helps its member agencies develop increased water conservation, recycling, storage, and other local resource programs.

Metropolitan is authorized to develop, store, and distribute water for domestic and municipal purposes and other beneficial uses if excess water is available, and may provide, generate, and deliver electric power within or outside the state for the purpose of developing, storing, and distributing water. All powers, privileges and duties vested in or imposed upon Metropolitan are exercised and performed by and through its Board of Directors. Metropolitan is governed by a 38-member Board of Directors representing the 26 member agencies. Metropolitan directors are selected by their respective member agencies and some of those directors also serve on the governing body of their member agency. Board and committee meetings are open to the public and are broadcast on the Internet through Metropolitan's website, www.mwdh2o.com. Although the Board and its committees have met virtually since the start of the COVID-19 pandemic, Metropolitan has made participation, observation, viewing, and listening options available to the public for all meetings. A schedule of Board and committee meetings, as well as current and archived Board materials, is available at the same website.

Metropolitan was established to obtain an allotment of Colorado River water and to construct and operate the 242-mile Colorado River Aqueduct (CRA), which runs from an intake at Lake Havasu on the California-Arizona border, to an endpoint at Metropolitan's Lake Mathews reservoir in Riverside County. Metropolitan owns and operates an extensive portfolio of capital facilities including the CRA, 16 hydroelectric facilities, nine reservoirs, 830 miles of large-scale pipes, and five water treatment plants.

In 1960, Metropolitan, followed by other public agencies, signed a long-term contract with the state Department of Water Resources (DWR) to participate in the State Water Project (SWP). The SWP is the largest state-built, user-financed water supply and transportation project in the country. Its facilities were constructed with several general types of financing, the repayment of which is made by the 29 agencies and districts that participate in the SWP through long-term contracts (the State Water Contractors). The State Water Contractors also pay for the operations, maintenance, power, and replacement (OMP&R) costs of the SWP, as the State Water Contracts are the basis for all SWP construction and ongoing operations. DWR manages and operates the SWP. As the largest of the now 29 contractors, Metropolitan is allocated slightly less than half of all SWP supplies. Water supplies from the SWP are conveyed to Metropolitan via the SWP's 444-mile California Aqueduct, which was made possible pursuant to Metropolitan's State Water Contract. The SWP serves urban and agricultural agencies from the San Francisco Bay area to Southern California.

To secure additional supplies, Metropolitan also has groundwater banking partnerships and water transfer arrangements within and outside of its service area. Metropolitan also provides financial incentives to its member agencies for local investments in demand management programs and projects. An increasing

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percentage of Southern California's water supply comes from these conservation programs and local resources projects, including water recycling and recovered groundwater.

To pay for its costs, the Act authorizes Metropolitan to: levy property taxes within its service area; establish water rates; collect charges for water standby and service availability; incur general obligation bonded indebtedness and issue revenue bonds, notes and short-term revenue certificates; execute contracts; and exercise the power of eminent domain for the purpose of acquiring property. In addition, Metropolitan's Board is authorized to establish terms and conditions under which additional areas may be annexed to Metropolitan's service area.

District Mission

The mission of Metropolitan is to provide its 5,200-square-mile service area with an adequate and reliable supply of high-quality water to meet present and future needs in an environmentally and economically responsible way.

Metropolitan Service Area

Metropolitan's service area comprises approximately 5,200 square miles and includes portions of the six counties of Los Angeles, Orange, Riverside, San Bernardino, San Diego and Ventura. When Metropolitan began delivering water in 1941, its service area consisted of approximately 625 square miles. Its service area has increased by 4,500 square miles since that time. The expansion was primarily the result of annexation of the service areas of additional member agencies. Metropolitan has historically provided between 40 and 60 percent of the water used annually within its service area.

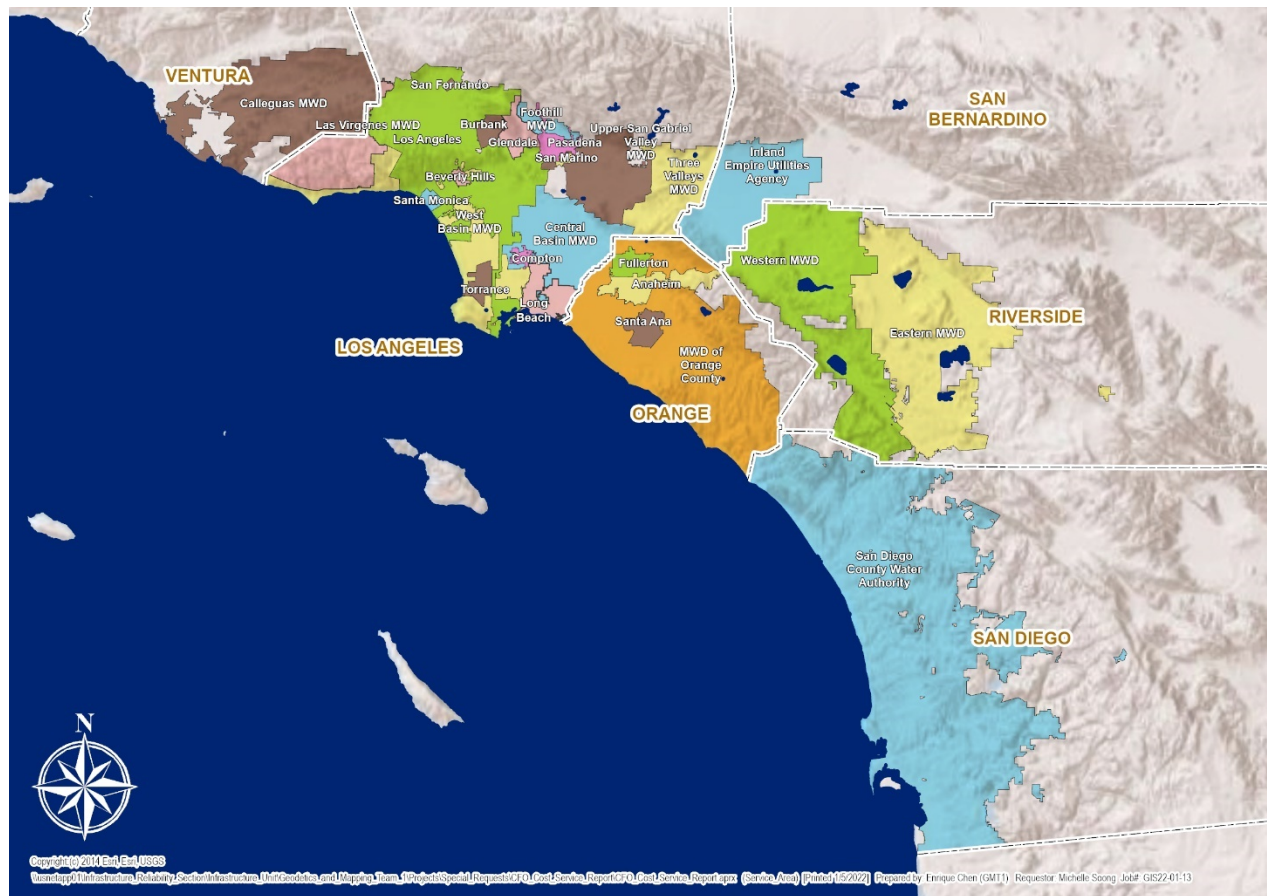
The area served by Metropolitan represents the most densely populated and heavily industrialized portions of Southern California. Metropolitan estimates that approximately 19 million people lived in Metropolitan's service area in 2020, based on official estimates from the California Department of Finance and on population distribution estimates from the Southern California Association of Governments (SCAG) and the San Diego Association of Governments (SANDAG). Recent population projections prepared by SCAG in 2020 and by SANDAG in 2019, which will be used as base data for Metropolitan's 2020 Integrated Water Resources Plan, show expected population growth of approximately 17 percent in Metropolitan's service area between 2010 and 2035, which is slightly lower than the approximately 18 percent population growth rate projected by SCAG in 2012 and SANDAG in 2013 (which projections were used as base data for Metropolitan's prior 2015 Integrated Water Resources Plan update).

The economy of Metropolitan's service area is exceptionally diverse. In 2019, the economy of the six counties which contain Metropolitan's service area had a gross domestic product larger than all but twelve nations of the world. The Six County Area economy ranked between South Korea (\$1.642 trillion) and Spain (\$1.394 trillion), with an estimated gross domestic product (GDP) of \$1.596 trillion. The Six County Area's gross domestic product in 2019 was larger than all states except California, Texas, and New York.

The climate in Metropolitan's service area ranges from moderate temperatures throughout the year in the coastal areas to hot and dry summers in the inland areas. Annual rainfall in an average year has historically been approximately 13 to 15 inches along the coastal area, up to 20 inches in foothill areas and less than 10 inches inland.

Service Area Map

Figure 1 below shows the area served by Metropolitan. It includes parts of the six counties that comprise Southern California (Six County Area) consisting of Los Angeles, Orange, Riverside, San Bernardino, San Diego, and Ventura counties. Although these counties comprise Metropolitan's service area, Metropolitan's territory does not encompass all the area within each of the six counties.

Figure 1: Map of Metropolitan's Service Area

Organization Structure

Board of Directors

Metropolitan is governed by the customers that use its system and service, its member public agencies, through a 38-member Board of Directors. Each member public agency is entitled to have at least one representative on the Board, plus an additional representative for each full five percent of the total assessed valuation of property in Metropolitan's service area that is within the member public agency. Accordingly, the Board may, from time to time, have more than 38 directors. There are also limits on reductions in the number of directors. Changes in relative assessed valuation do not terminate any director's term and as a result of California Assembly Bill 1220 (Garcia) enacted in 2019, "A member public agency shall not have fewer than the number of representatives the member public agency had as of January 1, 2019."

The Board includes business, professional and civic leaders. Directors serve on the Board without compensation from Metropolitan. Voting is based on assessed valuation, with each member agency being entitled to cast one vote for each \$10 million or major fractional part of \$10 million of assessed valuation of property within the member agency, as shown by the assessment records of the county in which the member agency is located. The Board administers its policies through the Metropolitan Water District Administrative Code (the Administrative Code), which the Board adopted in 1977. The Board periodically amends the Administrative Code to reflect new policies or changes in existing policies that occur from time to time.

Metropolitan's day-to-day management is under the direction of its General Manager, who serves at the pleasure of the Board, as do Metropolitan's General Counsel, General Auditor, and Ethics Officer. Metropolitan's organization chart is shown in Figure 2; Table 1 provides a listing of Metropolitan's Senior Management.

Figure 2: Metropolitan Organization Chart

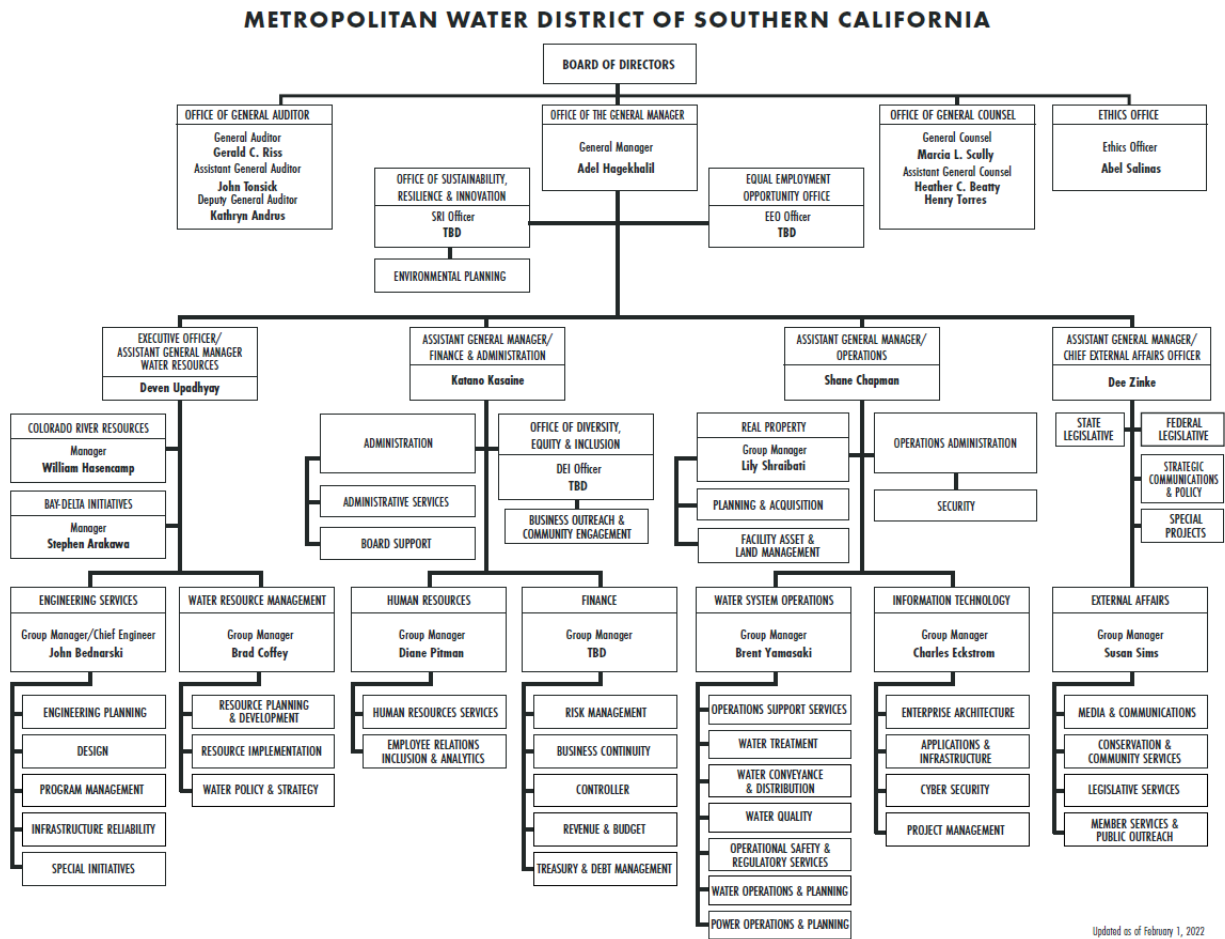


Table 1: Metropolitan Senior Management

Adel Hagekhalil	General Manager
Marcia Scully	General Counsel
Gerald Riss	General Auditor
Abel Salinas	Ethics Officer
Deven Upadhyay	Executive Officer and Assistant General Manager/Water Resources
Katano Kasaine	Assistant General Manager/Finance & Administration
Dee Zinke	Assistant General Manager/Chief External Affairs Officer
Shane Chapman	Assistant General Manager/Operations
Rosa Castro	Board Administrator

Member Agencies

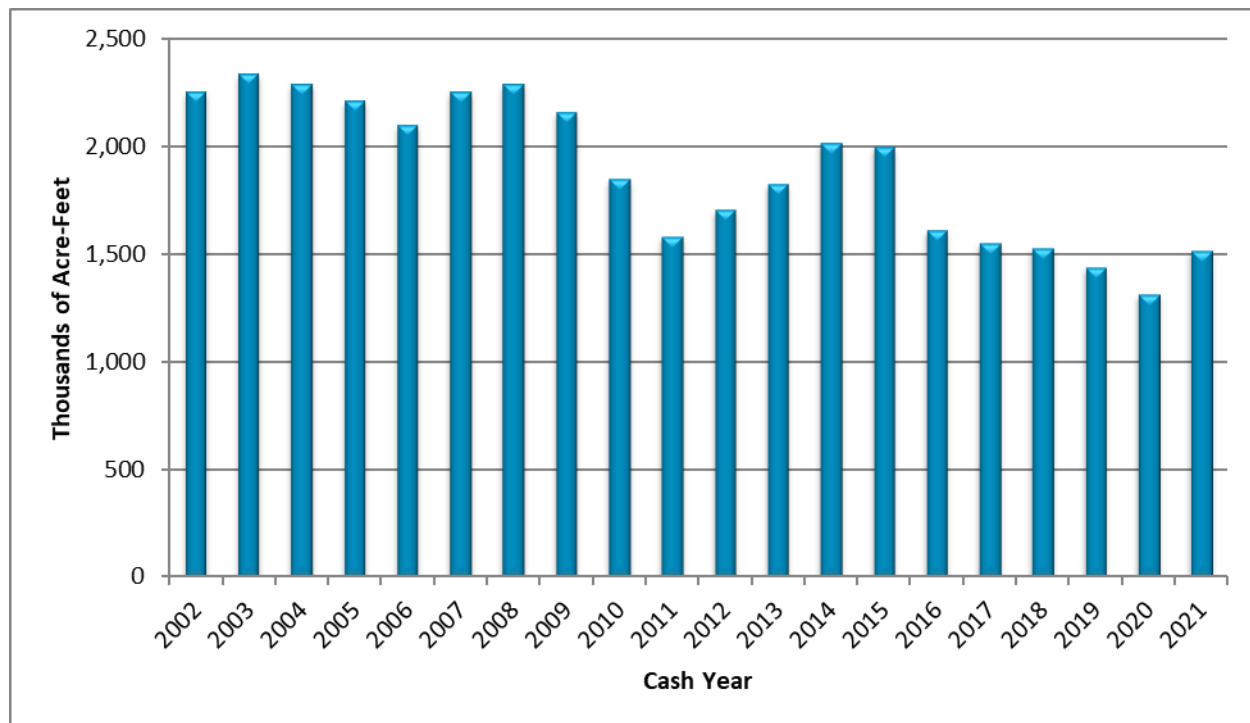
Table 2 lists the 26 member agencies of Metropolitan which include 11 municipal water districts, 14 cities and one county water authority.

Table 2: Metropolitan Member Agencies

Municipal Water Districts	Cities	County Water Authority
Calleguas	Anaheim	San Diego
Central Basin	Beverly Hills	
Eastern	Burbank	
Foothill	Compton	
Inland Empire Utilities Agency	Fullerton	
Upper San Gabriel Valley	Glendale	
Western of Riverside County	Long Beach	
Las Virgenes	Los Angeles	
Orange County	Pasadena	
Three Valleys	San Fernando	
West Basin	San Marino	
	Santa Ana	
	Santa Monica	
	Torrance	

Metropolitan's Water Transactions with Member Agencies

Due to Metropolitan's role as a voluntary cooperative of, and supplemental wholesale supplier to, member agencies with varying degrees of reliance on Metropolitan, and other factors described below, water transactions are highly variable and unpredictable from year to year. In the past 20 years, water transactions have been as high as 2.3 million acre-feet (MAF) in Cash Year 2003 and as low as 1.3 MAF in Cash Year 2020, as shown in Figure 3. Figure 3 includes total member agencies transactions by cash year, which includes water sales, exchanges, and wheeling. Variation occurs for many reasons. The demand for supplemental supplies is dependent on water use at the retail consumer level and the amount of local water supplies available to member agencies. Consumer demand and locally supplied water vary from year to year, resulting in variability in Metropolitan's water transactions. Both economic growth and recessions can also lead to increases and decreases in demand. Weather also affects demands. Wet cool weather not only increases the availability of local supplies, it also decreases retail demands. Conversely, hot and dry weather results in significant increases in retail demand. Member agencies also rely on Metropolitan during times of operational emergencies. Examples include: power outages, when member agencies need gravity-fed supplies to replace energy-dependent operations; water quality issues, such as when contaminants in groundwater force member agencies to shut down wells; and fires, when member agencies rely on Metropolitan for increased flows.

Figure 3: Historic Water Transactions Cash Year 2002 -2021¹

¹ Occur period Water Transactions. Includes transactions for services provided to member agencies.

Table 3 identifies the amounts paid by member agency, including fixed charges and volumetric rates, as well as the volume of water transactions by Metropolitan member agencies for FY 2021. Water transactions include sales, exchanges, and wheeling.

Table 3: Metropolitan Water Transactions with Member Agencies, Year Ended June 30, 2021(Accrual Basis, Dollars in Thousands) ^{1, 2}

Agency	Revenues				Water Transactions	
	Fixed Charges (\$ thousands)	Volumetric Charges (\$ thousands)	Total (\$ thousands)	Percent of Total	AF	Percent of Total
Anaheim	\$ 1,344	\$ 41,292	\$ 42,636	2.87%	41,964	2.67%
Beverly Hills	1,196	10,675	11,871	0.80%	9,784	0.62%
Burbank	853	8,760	9,613	0.65%	9,920	0.63%
Calleguas	8,046	103,711	111,757	7.51%	95,365	6.06%
Central Basin	836	27,263	28,099	1.89%	25,527	1.62%
Compton	61	2	63	0.00%	2	0.00%
Eastern	7,830	89,647	97,476	6.55%	91,462	5.81%
Foothill	645	10,598	11,243	0.76%	9,733	0.62%
Fullerton	486	7,552	8,038	0.54%	6,947	0.44%
Glendale	1,348	17,719	19,067	1.28%	16,183	1.03%
Inland Empire	4,521	44,465	48,986	3.29%	71,347	4.53%
Las Virgenes	1,842	23,056	24,897	1.67%	21,153	1.34%
Long Beach	2,379	24,043	26,422	1.78%	22,399	1.42%
Los Angeles	28,159	271,083	299,242	20.11%	316,537	20.11%
MWDOC	15,423	137,769	153,192	10.30%	140,558	8.93%
Pasadena	1,644	23,314	24,958	1.68%	21,297	1.35%
San Diego CWA	19,952	197,949	217,901	14.64%	335,760	21.33%
San Fernando	3	-3	0	0.00%	-	0.00%
San Marino	108	796	903	0.06%	738	0.05%
Santa Ana	734	8,423	9,157	0.62%	7,738	0.49%
Santa Monica	707	6,113	6,820	0.46%	5,603	0.36%
Three Valleys	5,078	62,301	67,379	4.53%	66,540	4.23%
Torrance	1,294	14,195	15,489	1.04%	14,341	0.91%
Upper San Gabriel	492	46,902	47,393	3.19%	60,036	3.81%
West Basin	12,177	118,108	130,285	8.76%	108,250	6.88%
Western MWD	4,404	70,673	75,077	5.05%	74,783	4.75%
Total	\$ 121,561	\$ 1,366,404	\$ 1,487,965	100.00%	1,573,965	100.00%

¹ Water Transactions include sales, exchanges, and wheeling.² Water Transactions as billed.

Due to differences in local supply resources and demand characteristics, usage profiles differ significantly among the member agencies. Table 4 summarizes the usage characteristics of the member agencies for the ten calendar years ended 2020. As can be seen from this table, individual agency purchases vary substantially from year to year, and the Metropolitan system accommodates usage behavior that varies widely among member agencies. The table shows that Metropolitan's transactions can vary as much as ± 30 percent from average. This range of variability is not typical for a retail water utility, but Metropolitan is a wholesale supplemental supplier with varying demands placed on it by its member agencies. Additionally, Metropolitan maintains its service available to all member agencies, regardless of each agencies' usage patterns.

Table 4: Member Agency Water Usage ProfilesCalendar Years 2011-2020 ^{1, 2, 3}

Agency	Average (AF)	Maximum (AF)	Minimum (AF)	Peak Day (CFS)
Anaheim	19,504	38,582	13,267	84.1
Beverly Hills	10,634	12,102	9,498	32.7
Burbank	15,690	19,815	7,747	22.6
Calleguas	100,699	133,688	87,759	240.8
Central Basin	42,659	73,685	17,546	79.2
Compton	420	1,597	-	6.9
Eastern	102,891	113,109	83,878	267.4
Foothill	8,270	9,532	7,218	19.9
Fullerton	7,515	10,339	5,057	27.4
Glendale	17,480	20,941	14,487	49.0
Inland Empire	81,713	103,526	63,287	153.9
Las Virgenes	20,807	24,639	17,815	46.1
Long Beach	33,225	45,221	25,953	80.4
Los Angeles	267,855	444,526	106,380	782.5
MWDOC	304,336	361,491	161,758	443.1
Pasadena	18,754	21,103	16,501	52.5
San Diego	443,762	600,211	323,909	1,138.2
San Fernando	31	108	-	4.9
San Marino	972	1,601	309	7.5
Santa Ana	10,452	16,675	4,747	21.7
Santa Monica	4,757	6,629	2,989	22.7
Three Valleys	67,162	73,500	55,988	178.6
Torrance	18,021	28,013	15,209	39.1
Upper San Gabriel	39,359	61,263	17,416	79.1
West Basin	144,806	156,213	119,443	230.2
Western	93,279	114,317	83,498	198.6
Total	1,875,053	2,492,428	1,261,658	4,309.3

¹ Water Transactions include sales, exchanges, and wheeling.² Occur period Water Transactions.³ Peak Day from May 1 through September 30, excluding replenishment.

Based on the variability of supplemental wholesale water transactions and unpredictability of future hydrologic conditions, transaction projections are based on long-term average forecasts consistent with Metropolitan's 2020 Integrated Resources Plan update analysis.

Metropolitan's Water Resources and Facilities

Metropolitan's total water system has been built over time to meet the widely differing needs of its member agencies and the sources of water available to Metropolitan. Some agencies have no local water resources and rely on Metropolitan for 100 percent of their annual water needs. Other agencies have adequate local surface supplies and storage and/or groundwater basins that provide them with the majority of their water supplies during wet and average years. However, during dry periods these agencies rely on Metropolitan to

make up any shortfalls in local water supplies. All members rely on the entirety of the system reliability during any emergency or shortage period. Therefore, Metropolitan operates its system to attempt to ensure the availability of its services to all its member agencies throughout the entire year. Challenges arise in managing water available from the SWP, the Colorado River, and water supply projects of Metropolitan.

Metropolitan's water delivery system is comprised of three integrated conveyance and delivery components:

- SWP;
- CRA; and
- Distribution System.

The California Aqueduct of the SWP and the CRA convey imported water into the Metropolitan service area. This water is then delivered to Metropolitan's member agencies via a regional network of canals, pipelines, and appurtenant facilities, which constitute the Distribution System. Supply, treatment, and storage facilities augment the Distribution System.

Water Conveyance System

For purposes of this report, components of the conveyance system are considered to include only those major trunk facilities that transport water from primary supply sources to either regional storage facilities or feeder lines linked to the primary conveyance facilities. All other water transport facilities, including pipelines, feeders, laterals, canals and aqueducts are considered part of the distribution facilities. Distribution facilities can be further identified in that they generally have at least one connection to a member agency's local distribution system. Existing regional conveyance facilities include both the SWP and CRA facilities. SWP facilities transport water from the Sacramento-San Joaquin Delta southward through a series of pumps, aqueducts, siphons, and tunnels that comprise the California Aqueduct. Conveyance facilities in or near Metropolitan's service area include the East Branch and West Branch of the California Aqueduct, the San Bernardino Tunnel, the Devil Canyon Power Plant, and the Santa Ana Valley Pipeline, which constitute the terminus of the reaches of the SWP facilities used and allocable to Metropolitan under its State Water Contract. The characteristics of the California Aqueduct are described more fully under the "State Water Project" heading below. Metropolitan operates the CRA. The CRA transports water from the Colorado River approximately 242 miles to its terminus at Lake Mathews in Riverside County. The characteristics of the CRA are more fully described under the "Colorado River Aqueduct" heading below. A summary of conveyance facilities is presented in Table 5.

Table 5: Components of Metropolitan's Water Conveyance System

Facility Name	Design Capacity (cfs)
East Branch SWP to Devil Canyon (a)	1,500
West Branch SWP (a)	1,490
Santa Ana Valley Pipeline SWP (a)	420
Colorado River Aqueduct	1,605
Inland Feeder	1,000

(a) The availability of additional capacity is dependent on coordination of Metropolitan's needs and the needs of other SWP Contractors

Metropolitan's conveyance facilities deliver available water to meet regional supplemental water demands either through direct deliveries or through deliveries to storage for later use. The two most important factors considered in evaluating water conveyance needs are:

- Availability of water supplies; and
- Supplemental water demands, including both:
 - Consumptive demands; and
 - Deliveries to storage during water surplus periods.

Additional factors that are considered in modeling operational needs and planning for additional water conveyance facilities include:

- Water quality blend requirements,
- System reliability in an emergency or unusual supply year; and
- System flexibility under other-than-normal operating conditions.

Conveyance system planning and operational needs are evaluated using both 1) computer simulation models, which indicate how much imported water is available during a given year, and 2) a distribution system mass balance model, which indicates system capacity constraints. These models use available imported supplies based on historical hydrology, and then map these supplies over projected supplemental water demands on a monthly basis. Modeling results are analyzed to determine if shortages occur because of conveyance constraints or water supply constraints under various wet, dry, and normal conditions. The need for additional conveyance facilities is governed by the most restrictive of the conveyance constraints.

State Water Project (SWP)²

One of Metropolitan's two major sources of water is the SWP, which is managed and operated by DWR, and is an integral part of Metropolitan's conveyance system. The SWP is the largest state-built, multipurpose, user-financed water project in the country. It was designed and built primarily to deliver water, but also provides flood control, generates power for pumping, is used for recreation, and enhances habitat for fish and wildlife. The SWP provides irrigation water for 750,000 acres of farmland, primarily in the San Joaquin Valley, and provides municipal and industrial water for approximately 27 million of California's estimated 39.5 million residents.

The SWP consists of a complex system of dams, reservoirs, power plants, pumping plants, canals and aqueducts to deliver water. SWP water consists of water from rainfall and snowmelt runoff that is captured and stored in SWP conservation facilities and then delivered through SWP transportation facilities to water agencies and districts located throughout the Upper Feather River, Bay Area, Central Valley, Central Coast, and Southern California. Metropolitan receives water from the SWP through the California Aqueduct, which is 444 miles long, and at four delivery points near the northern and eastern boundaries of Metropolitan's service area. The SWP facilities are shown in Figure 4.

The capacity of the SWP to deliver water decreases with distance from the Banks Pumping Plant, located in the Sacramento-San Joaquin Delta, as water is delivered to Contractors through the South Bay Aqueduct and the Coastal Branch Aqueduct, and to turnouts in the San Joaquin Valley and Southern California. The design pumping capacity at Banks Pumping Plant is 10,670 cubic feet-per-second (cfs) but only 4,480 cfs at the Edmonston Pumping Plant, located at the base of the Tehachapi Mountains.

In addition to the delivery of SWP water, the SWP is also used to convey transfers of SWP water and non-SWP water. SWP operations are closely coordinated and integrated with the federal Central Valley Project (CVP) and the San Luis Reservoir and San Luis Canal section of the California Aqueduct are shared SWP/CVP facilities. The SWP is also connected to other water sources upstream of the Sacramento-San Joaquin Delta, and along the California Aqueduct as it passes through Central Valley.

² For historical and current information regarding the SWP, refer to Bulletin 132, published periodically by DWR since 1963. The most recently published Bulletin is Bulletin 132-18 dated January 2021 and titled "Management of the California State Water Project". Appendices to the Bulletin are also updated separately. Both are available at: <https://water.ca.gov/Programs/State-Water-Project/Management/Bulletin-132>.

Figure 4: Facilities of the State Water Project

In 1960, Metropolitan signed the first water supply contract (as amended, the State Water Contract) with DWR, which had a term of 75 years. The contract has been amended over the years. Metropolitan is one of 29 agencies (State Water Contractors) that are participants in the SWP through long-term contracts with DWR, and is the largest agency in terms of the number of people in its service area (approximately 19 million), the share of SWP water that it is allocated pursuant to the State Water Contract (approximately 46 percent), and the percentage of total annual payments made to DWR by the State Water Contractors.

State Water Contractors participate in the SWP through responsibility for costs of the SWP in exchange for delivery of water conserved and stored by the SWP, an allocated portion of that total supply, and other participation rights. Each year, DWR determines the percentage of the total contracted amount it estimates

will be available to the State Water Contractors (the DWR allocation). Under a 100 percent allocation, Metropolitan would receive 1,911,500 acre-feet of SWP water. Late each year, DWR announces an initial allocation estimate for the upcoming year but may revise the estimate throughout the year if warranted by developing precipitation and water supply conditions. State Water Contractors are obligated to pay all costs of the SWP, except for those attributable to recreation, flood control, and other costs not associated with water deliveries to the State Water Contractors, regardless of the annual allocation determined by DWR. In addition to SWP water, Metropolitan also obtains water from water transfers, groundwater banking and exchange programs delivered through the California Aqueduct. From calendar years 2004 through 2020 the amount of water received by Metropolitan from the SWP, including water from water transfer, groundwater banking and exchange programs delivered through the California Aqueduct (described under “Water Transfer, Storage and Exchange Programs” below), varied from a low of 593,000 acre-feet in calendar year 2015 to a high of 1,800,000 acre-feet in 2004. In calendar year 2020, DWR’s allocation to State Water Contractors was 20 percent of contracted amounts, or 382,200 acre-feet, for Metropolitan. In calendar year 2021, DWR’s allocation to State Water Contractors was 5 percent of contracted amounts, or 95,550 acre-feet, for Metropolitan.

On December 1, 2020, DWR announced an initial calendar year 2020 allocation of 10 percent. On March 23, 2021, DWR decreased the allocation to 5 percent. Decreased hydrologic conditions, including below-average precipitation in the month of January and February, led to the decrease to 5 percent. For calendar year 2021, DWR’s initial allocation was announced on December 1, 2021 and was 0 percent of contracted amounts. This is the first year in DWR’s history of setting an initial allocation of 0 percent. As a result of improved runoff conditions, on January 20, 2022 DWR increased the allocation to 15 percent. On March 18, DWR decreased the allocation to 5 percent due to a historically dry January and February.

In addition to the allocation percentage set by DWR, the availability of SWP water to its contractors depends on the ability of the system to convey the water to each contractor. Regulatory constraints have reduced the ability of the SWP to divert water from the Bay-Delta, and subsidence has reduced the capacity to convey water to the service area of contractors south of the Bay-Delta.

In addition to being a source of water for diversion into the SWP, the Bay-Delta is also the source of water for local agricultural, municipal and industrial needs, and, in addition, supports significant resident and anadromous fish and wildlife resources and important recreational uses of water. Both the SWP’s upstream reservoir operations and its Bay-Delta diversions can at times affect these other uses of Bay-Delta water directly, or indirectly, through impacts on Bay-Delta water quality.

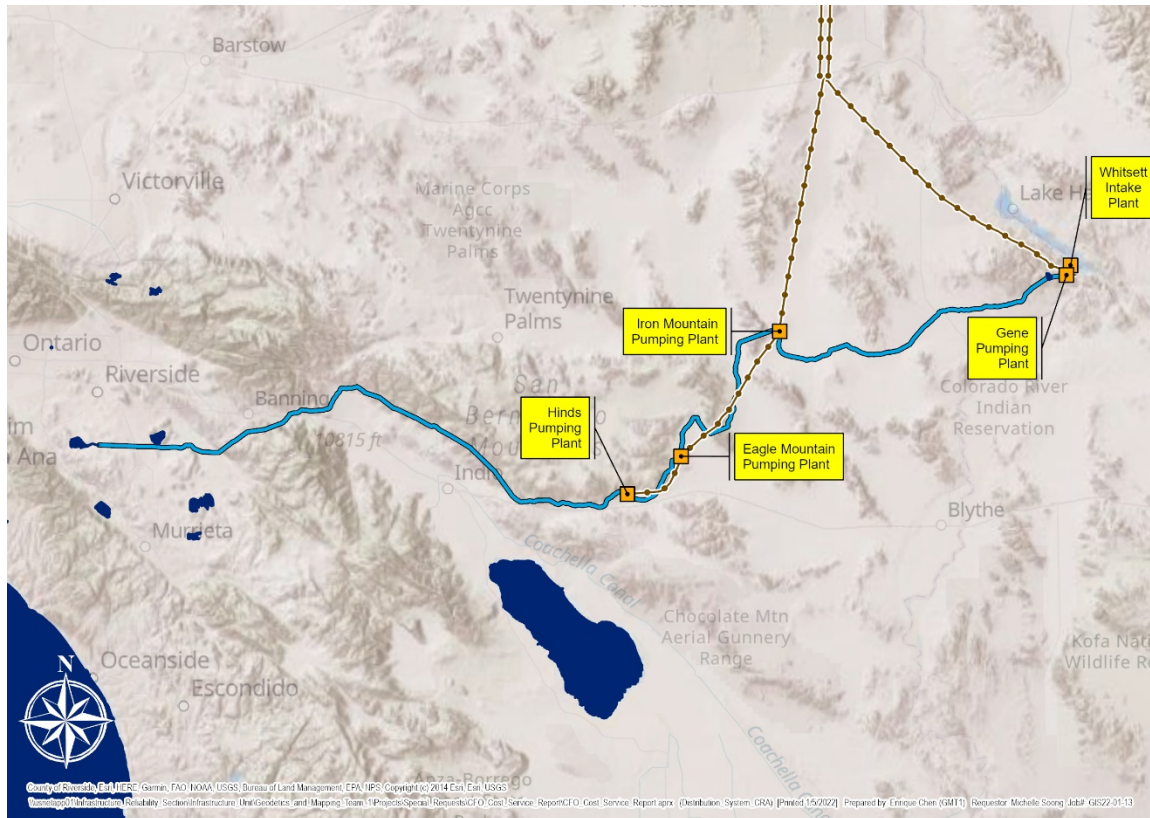
Colorado River Aqueduct (CRA)

The other major source of water for Metropolitan is the Colorado River through the CRA. Metropolitan was established to obtain an allotment of Colorado River water, and its first mission was to construct and operate the CRA. The CRA consists of 5 pumping plants, 450 miles of high voltage power lines, 1 electric switching station, 4 regulating reservoirs, and 242 miles of aqueducts, siphons, canals, conduits and pipelines terminating at Lake Mathews in Riverside County.

The Colorado River was Metropolitan’s original source of water after Metropolitan’s establishment in 1928. Metropolitan has a legal entitlement to receive water from the Colorado River under a permanent service contract with the Secretary of the Interior. Water from the Colorado River and its tributaries is also available to other users in California, as well as users in the states of Arizona, Colorado, Nevada, New Mexico, Utah, and Wyoming (the Colorado River Basin States), resulting in both competition and the need for cooperation among these holders of Colorado River entitlements. In addition, under a 1944 treaty, Mexico has an allotment of 1.5 MAF of Colorado River water annually except in the event of extraordinary drought or serious accident to the delivery system in the United States, in which event the water allotted to Mexico would be curtailed. Mexico also can schedule delivery of an additional 200,000 acre-feet of Colorado River water per year if water is available in excess of the requirements in the United States and the 1.5 MAF allotted to Mexico.

The CRA, which is directly owned and operated by Metropolitan, transports water from the Colorado River approximately 242 miles to its terminus at Lake Mathews in Riverside County. The CRA is shown in Figure 5. Up to 1.25 MAF of water per year may be conveyed through the CRA to Metropolitan's service area, subject to availability of Colorado River water for delivery to Metropolitan as described below.

Figure 5: Colorado River Aqueduct



California is apportioned the use of 4.4 MAF of water from the Colorado River each year plus one-half of any surplus that may be available for use collectively in Arizona, California and Nevada. Under the 1931 priority system that has formed the basis for the distribution of Colorado River water made available to California, Metropolitan holds the fourth priority right to 550,000 acre-feet per year. This is the last priority within California's basic apportionment. In addition, Metropolitan holds the fifth priority right to 662,000 acre-feet of water, which is in excess of California's basic apportionment. Until 2003, Metropolitan had been able to take full advantage of its fifth priority right as a result of the availability of surplus water and water apportioned to Arizona and Nevada that was not needed by those states. However, during the 1990s, Arizona and Nevada increased their use of water from the Colorado River and by 2002 no unused apportionment was available for California. In addition, a severe drought in the Colorado River Basin reduced storage in system reservoirs, ending the availability of surplus deliveries to Metropolitan. As a result, California has been limited to 4.4 MAF since 2003. Prior to 2003, Metropolitan could divert over 1.25 MAF in any year, but since that time, Metropolitan's net diversions of Colorado River water have ranged from a low of 537,607 acre-feet in 2019 to a high of approximately 1,179,000 acre-feet in 2015. Metropolitan has taken steps to augment its share of Colorado River water through agreements with other agencies that have rights to use such water.

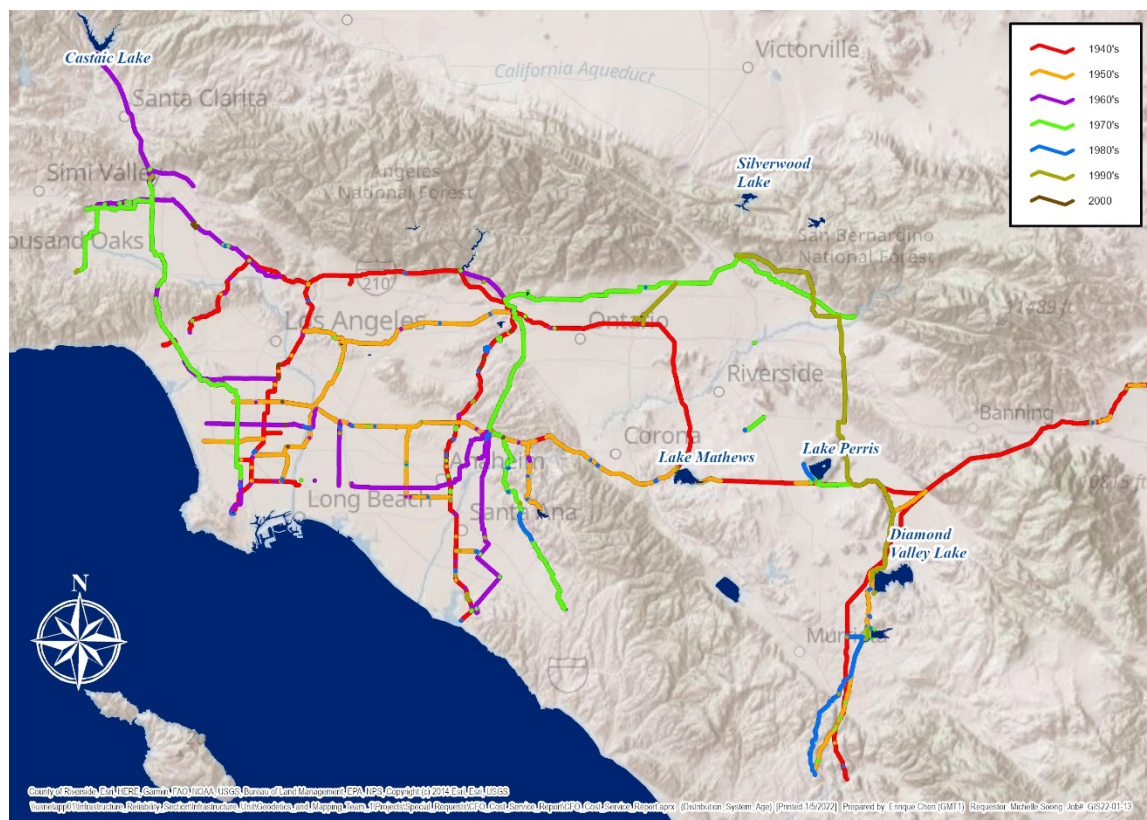
The Quantification Settlement Agreement (QSA) and related agreements, executed by Coachella Valley Water District (CVWD), Imperial Irrigation District (IID), Metropolitan, and other parties in October 2003, establishes Colorado River water use limits for IID and CVWD, and provides for specific acquisitions of conserved water and water supply and delivery arrangements for up to 110 years. The QSA and related

agreements provide a framework for Metropolitan to enter into other cooperative Colorado River supply programs and set aside several disputes among California's Colorado River water agencies.

Specific programs under the QSA and related agreements include lining portions of the All-American and Coachella Canals, which conserve approximately 96,000 acre-feet annually. Included under the QSA is an allocation agreement, in which Metropolitan assigned about 80,000 acre-feet of conserved canal lining water per year to the San Diego County Water Authority (SDCWA) for 110 years. Also included is an exchange agreement with SDCWA, under which SDCWA makes available to Metropolitan at Lake Havasu the conserved canal lining water and conserved transfer water from IID, and in exchange Metropolitan delivers a like quantity of water to SDCWA in its service area. Additionally, included under the QSA is the delivery and exchange agreement between Metropolitan and CVWD that provides for Metropolitan, when requested, to deliver annually up to 35,000 acre-feet of Metropolitan's SWP contractual water to CVWD by exchange with Metropolitan's available Colorado River supplies. Metropolitan and CVWD also share in 105,000 acre-feet annually of water conserved by IID, with Metropolitan receiving no less than 85,000 acre-feet. In 2021, the transfer of water conserved annually by IID to SDCWA was 205,000 acre-feet. With full implementation of the programs identified in the QSA, at times when California is limited to its basic apportionment of 4.4 MAF per year, Metropolitan expects to be able to annually divert to its service area approximately 900,000 acre-feet of Colorado River water plus water from other water augmentation programs it develops, including the Palo Verde Irrigation District (PVID) program, which provides up to approximately 133,000 acre-feet of water per year.

Distribution System

All water transport facilities not specifically identified as part of the regional conveyance system are considered part of the distribution facilities (Distribution System). While conveyance and aqueduct system components are regional in nature and do not link directly to local agency distribution systems, Distribution System facilities do ultimately connect to local agency systems. As a result, these facilities rely on conveyance and aqueduct facilities to import water from regional supply sources. The Distribution System is a complex network of facilities which routes water from the SWP and CRA to storage reservoirs and treatment plants within Metropolitan's member agencies and also to the member agencies. Beginning at the terminal delivery points of the CRA and SWP, Metropolitan's Distribution System includes approximately 775 miles of pipelines, feeders, and canals. The Distribution System includes components dating from the 1930's up to the present day, as shown in Figure 6. Distribution System operations are coordinated from the Operations Control Center in Eagle Rock. The control center plans, schedules, and balances daily water operations in response to member agency demands and the operational limits of the system as a whole. Metropolitan's storage and treatment facilities augment the Distribution System. Metropolitan operates and maintains separate untreated and treated distribution facilities.

Figure 6: Metropolitan's Distribution System

¹ Figure includes Colorado River Aqueduct and Inland Feeder which are part of the Conveyance and Aqueduct Facilities.

Storage Facilities

Existing imported water storage available to the region consists of Metropolitan's raw water reservoirs, a share of the SWP's raw water reservoirs in and near the service area, and the portion of the groundwater basins used for conjunctive-use storage. Figure 7 shows the geographical location of Metropolitan's major storage facilities. Table 6 lists surface water storage facilities owned and operated by Metropolitan. With some limitations, these reservoirs can be used to help meet the region's water storage requirements. Total storage capacity currently available to Metropolitan in these existing reservoirs is about 1,041,830 acre-feet.

Metropolitan's water storage is divided into three categories: emergency, regulatory, and drought carryover storage. Emergency storage capacity is intended to provide the Metropolitan service area with a supply of water in the event of a major regional catastrophe isolating Southern California from its imported water supplies. Regulatory storage requirements are based on historical reservoir cycling and known cycling targets intended to meet the delivery schedules of the member agencies. Drought carryover storage is intended to prevent water shortages during dry years and is evaluated using computer simulation models, incorporating historic hydrologic data, projections of future demand, and information on currently available storage levels.

Storage Facilities	Capacity (Acre-feet)
Etiwanda Reservoir	447
Garvey Reservoir	1,610
Orange County Reservoir	Out of Service
Palos Verdes Reservoir	695
Live Oak Reservoir	2,500
Lake Mathews	182,000
Lake Skinner	44,000
Diamond Valley Lake	810,000
Total Storage Capacity	1,041,252

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644,000 AF, based on the availability at the reservoirs and need of all State Water Contractors with access to the reservoirs.

Under a conjunctive-use groundwater program, groundwater basins are used to store imported supplies during years when water is abundant. The stored water is then used during shortages and emergencies, reducing demand on imported supplies. Consequently, groundwater conjunctive use enables member agencies to better capture surplus surface flows Metropolitan receives from the SWP and the CRA and reduces demand that would otherwise be placed on Metropolitan's system during dry periods.

Treatment Plants

In addition to raw water supply, Metropolitan provides treated water to supplement the potable water needs of its member agencies. Table 7 identifies Metropolitan's water treatment plants and related design capacities.

Metropolitan's Water Treatment Plants

Table 7: Water Treatment Plants

Water Treatment Plants	Design Capacity (cfs)
Diemer Filtration Plant	803
Jensen Filtration Plant	1,163
Mills Filtration Plant	341
Skinner Filtration Plant	543
Weymouth Filtration Plant	803
Total	3,652

Metropolitan's water treatment plants are listed in Table 7 and shown geographically in Figure 8. More than 60 percent of Metropolitan's demand for supplemental treated water is located in a region of the service area referred to as the "Central Pool". Agencies located partially or entirely within the Central Pool include Los Angeles, Orange, and Ventura Counties. Three existing Metropolitan treatment plants serve the Central Pool's treated water needs:

- The Jensen plant in Granada Hills;
- The Weymouth plant in La Verne; and
- The Diemer plant in Yorba Linda.

While some areas of the Central Pool receive treated water from one plant, the three plants together also jointly produce water for a common area of the Central Pool referred to as the "Common Pool". The Mills plant and the Skinner plant do not produce water for the Common Pool but serve areas in the eastern part of Metropolitan's service area.

[illegible]

Table 8 shows Metropolitan's treated and untreated water transactions by member agency for Cash Year 2021. Approximately 50 percent of Metropolitan's water transactions in Cash Year 2021 were treated.

Table 8: Treated and Untreated Water Transactions by Member Agency, Cash Year 2021

Acre-Feet^{1, 2}

Agency	Treated (AF)	Untreated (AF)	Total (AF)
Anaheim	28,847	14,177	43,024
Beverly Hills	9,709	-	9,709
Burbank	4,796	5,472	10,268
Calleguas	93,372	-	93,372
Central Basin	24,449	-	24,449
Compton	2	-	2
Eastern	64,690	26,344	91,034
Foothill	9,289	-	9,289
Fullerton	6,652	-	6,652
Glendale	16,136	-	16,136
Inland Empire	-	68,651	68,651
Las Virgenes	21,097	-	21,097
Long Beach	22,906	-	22,906
Los Angeles	75,715	211,520	287,235
MWDOC	107,910	29,374	137,284
Pasadena	19,654	-	19,654
San Diego	29,810	294,288	324,097
San Fernando	-	-	-
San Marino	1,365	-	1,365
Santa Ana	8,254	-	8,254
Santa Monica	5,571	-	5,571
Three Valleys	35,140	28,814	63,954
Torrance	14,489	-	14,489
Upper San Gabriel	4,378	54,895	59,273
West Basin	109,127	-	109,127
Western	43,744	28,895	72,639
Total	757,103	762,429	1,519,531

¹ Water Transactions include sales, exchanges, and wheeling.

² Water Transactions are based on occur period.

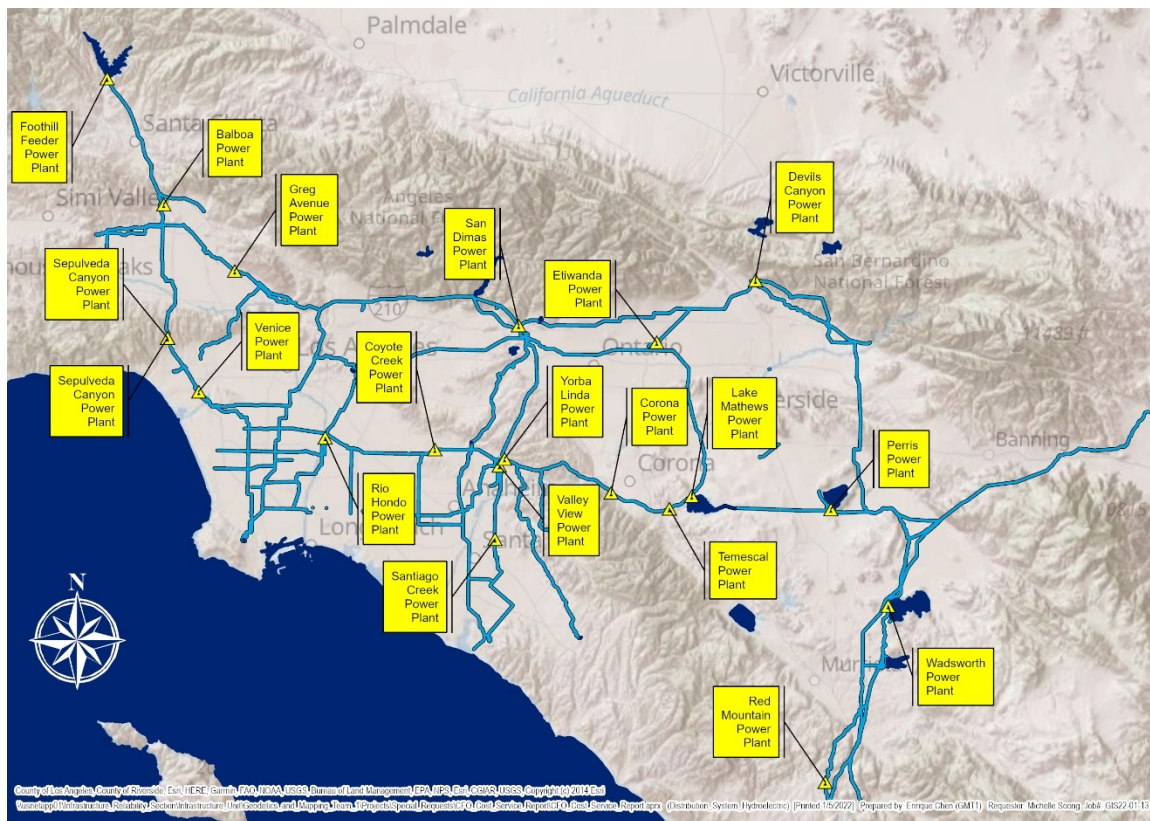
Hydroelectric Facilities

Metropolitan's Distribution System has 16 small hydroelectric plants located throughout the service area. The plants are located in Los Angeles, Orange, Riverside, and San Diego Counties as shown in Figure 9. The combined generating capacity of these plants and the generating capacity at Diamond Valley Lake (DVL) are approximately 130 megawatts. Depending upon annual water deliveries, projected annual income for the next several years is expected to range between \$11 million and \$13 million.

Power from four of the plants is sold to DWR at a contract rate. Power from four plants is sold to the Southern California Public Power Authority based on a contract rate. Power generation from the Sepulveda Canyon Plant is sold to the Los Angeles Department of Water and Power based on a contract rate. Power from the Etiwanda Power Plant has been sold to the Pacific Gas and Electric Company based on contract rates. Power generated by DVL and the remaining four plants are sold into the wholesale market, while the resource adequacy attributes are retained by Metropolitan to serve the CRA Bulk Electric System resource adequacy requirements.

Electricity generated by Metropolitan hydroelectric facilities is sold rather than used internally because of the costs and inefficiencies that would be associated with building an internal electric distribution network for transmitting the electricity throughout the Metropolitan system. The costs associated with contracting for such transmission services from others would be similarly prohibitive.

Figure 9: Metropolitan's Hydroelectric Facilities



DEVELOPMENTS

Today, Metropolitan finds that its challenges and goals are evolving. The Board of Directors in the 1990s was deeply concerned with member agencies relying too much on importing supplies from Northern California and the Colorado River. Programs to regionalize conservation efforts and to incentivize new local supplies such as the LRP were developed. This approach was developed through regional long-term planning via Metropolitan's Integrated Water Resources Plan (IRP) initiated in 1996.

Today, there is a shifting water landscape. Population growth and water demands, in large part due to tremendous strides in water use efficiency, are far less than once predicted. Metropolitan's water transactions, which include sales, exchanges, and wheeling, in fiscal year 2019 were the lowest in nearly 40 years. A new generation of larger local supply projects are in the planning stages.

Delivery of imported supplies will always be a foundation to meet ongoing regional demands, even with climate change, and importantly so will storage of imported water for droughts and emergencies. Given fluctuations in the availability of water resources, maintaining and enhancing system flexibility is a priority for Metropolitan. The evolving mix of Southern California's future water portfolio is still to be determined and will be impacted by future policies and decisions made by Metropolitan's Board.

Delta Conveyance

Within the region's water portfolio, supplies from the SWP remain an essential baseline water source for Southern California. Water from Northern California delivered through the SWP has provided key supplies in wet years to manage against dry years, and it is the only imported supply that can physically reach significant portions of Metropolitan's service area. This water source faces uncertainties due to climate change and the Delta's badly outdated delivery system; these problems are compounded by a declining ecosystem and 1,100-mile levee systems that are increasingly vulnerable.

California WaterFix was a comprehensive science-based solution proposed by the state to modernize critical water delivery infrastructure of the SWP. The California WaterFix proposed construction of new water intakes in the north Delta and two 40-foot diameter tunnels under the Delta terminating at a forebay in the south Delta. This would have fulfilled the requirement of the 2009 Delta Reform Act to contribute toward meeting the coequal goals of more reliably delivering water for California and protecting, restoring and enhancing the Delta ecosystem.

On April 29, 2019, Governor Newsom issued an executive order directing State agencies to develop a comprehensive statewide strategy to build a climate-resilient water system that included consideration of a single-tunnel Delta conveyance facility instead of the approved two-tunnel WaterFix project. In light of this order, DWR and the State Water Contractors deleted the WaterFix cost provisions from the current amendment process leaving only the water management provisions and embarked on a new public process to further negotiate proposed amendments related to cost allocation for a potential new Bay-Delta conveyance project. **As a result, the costs of any such new project are yet unknown and Metropolitan's projected up to \$10.8 billion costs for California WaterFix are no longer included in its current or future budgeting or projections.**

Consistent with the Governor's direction, the formal environmental review process for a proposed single tunnel Delta Conveyance Project commenced with the issuance by DWR of a Notice of Preparation under CEQA on January 15, 2020. Planning, environmental review and conceptual design work by DWR is expected to be completed in the 2023-2024 timeframe. The Proposed Biennial Budget includes Metropolitan's planned contribution of \$99.0 million for Delta conveyance project planning activities. This contribution follows Board policy that staff work with the State to find solutions to improve Delta conveyance. The focus over the

next two years will be supporting the DWR as it seeks permits for a Delta conveyance project; participating in the Delta Conveyance Design and Construction Authority; and continuing to put forward sound scientific research to help inform and improve Delta management decisions. If staff determines that Metropolitan's appropriate contribution toward planning activities should exceed the budgeted amount, the General Manager will request authorization from the Board for additional funding. Additionally, the Board will separately consider Metropolitan's participation in a new Delta conveyance project once that proposed project is finalized by DWR. Information regarding the Delta conveyance project is located on Metropolitan's website at <https://www.mwdh2o.com/planning-for-tomorrow/securing-our-imported-supplies/delta-conveyance/>.

Regional Recycled Water Program

The Regional Recycled Water Program (RRWP), is a partnership between Metropolitan and the Sanitation Districts of Los Angeles County. In November 2020, Metropolitan's Board voted to proceed with the Environmental Planning Phase of the Program. This work will prepare the documentation needed for future Board approval of the Program Environmental Impact Report. As it has since its completion in 2019, the RRWP's demonstration facility will produce approximately 500,000 gallons per day and will continue to be operated to generate information needed for regulatory approval and to increase the efficiency of the treatment processes that may be used in a potential full-scale recycled water facility. The potential full-scale project, viewed as a potential third source of water for Metropolitan, would provide a reliable, drought-proof, climate-resilient, local supply for indirect potable reuse (IPR) through groundwater basin recharge, direct potable reuse (DPR) through raw water augmentation at Metropolitan's treatment plants, and direct industrial use. If approved, the full-scale project will produce 150 million gallons per day (mgd), or approximately 168,000 acre-feet (AF) per year (AFY), of purified water.

Construction of the 0.5 mgd advanced water treatment demonstration plant was approved in 2017 and was completed in August 2019. Testing and operation of the plant began in October 2019 to confirm treatment costs and provide the basis for regulatory approval of the proposed treatment process and technical recommendations concerning design, operation, and optimization of the full-scale RRWP. The initial phase of testing is scheduled for completion in 2021 with future testing phases planned that will form the basis for the design, operation and optimization of, and will inform Metropolitan's Board decision whether to move forward with, a full-scaled advanced water treatment facility. **The Board has not yet committed to a full-scale project; however, the planning costs for the backbone system of the RRWP is included in the Biennial Budget in the order of approximately \$20 million over the biennial period.** Metropolitan has secured partners in the Southern Nevada Water Authority and Central Arizona Project who have each committed to pay a portion of the planning costs of the project and executed Memorandum of Understandings with Metropolitan to document their commitment to the program's success. Information regarding the RRWP is located on Metropolitan's website at <https://www.mwdh2o.com/planning-for-tomorrow/building-local-supplies/regional-recycled-water-program/>.

2020 IRP Update

The IRP is a plan for providing reliable and affordable water to Southern California for the next 25 years, from its inception in 1996 and then from regular updates, most recently in 2015. It broadly identifies and aligns regional and local needs, priorities, resources and opportunities, both in the scale of actions and in their timing. The emphasis is on its broad collaborative approach to planning.

Each IRP sets important targets for actions such as developing local supply, water use efficiency, or average-year expectations from the Colorado River and the SWP. It does not signal that Metropolitan will build or pay for any specific initiative or project to meet those targets, nor does it assume any particular local supply project will be funded or constructed. The IRP is a method for setting targets and reassessing them approximately every five years along with the Urban Water Management Plan.

Metropolitan is preparing to finalize the 2020 IRP Update in early 2022 and initiate the IRP Implementation Plan shortly thereafter. During this update Metropolitan's Board will be faced with deciding the vision for Metropolitan's second century – to provide service at reduced levels of demand and provide resilient operations through variable hydrology. This vision will help drive the direction of the 2020 IRP Update as well as many other decisions.

Rate Structure Review

Since its creation Metropolitan has shifted from receiving the bulk of its revenues from a single source, ad valorem property taxes, to a mix of fixed charges and volumetric rates. This shift took place over decades for numerous reasons, including the availability of water to deliver to Metropolitan's member agencies. Currently about 80 percent of Metropolitan's revenues come from the volumetric rates and the remaining 20 percent comes from fixed sources such as the fixed charges, ad valorem property taxes, and miscellaneous revenue sources including interest income, hydroelectric power sales, leases and grant funding.

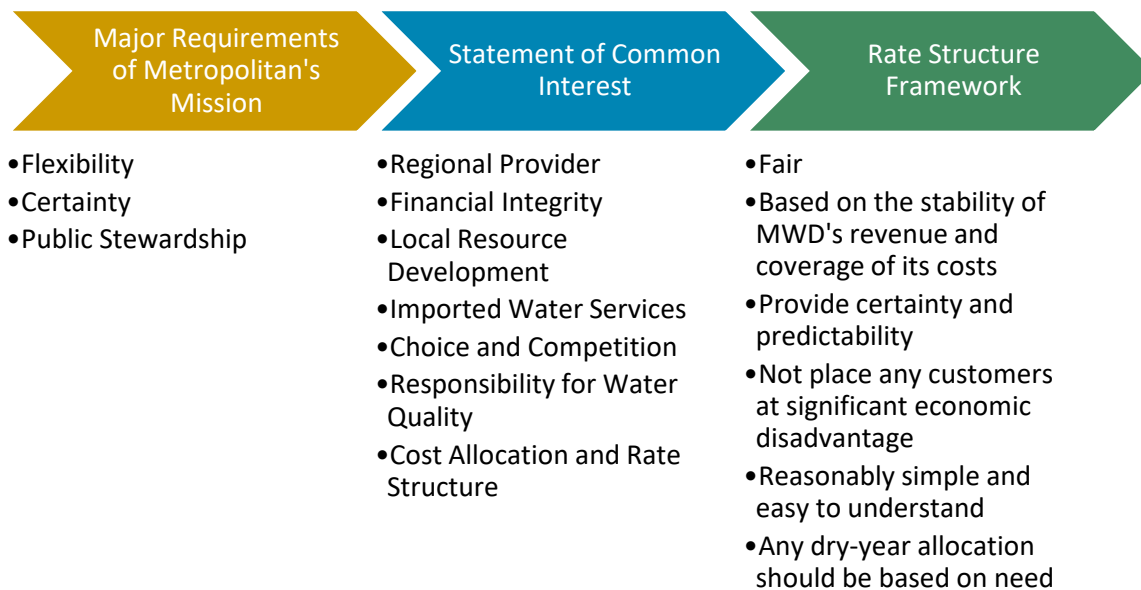
Member agencies' purchases and use of Metropolitan's system have always varied for many reasons, with member agencies able to call on Metropolitan's services at various levels from year to year. Because Metropolitan's deliveries to its member agencies have generally remained consistent on a long-term basis (as opposed to year-to-year), the volumetric revenue base has provided consistent necessary revenue for Metropolitan. **However, if through the IRP process and strategic planning, the Board determines that reliance on Metropolitan will be less consistent, then the current rate structure may not be consistent with that role.** Any changes to the rate structure should seek to maintain a structure that is sustainable for the long-term and remains equitable to Metropolitan's member agencies throughout the service area.

RATE STRUCTURE

Framework

The Rate Structure Framework evolved through a comprehensive strategic planning process initiated in 1998. As depicted in the following figure, the first step of the process was to identify the “Major Requirements of Metropolitan’s Mission,” which was reflected in the Strategic Plan Policy Principles. The Statement of Common Interests formed the basis of Metropolitan’s strategic plan to address these mission requirements. One of the most important common interests was “Cost Allocation and Rate Structure.” In determining the most appropriate Cost of Service (COS) and rate structure, a set of pricing objectives, or guiding rate principles, was developed. These guiding rate principles defined Metropolitan’s Rate Structure Framework by which various COS and rate-setting methodologies could be evaluated.

Development of the Rate Structure Framework



The strategic planning process which established the foundation of the Rate Structure Framework is discussed below.

Major Requirements of Metropolitan’s Mission

As one of the first steps in the strategic planning process in 1998, the Board developed a list of three mission requirements in its Metropolitan vision statement – flexibility, certainty, and public stewardship, which it described as:

- **Flexibility.** Metropolitan is aware of the legislative and economic pressures which make flexibility in providing water services for a changing demand and in a competitive water market paramount. Fair compensation for wheeling through Metropolitan’s conveyance systems is an essential element of Southern California’s developing market.

- **Certainty.** The certainty that Metropolitan's water supply is reliable, and that the COS is appropriate is of utmost importance to member agencies and their retailers who are endeavoring to provide not only water, but value to the residents in their service area.
- **Public Stewardship.** As public stewards of much of Southern California's water supply, Metropolitan and its member agencies are responsible for making certain that the water is provided in a cost-effective and environmentally sound manner.

Statement of Common Interests

From the strategic planning mission requirements, the Board developed a list of seven areas of common interest that formed the major focus elements of the Metropolitan strategic plan, described as:

- **Regional provider.** This area includes the concerns of protecting regional infrastructure and providing service during drought periods. Regional water must be provided to meet the needs of the member agencies, and water supplies must be equitably allocated during drought periods based on the Water Surplus and Drought Management Plan principles.
- **Financial integrity.** It is a common interest of the members for Metropolitan to assure the financial integrity of the agency in all aspects of its operations.
- **Local resource development.** Metropolitan supports local resources development by working in partnership with its member agencies and by providing member agencies with financial incentives for water conservation and for local projects.
- **Imported water service.** Metropolitan is responsible for providing imported water to meet the committed needs of its member agencies.
- **Choice and competition.** After Metropolitan provides imported water for the member agencies' committed demands, a member agency can choose the most cost-effective additional water supplies for its customers. These choices include either Metropolitan, local resource development, market transfers, or some combination of these secondary options. Metropolitan and its member agencies can decide how to provide these additional supplies collaboratively while balancing local, imported, and market opportunities with affordability.
- **Responsibility for water quality.** Metropolitan must advocate for source water quality and implement in-basin water quality for the imported water it supplies. This is necessary to guarantee compliance with primary drinking water standards and to meet the water quality requirements for water recycling and ground water replenishment.
- **Cost allocation and rate structure.** The framework for a revised rate structure will be established to address allocation of costs, financial commitment, unbundling of services, and fair compensation for services including wheeling, peaking, growth, and others.

Rate Structure Framework

A major element of common interest was "*Cost Allocation and Rate Structure.*" In addressing this element, a set of pricing objectives, or guiding rate principles, had to be developed to evaluate alternative COS and rate setting approaches, or methodologies. As a result, the Board adopted a set of rate principles which was defined as the *Rate Structure Framework*. The Rate Structure Framework provided the principles for the Strategic Planning Steering Committee to develop a preferred rate structure. The Rate Structure Framework includes the following principles:

- The rate structure should be *fair*;
- It should be based on the *stability* of Metropolitan's revenue and coverage of its costs;
- It should provide certainty and predictability;

- It should not place any customers at *significant economic disadvantage*;
- It should be reasonably *simple and easy to understand*; and
- Any dry-year allocation should be *based on need*.

The 2001 COS and rate structure was adopted by the Board to address the Rate Structure Framework. That COS process and rate structure remain today, with the exception of recent modifications by the Board. First, in August 2020, the Board repealed the pre-set wheeling rate for short-term wheeling service to member agencies. As a result, charges for short-term wheeling to member agencies is now subject to contractual negotiations on a case-by-case basis, as has been the case with long-term wheeling arrangements for member agencies, all wheeling for third parties, and all exchange transactions. In December 2019, the Board directed staff (1) to incorporate the 2019/20 fiscal-year-end balance of the Water Stewardship Fund to fund all demand management costs in the proposed FYs 2020/21 and 2021/22 Biennial Budget; and (2) to not incorporate the Water Stewardship Rate, or any other rate or charge to recover demand management costs, with the proposed rate and charges for CYs 2021 and 2022. In November 2021, the Board directed staff to allocate all demand management costs to Metropolitan's supply rate elements, and no Water Stewardship Rate or other demand management recovery charge is included in the rate structure after 2022.

Rate Structure Design

The elements of the rate structure are summarized in Table 9 below, along with the current amounts for rates and charges effective in the current calendar year 2022:

Table 9: Rate Elements, Calendar Year 2022

Rate Design Elements	Functional Costs Recovered	Type of Charge	Rate or charge effective January 1, 2022
Tier 1 Supply Rate	Supply, Drought Storage	Volumetric (\$/af)	\$243
Tier 2 Supply Rate	Tier 1 Supply costs, plus cost of transfers from north of the Delta	Volumetric (\$/af)	\$285
System Access Rate	Conveyance/Distribution (Average Capacity), portion of Regulatory/Emergency Storage	Volumetric (\$/af)	\$389
Water Stewardship Rate (incorporated in Supply Rates after 2022)	Demand Management	Volumetric (\$/af)	\$-
System Power Rate	Power on CRA and SWP	Volumetric (\$/af)	\$167
Treatment Surcharge	Treatment	Volumetric (\$/af)	\$344
Capacity Charge	Peak Distribution Capacity, portion of Regulatory Storage	Fixed (\$/cfs)	\$12,200
Readiness-to-Serve Charge	Available Conv. & Dist. Capacity, Emergency Storage	Fixed (\$M)	\$140

Supply Rates

Purpose

The rate structure recovers supply costs through a two-tiered price structure. The amount of water a member agency may purchase at a lower Tier 1 Supply Rate (water sales within a member agency's Tier 1 maximum) is established by either a purchase order agreement or calculated as 60 percent of its Revised Base Firm Demand.

Tier 1 Supply Rate

The Tier 1 Supply Rate is a volumetric rate charged on Metropolitan's water sales that are within a member agency's Tier 1 maximum. The Tier 1 Supply Rate supports a regional integrated approach through the uniform, postage stamp rate. The Tier 1 Supply Rate is calculated as the amount of the total revenue requirement functionalized as supply divided by the estimated amount of Tier 1 water sales. Per Board direction in December 2021, all demand management costs are now functionalized as supply and collected on the Tier 1 and Tier 2 supply rates. All projected water sales for CY 2023 and 2024 are project to be Tier 1 sales.

The Supply Rate includes the costs of supply programs and demand management.

Tier 2 Supply Rate

The Tier 2 Supply Rate is a volumetric rate that reflects the costs of Tier 1 and Metropolitan's cost of purchasing water transfers north of the Delta. The Tier 2 Supply Rate is charged on Metropolitan water sales that exceed a member agency's Tier 1 maximum. The higher costs reflected in the Tier 2 Supply Rate encourages the member agencies and their customers to maintain existing local supplies and develop cost-effective local supply resources and conservation. Per Board direction in December 2021, all demand management costs are now functionalized as supply and collected on the Tier 1 and Tier 2 supply rates. No Tier 2 water sales are projected for CY 2023 and 2024.

Implementation

Because the Tier 1 maximum is set at a total member agency level and not at a meter level, all system water delivered will be billed at the Tier 1 Supply Rate. Any water delivered that exceeds the Tier 1 maximum will be billed an additional amount equivalent to the difference between the Tier 2 and Tier 1 Supply Rates.

For member agencies without purchase orders and member agencies with purchase orders that accrue a cumulative Tier 2 obligation at the end of year five of the purchase order, the Tier 2 Supply Rate will be applied in the month where the Tier 1 maximum is surpassed on all applicable deliveries. Otherwise, any obligation to pay the Tier 2 Supply Rate will be calculated over the ten-year period, consistent with the calculation of any purchase order commitment obligation.

System Access Rate (SAR)

Purpose

The SAR recovers the costs of Conveyance, Distribution, and Storage that is used on an average annual basis through a uniform, volumetric rate. All member agencies pay the SAR for the conveyance and distribution capacity associated with deliveries of full-service water.

Implementation

The SAR is charged for each acre-foot of water transported by Metropolitan to its member agencies and delivered as a full-service water transaction.

System Power Rate (SPR)

Purpose

The SPR recovers the costs of energy required to pump water to Southern California through the SWP and CRA. The cost of power is recovered through a uniform, volumetric rate.

Implementation

The SPR is applied to all deliveries of Metropolitan water to member agencies.

Treatment Surcharge

Purpose

The Treatment Surcharge recovers all costs of providing treatment capacity and operations through a uniform, volumetric rate per acre-foot of treated water transactions.

Implementation

The Treatment Surcharge is charged on all treated water transactions.

Capacity Charge

Purpose

The Capacity Charge recovers the costs incurred to provide peak capacity within the Distribution System. The Capacity Charge also provides a price signal to encourage agencies to reduce peak demands on the Distribution System and to shift demands that occur during the May 1 through September 30 period into the October 1 through April 30 period, resulting in more efficient utilization of Metropolitan's existing infrastructure and deferring capacity expansion costs.

Implementation

Each member agency will pay the Capacity Charge per cubic feet per second (cfs) based on a three-year trailing peak (maximum) day demand, measured in cfs. Each member agency's peak day is likely to occur on different days; therefore, this measure approximates peak week demands on Metropolitan.

Readiness-To-Serve Charge (RTS)

Purpose

The RTS recovers the cost of the portion of system that is available to provide emergency service and available capacity during outages and hydrologic variability.

Implementation

The RTS is a fixed charge that is allocated among the member agencies based on a ten-fiscal-year rolling average of firm demands. Water transfers and exchanges are included for purposes of calculating the ten-year rolling average³. The Standby Charge is collected at the request of some member agencies that have elected to use the charge as a direct offset to the member agency's RTS obligation.

³ The SDCWA exchange water transactions are excluded from the calculation of the ten-year rolling average per the terms of the parties' exchange agreement.

Purchase Order Option

Purpose

The current rate structure allows member agencies to choose to purchase water from Metropolitan by means of a Purchase Order. Purchase Orders are voluntary agreements that determine the amount of water that a member agency can purchase at the Tier 1 Supply Rate. They allow member agencies to purchase a greater amount of water at the lower Tier 1 Supply Rate than would otherwise be authorized by the Administrative Code. In exchange for the higher Tier 1 Maximum, the member agency commits to purchase a specific amount of water (based on past purchase levels) over the term of the agreement. Such agreements allow member agencies to manage costs and provide Metropolitan with a measure of secure revenue.

In November 2014, the Metropolitan Board approved new Purchase Orders effective January 1, 2015 through December 31, 2024 (the "Purchase Order Term"). Twenty-one of the twenty-six-member agencies have Purchase Orders, which commit the member agencies to purchase a minimum amount of supply from Metropolitan (the "Purchase Order Commitment").

The key terms of the Purchase Orders include:

- A ten-year term, effective January 1, 2015 through December 31, 2024;
- A higher Tier 1 limit based on the Base Period Demand, determined by the member agency's choice between (1) the Revised Base Firm Demand, which is the highest fiscal year purchases during the 13-year period of fiscal year 1989/90 through fiscal year 2001/02, or (2) the highest year purchases in the most recent 12-year period of fiscal year 2002/03 through 2013/14. The demand base is unique for each member agency, reflecting the use of Metropolitan's system water over time;
- An overall purchase commitment by the member agency equal to the Demand Base period chosen, multiplied by ten to reflect the ten-year Purchase Order term. Those agencies choosing the more recent 12-year period may have a higher Tier 1 Maximum and commitment. The commitment is also unique for each member agency.
- The opportunity to reset the Base Period Demand using a five-year rolling average;
- Any obligation to pay the Tier 2 Supply Rate will be calculated over the ten-year period, consistent with the calculation of any Purchase Order commitment obligation; and
- An appeals process for agencies with unmet purchase commitments that will allow each acre-foot of unmet commitment to be reduced by the amount of production from a local resource project that commences operation on or after January 1, 2014.

Member agencies that do not have Purchase Orders in effect are subject to Tier 2 Supply Rates for amounts exceeding 60 percent of their base amount (equal to the member agency's highest fiscal year demand between 1989/90 and 2001/02) annually.

Implementation

Purchase Order Commitments are unique for each member agency. The commitment is calculated based on the demand base chosen (the "Base Period Demand") and multiplied by ten to reflect the ten-year Purchase Order Term. If a member agency opted to use the Revised Base Firm Demand, which is the highest fiscal year purchases during the original 13-year period of fiscal year 1989/90 through fiscal year 2001/02 for their Purchase Order, their Commitment is 60 percent of the 2003 Initial Base Firm Demand, the same as the previous Amended and Restated Purchase Order agreement, multiplied by ten. If a member agency opted to use the more recent 12-year period of fiscal year 2002/03 through fiscal year 2013/14 for their Purchase Order, their Commitment is 60 percent of the highest year in the period of fiscal year 2002/03 through fiscal year 2013/14, multiplied by ten. The Purchase Order Commitment is fixed for the Purchase Order Term.

At the end of the Purchase Order Term, if the member agency has not purchased enough firm supply to meet its Purchase Order Commitment, it will be billed for the remaining balance of the Purchase Order Commitment at the average of the Tier 1 Supply Rate in effect during the Term. This payment may be prorated with interest evenly over the next 12 invoices.

If a member agency fulfills its Purchase Order Commitment prior to the end of the Purchase Order Term, then the member agency has met its obligation under the Purchase Order. The member agency may continue to purchase up to 90 percent of its cumulative Base Period Demand over the Term at the Tier 1 Supply Rate for the duration of the Purchase Order Term.

Firm water purchases made under the terms of the Purchase Order agreements are subject to reduction in accordance with the shortage allocation provisions of the Water Surplus and Drought Management Plan (WSDM Plan) implemented through the Water Supply Allocation Plan (WSAP). In the event that Metropolitan's Board or General Manager determines to reduce, interrupt or suspend deliveries of water, any outstanding balance of the Purchase Order Commitment at the end of the Term will be reduced by the "Purchase Order Commitment—Annual Average" for each and every fiscal or calendar year that a reduction, interruption or suspension occurred. The original Purchase Order Commitment was reduced by 10 percent due to the WSAP implantation in FY 2015/16.

The following water transactions will be counted toward the Purchase Order Commitment:

- Full-service sales (Tier 1 or Tier 2 Supply Rates) of treated or untreated water
- Conjunctive Use sales
- Cyclic sales.

The current bundled full-service costs are shown in Table 10.

Table 10: Bundled Full-Service Costs⁴

Rate Type	Type of Charge	Rate or charge effective January 1, 2022
Tier 1 Full-Service Untreated Cost	Volumetric (\$/af)	\$799
Tier 2 Full-Service Untreated Cost	Volumetric (\$/af)	\$841
Tier 1 Full-Service Treated Cost	Volumetric (\$/af)	\$1,143
Tier 2 Full-Service Treated Cost	Volumetric (\$/af)	\$1,185

The Tier 1 Full-Service Untreated Cost consists of the following rate elements: The Tier 1 Supply Rate, the System Access Rate, the System Power Rate, and the Water Stewardship Rate (currently set at \$0).

The Tier 2 Full-Service Untreated Cost consists of the following rate elements: The Tier 2 Supply Rate, the System Access Rate, the System Power Rate, and the Water Stewardship Rate (currently set at \$0).

The Tier 1 Full-Service Treated Cost consists of the following rate elements: The Tier 1 Supply Rate, the System Access Rate, the System Power Rate, the Water Stewardship Rate (currently set at \$0), and the Treatment Surcharge.

The Tier 2 Full-Service Treated Cost consists of the following rate elements: The Tier 2 Supply Rate, the System Access Rate, the System Power Rate, the Water Stewardship Rate (currently set at \$0), and the Treatment Surcharge.

⁴ Nineteen of Metropolitan's member agencies have invoices prepared using bundled rates; seven of Metropolitan's member agencies have invoices prepared using the unbundled rate elements.

COST OF SERVICE

A cost of service (COS) report contains analysis of costs using a methodology to equitably allocate the revenue requirements of a utility between the various users of service. Costs of operating a utility are not accounted for on a specific user or service basis. Many costs are incurred for the joint benefit of all users, while other costs may benefit only the users of certain services. Metropolitan uses the COS methodology to functionalize, allocate and distribute costs to services provided. The unbundled rate structure is used to collect revenue based on the services provided to different member agencies and contractual arrangements. Metropolitan provides full-service water (treated and untreated) to its member agencies. Exchanges, wheeling, and other arrangements are provided on a contractual basis.

AWWA Guidelines

The American Water Works Association (AWWA) is the professional association which, among other functions, identifies water industry standards for financial management and rate-setting practices. AWWA publishes a document on these topics in its Manual of Water Supply Practices series, which is the AWWA's M1, Principles of Water Rates, Fees, and Charges, Seventh Edition.

AWWA manual M1 Seventh Edition delineates a number of guidelines and principles that are intended to be observed in the broad development of cost of service and rate setting steps⁵. The COS process reflects the M1 Seventh Edition guidelines and principles, which were carefully considered in the conceptual design of the Metropolitan COS. Major AWWA guidelines and principles considered in the proposed COS approach are outlined below.

- One of the most effective methods used to accommodate the impact of rapidly increasing costs on rate design is the use of a "forward looking" or prospective rate period. This procedure is frequently used by government-owned utilities in determining cost of service. Metropolitan's COS follows this approach by incorporating budget data for upcoming fiscal years, using projected debt service and State Water Contract payment obligation data, and applying annual escalation factors to operations and maintenance costs.
- The purpose of performing functional assignment of costs is to express the utility's cost of service in terms that make it possible to allocate and then distribute costs to services in accordance with the costs of serving each class of customer, or in Metropolitan's case, each function type. In keeping with AWWA recommendations, the functional assignment and commodity/demand allocation modules of the COS allow identification of functional cost components at a level that allows the unbundling of Metropolitan's rates.
- The cash-needs approach, which develops the revenue requirements for a utility based on total estimated cash expenditures for a time period, is one of two methodologies endorsed by AWWA principles and is frequently used by government-owned utilities. The COS's revenue requirements module is consistent with this approach.
- In areas where seasonal usage patterns impose significant demands and ultimately costs on the utility, consideration may be given to separate charges for such use. System costs associated with accommodating seasonal use may be recovered either through rates applied to separate metering for

⁵ The majority of the M1 Seventh Edition is written for utilities providing retail service or combined retail and wholesale service. The distinction in practices for wholesale-only utilities is indirect; care must be taken to be attuned to these distinctions such that the guidelines are not incorrectly applied or misrepresented.

such services or through charges applied based on seasonal use. This principle is consistent with the conceptual design of the COS's allocation module.

General principles for establishing charges state that:

- Beneficiaries of a service should pay for that service.
- The level of service charges should be related to the cost of providing the service.
- The price of services may be used to change user behavior and demand for the good or service.⁶

The proposed COS process is consistent with these principles.

AWWA's M1 Seventh Edition provides rate-setting objectives as a basis for evaluating water utility rate designs. These objectives have all been considered in the development of the proposed COS process and resulting rates, fees and charges for service⁷.

- Effectiveness in yielding total revenue requirements (full cost recovery).
- Revenue stability and predictability.
- Stability and predictability of the rates themselves from unexpected or adverse changes.
- Promotion of efficient resource use (conservation and efficient use).
- Fairness in the apportionment of total costs of service among the different ratepayers.
- Avoidance of undue discrimination (subsidies) within the rates.
- Dynamic efficiency in responding to changing supply and demand patterns.
- Freedom from controversies as to proper interpretation of the rates.
- Simple and easy to understand.
- Simple to administer.
- Legal and defensible.

It should be noted that there are circumstances in which some of these objectives can be in conflict with each other. For example, competing objectives could be conservation and revenue stability. To incentivize conservation, a utility might develop a rate structure that was 100 percent volumetric. To provide revenue stability, the same utility might develop a rate structure that was 100 percent fixed. Because of such conflict potential, all AWWA pricing objectives must be carefully balanced when selecting a preferred COS and rate setting approach.

Cost of Service

Prior to discussing the specific rates and charges that make up the rate structure, it is important to understand the cost of service process that supports the rates and charges. The AWWA M1 Seventh Edition sets out the steps in the COS process as: (1) identify which costs should be recovered through rates and charges (the revenue requirement); (2) organize costs into operational functions (functionalize); (3) allocate operational function costs on the basis for which the cost was incurred (allocate); and (4) distribute costs to rate elements (distribute). The process acronym is FAD: functionalize, allocate, distribute. The balance of

⁶ Metropolitan's rates reflect the cost of providing its services and the impact of those costs may have an impact on member agencies' conservation and local resource development. Metropolitan invests in demand management, by providing incentives to those conserving and developing local resource projects that reduce the price of those projects for the participants. Those demand management investments lower system costs and reduce the need for Metropolitan to import additional supplies into the service area.

⁷ Manual of Water Supply Practices, M1, Principles of Water Rates, Fees and Charges, American Water Works Association, Seventh Edition, pg.4

this report uses this nomenclature, while tailoring the process to Metropolitan's unique service obligations and member agency needs.

The purpose of sorting Metropolitan's costs in a manner that reflects the type of function (e.g., supply vs. conveyance), the characteristics of the cost (e.g., fixed or variable) and the reason why the cost was incurred (e.g., to meet peak or average demand) is to create logical cost of service "building blocks". The building blocks can then be arranged to design rates and charges with a reasonable nexus between costs and benefits.

Cost of Service Process

The general cost of service process involves the basic steps outlined below.

Step 1 - Development of Revenue Requirements

In the revenue requirement step, the costs that Metropolitan must recover through rates and charges, after consideration of revenue offsets (such as property tax revenue, interest income, and miscellaneous income), are identified. The cash-needs approach, an accepted industry practice for government-owned utilities, has historically been used in identifying Metropolitan's revenue requirements⁸. Although the utility approach would be acceptable under AWWA guidelines, the cash-needs approach was applied for the purposes of this study. All of Metropolitan's costs fall under the broad categories of either Departmental Costs or General District Requirements. Departmental Costs include budgeted items identified with specific departments within Metropolitan. General District Requirements primarily consist of requirements associated with the CRA, SWP, Supply Programs, Demand Management Programs, and capital financing costs. General District Requirements also include reserve fund transfers required by bond covenants and Metropolitan's Administrative Code. Under the cash needs approach, revenue requirements include operating costs and annual requirements for meeting financed capital items (debt service and funding of the CIP from operating revenues).

Step 2 - Functionalization of Costs

To allow for the development of rates that properly reflect the costs of providing different service types (full-service (treated and untreated), revenue requirements should be categorized based on the operational functions associated with each cost. In the functional assignment step, revenue requirements are assigned to different categories based on the operational functions associated with each cost. The functional categories are identified in such a way as to allow the development of logical assignment bases. The functional categories used in this cost of service process include:

- Supply
- Conveyance and Aqueduct
- Storage
- Treatment
- Distribution
- Demand Management
- Administrative and General
- Hydroelectric

These functional assignments reflect the unique functions that Metropolitan undertakes and is consistent with the Strategic Plan Policy Principles. In order to provide more finite functional assignment, many of these functional categories are subdivided into more detailed sub-functions in the COS process. For example, costs

⁸ The primary difference between the two methods is how capital-related costs are approached. The cash-needs approach uses debt service on bonds and capital funded from rates; the utility approach uses depreciation and a return on Rate Base or Investment.

for the Supply and Conveyance and Aqueduct (C&A) functions are further subdivided into the sub-functions SWP, CRA, and Other. Similarly, costs in the Storage function are broken down into the sub-functions Emergency Storage, Drought Carryover Storage, and Regulatory Storage.

Step 3 - Allocation of Costs

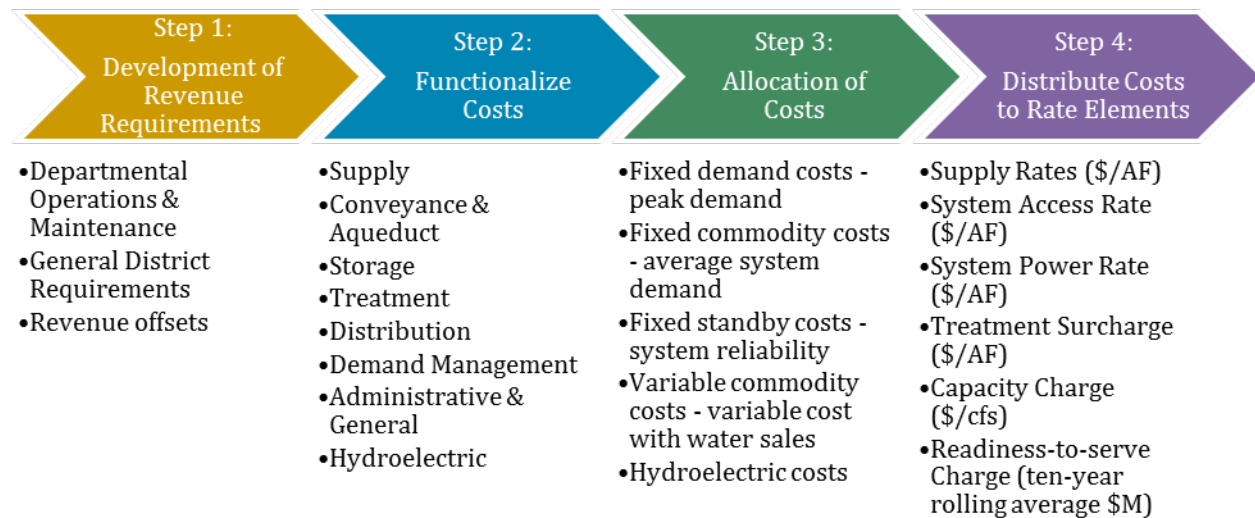
In the cost allocation step, functionalized costs are separated into categories according to their causes and behavioral characteristics. Proper cost allocation is critical in developing a rate structure that recovers costs in a manner consistent with the causes and behaviors of those costs. Under AWWA guidelines, cost allocation may be done using either the Base/Extra-Capacity approach or the Commodity/Demand approach. In the simplest sense, these approaches offer alternative means of distinguishing between utility costs incurred to meet average or base demands and costs incurred to meet peak demands. The Commodity/Demand approach was selected because it: (1) is best suited for systems where design criteria are focused on peaking patterns within a long-term time frame, such as peak month and peak week, (2) it works well in situations where complex cost relationships exist in the service area and attempting to allocate costs to peak day and peak hour functions would be complicated and often impractical, and (3) it allows for the development of the most appropriate COS classification bases because of the way Metropolitan's financial and operational data is organized. The Commodity/Demand approach was modified for its application to Metropolitan's rate structure by adding a separate cost allocation for costs related to Metropolitan's standby function. Analysis of system operating data indicated that a modified Commodity/Demand approach was most appropriate for developing Metropolitan's cost of service allocation bases.

Step 4 - Distribution to Rate Elements

The distribution of costs to the rate design elements depends on the purpose for which the cost was incurred and the manner in which the member agencies use the Metropolitan system. For example, costs incurred to meet average system demands are typically recovered by dollar per acre-foot rates and are distributed based on the volume of water purchased by each agency. Rates that are levied on the amount or volume of water delivered are commonly referred to as volumetric rates as the customer's costs vary with the volume of water purchased. Costs incurred to meet peak distribution demands (referred to in this report as demand costs) are recovered through a peaking charge (the Capacity Charge) and are distributed to agencies based on their peak summer demand behavior. Costs incurred to provide system reliability in the event of an emergency, major outage or hydrologic variability (referred to in this report as standby costs) are recovered through a Readiness-To-Serve Charge. Differentiating between costs for average, peak, and standby is just one example of how the COS process allows for the design of rates and charges to achieve overall customer equity and efficiency.

With regards to treatment-related costs, all costs, whether for average, peak, or standby, are recovered by dollar per acre-foot rates and are distributed based on the volume of treated water purchased. The following figure summarizes the Metropolitan COS process.

Cost of Service Process



Revenue Requirements

The estimated revenue requirements presented in this report are for FY 2022/23 and 2023/24. Throughout the report, the fiscal years are used as the “test years” to demonstrate the application of the COS process. Schedule 1 and Schedule 2 summarize the FY 2022/23 and FY 2023/24 revenue requirements, respectively, by the major budget line items used in Metropolitan’s budgeting process.

Current estimates indicate Metropolitan’s annual expenditures (including capital financing costs, but not construction outlays financed with bond proceeds) will total approximately \$1.93 billion in FY 2022/23 and \$2.00 billion in FY 2023/24. These expenditures support sales of 1.59 MAF in FY 2022/23 and 1.54 MAF in FY 2023/24 and assume a 15 percent SWP allocation in CY 2022, 40 percent SWP allocation in CY 2023, and 50 percent SWP allocation in CY 2024 with CRA diversions of 1.01 MAF in FY 2022/23 and 0.92 MAF in FY 2023/24.

The rates and charges do not have to cover the entire amount of estimated expenditures. Metropolitan generates a significant amount of revenue from interest income, hydroelectric power sales and miscellaneous income. These internally generated revenues are referred to as revenue offsets and are expected to generate about \$72 million in FY 2022/23 and \$57 million in FY 2023/24. It is expected that Metropolitan will also generate about \$163 million in ad valorem property tax revenues (assuming that ad valorem tax rates are maintained at 0.0035 percent of assessed valuation) in FY 2022/23 and \$168 million in FY 2023/24. Property tax revenues are used to pay for a portion of Metropolitan’s general obligation bond debt service, a portion of Metropolitan’s obligation to pay for debt service on bonds issued to fund the SWP, and other SWP costs. The total revenue offsets are estimated to be about \$235 million in FY 2022/23 and \$226 million in FY 2023/24. Therefore, the revenue required from rates and charges is the difference between the total estimated expenditures (costs) and the revenue offsets, or \$1.70 billion in FY 2022/23 and \$1.78 billion in FY 2023/24. Given an effective date of January 1, 2023 and January 1, 2024, respectively, the rates and charges recommended in this report, combined with rates and charges effective through December 31, 2022 will generate a total of \$1.68 billion in FY 2022/23 and \$1.75 billion in FY 2023/24.

All of Metropolitan's costs fall under the broad categories of Departmental Costs or General District Requirements. Departmental Costs include budgeted items identified with specific organizational groups. General District Requirements consist of requirements associated with the CRA, SWP, Supply Programs, Demand Management Programs, and capital financing costs associated with the Capital Investment Plan (CIP). General District Requirements also include reserve fund transfers required by bond covenants and Metropolitan's Administrative Code.

Schedule 1: Revenue Requirements (by budget line item), FY 2022/23

	Fiscal Year Ending 2023	% of Revenue Requirements (1)
Departmental Operations & Maintenance		
Office of General Manager	\$ 9,788,687	0.5%
Water Systems Operations	272,506,347	12.6%
Water Resources Management	24,401,574	1.1%
Engineering Services	47,697,671	2.2%
Bay Delta Initiatives	11,925,029	0.6%
Business Technology	80,687,613	3.7%
Real Property	28,962,611	1.3%
Human Resources	15,364,281	0.7%
Office of the Chief Financial Officer	28,630,140	1.3%
External Affairs	27,210,145	1.3%
General Counsel	15,833,730	0.7%
General Auditor	4,599,034	0.2%
Ethics Office	2,106,637	0.1%
Sustainability, Resilience & Innovation	9,831,427	0.5%
Diversity, Equity & Inclusion	1,371,646	0.1%
Equal Employment Opportunity	1,943,227	0.1%
Total	582,859,799	26.9%
General District Requirements		
State Water Contract*	681,709,121	31.5%
Colorado River Aqueduct Power Costs	105,857,041	4.9%
Supply Programs (cash funded portion)	66,659,522	3.1%
Demand Management (cash funded portion)	50,815,317	2.3%
Capital Financing	423,023,470	19.5%
Other Operating Costs	14,394,884	0.7%
Increase/(Decrease) in Required Reserves	6,100,000	0.3%
Total	1,348,559,356	62.2%
Revenue Offsets	(235,108,965)	10.9%
Net Revenue Requirements	1,696,310,190	100.0%
(1) Given as a percentage of the absolute values of total dollars apportioned * Includes Delta Conveyance planning costs net of California WaterFix refund Totals may not foot due to rounding		

Schedule 2: Revenue Requirements (by budget line item), FY 2023/24

	Fiscal Year Ending 2024	% of Revenue Requirements (1)
Departmental Operations & Maintenance		
Office of General Manager	\$ 10,072,761	0.5%
Water Systems Operations	279,846,732	12.5%
Water Resources Management	25,035,947	1.1%
Engineering Services	46,260,690	2.1%
Bay Delta Initiatives	12,280,257	0.5%
Business Technology	84,259,703	3.8%
Real Property	28,965,582	1.3%
Human Resources	15,617,559	0.7%
Office of the Chief Financial Officer	25,369,838	1.1%
External Affairs	27,692,872	1.2%
General Counsel	15,716,806	0.7%
General Auditor	4,737,939	0.2%
Ethics Office	2,156,213	0.1%
Sustainability, Resilience & Innovation	9,216,241	0.4%
Diversity, Equity & Inclusion	1,426,072	0.1%
Equal Employment Opportunity	2,036,286	0.1%
Total	590,691,497	26.5%
General District Requirements		
State Water Contract*	761,239,991	34.1%
Colorado River Aqueduct Power Costs	85,626,149	3.8%
Supply Programs (cash funded portion)	64,100,985	2.9%
Demand Management (cash funded portion)	49,108,217	2.2%
Capital Financing	436,025,242	19.5%
Other Operating Costs	13,836,761	0.6%
Increase/(Decrease) in Required Reserves	6,900,000	0.3%
Total	1,416,837,345	63.4%
Revenue Offsets	(225,704,132)	10.1%
Net Revenue Requirements	1,781,824,709	100.0%
(1) Given as a percentage of the absolute values of total dollars apportioned		
* Includes Delta Conveyance planning costs net of California WaterFix refund		
Totals may not foot due to rounding		

Departmental Costs

Departmental costs consist of salary and benefits, chemicals, power, outside services, materials and supplies, association dues, insurance expenses, leases, and property taxes budgeted by the General Manager's Department, as well as the General Counsel, General Auditor, and Ethics Officer.

The proposed FY 2022/23 O&M budget includes \$597.3 million for labor and benefits, water treatment chemicals, power, and solids handling, materials and supplies, professional services, and operating equipment purchases. This is \$17.4 million, or 3.0 percent, higher than the FY 2021/22 budget of \$579.9 million due primarily to negotiated labor, benefits, and outside services cost increases. Variable treatment costs are also higher due to higher chemical prices. The total authorized personnel complement for the FY 2022/23 budget is 1,974 authorized positions, including 47 district temporary full-time equivalents (FTEs), and reflects an increase of 30 full-time positions from the FY 2021/22 budget. Total funded positions are 1,974 FTEs.

The proposed FY 2023/24 O&M budget is \$604.5 million, an increase of \$7.2 million, or 1.2 percent, compared to the FY 2022/23 budget. This increase is primarily due to negotiated labor, benefits, and outside services cost increases, and slight increase in chemical prices. The total authorized personnel complement for FY 2023/24 is increased by 2 positions to 1,976 authorized positions, including 49 district temporary full-time equivalents (FTEs). Total funded positions are 1,976 FTEs.

The Departmental Budget is described in detail in the Biennial Budget document.

General District Revenue Requirements

General District Requirements include costs for the SWP, CRA power, Supply Programs, Demand Management Programs, and the Capital Financing costs. Each of these areas is described in the following.

State Water Project

Metropolitan participates in the State Water Project (SWP), which is managed and operated by the California Department of Water Resources (DWR) and is an integral part of Metropolitan's conveyance system, through its State Water Contract. All costs of the SWP capital expenditures and costs of the operations, maintenance, power and replacement (OMPR) associated with water conservation (supply) and transportation (delivery) are paid by the 29 State Water Contractors. Metropolitan recovers the costs associated with the SWP through ad valorem property taxes, the Tier 1 Supply Rate, System Access Rate, the System Power Rate, and the Readiness-to-Serve Charge.

All State Water Contractors are obligated to pay all costs incurred by DWR to operate the SWP for water supply delivery, as part of their contractual participation in the project. Articles 22 through 26 of the State Water Contract provide that all costs DWR might incur to conserve and transport water to Metropolitan will be recovered from Metropolitan. Metropolitan is responsible for paying the costs of the system necessary to conserve and transport SWP water regardless of whether Metropolitan receives any water at all. Only the Transportation Variable, which recovers power costs for pumping through SWP transportation facilities to Metropolitan, varies depending on the amount of water delivered to Metropolitan. In the event Metropolitan does not pay DWR, DWR can require Metropolitan to recover its SWP costs through property taxes. DWR has no recourse to go to the State General Fund to pay SWP costs. DWR has no exposure whatsoever for any revenue shortfall, cost changes, or the cost impacts of operational limitations; these risks are solely the Contractors' risks.

Annually, the DWR reviews and redetermines the water supply and financial aspects of the SWP as required by the State Water Contract. The annual review and redetermination results in the annual Statement of Charges to the Contractors for each calendar year. The information that supports the Statement of Charges is published by the DWR as Appendix B to the appropriate Bulletin 132 (i.e., the Statement of Charges for Calendar Year 2022 is supported by Appendix B to Bulletin 132-21). DWR does not charge rates for water service. It does not develop a revenue requirement and then develop rates based on projected billing determinants for a calendar year. Rather, DWR apportions its costs to the Contractors based on their proportionate share of conservation (supply) costs (the Delta Water Charge) and transportation (delivery) costs (the Transportation Charge). DWR reconciles actual costs for each year and either collects more funds from the Contractors if actual costs exceeded estimated costs or provides a credit/refund if actual costs were lower than estimated costs.

The Biennial Budget includes Metropolitan's planned contribution for Delta conveyance project planning activities of \$99.0 million. The expenditures for the SWP are described in detail in the Biennial Budget document.

Colorado River Aqueduct

Metropolitan owns, operates, and manages the CRA. Metropolitan is responsible for operating, maintaining, rehabilitating, and repairing the CRA, and is responsible for obtaining and scheduling energy resources adequate to power pumps at the CRA's five pumping stations.

The CRA costs for delivery and supply are reflected in the Departmental costs and in the costs of the appropriate operational functions. The expenditures for CRA power are described in detail in the Biennial Budget document.

In fiscal years 2022/23 and 2023/24, it is projected Metropolitan will receive annual CRA water diversions of approximately 1.01 MAF and 0.92 MAF respectively. The budgeted power costs for the CRA are \$105.9 million in FY 2022/23 and \$85.6 million in FY 2023/24.

Supply Programs: SWP

Since inception, the SWC provided Contractors the ability to use the SWP to convey non-SWP water under certain circumstances. Specifically, Article 18(c)(2) of the original SWC addresses situations where there is a shortage in the supply of water made available under the SWC and states, "[T]he District, at its option, shall have the right to use any of the project transportation facilities which by reason of such permanent shortage in the supply of project water to be made available to the District are not required for delivery of project water to the District, to transport water procured by it from any other source: [p]rovided, [t]hat such use shall be within the limits of the capacities provided in the project transportation facilities for service to the District under this contract". However, Article 18(c)(2) only applied in the event a permanent shortage was declared by DWR and it was unclear on how costs would be charged for using SWP facilities to transport nonproject water. In 1994, the Contractors and DWR negotiated the Monterey Amendment to the SWC, including Article 55, which made explicit that the Contractors' rights to use the portion of the SWP conveyance system necessary to deliver water to them (their "Reaches") also includes the right to convey non-SWP water at no additional cost as long as capacity exists. Power for the conveyance of non-SWP water is charged at the SWP melded power rate. The Monterey Amendment also expanded the ability to carry over SWP water in SWP storage facilities, allowed participating Contractors to borrow water from terminal reservoirs, and allowed Contractors to store water in groundwater storage facilities outside a Contractor's service area for later use. These amendments, approved by Metropolitan's Board in 1995, secured the means for individual Contractors to increase supply reliability through water transfers, and storage outside their service areas.

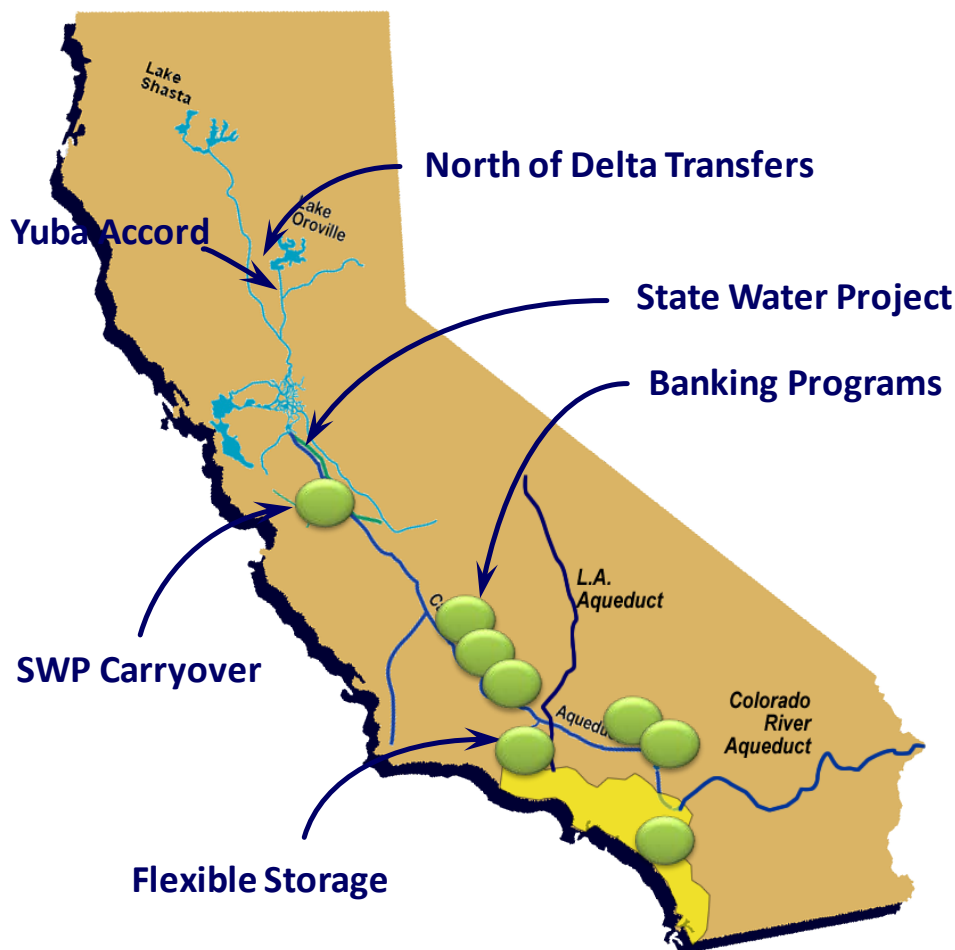
Since adoption of the 1996 Integrated Resources Plan (1996 IRP) and subsequent updates, Metropolitan has developed and actively managed a portfolio of supplies to convey through the California Aqueduct, as shown in Figure 10. The geographical locations of the projects are indicated by the green dots; Metropolitan's service area is designated by the yellow highlighted area. Metropolitan submits delivery schedules to DWR for these supplies and alters these schedules throughout the year based on changes in the availability of SWP and Colorado River water. The portfolio of supplies that Metropolitan has developed to be conveyed through the SWP since adoption of the Monterey Amendments and the 1996 IRP extend from north of the Delta to Southern California.

Since the Monterey Amendments, Metropolitan has secured one-year water transfer supplies through Metropolitan-only purchases, buyer coalition-purchases, and Governor Drought Water Banks. The most recent years that Metropolitan secured these one-year transactions were 2015, and 2021. Metropolitan opted not to pursue these transactions in 2018 or 2020. Most of the sellers were Sacramento Valley water users who are not Contractors. Other Contractors obtained one-year water transfers during this timeframe as well. There were no single-year transfer programs in, 2016-2017, or 2019 because of favorable water supply conditions and lack of capacity to move transfer supplies through the Delta.

In addition to the above one-year water transfers, Metropolitan purchases long-term water transfer supplies through the Yuba Accord. The Yuba Accord has provided water to enhance SWP and CVP water supply reliability by offsetting Delta export reductions and providing dry year water supplies for participating SWP

and CVP contractors. This water is Yuba River water developed by Yuba County Water Agency (YCWA) making reservoir releases or by YCWA's member units substituting groundwater for their surface water supplies; it is not SWP water.

Figure 10: California Aqueduct Portfolio of Supplies

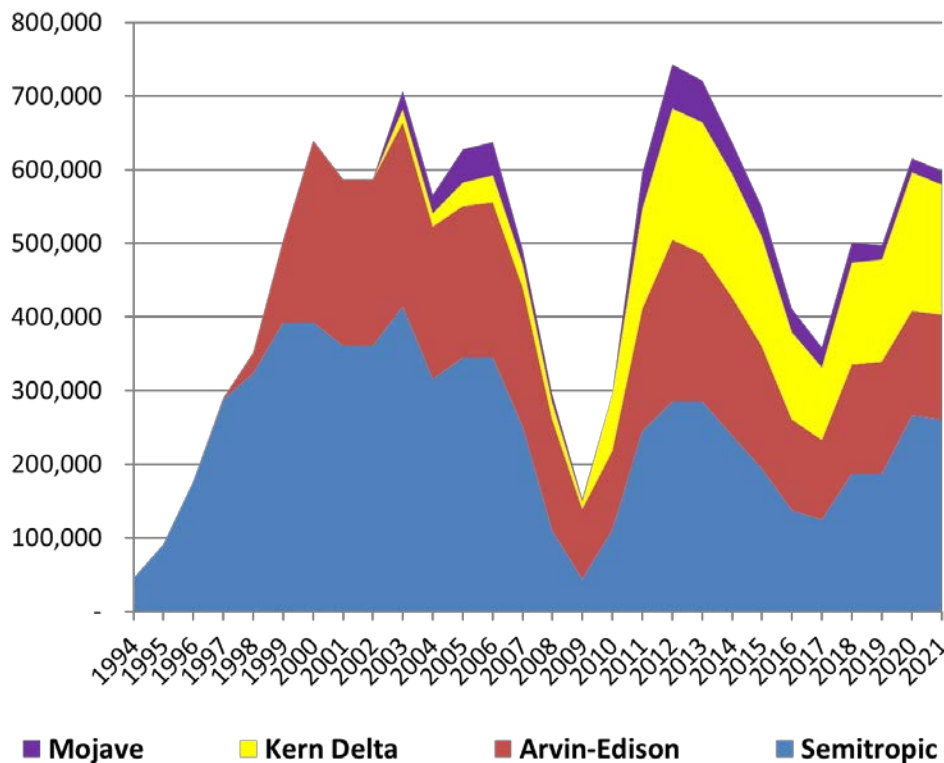


In addition to one-year transfers, and the Yuba Accord water, Metropolitan has developed groundwater storage agreements that allow Metropolitan to store available supplies in the Central Valley for return later. Metropolitan enters into point of delivery agreements with DWR to deliver water supplies from the SWP facilities to these storage programs. Metropolitan enters into agreements for introduction of local supplies to return these water supplies to the SWP system for delivery to Metropolitan's service area. Metropolitan's storage activities are shown in Figure 11. The figure shows how the programs function to store supplies during surplus conditions and return supplies during a drought. The storage programs have demonstrated that they can provide a significant amount of water when needed.

- **Arvin-Edison Storage Program:** under the agreement, Arvin-Edison Water Storage District stores water on behalf of Metropolitan. Up to 350,000 acre-feet can be stored; Arvin-Edison is obligated to return up to 75,000 acre-feet of stored water in any year to Metropolitan, upon request. The water is returned by direct groundwater pump-in and exchange of SWP supplies. A 2017 State Water Resources Control Board (SWRCB) regulation setting a Maximum Contaminant Level (MCL) for TCP has temporarily suspended use of this program due to the levels detected in the program groundwater wells. In November 2021, a change in the point-of-delivery was initiated to allow Metropolitan access to its stored water through an operational exchange of Friant Division CVP water supplies with SWP supplies in San Luis Reservoir.
- **Semitropic Storage Program:** under the agreement, Metropolitan stores water in the groundwater basin underlying land within the Semitropic Water Storage District. The maximum storage capacity

is 350,000 acre-feet. Currently, the minimum annual yield to Metropolitan is 38,200 acre-feet, and the maximum annual yield is 229,700 acre-feet depending on the available unused capacity and the SWP allocation. The water is returned by direct groundwater pump-in and exchange of SWP supplies.

- Kern Delta Storage Program: under the agreement, Kern Delta Water District provides groundwater banking and exchange transfer to allow Metropolitan to store up to 250,000 acre-feet of SWP water in wet years and take up to 50,000 acre-feet annually during droughts. The water is returned by direct groundwater pump-in or by exchange of surface water supplies.
- Mojave Storage Program: under the agreement, Mojave Water Agency provides groundwater banking and exchange transfers to allow Metropolitan to store up to 390,000 acre-feet for later return. The agreement allows Metropolitan to annually withdraw Mojave Water Agency's SWP contractual amounts, after accounting for local needs. The Mojave storage program returns water only by exchange of surface water supplies.
- Antelope Valley East Kern (AVEK) Storage Program: under the Storage Program, Metropolitan, at its discretion, could store up to 30,000 acre-feet of its SWP Table A amount or other supplies in the Antelope Valley Groundwater Basin in an account designated for Metropolitan. The water is returned by exchange of SWP supplies or direct groundwater pump-in.
- Antelope Valley-East Kern (AVEK) High Desert Water Bank Program: under this agreement, AVEK provides storage for up to 70,000 acre-feet per year of its unused SWP Table A amount to Metropolitan or other supplies for later return. The maximum storage capacity for Metropolitan supplies would be 280,000 acre-feet. The program is designed to return up to 70,000 acre-feet per year by direct pump-in to the East Branch of the California Aqueduct. Water can also be returned by exchange of SWP supplies when available.
- Sites Reservoir: under a participation agreement, Metropolitan is contributing to planning activities for a proposed reservoir project of approximately 1.3 to 1.5 million acre-feet being analyzed by the Sites Reservoir Authority, to be located in Colusa County. Water stored for the proposed project would be diverted from the Sacramento River. The maximum storage capacity for Metropolitan supplies would be 31,700 acre-feet. As proposed, the program would be designed to return up to 50,000 acre-feet per year on average to Metropolitan by direct pump-in to the Sacramento River. Metropolitan's agreement to participate in funding of this phase of project development activities does not commit Metropolitan to participate in any actual reservoir project that may be undertaken in the future.

Figure 11: SWP Groundwater Storage Programs, acre-feet

Metropolitan has developed exchanges and transfers with other Contractors to enhance supply flexibility. Some of these agencies have extensive groundwater supplies and are willing to exchange their SWP supplies.

- San Gabriel Valley Water District: under this agreement, Metropolitan delivers treated water to a San Gabriel Valley Water District (SGVMWD) subagency in exchange for twice as much untreated SWP supplies delivered into the Main San Gabriel groundwater basin. The groundwater basin supplies water to both Metropolitan and SGVMWD subagencies. Each year Metropolitan purchases 5,000 acre-feet minus the unbalanced exchange amount. By mutual agreement Metropolitan may purchase more than the 5,000 acre-feet per year should SGVMWD have additional supplies available. This program has the potential to increase Metropolitan's reliability by providing 115,000 acre-feet through 2035.
- Desert Water Agency/Coachella Valley Water District Advance Delivery Program: under this program, Metropolitan delivers Colorado River water to the Desert Water Agency (DWA) and Coachella Valley Water District (CVWD) in advance of the exchange for their SWP Contract Table A allocations. In addition to their Table A supplies, the agencies can take delivery of SWP supplies available under Article 21 and the Turn-back Pool Program, and non-SWP supplies separately acquired by each agency. These non-SWP supplies have included Yuba Accord water, drought water bank water, and San Joaquin Valley water. By delivering enough water in advance to cover Metropolitan's exchange obligations, Metropolitan is able to receive DWA and CVWD's available SWP supplies in years in which Metropolitan's supplies are insufficient without having to deliver an equivalent amount of Colorado River water. In December 2019, the exchange agreements were amended to provide more flexibility and operational certainty for the parties involved. Additionally, under the amended agreement, Coachella and Desert in wet years pay a portion of Metropolitan's water storage management costs, up to a combined total of \$4 million per year.

Supply Programs: CRA

Since adoption of the 1996 IRP and subsequent updates, Metropolitan has developed and actively manages a portfolio of supplies to convey through the CRA. Metropolitan determines the delivery schedule of those resources throughout the year based on changes in the availability of SWP and of Colorado River water. Figure 12 shows the geographic location of the portfolio of additional CRA supplies, designated by the red dots, which Metropolitan has developed for diversion into the CRA since adoption of the 1996 IRP. These resources extend from Lake Mead to Southern California and provide supply to Metropolitan's service area, which is shown in the yellow highlighted area.

Figure 12: Colorado River Aqueduct Portfolio of Supplies



- **Bard Fallowing:** Approved by the MWD Board in December 2019, the Bard Water District (Bard) Seasonal Fallowing Program (Program) incentivizes farmers to fallow land irrigated with Colorado River water for the spring and summer months in order to reduce water consumption Bard and augment Metropolitan's Colorado River supplies. Metropolitan estimates a water savings of 2.2 acre-feet per irrigable acre. Metropolitan benefits from the reduced water consumption as the saved water will remain in the Colorado River and be made available for diversion.
- **Imperial Irrigation District/Metropolitan Conservation Program:** Under a 1988 Conservation Agreement, Metropolitan has funded water efficiency improvements within the Imperial Irrigation District's (IID) service area in return for the right to divert the water conserved by those investments. Metropolitan provided funding for IID to construct and operate a number of conservation projects that have conserved up to 109,460 acre-feet of water per year that is then

available to Metropolitan. Execution of the Quantification Settlement Agreement (QSA) and related agreements resulted in changes in the availability of water under the program. As a result of a 2014 IID-Metropolitan letter agreement, the amount of water conserved by IID has been quantified at 105,000 acre-feet per year beginning in 2016. Metropolitan is guaranteed at least 85,000 acre-feet per year, with the remainder of the conserved water being made available to the Coachella Valley Water District (CVWD), if needed under the 1989 Approval Agreement as amended. However, in a recent clarifying agreement, CVWD has agreed to limit its call to 15,000 acre-feet per year through 2026, yielding 90,000 acre-feet annually from the program for Metropolitan, with Metropolitan delivering the remaining 15,000 AF to CVWD at Whitewater.

- N-Drip Irrigation: Metropolitan has agreed to jointly fund a pilot project in Arizona to test the efficacy of a novel drip irrigation technology produced by an Israeli company called N-Drip. The key component of the technology is a drip emitter that resists clogging under relatively low water pressure, which allows for drip irrigation systems without pumps or electricity, significantly reducing the cost of installation and operation. Other funding partners include the Central Arizona Water Conservation District (the project lead), the Southern Nevada Water Authority, the Central Utah Water Conservancy District, and Denver Water. The pilot is primarily a research project expected to yield minimal water savings for Metropolitan (at most, 400 AF in 2022). However, if the technology is widely adopted in the future, it could yield significant additional conservation savings that could increase Metropolitan's Colorado River supplies.
- Palo Verde Land Management, Crop Rotation, and Water Supply Program: Under this program, participating landowners in the PVID's valley service area are paid to reduce water use by not irrigating a portion of their land. A maximum of 35 percent of the participating lands within the Palo Verde Valley can be fallowed in any given year. This program saves up to 133,000 acre-feet of water in certain years, and a minimum of 33,000 acre-feet per year. The term of the program is 35 years. Fallowing began in 2005. In March 2009, Metropolitan and PVID entered into a supplemental emergency fallowing program within PVID that provided for the fallowing of additional acreage in 2009 and 2010. Since 2005, over 1.3 million acre-feet total of Colorado River water has been conserved. The volume of water that becomes available to Metropolitan is governed by the QSA and the Colorado River Water Delivery Agreement. Under these agreements:
 - Metropolitan must reduce its consumptive use of Colorado River water by that volume of consumptive use by PVID and holders of Priority 2 that is greater than 420,000 acre-feet in a calendar year, or
 - Metropolitan may increase its consumptive use of Colorado River water by that volume of consumptive use by PVID and holders of Priority 2 that is less than 420,000 acre-feet in a calendar year.

In both cases, each acre-foot of reduced consumptive use by PVID is an additional acre-foot that becomes available to Metropolitan.

- Quechan Forbearance: In 2005, Metropolitan entered into a settlement agreement in *Arizona v. California* with the Quechan Indian Tribe and other parties. The Tribe uses Colorado River water on the Fort Yuma Indian Reservation. Under the settlement agreement, the Tribe, in addition to the amounts of water decreed for the benefit of the Reservation in the 1964 decree in *Arizona v. California*, is entitled to (a) 20,000 acre-feet of diversions from the Colorado River, or (b) the amount necessary to supply the consumptive use required for irrigation of a specified number of acres, and for the satisfaction of related uses, whichever is less. Of the additional diversions, 13,000 acre-feet became available to the Tribe in 2006. Metropolitan agreed to provide annual incentive payments to the Tribe if the Tribe forbore diversion of the additional water, thereby allowing Metropolitan to divert it.
- Quechan Fallowing: Approved by the MWD Board in December 2021, the Metropolitan/Quechan Tribe Seasonal Fallowing Pilot Program (Pilot) incentivizes farmers to fallow land irrigated with Colorado River water for the spring and summer months in order to reduce water consumption in

the Quechan tribal land and augment Metropolitan's Colorado River supplies. Since the Quechan Tribe's water supplies have a higher priority than Metropolitan's on the Colorado River, Metropolitan benefits from the reduced water consumption as the saved water will remain in the Colorado River and be made available for diversion.

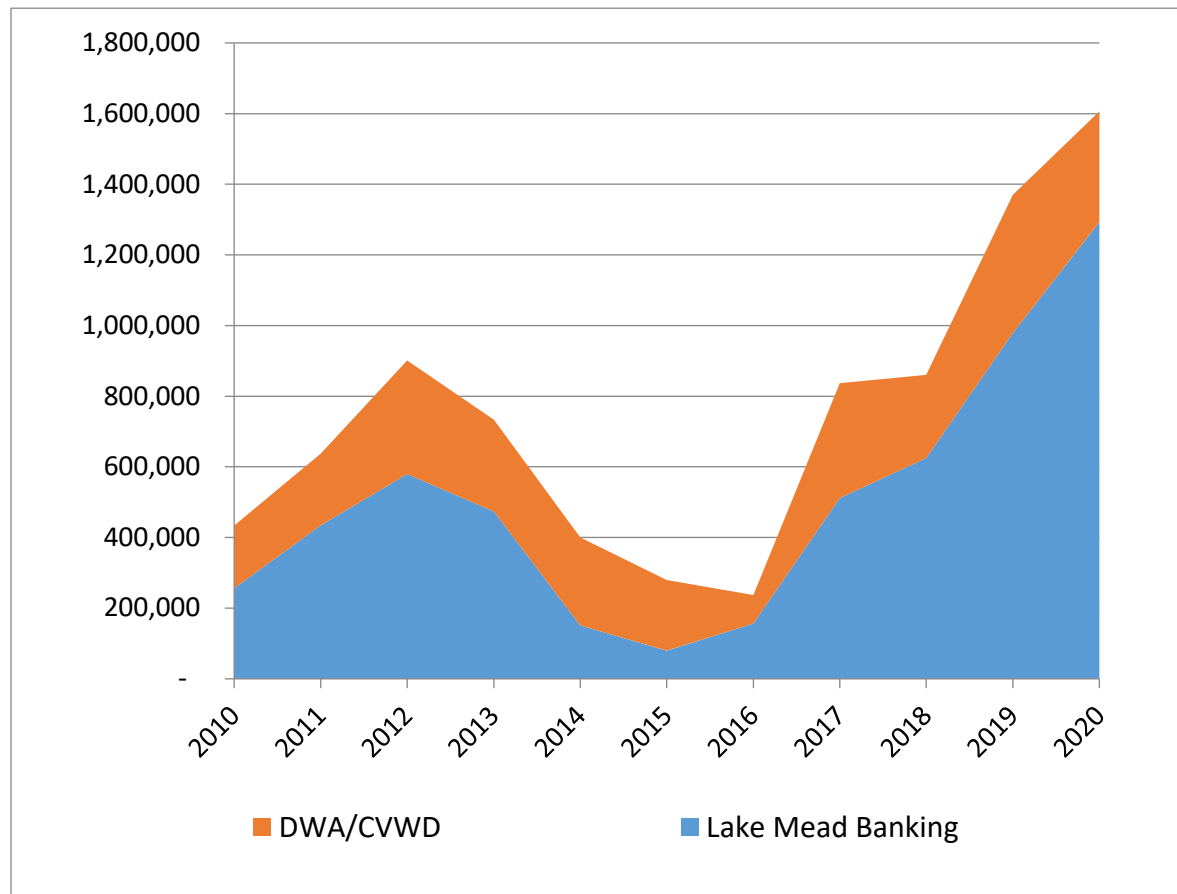
- Southern Nevada Water Authority and Metropolitan Storage and Interstate Release Agreement: Under this 2004 agreement and a related Operational Agreement, the Southern Nevada Water Authority (SNWA) may offer a portion of its Colorado River water supplies to Metropolitan when there is space available in the CRA to receive the water. SNWA may call for return of the water in a future year, in which Metropolitan would reduce its Colorado River water order to return this water to SNWA. In 2009, 2012, and 2015, Metropolitan, the Colorado River Commission of Nevada, and SNWA amended the related Operational Agreement dealing with volumes of water that may be stored or called at various times. The agreements can be terminated upon 90 days' notice following the return of the water stored by Metropolitan.
- Lower Colorado Water Supply Project: This project develops additional water supplies by pumping groundwater into the All-American Canal for delivery to IID. An equal volume of Colorado River water is then made available for other water users along the river. Under a contract among Metropolitan, the City of Needles, and the United States Bureau of Reclamation, Metropolitan receives any excess unused water developed by the project. Metropolitan makes payments to a trust fund to develop a replacement project or to desalt the groundwater should the groundwater become too saline for discharge into the All-American Canal.
- Exchange with the United States (San Luis Rey): 16,000 acre-feet from the All-American and Coachella Canal lining projects is allocated to the San Luis Rey Settlement Parties. The United States furnishes this water at Metropolitan's Colorado River Intake on Lake Havasu. Metropolitan takes possession of the water and by exchange delivers an equal volume of Metropolitan's blended supplies to SDCWA. By separate agreement, SDCWA conveys the water to the San Luis Rey Settlement Parties.
- California ICS Agreement: Under a 2007 agreement and its amendment, Metropolitan may store a portion of IID's excess conservation in Metropolitan's service area, subject to both annual creation and total accumulation limits. IID may call for return of the water in a future year, in which Metropolitan would reduce its Colorado River water order to return the water.
- Lake Mead Storage Program: In December 2007, Metropolitan entered into agreements to set forth the guidelines under which Intentionally Created Surplus (ICS) water is developed and stored in and delivered from Lake Mead. The amount of water stored in Lake Mead must be created through extraordinary conservation, system efficiency, or tributary conservation methods. ICS is available for delivery in a subsequent year, with Extraordinary Conservation ICS subject to a one-time deduction to benefit the river system and annual evaporation losses. Extraordinary conservation methods used by Metropolitan to date are: water saved by fallowing in the Palo Verde Valley, projects implemented with IID in its service area, the Lower Colorado Water Supply Project, All American and Coachella Canal water received under the San Luis Rey Indian Water Rights Settlement Agreement prior to the settlement parties receiving the water, groundwater desalination, groundwater recovery, water conserved from Metropolitan's Landscape Transformation Program, water conserved from implementation of indoor water conservation devices, and water recycling. "System Efficiency ICS" can be created through the development and funding of system efficiency projects that save water that would otherwise be lost from the Colorado River. Metropolitan has participated in two projects to create System Efficiency ICS, and two projects to create ICS by conservation in Mexico:
 - Yuma Desalting Pilot Project: Metropolitan contributed funds toward the 2010-2011 pilot run of the Yuma Desalting Plant in exchange for a portion of the desalinated water produced by the project. The Yuma Desalting Plant treated brackish agricultural drainage that flows into Mexico to the Ciénega de Santa Clara at the terminus of the Colorado River but does not count as deliveries to Mexico under the Mexican Water Treaty. Metropolitan's portion of the desalinated

water was 24,397 acre-feet and this water was stored in Lake Mead. Metropolitan can take delivery of up to the entire amount in any single year.

- Drop 2 (Warren H. Brock) Reservoir: Metropolitan contributed funds toward the U.S. Bureau of Reclamation's construction of an 8,000 acre-foot off-stream regulating reservoir near Drop 2 of the All-American Canal in Imperial County. This reservoir conserves about 55,000 acre-feet of water per year by capturing and storing otherwise non-storable flow. In return for its funding, Metropolitan received 100,000 acre-feet of water that was stored in Lake Mead and has the ability to take delivery of up to 25,000 acre-feet of water in any single year. Besides the additional water supply, the new reservoir adds to the flexibility of Colorado River operations.
- In November 2012, Metropolitan executed agreements in support of a program to augment Metropolitan's Colorado River supply between 2013 and 2017 through an international pilot project in Mexico. Metropolitan's total share of costs was \$5 million for 47,500 acre-feet of project supplies. The costs were paid and the conserved water was credited to Metropolitan's intentionally-created surplus water account. In December 2013, Metropolitan and IID executed an agreement under which IID paid half of Metropolitan's program costs, or \$2.5 million, in return for half of the project supplies, 23,750 acre-feet.
- In September 2017, Metropolitan executed agreements in support and continuation of a program to augment Metropolitan's Colorado River supply through international pilot projects in Mexico. Under the new set of agreements, Metropolitan's total share of costs are expected to be \$3.75 million for 27,275 acre-feet of project supplies. The costs will be paid in three parts in 2020, 2023, and 2026. Water was and will be received in the year of payment.
- Desert Water Agency/Coachella Valley Water District/Metropolitan Water Exchange and Advance Delivery Programs: Under these programs, Metropolitan delivers Colorado River water to the DWA and CVWD, in exchange for future deliveries by DWA and CVWD of an equal volume of their SWP supplies. By delivering enough water in advance to cover Metropolitan's exchange obligations, Metropolitan is able to receive DWA and CVWD's available SWP supplies in years in which Metropolitan's supplies are insufficient to deliver an equivalent amount of Colorado River water⁹.

Figure 13 shows the year-end balance in Metropolitan's Colorado River storage programs. The combined capacity of the Lake Mead Storage program and the DWA/CVWD advance delivery program is 2,300,000 acre-feet, plus the amount of water in storage in Lake Mead as a result of the Drop 2 Reservoir and Yuma Desalting Plant system efficiency projects.

⁹ DWA has a SWP Table A contract right of 55,750 acre-feet per year and CVWD has a SWP Table A contract right of 138,350 acre-feet per year, for a total of 194,100 acre-feet per year. In addition to their Table A supplies, DWA and CVWD, subject to Metropolitan's written consent may by exchange take delivery of SWP supplies available under Article 21 of their SWP Contracts, the Turn-back Pool Program, and non-SWP supplies they may acquire and convey through SWP facilities. Under the Metropolitan-CVWD Delivery and Exchange Agreement for 35,000 Acre-feet, up to 35,000 acre-feet of Metropolitan's SWP Table A supply can be requested annually by CVWD for delivery by exchange. Through the Second Amendment to this agreement, CVWD can request an additional 15,000 acre-feet annually from 2020 through 2026, for an additional transfer amount of 105,000 acre-feet.

Figure 13: Colorado River Storage Programs, acre-feet

In addition to the supply programs developed by Metropolitan, Metropolitan entered into an exchange agreement with the San Diego County Water Authority (SDCWA) in 1998, which was amended in 2003. The entire agreement, consideration exchanged between the parties, and obligations are found in the Amended and Restated Exchange Agreement and the related QSA Agreements. SDCWA acquires Colorado River water from two sources and exchanges up to 277,700 with Metropolitan for Metropolitan water deliveries. SDCWA makes available to Metropolitan Colorado water it purchases from IID that is conserved within IID and conserved water from the lining of the All-American and Coachella canals. In exchange, Metropolitan delivers its own blended water to SDCWA in even monthly installments.

Supply Programs Developed in Basin

Metropolitan has developed a number of local programs to work with its member agencies to increase storage in groundwater basins. Metropolitan has encouraged storage through its cyclic and conjunctive use storage programs. These programs allow Metropolitan to deliver water into a groundwater basin in advance of agency demands. Metropolitan has drawn on dry-year supply from nine contractual conjunctive use storage programs to address shortages from the State Water Project and the CRA.

- **Cyclic Storage Agreements:** Under these agreements, the pre-delivery of imported water is used for recharge into groundwater basins in excess of an agency's planned and budgeted deliveries making best use of available capacity in conveyance pipelines, use of storm channels for delivery to spreading basins, and use of spreading basins. This water is then purchased at a later time when the agency has a need for groundwater replenishment deliveries. Total program capacity is 525,000 AF.

- Conjunctive Use Agreements: Under these agreements, excess imported water can be stored, and then called for use by Metropolitan during dry, drought, or emergency conditions. During a dry period, Metropolitan has the option to call water stored in the groundwater basins pursuant to its contractual conjunctive use agreements. At the time of the call, the member agency pays Metropolitan the prevailing rate for that water. Nine conjunctive use projects provide about 210,000 acre-feet of groundwater storage and have a combined extraction capacity of about 70,000 acre-feet per year.
- Operational Shift Cost-Offset Program: Under these agreements, Metropolitan works with the member agencies to shift the points of delivery to meet demands wherever possible to preserve SWP storage during calendar years 2021 and 2022. Shifts are made at Metropolitan's request and in accordance with the member agencies' capabilities. Metropolitan provides these member agencies a credit of up to \$332/AF in CY 2021 and \$349/AF in CY 2022 to offset additional operational costs the member agencies may accrue from shifting delivery locations. OSCOP allows for improved availability of storage reserves to supplement supplies during dry years by maximizing current available resources from the Colorado River and SWP storage. This program helps reduce the need for purchasing more expensive transfer supplies and helps Metropolitan fully utilize its diverse portfolio to increase reliability for the entire region. This Program continues through end of CY 2022, which covers the first half of the first fiscal year of the proposed biennial budget.

The budget for the Supply Programs is \$105.1 million in FY 2022/23 and \$110.1 million in FY 2023/24. This includes expenditures of \$38.4 million in FY 2022/23 and \$46.0 million in FY 2023/24 for the AVEK High Desert Water Bank that are proposed to be bond funded. The expenditures for the Supply Programs are described in detail in the Biennial Budget document.

Demand Management Programs

Demand Management is an operational function Metropolitan undertakes to enable it to provide its full-service water to its member agencies, as well as to benefit Metropolitan's integrated system used for contractual arrangements such as wheeling and exchanges. Demand Management costs are Metropolitan's expenditures for funding local water resource development programs, water conservation programs, the Future Supply Actions Program, and the Stormwater Pilot Program. These Demand Management Programs incentivize the development of local water supplies and the conservation of water to reduce the need to import water to deliver to Metropolitan's member agencies. These programs are implemented below the delivery points between Metropolitan's and its member agencies' distribution systems and, as such, do not add any water to Metropolitan's supplies. Rather, the effect of these downstream programs is to produce a local supply of water for the local agencies and to reduce demands by member agencies for water imported through Metropolitan's system.

Metropolitan also pursues conservation and local water resource development because it has uniquely been directed to do so by the state Legislature. In 1999, then Governor Davis signed SB 60 (Hayden) into law. SB 60 amended the Metropolitan Water District Act to direct Metropolitan to increase conservation and local resource development. No other water utility in California, public or private, has been specifically identified by the state Legislature and directed to pursue water conservation and local water resource development.

Metropolitan's Demand Management programs also support the region's compliance with the requirements of SB X7-7. In 2009, the state Legislature passed SB X7-7, which was enacted to reduce urban per capita water use by 20 percent by December 31, 2020. Urban retail water suppliers are not eligible for state water grants or loans unless they comply with the water conservation requirements of the legislation. Demand Management programs helped the region achieve urban per capita water use reductions.

AB 1668 and SB 606 build on Governor Brown's efforts to make water conservation a way of life in California and create a new foundation for long-term improvements in water conservation and drought planning. These bills establish guidelines for efficient water use and a framework for the implementation and oversight of the new standards, which will set a new target for retail agencies in 2026. Metropolitan's Demand Management programs will also support Metropolitan's member agencies' ability to meet these guidelines and standards.

Demand Management costs also support the Strategic Plan Policy Principles approved by Metropolitan's Board on December 14, 1999. These principles represent the Board's vision that Metropolitan is a regional provider of wholesale water services. In this capacity, Metropolitan is the steward of regional infrastructure and the regional planner responsible for coordinated drought management and the collaborative development of additional supply reliability and necessary capacity expansion. Through these regional services, Metropolitan ensures a baseline level of reliability and quality for service in its service area.

Capital Financing Costs

Capital financing costs are Metropolitan's expenditures for Revenue Bond debt service, General Obligation bond debt service, debt administration costs, and the funding of capital expenditures from current operating revenues or Pay-As-You-Go (PAYGO).

Budgeted amounts for Capital Financing represent the expenditures for existing and future debt service, anticipated debt administration costs to support the debt portfolio, and PAYGO amounts to support the Capital Investment Plan (CIP). Metropolitan generally incurs long-term debt to finance projects or purchase assets which will have useful lives equal to or greater than the related debt. Revenue supported debt can be authorized by Metropolitan's Board of Directors.

- **Revenue Bond Debt Service:** Includes the annual principal and interest payments for Metropolitan's outstanding and estimated future Revenue Bond debt service costs. Revenue bonds are used to finance the majority of Metropolitan's CIP. Long-term interest rates are assumed to be 2.75 percent for new fixed rate bonds issued over the biennium.
- **G.O. Bond Debt Service:** Includes Metropolitan's currently outstanding General Obligation (GO) bond interest and principal payments. In the long-term, it is assumed that no additional GO debt is issued to finance the CIP.
- **Debt administration costs:** Includes liquidity, remarketing, and broker-dealer fees.
- **PAYGO:** For FY 2022/23 and 2023/24, 45 percent of Metropolitan's capital costs are assumed to be funded from current revenues. It is projected that \$135 million PAYGO funding will be available per year, which is revenue collected through the rates and charges for this purpose over the next two fiscal years.

Expenditures for Capital Financing are \$423 million in FY 2022/23 and \$436 million in FY 2023/24. The Capital Financing costs are described in more detail in the Biennial Budget document.

Required Reserves

Metropolitan's Administrative Code and provisions of the revenue bond covenants require that reserves be held in certain funds at certain times. Therefore, as costs increase, reserves also increase to meet the Administrative Code and revenue bond covenants requirements. This line item reflects current policy requiring O&M fund and minimum requirements for the Revenue Remainder Fund. The increase in Required Reserves is \$6.1 million in FY 2022/23 and \$6.9 million in FY 2023/24.

Functional Costs

Metropolitan undertakes several major operational functions in order to deliver full-service water to Metropolitan's member agencies. These include the supply itself, the conveyance capacity and energy used to move the supply, storage of water, distribution of supplies within Metropolitan's system, and treatment of these supplies. Metropolitan's rate structure recovers the majority of the costs of these functions through rates and charges.

The functional categories developed for Metropolitan's cost of service process are consistent with the AWWA rate setting guidelines. A standard chart of accounts for utilities is provided in the AWWA publication "Financial Management for Water Utilities: Principles of Finance, Accounting, and Management Controls".

Figure 5-2, page 46, lists Operation and Maintenance (O&M) Expense Accounts. As noted, these are Expense Accounts, which provide the means by which O&M and capital financing costs are functionalized for COS. Because all water utilities are not identical, the functional categories used in the COS reflect, as they should, Metropolitan's unique physical, financial, and institutional characteristics, as permitted under the AWWA guidelines. Metropolitan has modified these functional categories as follows:

Pumping: Metropolitan functionalizes its pumping costs for the SWP and the CRA to a Conveyance and Aqueduct subaccount.

Customer Accounts, Customer Service and Sales Promotion: These are not applicable as Metropolitan is not a retail utility.

Storage: Metropolitan provides significant emergency storage, dry-year supply and regulatory services, and functionalizes costs to Storage to reflect Metropolitan's unique physical and operational reliability services.

Demand Management: Metropolitan incurs expenditures to support its Demand Management program, as described throughout this document.

Hydroelectric: Metropolitan has developed recovery generation facilities throughout its distribution system and recovers the costs and revenues from this investment in its COS.

A key goal of functional assignment is to maximize the degree to which rates and charges reflect the costs of undertaking different types of operational functions. For functional assignment to be of maximum benefit, two criteria must be kept in mind when establishing functional categories.

- The categories should correlate rates and charges elements with the costs of the functions associated with those elements; and
- Each function should include reasonable allocation bases by which costs may be allocated.

Each of the functions developed for the cost of service process is described below.

Supply

This function includes costs for those SWP and CRA facilities and programs that relate to managing and developing supplies to meet the member agencies' demands.

Metropolitan has a contractual right to a proportionate share of the project water that DWR determines is available for allocation to the Contractors. This determination is made each year based on existing supplies in storage, forecasted hydrology, and other factors. Available project water is then allocated to the Contractors in proportion to the amounts set forth in Table A of their State Water Contracts (Table A Allocation). The costs of the SWP supply are paid pursuant to Metropolitan's State Water Contract.

DWR's Delta Water Charge recovers the Capital and Minimum Operation, Maintenance, Power and Replacement (OMP&R) costs for the facilities that DWR determines are Conservation costs, meaning they conserve water to supply to the Contractors. Metropolitan reviews DWR's determination for purposes of functionalization. The Delta Water Charge is based on Contractors' cumulative Table A Allocations, which is approximately 46 percent for Metropolitan, regardless of whether it receives any Table A water in a year.

Under its contract with the federal government, Metropolitan has a fourth priority to 550,000 acre-feet per year of Colorado River water, less certain use by higher priority holders and Indian tribes in California. Metropolitan also holds a fifth priority for an additional 662,000 acre-feet per year that exceeds California's 4.4-million-acre-foot normal year basic apportionment, 38,000 acre-feet under the sixth priority during the term of the Colorado River Water Delivery Agreement, and another 180,000 acre-feet per year when surplus flows are available. Metropolitan can obtain water under the fourth, fifth, and sixth priorities from:

- Water unused by the California holders of priorities 1 through 3;
- Water saved by extraordinary conservation and crop rotation programs; or,
- When the U.S. Secretary of the Interior makes available:

- Surplus water, Intentionally Created Surplus water, and/or
- Water apportioned to, but unused by, Arizona and Nevada.

In fiscal years 2022/23 and 2023/24 it is projected that Metropolitan will receive annual CRA water diversions of approximately 1.01 MAF and 0.92 MAF respectively.

The costs of the CRA supply portfolio developed by Metropolitan are paid by Metropolitan. The CRA supply portfolio is supported by Water Resource Management labor, materials and supplies, outside services and professional services. The CRA supply portfolio activities benefit from Water Resource Management support services and management supervision, as well as Administrative and General activities of Metropolitan.

Metropolitan's supply related costs include investments in the Conservation Agreement with the IID, the PVID Program, and other CRA supply programs previously described. SWP programs include the Kern Delta Program, Semitropic Water Storage Program, Yuba Accord Program, Arvin-Edison Water Storage Program, Mojave Storage Program, AVEK Storage and Water Bank Programs, and others as previously described. Costs for programs within Metropolitan's service area, such as Conjunctive Use Agreements and Cyclic Storage Agreements, are also included.

Metropolitan finances past, current and future capital improvements associated with the supply portfolio capital assets and capitalizes investments associated with IID/Metropolitan Conservation Program, the PVID Land Management, Crop Rotation, and Water Supply Program, the Kern Delta Storage Program, Semitropic Storage Program, the Arvin-Edison Storage Program, and the AVEK High Desert Water Bank Program as Participation Rights.

California EcoRestore

California EcoRestore represents the state's near-term effort to accelerate habitat restoration in the Delta. This effort parallels a Delta Conveyance project and is a separate effort to improve the long-term health of the Delta. To date, California EcoRestore efforts include tidal restoration, fish passage improvements in the Yolo Bypass, tidal marsh restoration efforts, and floodplain projects. State Water Contractors and Central Valley Contractors have an obligation to pay for an existing commitment for habitat restoration. Any future costs are a public benefit and not a cost of the SWP. Any costs incurred by the SWP under the existing habitat restoration commitment under existing operating permits are likely to be recovered through the Delta Water Charge in Metropolitan's SWP bills and functionalized to Supply.

Conveyance and Aqueduct

This function includes the capital, operations, maintenance, and overhead costs for SWP and CRA facilities that convey water to Metropolitan's internal distribution system. Variable power costs for the SWP and CRA are also considered to be Conveyance and Aqueduct costs but are separately reported under a "power" sub-function. Conveyance and Aqueduct facilities can be distinguished from Metropolitan's other facilities primarily by the fact that they do not typically include direct connections to the member agencies. For purposes of this analysis, the Inland Feeder Project functions as an extension of the SWP East Branch and is therefore considered a Conveyance and Aqueduct facility as well.

Conveyance and Aqueduct: SWP¹⁰

Since inception, the State Water Contract provided Contractors the ability to use the SWP to convey non-SWP water under certain circumstances. Specifically, Article 18(c)(2) of the original SWC addressed situations where there is a shortage in the supply of water made available under the contract and stated, "[T]he District, at its option, shall have the right to use any of the project transportation facilities which by reason of such permanent shortage in the supply of project water to be made available to the District are not required for delivery of project water to the District, to transport water procured by it from any other source: [p]rovided, [t]hat such use shall be within the limits of the capacities provided in the project transportation facilities for service to the District under this contract". However, Article 18(c)(2) only applied in the event a permanent shortage was declared by DWR and it was unclear how costs would be charged for using SWP facilities to transport non-project water. In 1994, the Contractors and DWR negotiated the Monterey Amendments to the State Water Contract, including Article 55, which made explicit the Contractors' rights to use the portion of the SWP conveyance system necessary to deliver water to them (their "reaches") also includes the right to convey non-SWP water at no additional cost as long as capacity exists. Power is charged at the SWP average power rate. The Monterey Amendments also expanded the ability to carryover SWP water in SWP storage facilities, allowed Contractors to store water in groundwater storage facilities outside a Contractor's service area for later use, and permitted certain Contractors to borrow water from terminal reservoirs. These amendments, approved by Metropolitan's Board in 1995, secured the means for individual Contractors to increase supply reliability through water transfers and storage outside their service areas.

The impact of the Monterey Amendments on SWP operations is shown in Tables 11 and 12 below, which are based on information supplied by DWR¹¹. In the nine calendar years ending in 2020, only 67.7 percent of the SWP deliveries to Metropolitan were Table A water delivered in the year it is paid for. Fully 32.3 percent of the deliveries were for non-Table A water. Non-SWP water comprised 8.6 percent of Metropolitan's deliveries from the SWP. For the other Contractors, 46.2 percent of the SWP deliveries were what one would consider "supply", or Table A water delivered in the year it is paid for; 53.8 percent of the deliveries are for non-Table A water. Non-SWP water transported by the other Contractors comprised 23.8 percent of their deliveries from the SWP. Non-Contractors using the SWP to wheel transfer supplies comprised 4.3 percent of all deliveries through the SWP. Fully 20.9 percent of the deliveries on the SWP were for non-SWP water.

¹⁰ For historical and current information regarding the SWP, refer to Bulletin 132, published periodically by DWR since 1963. The most recently published Bulletin is Bulletin 132-18, dated January 2021 and titled, "Management of the California State Water Project." Appendices to the Bulletin are also updated separately. Both are available at: <https://water.ca.gov/Programs/State-Water-Project/Management/Bulletin-132>.

¹¹ DWR, Water Deliveries Section, State Water Project Analysis Office, January 27, 2022.

Table 11: State Water Project Water Management Activities, CY 2010 through 2020, Acre-Feet

SWP Deliveries--Acre-feet											
Metropolitan				Other SWP Contractors				Non-SWC Agencies		Total Deliveries ⁴	
(a)	(b)	(c)	(d) = (a) + (b) + (c)	(e)	(f)	(g)	(h) = (e) + (f) + (g)	(i) = (d) + (h)	(j)	(k) = (i) + (j)	
Table A ¹	Other SWP ²	Non-SWP ³	Total MWD	Table A ¹	Other SWP ²	Non-SWP ³	Total Other SWC	Total SWC	Non-SWP ⁴		
2010	639,537	352,831	265,720	1,258,088	686,826	360,138	355,908	1,402,872	2,660,960	148,986	2,809,946
2011	857,794	590,003	145,907	1,593,704	1,218,697	601,769	182,579	2,003,045	3,596,749	61,739	3,658,488
2012	906,009	308,689	10,010	1,224,708	933,103	445,898	250,144	1,629,145	2,853,853	109,064	2,962,917
2013	613,271	145,147	113,469	871,887	472,427	392,367	371,733	1,236,527	2,108,414	130,642	2,239,056
2014	59,181	224,077	114,032	397,290	25,291	167,928	488,830	682,049	1,079,339	97,493	1,176,832
2015	379,296	37,459	148,149	564,904	253,861	176,621	380,150	810,632	1,375,536	57,810	1,433,346
2016	989,125	12,646	42,081	1,043,852	717,887	248,552	232,388	1,198,827	2,242,679	70,404	2,313,083
2017	1,084,494	453,261	37,521	1,575,276	1,146,288	712,860	291,728	2,150,876	3,726,152	83,270	3,809,422
2018	562,026	78,366	30,247	670,639	417,894	511,356	384,834	1,314,084	1,984,723	193,316	2,178,039
2019	1,012,458	322,158	10,975	1,345,591	914,657	568,778	219,533	1,702,968	3,048,559	131,516	3,180,075
2020	330,879	78,112	22,514	431,505	222,086	360,065	444,255	1,026,406	1,457,911	89,414	1,547,325
Total	7,434,070	2,602,749	940,625	10,977,444	7,009,017	4,546,332	3,602,082	15,157,431	26,134,875	1,173,654	27,308,529

¹ Table A delivered and not exchanged or transferred or stored² Other SWP = SWP Exchanges, Transfers, Carryover Storage, Flexible Storage, Article 21, Pool A/B, settlement³ Non-SWP = banking, non-SWP transfers and exchanges, Dry Year Purchase Program, local water, general conveyance water, operations exchange⁴ Deliveries made to non State Water Contractors. Does not include FSRA, include BBID and CVC. Del="Y", SWP="N"**Table 12: State Water Project Water Management Activities, CY 2010 through 2020, percentages**

SWP Deliveries--Percentages								
	=(a) / (d)	=((b) + (c)) / (d)	= (c) / (d)	= (e) / (h) Other	= ((f) + (g)) / (h)	= (g) / (h)	= (j) / (k)	=((c)+(g)+(j)) / (k)
MWD Table A	MWD Non-Table A	MWD Non-SWP	Contractors Table A	Other Contractors Non-Table A	Other Contractors Non-SWP	Non SWC to Total	Total non-SWP to Total	
2010	50.8%	49.2%	21.1%	49.0%	51.0%	25.4%	5.3%	27.4%
2011	53.8%	46.2%	9.2%	60.8%	39.2%	9.1%	1.7%	10.7%
2012	74.0%	26.0%	0.8%	57.3%	42.7%	15.4%	3.7%	12.5%
2013	70.3%	29.7%	13.0%	38.2%	61.8%	30.1%	5.8%	27.5%
2014	14.9%	85.1%	28.7%	3.7%	96.3%	71.7%	8.3%	59.5%
2015	67.1%	32.9%	26.2%	31.3%	68.7%	46.9%	4.0%	40.9%
2016	94.8%	5.2%	4.0%	59.9%	40.1%	19.4%	3.0%	14.9%
2017	68.8%	31.2%	2.4%	53.3%	46.7%	13.6%	2.2%	10.8%
2018	83.8%	16.2%	4.5%	31.8%	68.2%	29.3%	8.9%	27.9%
2019	75.2%	24.8%	0.8%	53.7%	46.3%	12.9%	4.1%	11.4%
2020	76.7%	23.3%	5.2%	21.6%	78.4%	43.3%	5.8%	35.9%
Total	67.7%	32.3%	8.6%	46.2%	53.8%	23.8%	4.3%	20.9%

The SWP has transformed from being solely a transporter of SWP water to a transporter of other water sources as well for Metropolitan, other State Water Contractors, and non-Contractors. The reason for this is quite simple: the SWP has allocated only about 50 percent on average of the water due to State Water Contractors. The State Water Contractors have a significant investment in the costs of operating, maintaining and financing the SWP, and have developed creative programs to develop additional supplies and improved supply reliability by using the SWP as a transportation system. Specifically, during times of shortage or low SWP supply allocations, Metropolitan uses the SWP facilities to transport non-SWP water, which is water it has acquired through use of non-SWP sources, to its service area. When Metropolitan conveys non-project water, it is using the SWP transportation facilities in transactions that have nothing to do with SWP water supply. The ability to move non-SWP water through the SWP facilities, either as a result of purchases of non-SWP water or withdrawals from banking programs, enhances Metropolitan's operational flexibility and contributes to regional system reliability from which all member agencies benefit.

In addition, Metropolitan has, from time to time, used its capacity in the SWP to wheel non-Metropolitan water to its member agencies. Examples include water delivered to Santa Margarita Water District (1,665.2 acre-feet net in 1998-2000) and Irvine Ranch Water District (1,000 acre-feet in 2015), sub-agencies of the Municipal Water District of Orange County, and for the San Diego County Water Authority (23,077 acre-feet in 2008 and 15,520 acre-feet net in 2009).

The costs of the SWP conveyance facilities are paid pursuant to Metropolitan's State Water Contract. DWR's Transportation Charge recovers the costs associated with the various aqueduct reaches that deliver project water to the Contractors. The Capital and fixed OMP&R portions of the SWP Transportation Charge recover costs from the Contractors based on the accumulation of allocated costs for each aqueduct reach to each Contractor. Unlike the Delta Water Charge, which is uniform for a unit of Table A water, the allocation of these portions of the Transportation Charge will vary based on the aqueduct segments needed to deliver water to a specific Contractor. The further a Contractor is from the Delta and the greater its capacity in the transportation facilities, the greater its allocation of the Capital and fixed OMP&R Transportation Charges. Payment of the Transportation Charge allocates Contractors the right to use their capacity in the SWP facilities for transportation of SWP or non-SWP water, on a space available basis, under the SWC. A Contractor that participates in the repayment of a particular reach, or segment of the SWP, has already paid the costs of using that reach for the conveyance of water supplies through the Transportation Charge. On average, Metropolitan pays approximately 57 percent of the total fixed transportation costs of the SWP.

Delta Conveyance

In May 2019, Governor Newsom announced actions to begin the environmental review process for a single-tunnel conveyance in the Delta (which has become known as the "Delta Conveyance Project"). At this time, the environmental review process of Delta Conveyance is underway. Metropolitan is working with the administration to advance the single-tunnel project.

DWR has not provided an analysis for how it proposes to categorize the capital financing and operating costs of the Delta Conveyance Project on State Water Contractor Statement of Charges. In fiscal year 2022/23, Metropolitan's planned contribution for Delta Conveyance Project planning activities are budgeted at \$34.5 million in fiscal year 2022/23 and \$64.5 million in fiscal year 2023/24, as explained above. Metropolitan has allocated these costs as transportation costs based on the intended function of the facility, which is to convey water from the Delta.

Conveyance and Aqueduct: CRA

The CRA has also transformed from being source dedicated to delivering only Metropolitan's entitlement of Colorado River water to a delivery system supporting many different supply sources. Specifically, Metropolitan uses the CRA to:

- transport water made available as a result of cooperative programs implemented through agreements with other water agencies, either in the year made available or in a subsequent year as intentionally-created surplus from Lake Mead storage to its service area;
- recharge water in a groundwater basin so that it can subsequently plan to recover it for delivery to Metropolitan's service area; and
- exchange water with and deliver water in advance to other water agencies.

When Metropolitan conveys water made available as a result of cooperative programs implemented through agreements with other water agencies, to recharge water and subsequently recover it, or to exchange water with or deliver water in advance to other agencies, it is by definition using the CRA as a transportation facility. The ability to convey such water through the CRA facilities enhances Metropolitan's operational flexibility and contributes to regional system reliability for the benefit of all member agencies. Metropolitan's total calendar year CRA water management activities from 2010 through 2020 are shown in Table 13.

Table 13: CRA Water Management Activities in Acre-Feet, CY 2010 through 2020

CRA Water Management Activities--Acre-Feet								
	(a)	(b)	(c)	(d)	(e)	(f)	(g) = (a) / (f)	= ((f) - (a)) / (f)
	Priority 4 & 5	IID/MWD	PVID + Bard**	Other, including Storage (to)/from	MWD Exchange w SDCWA	Total Net Diversions	Priority 4 & 5 to Total	Non Priority 4 and 5 to Total
2010	815,525	97,000	148,600	(113,571)	151,507	1,099,061	74.2%	25.8%
2011	485,178	99,940	122,200	(151,571)	143,243	698,990	69.4%	30.6%
2012	467,166	93,677	73,700	(85,285)	186,861	736,119	63.5%	36.5%
2013	545,087	98,307	32,750	156,315	180,256	1,012,715	53.8%	46.2%
2014	484,937	84,305	43,010	383,959	180,123	1,176,334	41.2%	58.8%
2015	616,685	101,105	94,477	187,311	179,347	1,178,925	52.3%	47.7%
2016	613,491	90,374	126,383	(11,503)	178,278	997,023	61.5%	38.5%
2017	590,021	105,000	121,689	(319,009)	179,326	677,027	87.1%	12.9%
2018	663,915	105,000	95,752	(183,305)	207,746	889,108	74.7%	25.3%
2019	610,573	105,000	44,477	(460,154)	237,711	537,607	113.6%	-13.6%
2020	721,720	105,000	49,933	(331,235)	270,200	815,618	88.5%	11.5%
Total	2,797,893	1,084,708	903,038	(136,659)	2,094,598	6,743,578	41.5%	58.5%

(a) Use by holders of Indian and Miscellaneous present perfected rights and use by holders of Priorities 1, 2, and 3b above 420,000 acre-feet absent the Metropolitan-PVID Land Management, Crop Rotation, and Water Supply Program have been deducted from the Priority 4 supply of 550,000 acre-feet.

In the 11 calendar years ending 2020, approximately 42 percent of the CRA diversions to Metropolitan represent Metropolitan's entitlements under the Seven Party Agreement system. The remaining 58 percent represents volumes of Colorado River water moved through other programs. Metropolitan periodically transports water for Tijuana, Mexico through the CRA. Recent amounts are 316 acre-feet in calendar year 2018, 706 acre-feet in 2019, and 1,502 acre-feet in 2020.

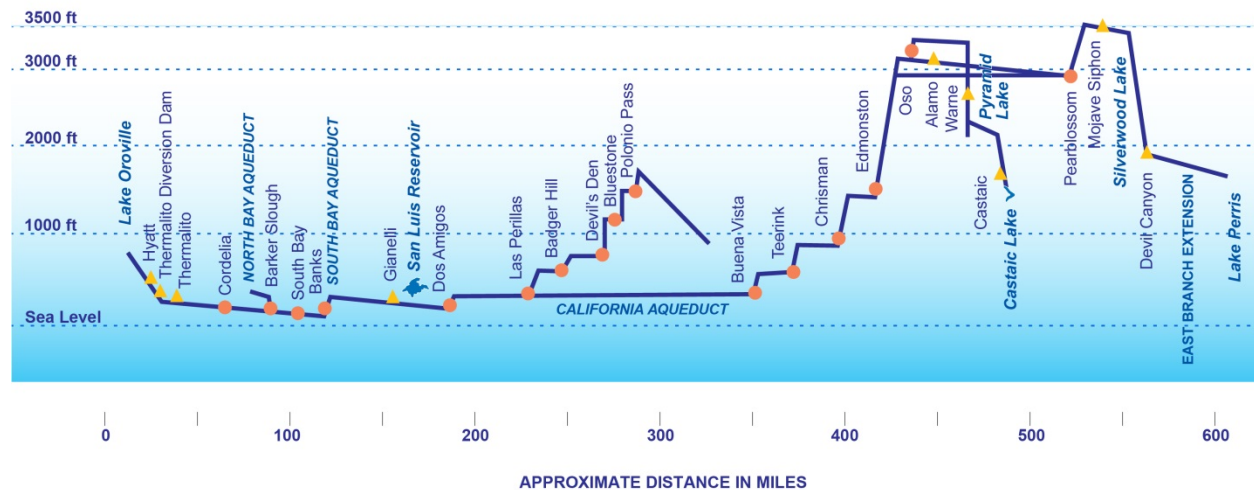
With regard to use as a transportation facility, the CRA differs from the SWP's California Aqueduct in that the capacity of the CRA is uniform through its entire length. The CRA was designed to move a relatively uniform volume of water through its entire length, and Metropolitan relies on the entire length to move water. There are no "reaches", or segments of the aqueduct, that are associated with deliveries to take-out points. The 4 regulating reservoirs are small, so water cannot be "batched" like the SWP, where pumps are cycled on and off to take advantage of cheaper time periods of the day to use electricity. Unlike the SWP, each CRA pump is uniformly sized at 225 cfs; none are variable speed pumps. This means the pumps are either operating at 225 cfs of capacity or are off at 0cfs.

The costs of the CRA itself are paid by Metropolitan directly, as it operates the CRA. Metropolitan incurs capital and operations and maintenance expenditures to support the CRA activities. The costs of the CRA activities include labor, materials and supplies, outside services to provide repair and maintenance, and professional services. The CRA activities benefit from Water System Operations support services and management supervision, as well as Administrative and General activities of Metropolitan. Metropolitan finances past, current and future capital improvements on the CRA, and capitalizes those improvements as assets. The costs of Metropolitan's capital financing activities are apportioned to operational functions, such as conveyance and aqueduct.

Conveyance and Aqueduct: SWP Power

In addition to the charges for supply (the Delta Water Charge capital and OMP&R) and Transportation (Transportation Capital and OMP&R), DWR also charges for the power needed to deliver project water throughout the system. Two charges recover these power costs: the variable OMP&R portion of the Transportation Charge (Variable Charge) and the Off-Aqueduct Power Facilities (OAPF) charge. Because the State Water Contracts are cost recovery contracts, DWR invoices Contractors on an estimated basis for any calendar year, and then provides credits in later years once cost true-ups are finished.

Figure 14: Pumping Lift and Recovery Generation Facilities, SWP



The Variable Charge includes the annually estimated cost of purchased power including capacity and energy, cost of SWP power generation facilities, program costs to offset annual fish losses at the Banks Pumping Plant, purchased transmission services, and credits for sales of ancillary services and excess SWP system power sales. The various lifts and recovery generation facilities of the SWP are shown in Figure 14; the orange circles indicate pumps to lift water, and the yellow triangles indicate recovery generation facilities.

The Variable Charge is calculated on the basis of the energy required to pump an acre-foot of water to its take-out point multiplied by the system energy rate, less energy from the recovery generation plants. The system energy rate is a system-wide average rate calculated as the net cost of energy--total costs less revenues--divided by the net energy required to pump all water. That rate is applied to each acre-foot of water delivered to SWP customer based on the power required to pump the water to designated delivery points on the system. DWR can adjust the system energy rate as the calendar year progresses in order to reflect actual costs.

The OAPF charge recovers only ongoing environmental remediation costs of power generation facilities not on the aqueduct, namely Reid Gardner Unit 4, and is negligible at this time.

The SWP uses low-cost hydroelectric and recovery generation resources, but they only provide about 50 percent of the SWP energy needs in an average water year. The SWP relies on the wholesale market and contractual resources with exposure to market price volatility for as much as 30 to 35 percent of its needs, using other contractual resources to fill in the difference.

The SWP energy required to move water to Metropolitan is related to the transportation on the East Branch through Devil Canyon and on the West Branch through Castaic. Because Metropolitan moves the largest amount of water on the SWP and Metropolitan's delivery points on the East and West Branch are at or near the southern extreme of the SWP, Metropolitan pays approximately 70 percent of the SWP power costs. The cost of power per acre-foot to Metropolitan's delivery points on the East and West Branches are shown in Table 14.

Table 14: Cost of SWP Power for Metropolitan Terminal Delivery Points, \$ per Acre-Foot

	CY 2017 DWR	CY 2018 DWR	CY 2019 DWR	CY 2020 DWR	CY 2021 Estimated	CY 2022 Estimated	CY 2023 Estimated
East Branch	\$149.60	\$173.92	\$157.28	\$171.47	\$287.46	\$369.32	\$307.83
West Branch	\$148.70	\$161.50	\$144.89	\$167.40	\$274.45	\$395.45	\$329.61

The SWP energy costs are impacted by two factors. First, the annual hydrology, secondly the energy policies of the state of California. The SWP has invested heavily in hydroelectric power generation facilities. The unit cost of operating the power facilities declines as the amount of available water increases. The SWP is acquiring renewable resources, primarily solar to date, to meet its obligation to reduce greenhouse gas emissions. The SWP energy costs are also impacted by the increasing cost of using the California Independent System Operator's (CAISO) grid to deliver power from its generating sources and the wholesale power market to its pumping loads. The SWP does not own high voltage transmission facilities and must use the CAISO grid to move power. Finally, the SWP has an obligation to acquire and surrender emissions allowances for the generating facilities the SWP owns, primarily the Lodi Energy Center.

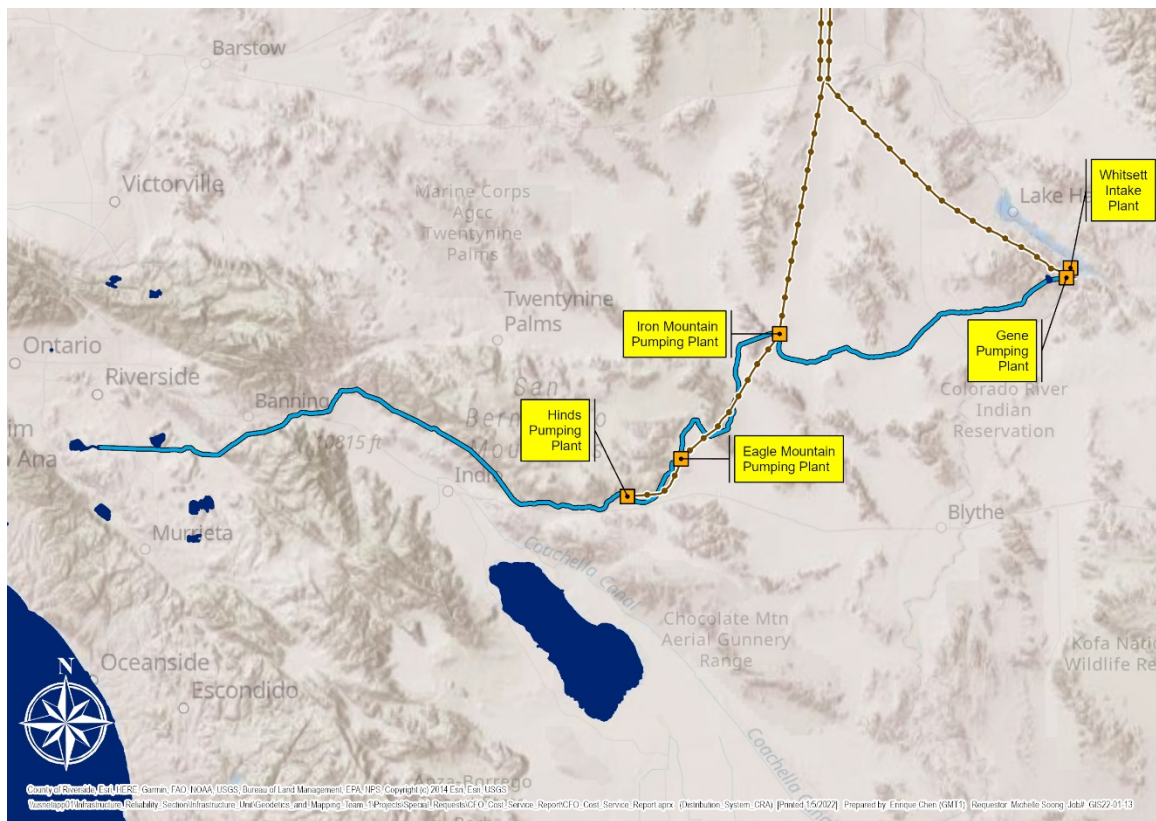
Conveyance and Aqueduct: CRA Power

Metropolitan operates five pumping plants on the CRA, which are shown in Figure 15. Water enters the aqueduct system from Lake Havasu at the Whitsett Intake Pumping Plant (Intake). It is then pumped to its highest elevation of 1,807 feet above sea level at the Hinds Pumping Plant (Hinds), which is about 126 miles west of Intake. Five pumping plants lift the water a total of 1,617 feet to the Hinds Pumping Plant. From Hinds, the water flows 116 miles by gravity to Lake Mathews.

Metropolitan currently has four basic sources of power available to meet CRA energy requirements: Hoover Power, Parker Power, wholesale purchases from inside and outside of the California Independent System Operator (CAISO). For wholesale power purchases within the CAISO, the standard index is South-of-Path 15 for southern California (SP15) to indicate CAISO power prices, whereas wholesale power purchases outside of CAISO utilize the MEAD bi-lateral index. MEAD substation is an import interconnection point for power into CAISO and can be utilized by Metropolitan to import power for the CRA from entities throughout the western United States. For budgeting purposes, it is assumed that Metropolitan buys supplemental power at forecasted SP15 rates.

Under a contract between the United States, Department of Energy, Western Area Power Administration, and Metropolitan, Metropolitan currently has a right to approximately 250 megawatts (MW) of capacity at the Hoover Dam power plant. Metropolitan has an annual firm energy entitlement of 1,291,227 megawatt-hours (MWh). The cost charged to Metropolitan for Hoover power is based on the revenue required by the U.S. Bureau of Reclamation to operate and maintain the power plant. This source of power has historically been at a lower cost than power purchased at market rates.

Metropolitan funded the total cost of construction of Parker Dam and incidental facilities, and 50 percent of the construction cost of the Parker Power plant. In consideration for this funding, Metropolitan is entitled in perpetuity to 50 percent of the capacity and energy of the four Parker generating units, which is approximately 54 MW of capacity. Parker power is also cost-based.

Figure 15: Metropolitan CRA Pumping Plants

Metropolitan's current basic power resource mix comprised of generation from Hoover and Parker dams is very cost effective but is not enough to provide power supply to pump Metropolitan's Colorado River water supplies in all years. For that reason, Metropolitan is required to purchase additional or supplemental power to transport Colorado River water supplies in some years. As a result, Metropolitan requires any party seeking to wheel non-Metropolitan water through its CRA to purchase, or arrange for Metropolitan to purchase, the power supplies required to pump that water. Any Colorado River water that is pumped through Metropolitan's CRA is diverted above Parker Dam and cannot generate energy for Metropolitan's use at the Parker Dam Power plant. To compensate for this loss, an additional 32 kilowatt-hours per acre-foot are required to make Metropolitan whole for undertaking to pump non-Metropolitan water through the CRA that would otherwise have flowed through the Parker Power plant. In total, 2,032 kilowatt-hours (or 2.032 MWh) of energy must be provided to Metropolitan to convey each acre-foot of non-Metropolitan water supplies through the CRA.

Supplemental power can be purchased to pump non-Metropolitan water through the CRA. The market rate for electric energy prices is regularly tracked and published for various regions in California. Metropolitan uses the CAISO Open Access Same-time Information System (OASIS) Day Ahead Locational Marginal Price as reflective of the supplemental power costs for electric energy used for its pumping plants on the CRA. The regional index applicable to energy sold for use on the CRA is designated as South-of-Path 15, or SP15, and is reflective of Southern California market energy prices.

Any party seeking to pump non-Metropolitan water through the CRA would have to purchase, or arrange for Metropolitan to purchase on its behalf, supplemental power. The market costs for purchases of power for the CRA are reflected in the CAISO OASIS Day Ahead Locational Marginal Price. Because Metropolitan utilizes the pumping capacity on the CRA for its own water supplies during off-peak hours to minimize its costs, the pumping of non-Metropolitan wheeled water would occur during on-peak hours and the on-peak price index published on the CAISO OASIS Day Ahead Locational Marginal Price is indicative of the price that would be paid to pump non-Metropolitan water.

Table 15: Cost of CRA Power Sources, \$ per Megawatt-hour (MWh)

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
Hoover ¹	\$17.86	\$18.46	\$18.33	\$17.64	\$15.76
Parker ¹	\$15.40	\$14.38	\$17.67	\$18.34	\$15.86
SP15, off-peak ²	\$26.48	\$28.27	\$38.52	\$27.29	\$35.73
SP15, on-peak ³	\$33.46	\$38.84	\$49.97	\$31.69	\$46.60
MEAD, off-peak ⁴	\$22.94	\$25.09	\$31.89	\$23.61	\$36.98
MEAD, on-peak ⁵	\$30.25	\$33.16	\$44.31	\$29.01	\$65.89

¹Information from Annual Reports for years 2017, 2018, 2019, 2020 and 2021

²SP15, off-peak is used to determine Metropolitan's off-peak energy costs. The costs were calculated by taking the annual average.

³SP15, on-peak is used to determine the market value of Metropolitan sales of excess energy, if any. SP15, on-peak is also used to determine the pumping costs associated with pumping non-Metropolitan water through the CRA system, unless otherwise provided by contract. The costs were calculated by taking the annual average.

⁴MEAD, off-peak is used to determine Metropolitan's off-peak supplemental energy costs imported at MEAD substation for power outside of the CAISO.

⁵MEAD, on-peak is used to determine Metropolitan's on-peak supplemental energy costs imported at MEAD substation for power outside of the CAISO.

The market value of Metropolitan's sales of excess energy, when not all power supply is needed for the CRA pumps, if any is valued at SP15 index for on and off-peak periods.

Metropolitan from time to time sells excess energy into the wholesale market and realizes revenues, which offset the total cost of energy as reflected in the System Power Rate. If Metropolitan were to deliver additional water through the CRA, these sales become a lost opportunity. The on-peak price index published on the CAISO OASIS Day Ahead Locational Marginal Price is indicative of the price that Metropolitan could realize by selling excess energy.

Table 16: South-of-Path 15 On-Peak Energy Prices (\$/MWh*)

	CY 2017	CY 2018	CY 2019	CY 2020	CY 2021
January	\$ 36.22	\$ 37.09	\$ 42.56	\$ 33.60	\$ 33.22
February	\$ 28.52	\$ 36.84	\$ 72.73	\$ 26.85	\$ 71.09
March	\$ 23.97	\$ 32.39	\$ 35.98	\$ 25.49	\$ 29.91
April	\$ 26.71	\$ 27.69	\$ 24.83	\$ 17.11	\$ 28.04
May	\$ 32.08	\$ 24.12	\$ 20.25	\$ 16.81	\$ 26.59
June	\$ 38.14	\$ 31.45	\$ 24.81	\$ 23.72	\$ 56.06
July	\$ 41.49	\$ 101.04	\$ 35.24	\$ 31.63	\$ 78.89
August	\$ 54.96	\$ 85.22	\$ 36.39	\$ 108.05	\$ 65.08
September	\$ 43.18	\$ 38.32	\$ 40.35	\$ 46.14	\$ 72.09
October	\$ 47.86	\$ 41.09	\$ 35.71	\$ 48.29	\$ 57.89
November	\$ 44.82	\$ 55.50	\$ 37.44	\$ 39.32	\$ 60.14
December	\$ 44.21	\$ 57.26	\$ 37.80	\$ 40.80	\$ 63.40

*MWh = megawatt-hour, or 1,000 kilowatt-hours

The budget assumes all supplement energy purchased at forecasted SP 15 rates.

Metropolitan has an obligation to acquire and surrender emissions allowances for fossil-fuel energy generated out-of-state and imported into California through its 230,000-volt transmission system. Alternatively, Metropolitan can purchase power in California, which already incorporates any necessary emissions allowances, but must pay to use the CAISO transmission network. Metropolitan has contracted with Arizona Electric Power Cooperative (AEPCCO) to provide energy management and scheduling services on a per Megawatt-hour basis. AEPCCO also provides operational services for Metropolitan's CRA transmission system, assuring compliance with federal reliability requirements. Finally, Metropolitan's CRA power system is within the Balancing Authority Area of the CAISO; Metropolitan incurs Grid Management Charges from the CAISO on a per Megawatt-hour basis and may realize a Resource Adequacy obligation depending on its pumping load and available firm resources.

Storage

Storage costs include the capital financing, operating, maintenance, and overhead costs for Diamond Valley Lake, Lake Mathews, Lake Skinner, and five smaller regulatory reservoirs within the Distribution System. Metropolitan's larger storage facilities are operated to provide: (1) emergency storage in the event of an earthquake or similar system outage; (2) drought storage that produces additional supplies during times of shortage; and (3) regulatory storage to balance system demands and supplies and provide for operating flexibility. To reasonably allocate the costs of storage capacity among member agencies, the storage function is categorized into sub-functions of emergency, drought, and regulatory storage.

Table 17: Functional Assignment of Metropolitan Storage Facilities

Storage Facilities	Functional Assignments		
	Emergency	Drought	Regulatory
Diamond Valley Lake	54%	33%	13%
Other Regulatory			100%
Lake Skinner	77%		23%
Lake Mathews	44%		56%
Semi-Tropic		100%	
Arvin-Edison		100%	
CRA Off-Stream		100%	
Groundwater Conjunctive Use		100%	

(a) DVL allocations are based on the 2019 Update of Metropolitan's Emergency Storage Objective, the 2010-2019 DVL Daily Average Available Storage, and the WSO Regulatory Storage White Paper.

(b) Lake Skinner and Lake Matthews allocation percentages are derived from the 2019 Update of Metropolitan's Emergency Storage Objective, and the WSO Regulatory Storage White Paper.

Treatment

This function includes capital financing, operating, maintenance, and overhead costs for Metropolitan's five treatment plants and is considered separately from other costs so that the treatment function may be priced separately.

Distribution

This function includes capital financing, operating, maintenance, and overhead costs for the Distribution System of feeders, canals, pipelines, laterals, and other appurtenant works. The Distribution System facilities are distinguished from Conveyance and Aqueduct facilities at the point of connection to the SWP, Lake Mathews (CRA), and other major turnouts along the CRA facilities. Examples include the Rialto Pipeline; the Etiwanda Pipeline; the Foothill Feeder; the Sepulveda Feeder; the Santa Monica Feeder; the Upper, Middle, and Lower Feeders; and the San Diego Pipelines No. 1, No. 2, No. 3, No. 4, and No. 5.

Demand Management

A separate demand management function has been used to clearly identify the cost of Metropolitan's programs designed to reduce the need to import water, such as conservation, incentives for local resource projects like recycling and desalination, the Future Supply Action Program, and the Stormwater Pilot Program. Demand management is an important part of Metropolitan's resource management efforts. Metropolitan's incentives in these areas contribute to savings for all users of the system in terms of lower capital costs that would otherwise have been required to expand and maintain the system.

Metropolitan increased the emphasis on Demand Management programs after the devastating drought of the early 1990's. Metropolitan's 1996 Integrated Resources Plan identified the Preferred Resource Mix as the resource plan that achieved the region's reliability goal of providing the full capability to meet all retail-level demands during foreseeable hydrologic events, represented the least-cost sustainable resources plan, met the region's water quality objectives, was balanced and diversified and minimized risks, and was flexible, allowing for adjustments should future conditions change.

The Preferred Resource Mix included locally developed water supplies and conservation and recognized that regional participation was important to achieve their development. Additional imported supplies frequently have relatively lower development costs but can create a large cost commitment for regional infrastructure to transport and store those imported supplies. On the other hand, local projects, like those designed to recycle water or increase groundwater production, may have higher development costs but require little or no additional infrastructure to distribute water supplies to customers. This trade-off between relatively lower-cost imported supplies requiring large regional infrastructure investments and relatively higher-cost local supply development requiring less additional local infrastructure was an important consideration in the development of the Preferred Resource Mix. A strategy of aggressively investing in imported water supply would lead to higher costs for the region because of the larger investments required in infrastructure.

Metropolitan's 1996 Integrated Resource Plan included an analysis of future demand scenarios and their effect on infrastructure requirements. A comparison of capital infrastructure costs with and without Demand Management Programs showed a difference of around \$2 billion. In other words, the ability to meet demand through local Demand Management Programs resulted in an anticipated \$2 billion in capital cost savings. A sensitivity analysis further showed that a 5 percent increase or decrease in demand had a correlative effect on when Metropolitan would need to incur capital infrastructure costs. Since then, Metropolitan has seen the benefits materialize. Metropolitan has been able to defer the need to build additional infrastructure such as the Central Pool Augmentation Project tunnel and pipeline, completion of San Diego Pipeline No. 6, the West Valley Interconnection, and the completion of the SWP East Branch expansion. Overall, the decrease in demand resulting from these projects is estimated to defer the need for projects between four and twenty-five years at a savings of approximately \$3 billion in 2019 dollars.

Since 1996, the Integrated Resources Plan has been updated three times, in 2004, 2010, and 2015, with a fourth update for 2020 in process, reaffirming long-term sustainability of the region's water supply through implementation of conservation and local resource development. Based on the 1996 IRP and its updates, Metropolitan determined Demand Management Programs decrease and avoid operating and capital maintenance and improvement costs, such as costs for repair of and construction of additional or expanded water conveyance, distribution, and storage facilities. Investments in demand side management programs like conservation, water recycling, and groundwater recovery help defer the need for additional conveyance, distribution, and storage facilities. The programs also free up capacity in Metropolitan's system to convey both Metropolitan water, and water from other non-Metropolitan sources.

Metropolitan allocated demand management costs to the transportation operational functions since the unbundling of its rate structure in 2001, which was implemented in January 2003. The functionalization of the costs was supported by the 1996 Integrated Resources Plan's (IRP) 25-year capital and resource planning, which expired this year. SDCWA challenged that allocation in court beginning in June 2010, alleging the Water Stewardship Rate could not be collected as part of Metropolitan's pre-set wheeling rate or the transportation rates charged under the SDCWA-Metropolitan Exchange Agreement. On June 21, 2017, the Court of Appeal entered a decision. The appellate court ruled Metropolitan may collect State Water Project transportation costs as part of Metropolitan's System Access Rate and System Power Rate in the wheeling rate and the Exchange Agreement price. However, the appellate court found the administrative record before it for the rates in calendar years (CYs) 2011 through 2014 did not support Metropolitan's inclusion of the Water Stewardship Rate in the wheeling rate or the transportation rates charged under the Exchange Agreement, but the opinion did not address the allocation in subsequent years based on a different record.

On September 21, 2021, the Court of Appeal issued a new appellate decision in which it interpreted its 2017 appellate decision. The Court of Appeal clarified that its 2017 decision regarding the Water Stewardship Rate was not limited to 2011-2014, and that it prohibits the inclusion of the Water Stewardship Rate in transportation rates charged under Metropolitan's wheeling rate and in the price term of the SDCWA-Metropolitan Exchange Agreement from 2015 forward. Accordingly, staff removed all Demand Management Cost Recovery Alternatives that include transportation rate elements for the Board Workshop on November 8, 2021. On November 23, 2021, the Metropolitan Board of Directors directed staff to incorporate 100 percent of demand management costs into the Supply rate elements the proposals for rates and charges.

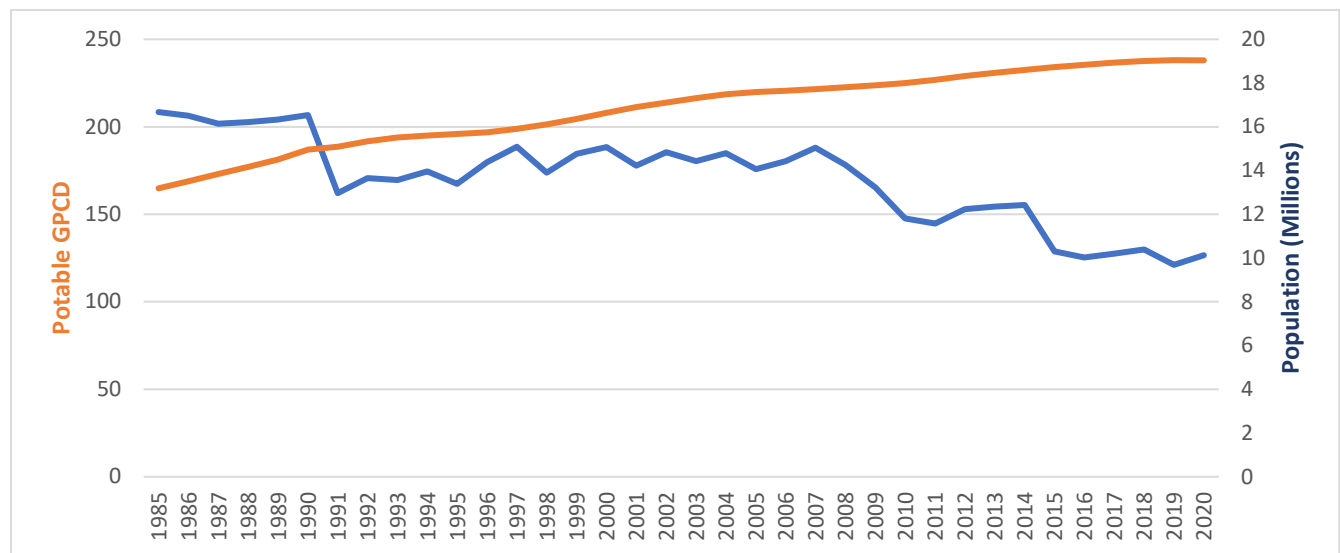
Accordingly, all demand management costs are functionalized as supply and collected on the Tier 1 and Tier 2 supply rates. However, because there are no projected Tier 2 transactions in the biennium, the demand managements costs are allocated entirely to Tier 1.

Demand Management: SB-60

In September 1999, Governor Gray Davis signed SB 60 (Hayden) into law. SB 60 amended the Metropolitan Water District Act to direct Metropolitan to increase “sustainable, environmentally sound, and cost-effective water conservation, recycling, and groundwater storage and replenishment measures.” SB 60 also requires Metropolitan to hold an annual public hearing to review its urban water management plan for adequacy in achieving an increased emphasis on cost-effective conservation and local water resource development, and to invite knowledgeable persons from the water conservation and sustainability fields to these hearings. Finally, Metropolitan is required to annually prepare and submit to the Legislature a report on its progress in achieving the goals of SB 60. SB 60 specifically indicated that no reimbursement was required by legislation because Metropolitan, as a local agency, has the authority to levy service charges, fees or assessments sufficient to pay for the program or level of service mandated by SB 60. No other water utility in California, public or private, has been specifically identified by the state Legislature and directed to pursue water conservation and local water resource development.

In fiscal year 2020/21 alone, Metropolitan’s service area achieved 1.7 million acre-feet of water savings from conservation, recycled water and groundwater recovery programs. Figure 16 below compares population in millions on the right axis and gallons per capita daily (GPCD) water use on the left axis. While the population has increased to approximately 19 million in 2020, GPCD water use has decreased to approximately 127 GPCD. These reductions derived from programs for which Metropolitan paid incentives, as well as code-based conservation achieved through legislation, building and plumbing codes and ordinances, and reduced consumption resulting from changes in water pricing. Cumulatively, since 1982 Metropolitan has invested \$1.5 billion and Metropolitan’s service area has achieved 7.6 million acre-feet of water savings. These water savings reduce per capita water demands, allowing Metropolitan to serve a growing population with existing supplies and without constructing additional facilities to import water.

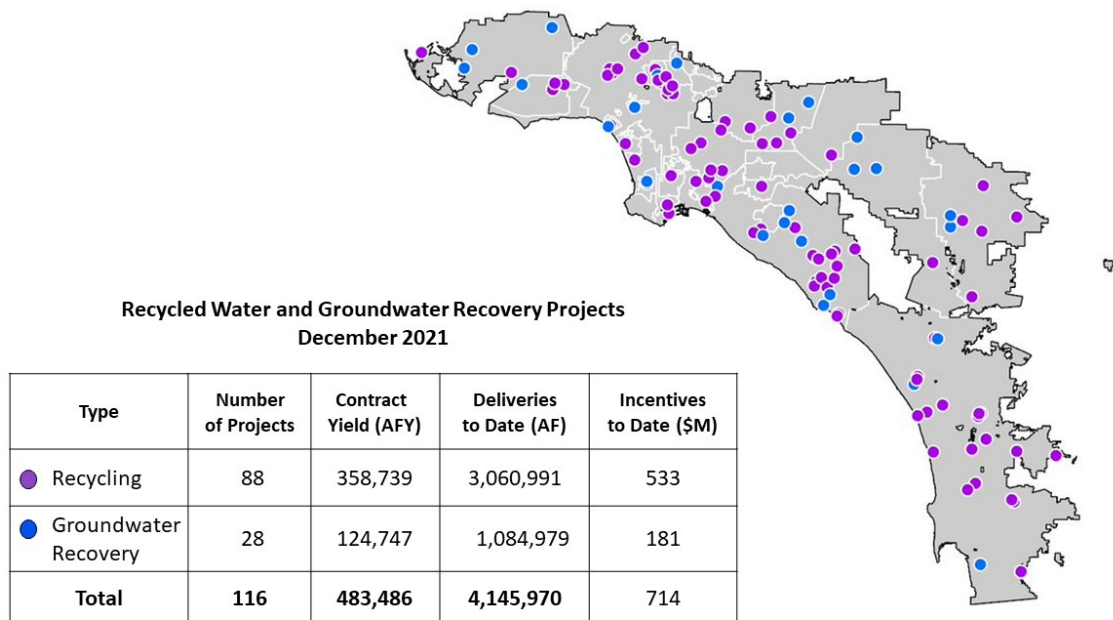
Figure 16: Population and Per Capita Daily Water Use



Metropolitan's Conservation Credits Program provides incentives to residents and businesses for use of water-efficient products and qualified water-saving activities. Rebates have been provided to residential customers for turf removal and purchasing of high-efficiency clothes washers and toilets. Rebates are also provided to businesses and institutions for water-saving devices. In fiscal year 2020/21, the Conservation Credits Program achieved 1.1 million acre-feet of saved water through new and existing conservation initiatives funded with incentives and maintained through plumbing codes. Cumulatively, through fiscal year 2020/21 the Conservation Credits Program has achieved 3.5 million acre-feet of water savings.

Metropolitan provides financial incentives through its Local Resources Program for the development and use of recycled water and recovered groundwater for the participants. The Local Resources Program consists of 88 recycling projects and 28 groundwater recovery projects located throughout Metropolitan's service area, of which 116 projects are in operation, as shown in Figure 17. From the Local Resources Program's inception in 1982 through FY 2020/21, Metropolitan has paid out about \$528 million in incentives to produce about 3.0 million acre-feet of recycled water. Metropolitan also provided approximately \$181 million to produce 1,099,000 acre-feet of recovered degraded groundwater for municipal use.

Figure 17: Local Resources Program Projects



Demand Management: SB X7-7, AB 1668, and SB 606

SB X7-7 mandated a new requirement to lower urban per capita water use 20 percent by December 31, 2020. Enacted by the state Legislature and signed into law by Governor Schwarzenegger as part of a historic package of water reforms in November 2009, the "20x2020" plan gave local communities flexibility in meeting this target while accounting for previous efforts in conservation and recycling. The Legislature found that reducing water use through conservation and regional water resources management would result in protecting and restoring fish and wildlife habitats, reducing dependence on water through the Delta, and providing significant energy and environmental benefits. Metropolitan coordinated closely with its member agencies to achieve these targets both at a retail agency level in compliance with legislative requirements, and as a region, in achieving a true 20 percent reduction in per-capita water use.

AB 1668 and SB 606 build on Governor Brown's efforts to make water conservation a way of life in California and create a new foundation for long-term improvements in water conservation and drought planning. These bills establish guidelines for efficient water use and a framework for the implementation and oversight of the new standards, which must be in place by 2022. The two bills strengthen the state's water resiliency in the face of future droughts with provisions that include:

- Establishing water use objectives and long-term standards for efficient water use that apply to urban retail water suppliers; comprised of indoor residential water use, outdoor residential water use, commercial, industrial and institutional (CII) irrigation with dedicated meters, water loss, and other unique local uses.
- Providing incentives for water suppliers to recycle water.
- Identifying small water suppliers and rural communities that may be at risk of drought and water shortage vulnerability and provide recommendations for drought planning.
- Requiring both urban and agricultural water suppliers to set annual water budgets and prepare for drought.

Metropolitan coordinates closely with its member agencies to achieve these provisions both at a retail agency level in compliance with legislative requirements and as a region.

Administrative and General (A&G)

These costs occur in each of the Groups' departmental budgets and reflect overhead costs that cannot be directly functionalized. The COS process allocates A&G costs to the operational functions based on the labor costs of non-A&G dollars allocated to each function.

Hydroelectric

Hydroelectric costs include the capital financing, operating, maintenance, and overhead costs incurred to operate the 16 small hydroelectric plants located throughout the water distribution system.

Functional Assignment Bases

The functional assignment bases are used to assign costs that make up the Revenue Requirement into the various operational functions. The primary functional assignment bases used in the COS process are listed below.

- Direct assignment
- Net Book Value plus Work-In-Progress
- Prorating in proportion to other allocations
- Manager analysis
- Prior year results

Schedule 3 summarizes the total dollar amounts assigned, including the absolute value of Revenue Offsets (rather than showing Revenue Offsets as a reduction to costs), using each of the above types of assignment bases, for FY 2022/23 and FY 2023/24. It assigns both total Revenue Requirements before Revenue Offsets and Revenue Offsets by summing the items before assigning dollars to the primary functional assignment bases. To ensure the correct amount has been assigned, the Revenue Requirement is restated at the bottom portion of each fiscal year chart.

Schedule 3: Summary of Functional Assignments by Type of Assignment Basis, FY 2022/23 and FY 2023/24

Primary Functional Assignment Bases	Estimated for FY 2023	% of Assigned Dollars
Direct Assignment	\$ 1,249,203,894	57.7%
Net Book Value	470,721,142	21.7%
Pro-Rating	110,565,174	5.1%
Manager Analysis	164,196,243	7.6%
Prior-Year Results	105,182,145	4.9%
Other	66,659,522	3.1%
Total Dollars Assigned	\$ 2,166,528,120	100.0%
Portion of Above Assignment Relating to:		
Revenue Requirements before Offsets	1,931,419,155	
Revenue Offsets	235,108,965	
Total Dollars Assigned	\$ 2,166,528,120	
Net Revenue Requirements		
Revenue Requirements before Offsets	1,931,419,155	
Revenue Offsets	(235,108,965)	
Net Revenue Requirements	\$ 1,696,310,190	

Totals may not foot due to rounding

Primary Functional Assignment Bases	Estimated for FY 2024	% of Assigned Dollars
Direct Assignment	\$ 1,294,527,419	58.0%
Net Book Value	482,285,933	21.6%
Pro-Rating	116,568,713	5.2%
Manager Analysis	168,793,605	7.6%
Prior-Year Results	106,956,320	4.8%
Other	64,100,985	2.9%
Total Dollars Assigned	\$ 2,233,232,974	100.0%
Portion of Above Assignment Relating to:		
Revenue Requirements before Offsets	2,007,528,842	
Revenue Offsets	225,704,132	
Total Dollars Assigned	\$ 2,233,232,974	
Net Revenue Requirements		
Revenue Requirements before Offsets	2,007,528,842	
Revenue Offsets	(225,704,132)	
Net Revenue Requirements	\$ 1,781,824,709	

Totals may not foot due to rounding

Each of the primary assignment bases is discussed in detail in the remainder of this section. Discussion of each assignment basis includes examples of costs assigned using that particular basis.

(a) Direct assignment

Direct assignment makes use of a clear and direct connection between a revenue requirement and the function being served by that revenue requirement. Directly assigned costs typically include: purely administrative costs; and certain distribution and conveyance departmental costs. Examples of costs that are directly assigned to specific functional categories are given below.

- Water Conveyance and Distribution, Desert Region Unit departmental O&M costs are directly assigned to Conveyance and Aqueduct, CRA.
- Transportation Capital and OMP&R charges for State Water Contract are directly assigned to Conveyance and Aqueduct SWP.

(b) Net Book Value Plus Work-In-Progress

Capital financing costs, including debt service and funding replacements and refurbishments from operating revenues, comprise about 22 percent in FY 2022/23 and 22 percent in FY 2023/24 of Metropolitan's annual revenue requirements. One approach would be to assign payments on each debt issue in direct proportion to specific project expenditures made using bond proceeds and assign PAYGO expenditures in a similar fashion. However, this approach would result in a high degree of volatility in relative capital cost assignments from year to year.

The approach used in this analysis is one widely used in water industry cost of service studies. Debt-related costs and PAYGO are allocated on the basis of the net book values of fixed assets plus work in progress for assets under construction within each functional category. This approach produces capital cost assignments that are consistent with the functional distribution of assets. Also, since the assignment basis is tied to fixed asset records rather than debt payment records, the resulting assignments are more reflective of the true useful lives of assets. Use of net book values as an assignment basis provides an improved matching of functional costs with asset lives. A listing of fixed asset net book values summarized by asset function is shown in Schedule 4 for FY 2022/23 and FY 2023/24.

Schedule 4: Net Book Value and Work in Progress Assignment Base, FY 2022/23 and FY 2023/24

Functional Categories	NBV for FY 2023	% of Total NBV
Source of Supply	\$ 354,980,855	4.0%
Conveyance & Aqueduct	1,947,472,918	21.7%
Storage	2,093,641,553	23.4%
Treatment	2,250,004,915	25.1%
Distribution	1,637,682,794	18.3%
Administrative & General	545,917,527	6.1%
Hydro-electric	134,462,445	1.5%
Total Fixed Assets Net Book Value	\$ 8,964,163,008	100.0%

Totals may not foot due to rounding

Functional Categories	NBV for FY 2024	% of Total NBV
Source of Supply	\$ 355,024,209	4.0%
Conveyance & Aqueduct	1,932,904,257	21.6%
Storage	2,073,708,957	23.2%
Treatment	2,228,514,685	24.9%
Distribution	1,666,619,997	18.6%
Administrative & General	558,022,939	6.2%
Hydro-electric	127,880,257	1.4%
Total Fixed Assets Net Book Value	\$ 8,942,675,301	100.0%

Totals may not foot due to rounding

In most instances, the cost of service process uses net book value plus work-in-progress to develop assignment bases for debt service costs and PAYGO. Examples of revenue requirements assignments using these net book value and work-in-progress assignments follow.

- Revenue Bond Debt Service: assigned using Net Book Value plus Work In Progress.
- Annual deposit of operating revenue to replacement and refurbishment fund: assigned using Net Book Value plus Work in Progress.

To calculate the relative percentage of fixed assets in each functional category, Metropolitan staff conducted a detailed analysis of historical accounting records and built a database of fixed asset accounts that contains records for all facilities currently in service and under construction. Each facility was sorted into the major operational function that best represented the facilities primary purpose and was then further categorized into the appropriate sub-functions described earlier.

(c) Pro-rating in proportion to other assignments

Utility COS studies frequently contain line items for which it would be difficult to identify an assignment basis specific to that line item. In these cases, the most logical assignment basis is often a pro-rata blend of assignment results calculated for other revenue requirements in the same departmental group, or general category. Reasonable pro-rata allocations are based on a logical nexus between a cost and the purpose which it serves. For example: Human Resources Section costs are allocated using all labor costs, since Human Resources spends its time and resources attending to the labor force.

(d) Manager analyses

The functional interrelationships of some organizational units are developed with extensive input from the organization's managers. In these cases, managers use their firsthand knowledge of the organization's internal operations to generate a functional analysis of departmental costs. For example, Fleet Services Unit costs are assigned to treatment, storage, conveyance, and distribution based on vehicle count by Section and Unit.

(e) Prior year results

If available, accounting data for the prior fiscal year by appropriation are used to functionalize Departmental O&M costs for several units or sections. Many of the appropriations parallel the operational functions used in the COS analysis. For example, Conveyance and Distribution Eastern and Western Units' costs are assigned to distribution, hydroelectric, and conveyance functions based on the prior year accounting data by appropriation.

A summary of the functional assignment results is shown in Schedules 5 through 8. Schedules 5 and 6 provide a breakdown of the revenue requirement for FY 2022/23 and FY 2023/24, respectively, into the major operational functions and sub-functions prior to the redistribution of administrative and general costs. Schedules 7 and 8 serve as a cross-reference summarizing how the budget line items are distributed among the operational functions for FY 2022/23 and FY 2023/24, respectively. The largest functional component of Metropolitan's revenue requirement is the Conveyance and Aqueduct function, which constitutes approximately 38.8 percent of the assigned revenue requirement in FY 2022/23 39.8 percent in FY 2023/24. Schedule 9 summarizes the budget line items distributed among the operational functions by sub-function for both FY 2022/23 and FY 2023/24.

Functional Assignment of Revenue Offsets

Revenue Offsets are assigned to the operational functions based on why these revenues were generated. For example, ad valorem property tax revenues are assigned to the General Obligation bonds debt service into Treatment and Distribution based on Net Book Values. The remaining property tax revenues are assigned proportionate to SWP costs. Hydroelectric sales revenues are assigned to the Hydroelectric function. Interest income is assigned to the operational functions proportional to Revenue Requirements. Miscellaneous revenues and fees are functionalized as Administrative and General, and thus are assigned to the operational functions proportional to Labor Costs.

Schedule 5: Revenue Requirement (by function), FY 2022/23

Functional Categories	Fiscal Year Ending 2023	% of Assigned Dollars (1)
Source of Supply		
CRA	\$ 56,532,092	3.3%
SWP	153,566,742	9.0%
Other Supply	32,425,485	1.9%
Total	242,524,319	14.3%
Conveyance & Aqueduct		
CRA		
CRA Power	113,915,012	6.7%
CRA All Other	67,263,676	4.0%
SWC		
SWC Power	155,009,717	9.1%
SWC All Other	251,108,491	14.8%
Other Conveyance & Aqueduct	71,270,831	4.2%
Total	658,567,727	38.8%
Storage		
Storage Costs Other Than Power		
Emergency	55,738,162	3.3%
Drought	52,988,668	3.1%
Regulatory	27,135,224	1.6%
Storage Power	(679,733)	0.0%
Total	135,182,321	8.0%
Treatment		
Jensen	52,010,735	3.1%
Weymouth	53,115,935	3.1%
Diemer	59,700,635	3.5%
Mills	29,988,435	1.8%
Skinner	50,862,008	3.0%
Total	245,677,747	14.5%
Distribution	194,950,061	11.5%
Demand Management	62,716,891	3.7%
Hydro-electric	340,101	0.0%
Administrative & General	156,351,024	9.2%
Total Functional Assignment:	\$ 1,696,310,190	100.0%
(1) Given as a percentage of the absolute values of total dollars Assigned. Totals may not foot due to rounding		

Schedule 6: Revenue Requirement (by function), FY 2023/24

Functional Categories	Fiscal Year Ending 2024	% of Assigned Dollars (1)
Source of Supply		
CRA	\$ 60,489,433	3.4%
SWP	158,321,247	8.9%
Other Supply	33,163,756	1.9%
Total	251,974,436	14.1%
Conveyance & Aqueduct		
CRA		
CRA Power	94,763,935	5.3%
CRA All Other	68,810,129	3.9%
SWC		
SWC Power	195,355,694	11.0%
SWC All Other	279,749,692	15.7%
Other Conveyance & Aqueduct	71,377,136	4.0%
Total	710,056,587	39.8%
Storage		
Storage Costs Other Than Power		
Emergency	55,934,466	3.1%
Drought	49,031,463	2.8%
Regulatory	27,618,608	1.5%
Storage Power	(545,067)	0.0%
Total	132,039,470	7.5%
Treatment		
Jensen	53,342,717	3.0%
Weymouth	54,548,742	3.1%
Diemer	61,377,909	3.4%
Mills	30,591,767	1.7%
Skinner	51,552,150	2.9%
Total	251,413,285	14.1%
Distribution	200,481,588	11.2%
Demand Management	62,214,163	3.5%
Hydro-electric	2,162,184	0.1%
Administrative & General	171,482,996	9.6%
Total Functional Assignment:	\$ 1,781,824,709	100.0%
(1) Given as a percentage of the absolute values of total dollars Assigned. Totals may not foot due to rounding		

Schedule 7: Operational function Revenue Requirements (by budget line item), FY 2022/23

Fiscal Year Ending 2023	Source of Supply	Conveyance & Aqueduct	Storage	Treatment	Distribution	Demand Management	Hydro Electric	Administrative & General	Total \$ Functionalized
Departmental Operations & Maintenance									
Office of General Manager	\$ 526,745	\$ 1,172,278	\$ 239,735	\$ 1,826,337	\$ 1,539,436	\$ 145,504	\$ 86,779	\$ 4,251,873	\$ 9,788,687
Water Systems Operations	14,137,607	46,066,087	2,285,865	109,285,457	89,491,421	-	5,047,524	6,192,385	272,506,347
Water Resources Management	17,139,437	55,276	-	-	454,193	6,713,974	-	38,693	24,401,574
Engineering Services	1,879,288	10,297,927	11,275,729	11,900,569	8,652,358	95,395	710,695	2,885,709	47,697,671
Bay Delta Initiatives	-	11,925,029	-	-	-	-	-	-	11,925,029
Business Technology	3,284,265	7,309,172	1,494,754	11,387,242	9,598,408	907,220	541,071	46,165,481	80,687,613
Real Property	1,795,682	9,441,811	2,345,972	-	3,550,816	-	-	11,828,330	28,962,611
Human Resources	1,049,464	2,335,594	477,638	3,638,713	3,067,104	289,896	172,895	4,332,977	15,364,281
Office of the Chief Financial Officer	-	-	-	-	-	-	-	28,630,140	28,630,140
External Affairs	-	-	-	-	-	2,845,509	-	24,364,636	27,210,145
General Counsel	-	-	-	-	-	-	-	15,833,730	15,833,730
General Auditor	-	-	-	-	-	-	-	4,599,034	4,599,034
Ethics Office	-	-	-	-	-	-	-	2,106,637	2,106,637
Sustainability, Resilience & Innovation	-	-	-	-	-	-	-	9,831,427	9,831,427
Diversity, Equity & Inclusion	-	-	-	-	-	-	-	1,371,646	1,371,646
Equal Employment Opportunity	-	-	-	-	-	-	-	1,943,227	1,943,227
Total Departmental O&M	39,812,489	88,603,174	18,119,694	138,038,318	116,353,735	10,997,499	6,558,965	164,375,925	582,859,799
General District Requirements									
State Water Contract*	190,552,288	491,156,833	-	-	-	-	-	-	681,709,121
Colorado River Aqueduct Power Costs	-	105,857,041	-	-	-	-	-	-	105,857,041
Supply Programs (cash funded portion)	48,447,861	-	18,211,661	-	-	-	-	-	66,659,522
Demand Management (cash funded portion)	-	-	-	-	-	50,815,317	-	-	50,815,317
Capital Financing	16,589,556	90,905,714	99,537,336	105,544,356	77,856,873	842,109	6,273,715	25,473,811	423,023,470
Other Operating Costs	983,249	2,188,232	447,502	3,409,131	2,873,587	271,605	161,987	4,059,591	14,394,884
Increase/(Decrease) in Required Reserves	-	-	-	-	-	-	-	6,100,000	6,100,000
Total General District Requirements	256,572,954	690,107,820	118,196,499	108,953,487	80,730,461	51,929,032	6,435,702	35,633,402	1,348,559,356
Revenue Offsets	(53,861,124)	(120,143,267)	(1,133,872)	(1,314,058)	(2,134,134)	(209,640)	(12,654,566)	(43,658,303)	(235,108,965)
Net Revenue Requirements	\$ 242,524,319	\$ 658,567,727	\$ 135,182,321	\$ 245,677,747	\$ 194,950,061	\$ 62,716,891	\$ 340,101	\$ 156,351,024	\$ 1,696,310,190

* Includes Delta Conveyance planning costs net of California WaterFix refund

Totals may not foot due to rounding

Schedule 8: Operational function Revenue Requirements (by budget line item), FY 2023/24

Fiscal Year Ending 2024	Source of Supply	Conveyance & Aqueduct	Storage	Treatment	Distribution	Demand Management	Hydro Electric	Administrative & General	Total \$ Functionalized
Departmental Operations & Maintenance									
Office of General Manager	\$ 542,859	\$ 1,214,503	\$ 239,852	\$ 1,916,779	\$ 1,592,153	\$ 154,245	\$ 89,429	\$ 4,322,941	\$ 10,072,761
Water Systems Operations	14,136,069	47,437,022	2,267,713	113,428,046	91,100,527	-	5,169,663	6,307,693	279,846,732
Water Resources Management	17,567,780	56,950	-	-	459,992	6,911,360	-	39,865	25,035,947
Engineering Services	1,841,175	9,848,901	11,000,792	11,356,999	8,539,723	175,791	652,276	2,845,032	46,260,690
Bay Delta Initiatives	-	12,280,257	-	-	-	-	-	-	12,280,257
Business Technology	3,464,824	7,751,628	1,530,868	12,233,936	10,161,994	984,477	570,783	47,561,193	84,259,703
Real Property	1,795,866	9,442,780	2,346,212	-	3,551,180	-	-	11,829,544	28,965,582
Human Resources	1,068,608	2,390,728	472,145	3,773,145	3,134,125	303,629	176,039	4,299,141	15,617,559
Office of the Chief Financial Officer	-	-	-	-	-	-	-	25,369,838	25,369,838
External Affairs	-	-	-	-	-	2,954,426	-	24,738,446	27,692,872
General Counsel	-	-	-	-	-	-	-	15,716,806	15,716,806
General Auditor	-	-	-	-	-	-	-	4,737,939	4,737,939
Ethics Office	-	-	-	-	-	-	-	2,156,213	2,156,213
Sustainability, Resilience & Innovation	-	-	-	-	-	-	-	9,216,241	9,216,241
Diversity, Equity & Inclusion	-	-	-	-	-	-	-	1,426,072	1,426,072
Equal Employment Opportunity	-	-	-	-	-	-	-	2,036,286	2,036,286
Total Departmental O&M	40,417,181	90,422,769	17,857,582	142,708,905	118,539,694	11,483,927	6,658,190	162,603,248	590,691,497
General District Requirements									
State Water Contract*	192,495,249	568,744,742	-	-	-	-	-	-	761,239,991
Colorado River Aqueduct Power Costs	-	85,626,149	-	-	-	-	-	-	85,626,149
Supply Programs (cash funded portion)	52,379,998	-	11,720,987	-	-	-	-	-	64,100,985
Demand Management (cash funded portion)	-	-	-	-	-	49,108,217	-	-	49,108,217
Capital Financing	17,275,568	92,411,266	103,219,347	107,044,197	81,610,541	1,649,426	6,120,239	26,694,659	436,025,242
Other Operating Costs	946,760	2,118,125	418,308	3,342,911	2,776,755	269,007	155,966	3,808,930	13,836,761
Increase/(Decrease) in Required Reserves	-	-	-	-	-	-	-	6,900,000	6,900,000
Total General District Requirements	263,097,574	748,900,281	115,358,643	110,387,108	84,387,295	51,026,650	6,276,205	37,403,588	1,416,837,345
Revenue Offsets	(51,540,319)	(129,266,464)	(1,176,754)	(1,682,728)	(2,445,402)	(296,414)	(10,772,211)	(28,523,840)	(225,704,132)
Net Revenue Requirements	\$ 251,974,436	\$ 710,056,587	\$ 132,039,470	\$ 251,413,285	\$ 200,481,588	\$ 62,214,163	\$ 2,162,184	\$ 171,482,996	\$ 1,781,824,709

* Includes Delta Conveyance planning costs net of California WaterFix refund

Totals may not foot due to rounding

Schedule 9: Revenue Requirement by sub-function and budget line item, FY 2022/23 and FY 2023/24

Fiscal Year Ending 2023	Supply			Conveyance & Aqueduct					Storage				Treatment	Distribution	Demand Mgt.	Hydro	Total
	CRA	SWC	Other	CRA power	CRA other	SWC power	SWC other	Other C&A	Emergency	Drought	Regulatory	Power					
Dept. Operations & Maintenance	9,293,672	16,178,661	14,340,157	3,487,850	53,082,729	-	23,883,009	8,149,586	7,897,612	6,046,755	4,175,327	-	138,038,318	116,353,735	10,997,499	6,558,965	418,483,874
General District Requirements																	
State Water Contract*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Capital	-	80,437,139	-	-	-	(4,981,305)	90,506,317	-	-	-	-	-	-	-	-	-	165,962,151
O&M	-	110,115,149	-	-	-	211,574,465	194,057,356	-	-	-	-	-	-	-	-	-	515,746,970
Colorado River Aqueduct Power	-	-	-	105,857,041	-	-	-	-	-	-	-	-	-	-	-	-	105,857,041
Supply Programs (cash funded portion)	47,197,861	-	1,250,000	-	-	-	-	-	-	18,211,661	-	-	-	-	-	-	66,659,522
Demand Management (cash funded portion)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	50,815,317	-	50,815,317
Capital Financing Program	-	-	16,589,556	8,252,673	13,094,802	-	6,400,032	63,158,208	47,831,816	28,758,037	22,947,482	-	105,544,356	77,856,873	842,109	6,273,715	397,549,660
Other Operating Costs	229,526	399,564	354,159	86,139	1,310,984	-	589,839	201,270	195,047	149,337	103,118	-	3,409,131	2,873,587	271,605	161,987	10,335,293
Revenue Offsets	(188,967)	(53,563,771)	(108,387)	(3,768,691)	(224,838)	(51,583,443)	(64,328,062)	(238,233)	(186,313)	(177,122)	(90,703)	(679,733)	(1,314,058)	(2,134,134)	(209,640)	(12,654,566)	(191,450,662)
Admin. & General	8,692,810	23,613,605	4,985,992	1,816,089	9,333,854	(3,750)	32,811,239	6,043,590	1,213,314	8,147,946	2,050,181	16	22,255,583	22,912,941	9,643,832	2,833,780	156,351,024
Net Revenue Requirement	65,224,902	177,180,347	37,411,477	115,731,101	76,597,530	155,005,967	283,919,730	77,314,422	56,951,477	61,136,614	29,185,405	(679,717)	267,933,330	217,863,002	72,360,723	3,173,881	1,696,310,190

* Includes Delta Conveyance planning costs net of California WaterFix refund
Totals may not foot due to rounding

Fiscal Year Ending 2024	Supply			Conveyance & Aqueduct					Storage				Treatment	Distribution	Demand Mgt.	Hydro	Total
	CRA	SWC	Other	CRA power	CRA other	SWC power	SWC other	Other C&A	Emergency	Drought	Regulatory	Power					
Dept. Operations & Maintenance	9,426,812	16,532,838	14,457,531	3,610,240	54,662,118	-	24,378,597	7,771,815	7,624,721	6,147,788	4,085,073	-	142,708,905	118,539,694	11,483,927	6,658,190	428,088,249
General District Requirements																	
State Water Contract*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Capital	-	85,494,959	-	-	-	(3,654,765)	115,160,127	-	-	-	-	-	-	-	-	-	197,000,320
O&M	-	107,000,290	-	-	-	258,551,933	198,687,447	-	-	-	-	-	-	-	-	-	564,239,670
Colorado River Aqueduct Power	-	-	-	85,626,149	-	-	-	-	-	-	-	-	-	-	-	-	85,626,149
Supply Programs (cash funded portion)	51,129,998	-	1,250,000	-	-	-	-	-	-	11,720,987	-	-	-	-	-	-	64,100,985
Demand Management (cash funded portion)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Capital Financing Program	-	-	17,275,568	8,898,220	13,195,409	-	6,554,298	63,763,339	48,397,633	31,252,283	23,569,430	-	107,044,197	81,610,541	1,649,426	6,120,239	409,330,584
Other Operating Costs	220,820	387,276	338,663	84,569	1,280,443	-	571,061	182,052	178,607	144,010	95,692	-	3,342,911	2,776,755	269,007	155,966	10,027,832
Revenue Offsets	(288,197)	(51,094,117)	(158,006)	(3,455,242)	(327,840)	(59,541,474)	(65,601,838)	(340,070)	(266,495)	(233,606)	(131,586)	(545,067)	(1,682,728)	(2,445,402)	(296,414)	(10,772,211)	(197,180,292)
Admin. & General	9,556,953	25,013,769	5,239,667	2,928,648	9,875,790	2,232,475	36,844,815	6,392,845	1,723,141	7,746,665	2,230,635	(6,229)	24,510,217	24,465,005	9,829,450	2,899,151	171,482,996
Net Revenue Requirement	70,046,386	183,335,016	38,403,423	97,692,583	78,685,919	197,588,169	316,594,507	77,769,982	57,657,607	56,778,128	29,849,243	(551,296)	275,923,502	224,946,593	72,043,612	5,061,335	1,781,824,709

* Includes Delta Conveyance planning costs net of California WaterFix refund
Totals may not foot due to rounding

Allocated Costs

In the cost allocation step, functionalized costs are further categorized based on the causes and behavioral characteristics of these costs. An important part of the allocation process is identifying which costs are incurred to meet average demands versus peak demands and which costs are incurred for standby. As with the functional assignment process, the proposed allocation process is consistent with AWWA guidelines, but has been tailored to meet Metropolitan's specific operational structure and service environment.

Two methods are discussed in the AWWA M1 Manual, Principles of Water Rates, Fees and Charges. These two methods are the Commodity/Demand method and the Base/Extra Capacity method.

In the simplest sense, these approaches offer alternative means of distinguishing between utility costs incurred to meet average or base demands and costs incurred to meet peak demands. The Commodity/Demand method allocates costs that vary with the amount of water produced to the commodity category with all other costs associated with water production allocated to the demand category. In the Base/Extra Capacity method, costs related to average demand conditions are allocated to the base category, and capacity costs associated with meeting above average demand conditions are allocated to the extra capacity category.

The Commodity/Demand approach was modified for its application to Metropolitan's rate structure by adding a separate cost allocation for costs related to standby. Analysis of system operating data indicated that a modified Commodity/Demand approach was most appropriate for developing Metropolitan's cost of service allocation bases.

A modified Commodity/Demand approach is the most appropriate for Metropolitan's cost of service needs because this approach is best suited for systems that are not designed to meet peak-day or peak-hour demands or provide flows for fire-fighting requirements. Metropolitan's system is designed to meet weekly demand peaks rather than daily or hourly peaks. It is also designed to provide available capacity to meet operational flexibility and reliability for emergencies, outages, and hydrologic variability.

Allocation categories used in the analysis include:

- Fixed Demand costs
- Fixed Commodity costs
- Fixed Standby costs
- Variable Commodity costs
- Hydroelectric costs

Fixed Demand costs are incurred to meet peak demands. Only the *direct* capital financing costs were included in the Fixed Demand allocation category. A portion of capital financing costs was included in the Fixed Demand allocation category because in order to meet peak demands additional physical capacity is designed into the system and, therefore, additional capital costs are incurred.

Variable Commodity costs vary with the amount of water produced, and include costs of chemicals, most power costs, and other O&M cost components that increase or decrease in relation to the volume of water supplied. Fixed Commodity costs include fixed operations and maintenance and comprise the balance of Metropolitan's O&M expenses. Fixed Commodity costs also include capital financing costs associated with meeting average demands. Fixed Commodity costs do not vary with the amount of water produced.

Fixed Standby costs relate to Metropolitan's role in ensuring system reliability during emergencies such as an earthquake, an outage of a major facility like the CRA and SWP, and hydrologic variability due to weather variances locally or in the two major supply basins Metropolitan relies on. Only the *direct* capital financing

costs were included in the Fixed Standby allocation category. The Fixed Standby costs identified include the emergency storage capacity within the system, and the available capacity within the conveyance and distribution systems.

An additional component used in Metropolitan's cost allocation process is the hydroelectric component. While not a part of most water utilities' cost allocation procedures, the Hydroelectric allocation component is necessary to segregate revenue requirements carried from the hydroelectric function established in the functional assignment process. Hydroelectric revenue requirements are ultimately recovered in the distribution system portion of the System Access Rate. Any net revenues generated by the hydroelectric operations offset the distribution costs and reduce the System Access Rate. All users of the distribution system benefit proportionately from the revenue offset provided by the sale of hydroelectric energy.

Schedules 10 and 11 provide the allocation percentages used to allocate the capital financing operational function costs into Fixed Demand, Fixed Commodity and Fixed Standby allocation categories for FY 2022/23 and FY 2023/24, respectively.

All capital financing costs functionalized to Supply are allocated as Fixed Commodity costs. Because these particular supply costs have been incurred to provide an amount of annual reliable system yield and not to provide peak demand delivery capability or standby availability, they are reasonably treated as Fixed Commodity costs.

Costs for the Conveyance and Aqueduct (C&A) function are allocated into Fixed Commodity, Fixed Demand and Fixed Standby categories. Because the capital costs for C&A were incurred to meet all three allocation categories, an analysis of C&A capacity usage was used. C&A capacity is the sum of the CRA actual capacity of 1.3 million acre-feet plus the SWP amount attributable to Metropolitan of 1.9 million acre-feet under a 100 percent allocation, for a total Conveyance Capacity of approximately 3.2 million acre-feet. For FY 2022/23, 49 percent of the available conveyance capacity varies with the quantity of water produced and is allocated to Fixed Commodity. A system peak factor¹² of 1.17 was applied to the annual usage to determine that 8 percent of available capacity is used to meet peak monthly deliveries to the member agencies and is allocated to Fixed Demand. The remaining portion of C&A, about 43 percent, is allocated to Fixed Standby. The same allocation percentages are applied to the CRA, SWP, and Other (Inland Feeder) Conveyance and Aqueduct sub-functions. The allocation shares reflect the system average use of conveyance capacity and not the usage of individual facilities. All Conveyance and Aqueduct energy costs for pumping water to Southern California are allocated as Variable Commodity costs and, therefore, are not shown in Schedule 6 because they carry through the allocation step. For FY 2023/24, 47 percent of the available conveyance capacity varies with the quantity of water produced and is allocated to Fixed Commodity. A system peak factor of 1.17 was applied to the annual usage to determine that 8 percent of available capacity is used to meet peak monthly deliveries to the member agencies and is allocated to Fixed Demand. The remaining portion of C&A, about 44 percent, is allocated to Fixed Standby.

Storage function costs for emergency, drought and regulatory storage are also distributed to the allocation categories based on the purpose they serve. Emergency storage costs are allocated as 100 percent Fixed Standby. Emergency storage is a prime example of a cost Metropolitan incurs to ensure the reliability of deliveries to the member agencies. In effect, through the emergency storage capacity in the system, Metropolitan is "standing by" with available capacity and water supply to provide service in the event of a catastrophe such as a major earthquake that disrupts regional conveyance capacity for an extended period of time. Drought carryover storage serves to provide reliable supplies by carrying over surplus supplies from periods of above normal precipitation and snowpack to drought periods when supplies decrease. Drought storage creates supply and is one component of the portfolio of resources that result in a reliable amount of

¹² Peak monthly deliveries to the member agencies average about 41 percent more than the average monthly deliveries.

annual system supplies. As a result, drought storage is allocated as a Fixed Commodity cost, in the same manner as Metropolitan's supply costs. Regulatory storage within the Metropolitan system provides operational flexibility in meeting peak demands and flow requirements, essentially increasing the physical distribution capacity. Therefore, regulatory storage is allocated in the same manner as Distribution costs.

Distribution function costs were allocated as Fixed Commodity by using projected transactions data for the test year. For FY 2022/23, 40 percent of the system distribution capacity is associated with the quantity of water delivered and is allocated to Fixed Commodity. Distribution function costs were allocated to Fixed Demand by using three years of recorded non-coincident peak demands. The difference between the three-year average non-coincident peak demand and the fixed commodity flows divided by the system capacity, or 33 percent of the distribution capacity, was used to meet non-coincident peak day demands, and is allocated to Fixed Demand. Although the Metropolitan Distribution System has a great deal of operational flexibility, the total amount of distribution capacity was limited to the historical non-coincident¹³ peak (maximum) day flow of all the member agencies; based on the last 20 years that maximum flow was 5,510 cfs in 2004. The remaining 27 percent of distribution capacity is associated with Standby and is allocated to Fixed Standby. For FY 2023/24, 39 percent of the system distribution capacity is associated with the quantity of water delivered, and is allocated to Fixed Commodity, 35 percent was used to meet non-coincident peak (maximum) day demands and is allocated to Fixed Demand, and the remaining 27 percent of distribution capacity is associated with Standby, and is allocated to Fixed Standby.

Treatment function costs were allocated to Fixed Commodity by using projected treated deliveries to the member agencies for the test year. The Treatment Fixed Demand calculation uses the system non-coincident peak factor of 2.1 applied to the test year usage; the remaining capacity is associated with Fixed Standby. Total treated water capacity of 3,652 cfs, which is the total design capacity of all the treatment plants, was used in the calculation. General and Administrative costs have been assigned to the allocation categories by operational function based on the ratio of allocated non-A&G function costs to total non-A&G function costs.

¹³ The term "non-coincident" means that the peak day for each agency may or may not coincide with the peak day for the system. A non-coincident approach is used in the rate design to capture the different operating characteristics of the member agencies. The sum of the member agency peak day demands is used as a proxy for peak week. For Metropolitan, "peak" and "maximum" flows, measured in cfs, are synonymous.

Schedule 10: Capital Financing Allocation Percentages, FY 2022/23

Fiscal year ending 2023 Function	Allocation Percentages			Total % Allocated	Comments
	Fixed Commodity	Fixed Demand	Fixed Standby		
Source of Supply					
Colorado River Aqueduct	100%	0%	0%	100%	Supply costs allocated as fixed commodity
State Water Project	100%	0%	0%	100%	Supply costs allocated as fixed commodity
Conveyance & Aqueduct					
Colorado River Aqueduct	49%	8%	43%	100%	Demand percentage represents amount of system conveyance capacity used to meet maximum demands. Commodity percentage represents amount of capacity that is a function of the amount of water delivered. Standby percentage is the remaining conveyance capacity. SWP, CRA, and Other are treated the same due to the use of a uniform system-wide System Access Rate.
State Water Project	49%	8%	43%	100%	
Other	49%	8%	43%	100%	
Storage					
Emergency	0%	0%	100%	100%	Allocated as Standby (recovered by RTS)
Drought	100%	0%	0%	100%	Allocated as fixed commodity (recovered by Supply Rates)
Regulatory	40%	33%	27%	100%	Allocated the same way as distribution.
Treatment	29%	31%	39%	100%	Demand percentage represents amount of system treatment capacity used to meet maximum demands. Commodity percentage represents amount of capacity that is a function of the amount of treated water delivered. Standby percentage is the remaining treatment capacity. The same allocations is applied to all five treatment plants due to the use of a uniform system-wide Treatment Surcharge.
Distribution	40%	33%	27%	100%	Demand percentage represents amount of system distribution capacity used to meet maximum demands. Commodity percentage represents amount of capacity that is a function of the amount of water delivered. Standby percentage is the remaining distribution capacity. The same allocations is applied to all distribution facilities due to the use of a uniform system-wide System Access Rate.
Demand Management	100%	0%	0%	100%	Allocated as fixed commodity (recovered by Supply Rates)

Totals may not foot due to rounding

Schedule 11: Capital Financing Allocation Percentages, FY 2023/24

Fiscal year ending 2024 Function	Allocation Percentages			Total % Allocated	Comments
	Fixed Commodity	Fixed Demand	Fixed Standby		
Source of Supply					
Colorado River Aqueduct	100%	0%	0%	100%	Supply costs allocated as fixed commodity
State Water Project	100%	0%	0%	100%	Supply costs allocated as fixed commodity
Conveyance & Aqueduct					
Colorado River Aqueduct	47%	8%	44%	100%	Demand percentage represents amount of system conveyance capacity used to meet maximum demands. Commodity percentage represents amount of capacity that is a function of the amount of water delivered. Standby percentage is the remaining conveyance capacity. SWP, CRA, and Other are treated the same due to the use of a uniform system-wide System Access Rate.
State Water Project	47%	8%	44%	100%	
Other	47%	8%	44%	100%	
Storage					
Emergency	0%	0%	100%	100%	Allocated as Standby (recovered by RTS)
Drought	100%	0%	0%	100%	Allocated as fixed commodity (recovered by Supply Rates)
Regulatory	39%	35%	27%	100%	Allocated the same way as distribution.
Treatment	29%	32%	39%	100%	Demand percentage represents amount of system treatment capacity used to meet maximum demands. Commodity percentage represents amount of capacity that is a function of the amount of treated water delivered. Standby percentage is the remaining treatment capacity. The same allocations is applied to all five treatment plants due to the use of a uniform system-wide Treatment Surcharge.
Distribution	39%	35%	27%	100%	Demand percentage represents amount of system distribution capacity used to meet maximum demands. Commodity percentage represents amount of capacity that is a function of the amount of water delivered. Standby percentage is the remaining distribution capacity. The same allocations is applied to all distribution facilities due to the use of a uniform system-wide System Access Rate.
Demand Management	100%	0%	0%	100%	Allocated as fixed commodity (recovered by Supply Rates)

Totals may not foot due to rounding

FY 2022/23 Operational Function Revenue Requirements (by allocation category)

A summary of cost allocation results for FY 2022/23 is shown in Schedules 12 and 13. The allocation of the functionalized costs results in about 5 percent, or \$78 million of the total revenue requirements, being allocated to the Fixed Demand allocation category. This amount represents a reasonable estimate of the annual fixed capital financing costs incurred to meet peak demands (plus the allocated administrative and general costs). A portion of Metropolitan's property tax revenue is allocated to Conveyance and Aqueduct Fixed Demand costs and is used to pay for the general obligation bond debt service allocated to the C&A costs, and other SWP costs. This revenue offsets the amount that needs to be recovered through rates.

About 68 percent of the revenue requirement (\$1,152 million) is allocated as Fixed Commodity. These fixed capital and operating costs are incurred by Metropolitan to meet annual average service needs and are typically recovered by a combination of fixed charges and volumetric rates. Fixed capital costs allocated to the Fixed Standby category total about \$179 million and account for about 11 percent of the revenue requirements. Standby costs are commonly recovered by a fixed charge allocated on a reasonable representation of a customer's need for standby availability. The Variable Commodity costs for power on the conveyance and aqueduct systems, and power, chemicals and solids handling at the treatment plants change with the amount of water delivered to the member agencies. These costs are allocated as Variable Commodity costs, total about \$284 million, and account for about 17 percent of the total revenue requirement. Because of the variable nature of these costs, it is appropriate to recover them through volumetric rates.

With regard to Metropolitan's planned contribution for Delta Conveyance Project planning costs, consistent with the treatment of SWP Conveyance and Aqueduct capital costs, 49 percent of costs are allocated to Fixed Commodity, which is recovered through the System Access Rate, and 51 percent of costs are allocated to Fixed Demand and Fixed Standby, which is recovered through the Readiness-to-Serve Charge.

FY 2023/24 Operational Function Revenue Requirement (by allocation category)

A summary of cost allocation results for FY 2023/24 is shown in Schedule 14 and 15. The allocation of the functionalized costs results in about 5 percent, or \$84 million of the total revenue requirements, being allocated to the Fixed Demand allocation category. This amount represents a reasonable estimate of the annual fixed capital financing costs incurred to meet peak demands (plus the allocated administrative and general costs). A portion of Metropolitan's property tax revenue is allocated to C&A Fixed Demand costs and is used to pay for the general obligation bond debt service allocated to the C&A costs, and other SWP costs. This revenue offsets the amount that needs to be recovered through rates.

About 67 percent of the revenue requirement (\$1,188 million) is allocated as Fixed Commodity. These fixed capital and operating costs are incurred by Metropolitan to meet annual average service needs and are typically recovered by a combination of fixed charges and volumetric rates. Fixed capital costs allocated to the Fixed Standby category total about \$195 million and account for about 11 percent of the revenue requirements. Standby costs are commonly recovered by a fixed charge allocated on a reasonable representation of a customer's need for standby. The Variable Commodity costs for power on the conveyance and aqueduct systems, and power, chemicals and solids handling at the treatment plants change with the amount of water delivered to the member agencies. These costs are allocated as Variable Commodity costs, total about \$310 million, and account for about 17 percent of the total revenue requirement. Because of the variable nature of these costs, it is appropriate to recover them through volumetric rates.

In FY 2023/24, consistent with the treatment of SWP Conveyance and Aqueduct capital costs, 47 percent of Metropolitan's planned contribution of Delta Conveyance Project planning costs are allocated to Fixed

Commodity, which is recovered through the System Access Rate, and 53 percent of costs are allocated to Fixed Demand and Fixed Standby, which is recovered through the Readiness-to-Serve Charge.

Schedule 12: Revenue Requirements by sub-function and allocation category, FY 2022/23

Fiscal Year Ending 2023	Supply			Conveyance & Aqueduct					Storage				Treatment	Distribution	Demand Mgt.	Hydro	Total
	CRA	SWC	Other	CRA power	CRA other	SWC power	SWC other	Other C&A	Emergency	Drought	Regulatory	Power					
Fixed Demand																	
engineering factors	-	-	-	0.0%	8.3%	0.0%	8.3%	8.3%	0.0%	0.0%	33.5%	0.0%	31.4%	33.5%	-	-	-
SWC Capital	-	-	-	-	-	-	7,541,538	-	-	-	-	-	-	-	-	-	7,541,538
Capital Financing	-	-	-	-	1,091,139	-	533,290	5,262,727	-	-	7,684,107	-	33,193,206	26,070,857	-	-	73,835,324
A&G less Offsets	-	-	-	-	(18,759)	-	(1,910,069)	(238,345)	-	-	(171)	-	(259,518)	(495,335)	-	-	(2,922,197)
Total fixed demand	-	-	-	-	1,072,380	-	6,164,759	5,024,382	-	-	7,683,936	-	32,933,688	25,575,521	-	-	78,454,666
Fixed Commodity																	
engineering factors	100%	100%	100%	100%	49.0%	0%	49.0%	49.0%	0%	100%	39.9%	0%	29.1%	39.9%	100%	-	-
Capital Financing	-	-	16,589,556	8,252,673	6,418,463	-	3,136,998	30,957,217	-	28,758,037	9,147,249	-	30,734,450	31,035,048	842,109	-	165,871,800
SWC Capital*	-	80,437,139	-	-	-	-	44,361,989	-	-	-	-	-	-	-	-	-	124,799,128
SWC O&M	-	110,115,149	-	-	-	-	194,057,356	-	-	-	-	-	-	-	-	-	304,172,505
Dept. O&M	9,293,672	16,178,661	14,340,157	3,487,850	53,082,729	-	23,883,009	8,149,586	7,897,612	6,046,755	4,175,327	-	105,574,027	116,353,735	10,997,499	-	379,460,618
Supply Programs (cash funded portion)	47,197,861	-	1,250,000	-	-	-	-	-	-	18,211,661	-	-	-	-	-	-	66,659,522
Demand Management (cash funded portion)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	50,815,317	-	50,815,317
Other Operating Costs	229,526	399,564	354,159	86,139	1,310,984	-	589,839	201,270	195,047	149,337	103,118	-	3,409,131	2,873,587	271,605	-	10,173,307
A&G less Offsets	8,503,843	(29,950,166)	4,877,605	1,818,559	9,223,797	-	(19,829,693)	6,044,312	1,019,350	7,970,823	1,959,787	-	27,290,445	21,668,410	9,434,192	-	50,031,266
Total fixed commodity	65,224,902	177,180,347	37,411,477	13,645,221	70,035,973	-	246,199,497	45,352,385	9,112,009	61,136,614	15,385,481	-	167,008,053	171,930,779	72,360,723	-	1,151,983,462
Fixed Standby																	
engineering factors	-	-	-	0%	43%	0%	42.7%	42.7%	100%	0%	26.7%	0%	39.4%	26.7%	-	-	-
SWC Capital*	-	-	-	-	-	-	38,602,790	-	-	-	-	-	-	-	-	-	38,602,790
Capital Financing	-	-	-	-	5,585,200	-	2,729,744	26,938,264	47,831,816	-	6,116,127	-	41,616,700	20,750,969	-	-	151,568,820
A&G less Offsets	-	-	-	-	(96,022)	-	(9,777,061)	(610)	7,651	-	(138)	-	(816,583)	(394,267)	-	-	(11,077,031)
Total fixed standby	-	-	-	-	5,489,178	-	31,555,473	26,937,654	47,839,467	-	6,115,988	-	40,800,117	20,356,702	-	-	179,094,579
Variable Commodity																	
SWC Power	-	-	-	-	-	206,593,160	-	-	-	-	-	-	-	-	-	-	206,593,160
CRA Power	-	-	-	105,857,041	-	-	-	-	-	-	-	-	-	-	-	-	105,857,041
Variable Treatment	-	-	-	-	-	-	-	-	-	-	-	-	32,464,291	-	-	-	32,464,291
A&G less Offsets	-	-	-	(3,771,160)	-	(51,587,193)	-	-	-	-	-	(679,717)	(5,272,819)	-	-	-	(61,310,890)
Total variable commodity	-	-	-	102,085,881	-	155,005,967	-	-	-	-	-	(679,717)	27,191,472	-	-	-	283,603,602
Hydroelectric																	
A&G less Offsets	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12,994,667	12,994,667
Total hydroelectric	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	(9,820,786)	(9,820,786)
Total Costs	65,224,902	177,180,347	37,411,477	115,731,101	76,597,530	155,005,967	283,919,730	77,314,422	56,951,477	61,136,614	29,185,405	(679,717)	267,933,330	217,863,002	72,360,723	3,173,881	1,696,310,190

* Includes Delta Conveyance planning costs net of California WaterFix refund
Totals may not foot due to rounding

Schedule 13: Operational function Revenue Requirements (by allocation category), FY 2022/23

Fiscal year ending 2023 Functional categories (by sub-Fuction)	Fixed Demand	Fixed Commodity	Fixed Standby	Variable Commodity	Hydroelectric	Total allocated
Source of Supply						
CRA	\$ -	\$ 65,224,902	\$ -	\$ -	\$ -	\$ 65,224,902
SWP	-	177,180,347	-	-	-	177,180,347
Other Supply	-	37,411,477	-	-	-	37,411,477
Subtotal: Source of Supply	-	279,816,726	-	-	-	279,816,726
Conveyance & Aqueduct						
CRA						
CRA Power	-	13,645,221	-	102,085,881	-	115,731,101
CRA All Other	1,072,380	70,035,973	5,489,178	-	-	76,597,530
SWP*						
SWP Power	-	-	-	155,005,967	-	155,005,967
SWP All Other	6,164,759	246,199,497	31,555,473	-	-	283,919,730
Other Conveyance & Aqueduct	5,024,382	45,352,385	26,937,654	-	-	77,314,422
Subtotal: Conveyance & Aqueduct	12,261,521	375,233,076	63,982,305	257,091,847	-	708,568,750
Storage						
Storage Costs Other Than Power						
Emergency	-	9,112,009	47,839,467	-	-	56,951,477
Drought	-	61,136,614	-	-	-	61,136,614
Regulatory	7,683,936	15,385,481	6,115,988	-	-	29,185,405
Storage Power	-	-	-	(679,717)	-	(679,717)
Subtotal: Storage	7,683,936	85,634,104	53,955,455	(679,717)	-	146,593,778
Treatment	32,933,688	167,008,053	40,800,117	27,191,472	-	267,933,330
Distribution	25,575,521	171,930,779	20,356,702	-	-	217,863,002
Demand Management	-	72,360,723	-	-	-	72,360,723
Hydroelectric	-	-	-	-	3,173,881	3,173,881
Total Costs Allocated	\$ 78,454,666	\$ 1,151,983,462	\$ 179,094,579	\$ 283,603,602	\$ 3,173,881	\$ 1,696,310,190

* Includes Delta Conveyance planning costs net of California WaterFix refund

Totals may not foot due to rounding

Schedule 14: Revenue Requirements by sub-function and allocation category, FY 2023/24

Fiscal Year Ending 2024	Supply			Conveyance & Aqueduct					Storage				Treatment	Distribution	Demand Mgt.	Hydro	Total
	CRA	SWC	Other	CRA power	CRA other	SWC power	SWC other	Other C&A	Emergency	Drought	Regulatory	Power					
Fixed Demand																	
engineering factors	-	-	-	0.0%	8.1%	0.0%	8.1%	8.1%	0.0%	0.0%	34.7%	0.0%	31.8%	34.7%	-	-	-
SWC Capital	-	-	-	-	-	-	9,291,517	-	-	-	-	-	-	-	-	-	9,291,517
Capital Financing	-	-	-	-	1,064,651	-	528,823	5,144,647	-	-	8,190,332	-	34,088,003	28,359,507	-	-	77,375,964
A&G less Offsets	-	-	-	-	(15,529)	-	(2,072,523)	(289,523)	-	-	86,168	-	(27,572)	(382,916)	-	-	(2,701,895)
Total fixed demand	-	-	-	-	1,049,123	-	7,747,818	4,855,124	-	-	8,276,500	-	34,060,431	27,976,591	-	-	83,965,586
Fixed Commodity																	
engineering factors	100%	100%	100%	100%	47.5%	0%	47.5%	47.5%	0%	100%	38.6%	0%	29.5%	38.6%	100%	-	-
Capital Financing	-	-	17,275,568	8,898,220	6,262,654	-	3,110,726	30,262,628	-	31,252,283	9,097,206	-	31,562,966	31,499,610	1,649,426	-	170,871,287
SWC Capital*	-	85,494,959	-	-	-	-	54,655,984	-	-	-	-	-	-	-	-	-	140,150,942
SWC O&M	-	107,000,290	-	-	-	-	198,687,447	-	-	-	-	-	-	-	-	-	305,687,738
Dept. O&M	9,426,812	16,532,838	14,457,531	3,610,240	54,662,118	-	24,378,597	7,771,815	7,624,721	6,147,788	4,085,073	-	107,825,632	118,539,694	11,483,927	-	386,546,786
Supply Programs (cash funded portion)	51,129,998	-	1,250,000	-	-	-	-	-	-	11,720,987	-	-	-	-	-	-	64,100,985
Demand Management (cash funded portion)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	49,108,217	-	49,108,217
Other Operating Costs	220,820	387,276	338,663	84,569	1,280,443	-	571,061	182,052	178,607	144,010	95,692	-	3,342,911	2,776,755	269,007	-	9,871,866
A&G less Offsets	9,268,756	(26,080,347)	5,081,661	1,989,620	9,647,857	-	(15,270,198)	6,037,968	1,026,052	7,513,059	1,945,460	-	28,683,604	22,691,715	9,533,036	-	62,068,243
Total fixed commodity	70,046,386	183,335,016	38,403,423	14,582,649	71,853,072	-	266,133,617	44,254,462	8,829,379	56,778,128	15,223,430	-	171,415,113	175,507,774	72,043,612	-	1,188,406,062
Fixed Standby																	
engineering factors	-	-	-	0%	44%	0%	44.5%	44.5%	100%	0%	26.7%	0%	38.7%	26.7%	-	-	-
SWC Capital*	-	-	-	-	-	-	51,212,626	-	-	-	-	-	-	-	-	-	51,212,626
Capital Financing	-	-	-	-	5,868,103	-	2,914,749	28,356,065	48,397,633	-	6,281,893	-	41,393,227	21,751,423	-	-	154,963,094
A&G less Offsets	-	-	-	-	(84,379)	-	(11,414,302)	304,330	430,594	-	67,420	-	(512,585)	(289,196)	-	-	(11,498,117)
Total fixed standby	-	-	-	-	5,783,725	-	42,713,072	28,660,395	48,828,227	-	6,349,313	-	40,880,642	21,462,227	-	-	194,677,602
Variable Commodity																	
SWC Power	-	-	-	-	-	254,897,168	-	-	-	-	-	-	-	-	-	-	254,897,168
CRA Power	-	-	-	85,626,149	-	-	-	-	-	-	-	-	-	-	-	-	85,626,149
Variable Treatment	-	-	-	-	-	-	-	-	-	-	-	-	34,883,273	-	-	-	34,883,273
A&G less Offsets	-	-	-	(2,516,214)	-	(57,308,999)	-	-	-	-	-	(551,296)	(5,315,958)	-	-	-	(65,692,466)
Total variable commodity	-	-	-	83,109,935	-	197,588,169	-	-	-	-	-	(551,296)	29,567,315	-	-	-	309,714,123
Hydroelectric																	
A&G less Offsets	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12,934,395	12,934,395
Total hydroelectric	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	(7,873,060)	(7,873,060)
Total Costs	70,046,386	183,335,016	38,403,423	97,692,583	78,685,919	197,588,169	316,594,507	77,769,982	57,657,607	56,778,128	29,849,243	(551,296)	275,923,502	224,946,593	72,043,612	5,061,335	1,781,824,709

* Includes Delta Conveyance planning costs net of California WaterFix refund

Totals may not foot due to rounding

Schedule 15: Operational function Revenue Requirements (by allocation category), FY 2023/24

Fiscal year ending 2024 Functional categories (by sub-Function)	Fixed Demand	Fixed Commodity	Fixed Standby	Variable Commodity	Hydroelectric	Total allocated
Source of Supply						
CRA	\$ -	\$ 70,046,386	\$ -	\$ -	\$ -	\$ 70,046,386
SWP	-	183,335,016	-	-	-	183,335,016
Other Supply	-	38,403,423	-	-	-	38,403,423
Subtotal: Source of Supply	-	291,784,825	-	-	-	291,784,825
Conveyance & Aqueduct						
CRA						
CRA Power	-	14,582,649	-	83,109,935	-	97,692,583
CRA All Other	1,049,123	71,853,072	5,783,725	-	-	78,685,919
SWP*						
SWP Power	-	-	-	197,588,169	-	197,588,169
SWP All Other	7,747,818	266,133,617	42,713,072	-	-	316,594,507
Other Conveyance & Aqueduct	4,855,124	44,254,462	28,660,395	-	-	77,769,982
Subtotal: Conveyance & Aqueduct	13,652,064	396,823,800	77,157,192	280,698,104	-	768,331,160
Storage						
Storage Costs Other Than Power						
Emergency	-	8,829,379	48,828,227	-	-	57,657,607
Drought	-	56,778,128	-	-	-	56,778,128
Regulatory	8,276,500	15,223,430	6,349,313	-	-	29,849,243
Storage Power	-	-	-	(551,296)	-	(551,296)
Subtotal: Storage	8,276,500	80,830,937	55,177,540	(551,296)	-	143,733,682
Treatment	34,060,431	171,415,113	40,880,642	29,567,315	-	275,923,502
Distribution	27,976,591	175,507,774	21,462,227	-	-	224,946,593
Demand Management	-	72,043,612	-	-	-	72,043,612
Hydroelectric	-	-	-	-	5,061,335	5,061,335
Total Costs Allocated	\$ 83,965,586	\$ 1,188,406,062	\$ 194,677,602	\$ 309,714,123	\$ 5,061,335	\$ 1,781,824,709

* Includes Delta Conveyance planning costs net of California WaterFix refund

Totals may not foot due to rounding

Distribution of Costs: Rates and Charges

Use of System-Wide (Postage Stamp) Rates

Metropolitan's rate structure consists of unbundled rate elements designed to provide transparency regarding the cost of specific functions to member agencies (system access, untreated water supplies, water treatment, etc.). The rates for each of these unbundled rate elements are uniform across Metropolitan's entire regional service area; they do not vary by member agency and they do not vary by geographic zone or distance.

In the utility industry, system-wide rates that are the same for all customers are referred to as "postage stamp" rates. Under a postage stamp rate design approach, every customer pays the same average rate for a service regardless of whether the cost caused by, or the benefit derived by, a customer for a given transaction varies from the average. The postage stamp rate design approach stands in contrast to alternative rate design approaches such as distance sensitive pricing schemes that attempt to develop rates applicable to specific geographic zones.

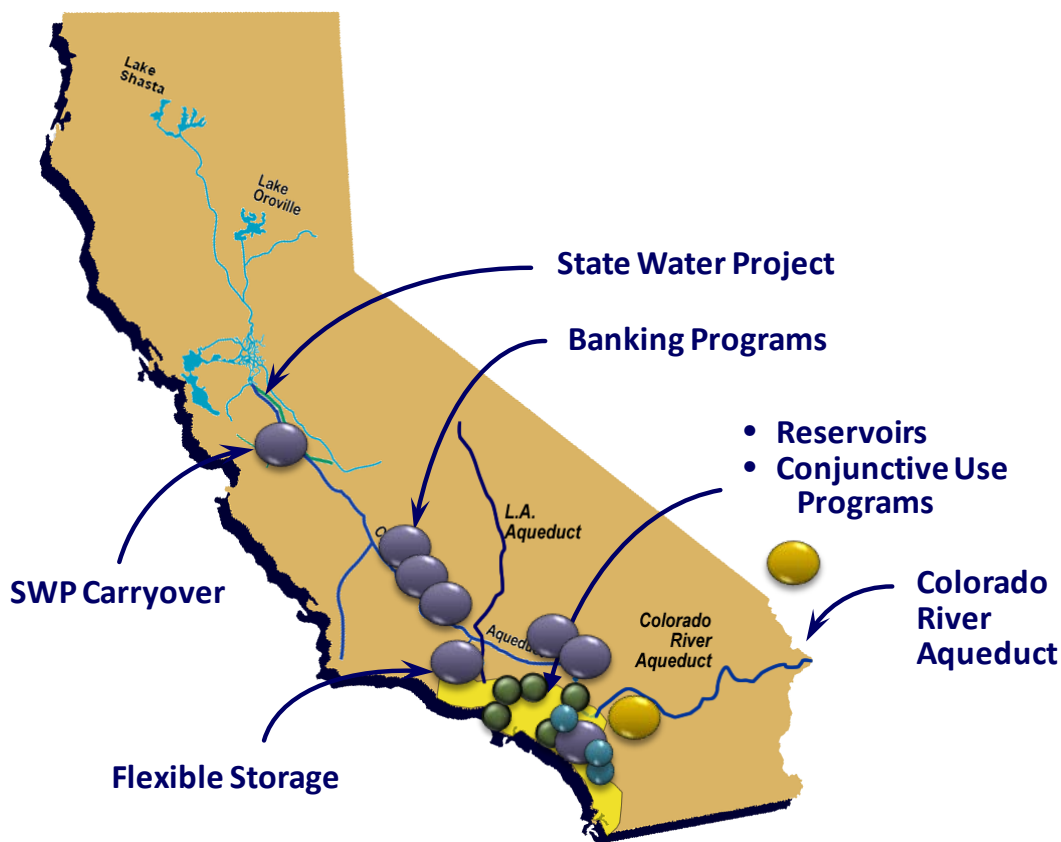
Metropolitan's postage stamp rate design is appropriate given Metropolitan's integrated regional system that benefits all member agencies. Metropolitan's system is not a point-to-point service, but an interconnected regional system. In order to balance the local concerns within the region, Metropolitan has long maintained postage stamp rates. In fact, Metropolitan has used uniform postage stamp rates since it started delivering water in 1942. Under the postage stamp approach, an agency develops an average rate for a service, as opposed to a point-to-point rate based on each customer's specific use, and all customers receiving that service pay the average rate. This allows the agency to establish non-discriminatory rates that match the cost of providing the service to a customer class. A postage stamp approach is especially appropriate for an interconnected regional system because it allows the agency to develop reliable alternatives to point-to-point service. Metropolitan's uniform, postage stamp rate structure has allowed it to develop an interconnected regional conveyance and distribution system with the ability to deliver supplies from the SWP, the Colorado River, and its storage portfolio throughout its vast and diverse service area. Metropolitan's conveyance and distribution system can deliver water from both the SWP and Colorado River to almost every member agency. This flexibility benefits all member agencies. Uniform postage stamp rates provide a region-wide funding mechanism to recover the costs of Metropolitan's integrated system, help ensure economies of scale, and result in lower costs for all of Metropolitan's member agencies. Given Metropolitan's integrated system, it is not logical to do otherwise.

Metropolitan's system draws on diverse supply sources, transports water across a large part of the State, distributes water in six counties, and serves an area that is home to 19 million residents. The 2007 Integrated Area Study (IAS), emphasized regional system flexibility as a key component of overall reliability.¹⁴ Metropolitan must maintain operational flexibility—the ability to respond to short-term changes in regional water supply, water quality, treatment requirements, and member agency demands. And it must maintain delivery flexibility—the ability to maintain partial to full water supply deliveries during planned and unplanned facility outages. Metropolitan is also required by state statute to have the objective, to the extent determined to be reasonable and practical, to deliver a blend of water constituting at least 50 percent of SWP water. (MWD Act, Sec. 136.) Each of Metropolitan's integrated conveyance, distribution and storage assets contributes to regional system reliability. It is fair and reasonable, therefore, to expect member agencies to share the cost of developing and maintaining these assets because all member agencies benefit from regional system reliability. And all member agencies are voluntary members of the cooperative formed to benefit from pooling of resources to enhance regional benefits to their service areas.

¹⁴ 2007 Integrated Area Study, Report No. 1317, pg. 2-10.

Operational flexibility has been achieved by creating an interconnected regional delivery network integrating the SWP and the CRA conveyance systems with the Distribution System. This integrated network allows Metropolitan to incorporate supply from the SWP and the Colorado River with a diverse portfolio of geographically dispersed storage programs, including the Central Valley groundwater storage programs, carryover storage in San Luis Reservoir, flexible storage capacity in Castaic Lake and Lake Perris, Lake Mead storage, the DWCV Advanced Delivery account, in-basin surface storage in DVL and Lake Mathews, and in-basin groundwater Conjunctive Use Programs. This integrated, regional network allows Metropolitan to move supplies throughout the system in response to service demands, supply availability and operational needs, and is shown in Figure 18.

Figure 18: Metropolitan Facilities, Supplies and Storage Portfolio



System flexibility and integration is easily demonstrated. In a year with a high SWP allocation, SWP supplies can be moved from the West Branch down into the Central Pool as far as western Orange County; on the East Branch, moving SWP supplies results in high SWP blends for eastern areas all the way into south San Diego County, with relatively little Colorado River water delivered to the Skinner area. In a year with a low SWP allocation, Colorado River water will dominate; this impact is mitigated by blending Colorado River water with SWP supplies stored in DVL. Under normal operations these CRA supplies can be pushed as far west as the Santa Monica Feeder.

The system flexibility can be seen through the operations of the system during calendar year 2020. As water conditions shifted, so did Metropolitan's operations to ensure continued water supply reliability. At the beginning of 2020, operations were transitioning from the extraordinary surplus year of 2019. Metropolitan strategically began repositioning storage to reduce the risk of spill and provide operational flexibility.

Figure 19: Operating Flexibility and Regional System Reliability: Moderate Deliveries of SWP Supplies (40% SWP Blend Target)



As calendar year 2020 progressed and hydrologic conditions turned dry, Metropolitan shifted system operations to minimize SWP deliveries with SWP blends at zero percent, and with Colorado River water supplies maximized throughout the distribution system through the end of the year.

Figure 20: Operating Flexibility and Regional System Reliability: Minimized Deliveries of SWP Supplies (0% SWP Blend Target Supplies)



The integrated conveyance and distribution network that Metropolitan has developed to serve the member agencies enables water supplies from multiple sources to be delivered throughout its service area to provide regional reliability. In 2014, the SWP allocation was a historically low 5 percent. Metropolitan re-operated its system to move CRA water all the way west to deliver to the areas south, west and east of the Jensen treatment plant, which are normally served with SWP water and Metropolitan is maximizing all flexibility during the current historic low Table A allocation.

Metropolitan's operational flexibility developed over time to where Metropolitan now has substantial operational flexibility to accommodate short-term changes in water supply, treatment, and demands. This is the result of having multiple water supplies and the ability to blend the supplies, robust treatment processes, and large storage capacities in multiple treated and untreated water reservoirs.

Delivery flexibility helps mitigate the impacts of regional facility outages. Metropolitan's delivery flexibility also developed over time. The 2007 IAS reported that 260 of 344 service connections, or 76 percent, had full back-up capability for single failures within Metropolitan's Distribution System. In the event of a treatment plant outage, 299 of 344 service connections, or 87 percent, had full back-up capability¹⁵.

The same flexibility principles inform development and operation of Metropolitan's storage functionality. Metropolitan's ability to shift among resources in its storage portfolio in order to enhance the regional reliability of Metropolitan's imported water service in the face of so many changing conditions is the result of its integrated, flexible operating system, consisting of its right to use the SWP conveyance pursuant to its participation therein, the CRA, and the Distribution System. Metropolitan is able to accomplish system reliability and operational flexibility while accommodating outages, managing to water quality goals, minimizing the risk of invasive species infestation and maintaining emergency storage reserves.

¹⁵ 2007 Integrated Area Study, Report No. 1317, pp. 2-10 and 2-11.

Metropolitan's integrated, flexible system directly benefits all agencies as to all services, including wheeling and exchange transactions. Wheeling and exchange transactions benefit from a robust and flexible system, including Metropolitan's right to use SWP facilities. Given the operating flexibility of Metropolitan's system, Metropolitan allocates costs in a way that allows it to develop and maintain such a flexible system. And every member agency is served by this system flexibility.

The vast majority of utilities operate under an implicit regulatory compact, which provides the exclusive service area in exchange for the obligation to serve. Metropolitan's system is a wholesale system and provides only "supplemental" wholesale supplies, meaning that Metropolitan is not the exclusive water source for its member agencies. Metropolitan is a wholesaler that has no exclusive right to serve in its service area. To the degree a member agency has local resources, develops local resources, implements conservation, or otherwise reduces demands, that member agency may not require Metropolitan's deliveries, although all member agencies rely on the availability of Metropolitan's services for various reasons. Moreover, member agencies are free to acquire supplies from other sources. Indeed, Metropolitan's Board has adopted the concept of "direct access", or customer choice for supplier, to accommodate a water transfer market.¹⁶

Metropolitan maintains an unbundled rate structure based on types of functions creating the costs, which provides transparency. Member agencies pay rates based on the services they use (full-service treated or full-service untreated), and agencies that use the same service pay the same rate. Agencies that take treated full-service water cover treatment costs, whereas agencies that take untreated full-service water pay no treatment costs. In fact, Metropolitan provides incentives for conservation and local resource development so member agencies do not have to take full-service water from Metropolitan.

This is an important distinction in the context of not having an exclusive service area. A water agency with an exclusive service area has more certainty in its revenues because it has no competition for its services. Metropolitan does have competition for its services. Therefore, Metropolitan has developed its unbundled rate structure in a fair and reasonable manner to ensure that system users pay for the services they use and the costs of Metropolitan's functions are transparent. Fair and reasonable rates that reflect applicable costs avoid negatively impacting the rates and charges paid by member agencies who do not acquire their own supplies to move through Metropolitan's interconnected delivery network. This is particularly true with regard to member agencies exercising choice of supplier. Compared to other water systems, Metropolitan's system is used to move significant amounts of non-Metropolitan supplies.

One Customer Class

Metropolitan, a wholesaler, provides full-service water service (treated or untreated) for which the Board sets rates and charges, as well as wheeling, exchange, and other arrangements pursuant to negotiated agreements. Metropolitan has one class of customers: its member agencies. The level of rate unbundling in Metropolitan's rate structure provides transparency to show that charges recover only for functions involved in the applicable service, and that no cross-subsidy of costs exists.

Metropolitan's volumetric rates recover operating costs as well as the portion of the conveyance and distribution system capital costs that are associated with meeting average water demands using system-wide rates that are the same for all customers, or "postage stamp" rates, as explained previously. Under a postage stamp rate design approach, every customer pays the same average rate for a service regardless of whether the cost caused by, or the benefit derived by, a customer for a given transaction varies from the average.

The Readiness-to-Serve (RTS) Charge recovers system capital costs for emergency storage capacity and ensures there is adequate capacity in the conveyance and distribution systems to reliably deliver supplies

¹⁶The Metropolitan Board adopted Strategic Plan Policy Principles on December 14, 1999, consisting of seven principles, presented on page 5.

during emergencies, major facility outages, hydrologic variability, and variances in local resources. The Capacity Charge recovers distribution system capital costs necessary to meet peak member agency needs on Metropolitan's distribution system during the summer.

Member agencies have unique usage characteristics that are captured in the Metropolitan rates and charges relating to treatment, peak use on the Metropolitan system, the need for emergency and available capacity, or average use. For this reason, it is not necessary to group member agencies into traditional customer classes as would be done in a typical retail rate setting process. The end result of the Metropolitan process is the determination of the cost of each service available to a member agency and to the extent a member agency uses that service, an amount, a rate or charge, is paid by the member agency that is reflective of the cost of that service.

Distributed Costs to Services

Schedules 16 and 17 provide a cross-reference between the allocated function costs and their distribution to the rate design elements for FY 2022/23 and FY 2023/24, respectively. The specifics of each rate design element are discussed in detail in the following section.

Schedule 16: Allocated Operational function Revenue Requirements (Distributed to rate design element): FY 2022/23

Fiscal year ending 2023	Rate Design Elements							Total Costs
	Supply Rates	System Access Rate	Supply - DM	System Power Rate	Capacity Charge	Readiness-to-Serve Charge	Treatment Surcharge	
Supply								
Fixed Demand	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Fixed Commodity	279,816,726	-	-	-	-	-	-	279,816,726
Fixed Standby	-	-	-	-	-	-	-	-
Variable Commodity	-	-	-	-	-	-	-	-
Hydroelectric	-	-	-	-	-	-	-	-
Subtotal: Supply	279,816,726	-	-	-	-	-	-	279,816,726
Conveyance and Aqueduct	-	-	-	-	-	-	-	-
Fixed Demand	-	-	-	-	-	12,261,521	-	12,261,521
Fixed Commodity	-	375,233,076	-	-	-	-	-	375,233,076
Fixed Standby	-	-	-	-	-	63,982,305	-	63,982,305
Variable Commodity	-	-	-	257,091,847	-	-	-	257,091,847
Hydroelectric	-	-	-	-	-	-	-	-
Subtotal: Conveyance and Aqueduct	-	375,233,076	-	257,091,847	-	76,243,826	-	708,568,750
Storage	-	-	-	-	-	-	-	-
Fixed Demand	-	-	-	-	-	-	-	-
Fixed Commodity	61,136,614	24,497,491	-	-	7,683,936	-	-	85,634,104
Fixed Standby	-	-	-	-	-	53,955,455	-	53,955,455
Variable Commodity	(679,717)	-	-	-	-	-	-	(679,717)
Hydroelectric	-	-	-	-	-	-	-	-
Subtotal: Storage	60,456,897	24,497,491	-	-	7,683,936	53,955,455	-	146,593,778
Treatment	-	-	-	-	-	-	-	-
Fixed Demand	-	-	-	-	-	-	32,933,688	32,933,688
Fixed Commodity	-	-	-	-	-	-	167,008,053	167,008,053
Fixed Standby	-	-	-	-	-	-	40,800,117	40,800,117
Variable Commodity	-	-	-	-	-	-	27,191,472	27,191,472
Hydroelectric	-	-	-	-	-	-	-	-
Subtotal: Treatment	-	-	-	-	-	-	267,933,330	267,933,330
Distribution	-	-	-	-	-	-	-	-
Fixed Demand	-	-	-	-	25,575,521	-	-	25,575,521
Fixed Commodity	-	171,930,779	-	-	-	-	-	171,930,779
Fixed Standby	-	-	-	-	-	20,356,702	-	20,356,702
Variable Commodity	-	-	-	-	-	-	-	-
Hydroelectric	-	3,173,881	-	-	-	-	-	3,173,881
Subtotal: Distribution	-	175,104,661	-	-	25,575,521	20,356,702	-	221,036,883
Demand Management	-	-	-	-	-	-	-	-
Fixed Demand	-	-	-	-	-	-	-	-
Fixed Commodity	-	-	72,360,723	-	-	-	-	72,360,723
Fixed Standby	-	-	-	-	-	-	-	-
Variable Commodity	-	-	-	-	-	-	-	-
Hydroelectric	-	-	-	-	-	-	-	-
Subtotal: Demand Management	-	-	72,360,723	-	-	-	-	72,360,723
Total	-	-	-	-	-	-	-	-
Fixed Demand	-	-	-	-	33,259,457	12,261,521	32,933,688	78,454,666
Fixed Commodity	340,953,339	571,661,346	72,360,723	-	-	-	167,008,053	1,151,983,462
Fixed Standby	-	-	-	-	-	138,294,462	40,800,117	179,094,579
Variable Commodity	(679,717)	-	-	257,091,847	-	-	27,191,472	283,603,602
Hydroelectric	-	3,173,881	-	-	-	-	-	3,173,881
Total	\$ 340,273,622	\$ 574,835,228	\$ 72,360,723	\$ 257,091,847	\$ 33,259,457	\$ 150,555,983	\$ 267,933,330	\$ 1,696,310,190

Totals may not foot due to rounding

Schedule 17: Allocated Operational function Revenue Requirements (Distributed to rate design element): FY 2023/24

Fiscal year ending 2024	Rate Design Elements							Total Costs
	Supply Rates	System Access Rate	Supply - DM	System Power Rate	Capacity Charge	Readiness-to-Serve Charge	Treatment Surcharge	
Supply								
Fixed Demand	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Fixed Commodity	291,784,825	-	-	-	-	-	-	291,784,825
Fixed Standby	-	-	-	-	-	-	-	-
Variable Commodity	-	-	-	-	-	-	-	-
Hydroelectric	-	-	-	-	-	-	-	-
Subtotal: Supply	291,784,825	-	-	-	-	-	-	291,784,825
Conveyance and Aqueduct	-	-	-	-	-	-	-	-
Fixed Demand	-	-	-	-	-	13,652,064	-	13,652,064
Fixed Commodity	-	396,823,800	-	-	-	-	-	396,823,800
Fixed Standby	-	-	-	-	-	77,157,192	-	77,157,192
Variable Commodity	-	-	-	280,698,104	-	-	-	280,698,104
Hydroelectric	-	-	-	-	-	-	-	-
Subtotal: Conveyance and Aqueduct	-	396,823,800	-	280,698,104	-	90,809,257	-	768,331,160
Storage	-	-	-	-	-	-	-	-
Fixed Demand	-	-	-	-	8,276,500	-	-	8,276,500
Fixed Commodity	56,778,128	24,052,809	-	-	-	-	-	80,830,937
Fixed Standby	-	-	-	-	-	55,177,540	-	55,177,540
Variable Commodity	(551,296)	-	-	-	-	-	-	(551,296)
Hydroelectric	-	-	-	-	-	-	-	-
Subtotal: Storage	56,226,833	24,052,809	-	-	8,276,500	55,177,540	-	143,733,682
Treatment	-	-	-	-	-	-	-	-
Fixed Demand	-	-	-	-	-	-	34,060,431	34,060,431
Fixed Commodity	-	-	-	-	-	-	171,415,113	171,415,113
Fixed Standby	-	-	-	-	-	-	40,880,642	40,880,642
Variable Commodity	-	-	-	-	-	-	29,567,315	29,567,315
Hydroelectric	-	-	-	-	-	-	-	-
Subtotal: Treatment	-	-	-	-	-	-	275,923,502	275,923,502
Distribution	-	-	-	-	-	-	-	-
Fixed Demand	-	-	-	-	27,976,591	-	-	27,976,591
Fixed Commodity	-	175,507,774	-	-	-	-	-	175,507,774
Fixed Standby	-	-	-	-	-	21,462,227	-	21,462,227
Variable Commodity	-	-	-	-	-	-	-	-
Hydroelectric	-	5,061,335	-	-	-	-	-	5,061,335
Subtotal: Distribution	-	180,569,109	-	-	27,976,591	21,462,227	-	230,007,928
Demand Management	-	-	-	-	-	-	-	-
Fixed Demand	-	-	-	-	-	-	-	-
Fixed Commodity	-	-	72,043,612	-	-	-	-	72,043,612
Fixed Standby	-	-	-	-	-	-	-	-
Variable Commodity	-	-	-	-	-	-	-	-
Hydroelectric	-	-	-	-	-	-	-	-
Subtotal: Demand Management	-	-	72,043,612	-	-	-	-	72,043,612
Total	-	-	-	-	-	-	-	-
Fixed Demand	-	-	-	-	36,253,091	13,652,064	34,060,431	83,965,586
Fixed Commodity	348,562,954	596,384,383	72,043,612	-	-	-	171,415,113	1,188,406,062
Fixed Standby	-	-	-	-	-	153,796,960	-	194,677,602
Variable Commodity	(551,296)	-	-	280,698,104	-	-	29,567,315	309,714,123
Hydroelectric	-	5,061,335	-	-	-	-	-	5,061,335
Total	\$ 348,011,658	\$ 601,445,718	\$ 72,043,612	\$ 280,698,104	\$ 36,253,091	\$ 167,449,024	\$ 275,923,502	\$ 1,781,824,709

Totals may not foot due to rounding

Proof of Revenue

FY 2022/23

Schedule 18 shows the Proof of Revenue for FY 2022/23. Based on expected transactions of 1.59 MAF, the expected revenues would be about \$59.3 million higher than the total revenue requirement, if the rates and charges were in effect the entire test year period. The cost of service allocation assuming a full twelve months of revenue is used to allocate costs among the various rate elements but should not be interpreted as over- or under-collection during a given fiscal year. However, because the recommended rates do not take effect until January 1, 2023, the expected revenues for FY 2022/23 will be about \$18.5 million lower than the total revenue requirement in FY 2022/23. The total revenue requirement includes a \$18.8 million decrease in the required reserves for the Revenue Remainder Fund. Deposits to the Treatment Surcharge Stabilization Fund are \$0.1 million in FY 2022/23. Withdrawals from the Water Stewardship Fund are \$56.1 million in FY 2022/23. Accounting for these adjustments, the withdrawal from reserves is about \$18.7 million in FY 2022/23.

FY 2023/24

Schedule 19 shows the Proof of Revenue for FY 2023/24. Based on expected sales of 1.54 MAF the expected revenues would be about \$46.0 million higher than the total revenue requirement, if the rates and charges were in effect the entire test year period. The cost of service allocation assuming a full twelve months of revenue is used to allocate costs among the various rate elements but should not be interpreted as over- or under-collection during a given fiscal year. However, because the recommended rates do not take effect until January 1, 2024, the expected revenues for FY 2023/24 will be about \$31.6 million lower than the total revenue requirement in FY 2023/24. The total revenue requirement includes a \$11.9 million increase in the required reserves for the Revenue Remainder Fund. Deposits to the Treatment Surcharge Stabilization Fund are \$5.3 million in FY 2023/24. Withdrawals from the Water Stewardship Fund are \$0 million in FY 2023/24. Accounting for these adjustments, the deposit to reserves is about \$25.1 million in FY 2023/24. Schedule 20 summarizes the rates and charges that would be effective on January 1, 2023 and January 1, 2024 using the assumptions and methodology of this report. Member agency impacts will vary depending upon an agency's RTS allocation, capacity charge and relative proportions of treated and untreated Tier 1 and Tier 2 purchases.

Schedule 18: FY 2022/23 Proof of Revenue (\$ millions)***Proof of Revenue FY2023 if Rates Effective for Full Test Year***

Rate Elements	Revenue Requirements	% Over (Under) Collected		Revenues if Rates Effective July 1st	Billing Determinant	Unit Rate
	\$M	\$M	%	\$M	MAF	\$/AF
Supply	412.6	13.4	3%	426.0	1.31	325
System Access Rate	574.8	21.5	4%	596.3	1.59	375
System Power Rate	257.1	8.5	3%	265.6	1.59	167
Treatment Surcharge	267.9	9.2	3%	277.2	0.77	360
Readiness-to-serve Charge	150.6	5.4	4%	156.0		
Capacity Charge	33.3	1.3	4%	34.5		
Total	1,696.3	59.3	3%	1,755.6		

Totals may not foot due to rounding

Proof of Revenue FY2023 if Rates Effective January 1st

Fiscal Year Ending 2023	Revenue Requirements	% Over (Under) Collected		Revenues if Rates Effective Jan 1st
Supply	412.6	(68.0)	-16%	344.6
System Access Rate	574.8	38.0	7%	612.8
System Power Rate	257.1	8.5	3%	265.6
Treatment Surcharge	267.9	0.1	0%	268.0
Readiness-to-serve Charge	150.6	(2.6)	-2%	148.0
Capacity Charge	33.3	5.6	17%	38.8
Total	1,696.3	(18.5)	-1%	1,677.8

Totals may not foot due to rounding

Schedule 19: FY 2023/24 Proof of Revenue (\$ millions)***Proof of Revenue FY2023 if Rates Effective for Full Test Year***

Rate Elements	Revenue Requirements	% Over (Under) Collected		Revenues if Rates Effective July 1st	Billing Determinant	Unit Rate
	\$M	\$M	%	\$M	MAF	\$/AF
Supply	420.1	10.3	2%	430.4	1.26	341
System Access Rate	601.4	16.0	3%	617.4	1.54	401
System Power Rate	280.7	7.2	3%	287.9	1.54	187
Treatment Surcharge	275.9	7.1	3%	283.0	0.78	363
Readiness-to-serve Charge	167.4	4.6	3%	172.0		
Capacity Charge	36.3	0.8	2%	37.1		
Total	1,781.8	46.0	3%	1,827.8		

Totals may not foot due to rounding

Proof of Revenue FY2023 if Rates Effective January 1st

Fiscal Year Ending 2024	Revenue Requirements	% Over (Under) Collected		Revenues if Rates Effective Jan 1st
Supply	420.1	(4.7)	-1%	415.4
System Access Rate	601.4	(13.2)	-2%	588.3
System Power Rate	280.7	(15.2)	-5%	265.5
Treatment Surcharge	275.9	5.3	2%	281.3
Readiness-to-serve Charge	167.4	(3.4)	-2%	164.0
Capacity Charge	36.3	(0.4)	-1%	35.8
Total	1,781.8	(31.6)	-2%	1,750.2

Totals may not foot due to rounding

Schedule 20: Rates and Charges Summary

Effective January 1st	2022	2023	2024
Tier 1 Supply Rate (\$/AF)	\$243	\$325	\$341
Tier 2 Supply Rate (\$/AF)	\$285	\$531	\$532
System Access Rate (\$/AF)	\$389	\$375	\$401
System Power Rate (\$/AF)	\$167	\$167	\$187
Full Service Untreated Volumetric Cost (\$/AF)			
Tier 1	\$799	\$867	\$929
Tier 2	\$841	\$1,073	\$1,120
Treatment Surcharge (\$/AF)	\$344	\$360	\$363
Full Service Treated Volumetric Cost (\$/AF)			
Tier 1	\$1,143	\$1,227	\$1,292
Tier 2	\$1,185	\$1,433	\$1,483
Readiness-to-Serve Charge (\$M)	\$140	\$156	\$172
Capacity Charge (\$/cfs)	\$12,200	\$10,700	\$11,500

System Access Rate (SAR)

The SAR is a volumetric¹⁷ system-wide rate charged on each acre-foot of water sold to member public agencies, which water is conveyed through Metropolitan's interconnected regional delivery network, including Metropolitan's right to use SWP facilities for conveyance of SWP and non-SWP water. The SAR would decrease to \$375 per acre-foot in 2023 primarily due to reduced Delta Conveyance, SWC Capital costs and RRWP planning costs, and increase to \$401 per acre-foot in 2024, primarily due to increasing Delta Conveyance and SWC Capital costs. The SAR recovers the cost of providing conveyance and distribution capacity to meet average annual demands, and a portion of Regulatory/Emergency Storage.

The SAR recovers, among other costs, the capital, operating, maintenance, and overhead costs associated with the interconnected regional delivery network necessary to deliver water to meet member agencies' average annual demands, which include the costs of conveyance facilities (facilities outside of Metropolitan's service area) and distribution facilities (facilities within Metropolitan's Distribution System), and portions of Regulatory/Emergency Storage facilities.

Metropolitan's delivery network costs are treated the same whether they were incurred for the SWP or the CRA. The fact that, unlike the CRA, Metropolitan does not hold legal title to the SWP facilities and does not operate the SWP facilities is immaterial for purposes of cost functionalization for the COS and rate determination process.

Metropolitan, like the other State Water Contractors, is obligated to pay all operating expenses and capital costs incurred by the SWP to provide the contractual supply and transportation services. The expenses include all unexpected expenses resulting from operational issues and changes in regulations. DWR charges Metropolitan based on estimated expenses and has the right to charge Metropolitan for any expenses beyond the estimates. The State Water Contractors carry all financial risk and must pay any costs without any regard for Metropolitan's own cash flows. By allocating costs, DWR does not bear any of these risks; the risks fall to the State Water Contractors. Metropolitan was even responsible for paying for the SWP costs during the

¹⁷ A volumetric rate is a charge applied to the actual amount of water delivered.

extended original construction period, years before Metropolitan received any SWP water. This is also not something typical of a supply contract and hence supportive of Metropolitan's cost functionalization process.

Metropolitan is also responsible for managing its SWP supply and transportation resources. Metropolitan determines what water to store and deliver in any year from its resource portfolio. On October 1 prior to the beginning of the Calendar Year, Metropolitan must provide its initial water order, plus any variations requested by DWR. The planning for this water order begins as early as the preceding July. A considerable amount of strategy goes in to determining which resource Metropolitan will dispatch when and deliver where to maximize resources. Examples of issues that Metropolitan must consider when managing SWP resources include:

- the level of the Table A allocation, and the amount of Table A supply available to Metropolitan, Desert Water Agency (DWA) and Coachella Valley Water District CVWD;
- shaping deliveries to the order to accommodate Article 21 (surplus water), turnback pool water (Table A allocation not needed by a Contractor) or Article 56 (b) water (water rescheduled due to system outages) if available;
- the amount of Carryover water in San Luis Reservoir, and the timing and location of need;
- the maximum input and withdrawal capacities of the Central Valley Storage programs, depending on whether Metropolitan is storing or withdrawing from these programs, and considering the level of water stored;
- the availability or need to refill Flexible Storage in Castaic and Perris Reservoirs;
- the availability of water transfer supplies; and,
- the supply conditions on the Colorado River.

Metropolitan, not DWR, is responsible for determining how, when or where to deliver any of the supply sources Metropolitan has that can be conveyed on the SWP. As a result of the execution of Monterey Amendments, the SWP can convey SWP water and non-SWP water and can be used by non-State Water Contractors; it is, therefore, appropriate to consider the SWP as part of Metropolitan's interconnected regional delivery network as has been confirmed by the Court of Appeal in *SDCWA v. MWD* (2017) 12 Cal.App.5th 1124. The volume of water delivered under arrangements, other than the contracts for delivery of water with the DWR, is also not determinative of the cost treatment; the ability to move *any* volume is what is relevant to the functionalization of Metropolitan's costs.

Like the SWP costs, Metropolitan fully pays the operating and capital costs of the CRA maintenance, operations and supply portfolio and the risks fall on Metropolitan.

Metropolitan uses the CRA for the conveyance of its multiple CRA resources. It is responsible for determining what water to store and deliver in any year from its resource portfolio. Prior to the beginning of the calendar year, Metropolitan must provide its Plan for the Creation of Extraordinary Conservation ICS to the Bureau of Reclamation in June and its best estimate of monthly diversion requirements in September. The amount of Extraordinary Conservation ICS which Metropolitan plans to create is deducted from the total supply available for diversion. In October or November, Reclamation staff conducts a consultation with Metropolitan prior to Reclamation's Regional Director making an annual determination of Metropolitan's estimated water requirements for the ensuing calendar year to the end that deliveries of Colorado River water to Metropolitan will not exceed those reasonably required for beneficial use. Reclamation provides Metropolitan with a notice of the Regional Director's determination regarding Metropolitan's proposed diversion and beneficial use of Colorado River water for the calendar year. A considerable amount of strategy is employed to determine which resources Metropolitan will dispatch and deliver to maximize use of the resources. Examples of issues that Metropolitan must consider when managing CRA resources include:

- the magnitude of the SWP Table A allocation, and the amount of Table A supply available to Metropolitan, DWA and CVWD;
- the amount of SWP surplus, turnback pool, and carryover water;
- the amount of ICS water that can be accessed;
- the amount of water in the DWA/CVWD advance delivery account; and,
- the Colorado River supply conditions and the projection of the likelihood of Lake Mead shortage, normal, and surplus conditions in future years.

Metropolitan is responsible for determining how, when and where to deliver any of the supply sources Metropolitan has that can be transported by the CRA. Metropolitan also uses the CRA to convey non-Metropolitan water to non-member agencies: the temporary emergency wheeling of Mexican Treaty Waters of the Colorado River for Tijuana. Given that the CRA can deliver water as a result of the execution of agreements apart from Metropolitan's 1930 contract for delivery of water, 1931 supplementary contract for delivery of water, 1946 contract merging the rights of the City of San Diego and Metropolitan, and 1987 contract for delivery of surplus flows from the Colorado River with the U.S. Department of the Interior, and that it is capable of delivering water to other water agencies, it is appropriate to consider the CRA as part of Metropolitan's interconnected regional delivery network. The volume of water delivered under arrangements, other than the contracts for delivery of water with the U.S. Department of the Interior, is also not determinative of the cost treatment; the ability to move *any* volume is what is relevant to the functionalization of Metropolitan's costs.

Metropolitan's Conveyance and Aqueduct and Distribution System form a single integrated system for all imported water, which is available to Metropolitan for the conveyance of SWP and CRA water, as well as water supply obtained from supply programs and other water transfers. Metropolitan's rights and ownership of the facilities create regional system flexibility to maintain operating flexibility and delivery flexibility and meet Metropolitan's mission as a public steward of water resources. Metropolitan's member agencies and all residents of Metropolitan's service area benefit from the integration of the SWP and CRA as Metropolitan's Conveyance and Aqueduct facilities, as it allows Metropolitan to meet varying regional demands, accommodate outages, manage water quality goals, maintain emergency storage reserves, and minimize the risk of invasive species infestation.

The treatment of Metropolitan's Conveyance and Aqueduct facilities as one integrated system for purposes of rate-setting is not uncommon or novel. The Federal Energy Regulatory Commission (FERC), for example, recognizes the practice of rolling the costs of transmission facilities into a single rate when the facilities are part of an integrated system. The practice is recognized regardless of legal ownership of (or allocations in) a particular facility.

Benefits

The SAR benefits include: (1) support of a regional approach; (2) accommodates a water transfer market that does not unfairly advantage one user over another; (3) provides a clear linkage between costs and benefits; and (4) establishes a simple approach to recovering the costs of conveyance and distribution functions.

The SAR supports a regional approach through the uniform, postage stamp rate element. This region-wide funding mechanism helps ensure economies of scale and low costs for all of Metropolitan's member agencies.

The SAR is a cost-based rate. By providing a non-discriminatory rate element to all parties that wish to use available system capacity to move water anywhere in the Metropolitan service area, the uniform SAR creates the opportunity for a fair and efficient water transfer market to develop. In keeping with the spirit of a regional provider approach, the SAR is uniform throughout the service area. Member agencies that receive

full-service water from Metropolitan will pay the exact same cost for access to the system as a customer that obtains supply from another supply source.

Charging all users, the same price for access to essential facilities is a basic principle of regulatory economics. The SAR provides a clear linkage between costs and benefits. The cost of service process clearly identifies the costs that are recovered by the SAR. The operational function revenue requirements for conveyance and aqueduct, distribution, and storage are identified and then allocated into commodity (average use), demand (peak use), and standby (emergency and available capacity) related costs.

Only commodity-related costs are allocated to the SAR. The SAR is an easily understood approach. The SAR is a uniform, volumetric per acre-foot rate and is straightforward for both Metropolitan and the member agencies to implement and administer.

System Power Rate (SPR)

The SPR is a volumetric, system-wide rate charged on each acre-foot of Metropolitan supplies moving through the Metropolitan system. SPR would remain at \$167 per acre-foot for 2023 and increase to \$187 in 2024, primarily due to higher State Water Contract power costs and higher CRA power costs. The SPR is a volumetric rate element that recovers the costs of pumping water to Southern California. The SPR recovers the cost of power for both the SWP and CRA.

Benefits

The primary benefit of the SPR is that it clearly identifies Metropolitan's average cost of power.

Treatment Surcharge

The Treatment Surcharge is a system-wide volumetric rate charged on water treated by Metropolitan. The Treatment Surcharge recovers the cost of treating water, including commodity, demand and standby-related costs as determined in the COS for all five treatment plants. The Treatment Surcharge would increase to \$360 per acre-foot in 2023, and increase to \$363 per acre-foot in FY 2024 primarily due to lower treated water sales.

Benefits

There are several primary benefits provided by the Treatment Surcharge. First, only treated water users pay for the costs of treatment. Second, by averaging the costs of providing treated water service over the entire system the regional economies of scale are preserved.

Capacity Charge

The Capacity Charge would decrease to \$10,700 per cubic-foot-second of capacity during calendar year 2023, as less capital costs are allocated to meet peak day system use, reflecting recent member agency non-coincident peaks and reduced capital financing costs. The Capacity Charge would increase to \$11,500 per cubic-foot-second of capacity during calendar year 2024, reflecting the increases to capital financing costs. The Capacity Charge is charged on the peak (maximum) summer day demand, measured in cfs, placed on the distribution system between May 1 and September 30 for a three-calendar year period, calculated for each member agency. The calculation is non-coincident, meaning the peak day will differ for each member agency. The sum of the member agency non-coincident peak day demands is a proxy for peak week demands, which are the design criteria for the Metropolitan Distribution system. The three-year period ending December 31,

2021 is used to charge the Capacity Charge effective January 1, 2023 through December 31, 2023. Demands measured for the purposes of billing the Capacity Charge include all firm demands including wheeling service and exchange.

The Capacity Charge is intended to pay for the cost of providing peak day capacity on Metropolitan's Distribution System, while providing an incentive for local agencies to decrease their use of the Metropolitan system to meet peak day demands and to shift demands into lower use time periods particularly October through April. Over time, a member agency will benefit from local supply investments and operational strategies that reduce its peak day demand on the system in the form of a lower total Capacity Charge. The estimated Capacity Charge to be paid by each member agency in calendar year 2023 is included in Schedule 21.

Benefits

The Capacity Charge provides several benefits including: (1) increasing the overall efficiency of water use; (2) improving the fair allocation of costs among member agencies based upon the demand imposed by each agency; and (3) providing a source of fixed revenue.

The Capacity Charge will improve the overall efficiency of water use by encouraging local agencies to invest in cost effective local storage and resources to avoid using the Metropolitan system to meet peak (maximum) day demands. In addition, significant regional savings can be realized through the deferral of expensive capacity expansion.

Schedule 21: Capacity Charge (by member agency)

Calendar Year 2023 Capacity Charge					
	Peak Day Demand (cfs) (May 1 through September 30)				Rate (\$/cfs): \$10,700
	Calendar Year				
Member Agency	2019	2020	2021	3-Year Peak	Calendar Year 2023 Capacity Charge
Anaheim	37.1	84.1	77.2	84.1	\$899,870
Beverly Hills	23.5	23.2	24.8	24.8	\$265,360
Burbank	17.3	16.6	15.5	17.3	\$185,110
Calleguas	168.9	178.2	189.6	189.6	\$2,028,720
Central Basin	48.6	51.9	54.1	54.1	\$578,870
Compton	2.9	0.0	0.0	2.9	\$31,030
Eastern	196.8	211.5	215.3	215.3	\$2,303,710
Foothill	16.0	19.3	22.8	22.8	\$243,960
Fullerton	13.1	14.1	20.0	20.0	\$214,000
Glendale	32.2	37.9	32.5	37.9	\$405,530
Inland Empire	118.7	98.4	101.4	118.7	\$1,270,090
Las Virgenes	39.4	41.7	42.9	42.9	\$459,030
Long Beach	51.8	67.3	45.7	67.3	\$720,110
Los Angeles	283.2	339.0	584.1	584.1	\$6,249,870
MWDOC	262.8	272.0	332.4	332.4	\$3,556,680
Pasadena	39.9	46.4	48.2	48.2	\$515,740
San Diego CWA	672.1	723.4	672.5	723.4	\$7,740,380
San Fernando	0.0	0.0	0.0	0.0	\$0
San Marino	2.3	7.3	5.4	7.3	\$78,110
Santa Ana	19.4	21.7	18.3	21.7	\$232,190
Santa Monica	20.7	17.0	15.1	20.7	\$221,490
Three Valleys	128.1	134.3	138.3	138.3	\$1,479,810
Torrance	27.8	28.9	27.2	28.9	\$309,230
Upper San Gabriel	29.1	21.1	32.4	32.4	\$346,680
West Basin	211.8	196.0	218.2	218.2	\$2,334,740
Western MWD	186.1	175.1	189.4	189.4	\$2,026,580
Total	2,649.6	2,826.4	3,123.3	3,242.7	\$34,696,890
Totals may not foot due to rounding					

The Capacity Charge also improves the equitable distribution of costs among the member agencies. Agencies that have relatively high peak demand to average demand ratios will bear a greater share of the costs of providing peak (maximum) day distribution capacity. The Capacity Charge also increases the portion of Metropolitan's fixed costs that are recovered by fixed charges.

Readiness-to-Serve Charge

The RTS recovers the costs of providing emergency storage capacity and available capacity to meet outages and hydrologic variability. The RTS will increase to \$156 million in calendar year 2023. The RTS increases to \$172 million in calendar year 2024, reflecting increases in capital financing costs and Delta Conveyance planning costs.

The RTS is allocated to the member agencies based on each agency's share of a ten-year rolling average of all firm demands, including water transfers and exchanges that use Metropolitan system capacity.¹⁸ A ten-year rolling average leads to a relatively stable RTS allocation that reasonably represents an agency's potential long-term need for available capacity under different hydrologic conditions. Member agencies that so choose may have a portion of their total RTS obligation offset by Standby Charge collections collected by Metropolitan on behalf of the member agency. The estimated RTS for each member agency for calendar year 2023 is shown in Schedule 22.

Benefits

The RTS provides two major benefits. These include: (1) a better matching of costs and benefits; and (2) a SAR that recovers only those costs associated with providing average annual service.

The proposed RTS matches costs and benefits in two ways. First, the RTS will recover the amount of emergency storage and available capacity costs needed to maintain reliable deliveries during outages and service interruptions and during periods of hydrologic variability, as identified in the COS, that is not paid for by ad valorem property tax revenues. Second, the proposed RTS allocates the emergency storage and available capacity costs among the member agencies in a manner that better represents each agency's potential need for standby availability. The RTS uses a ten-year rolling average of demands. A long-term rolling average like the ten-year measure is a simple and reasonable representation of an agency's potential need for available capacity under a range of 91 conditions.

¹⁸ The SDCWA exchange water transactions are excluded from the calculation of the ten-year rolling average per the terms of the parties' exchange agreement.

Schedule 22: Readiness-to-Serve Charge (by member agency)

Calendar Year 2023 RTS Charge			
Member Agency	Rolling Ten-Year Average Firm Deliveries (Acre-Feet) FY2011/12 - FY2020/21	RTS Share	12 months @ \$156 million per year (1/23-12/23)
Anaheim	19,376.9	1.37%	\$ 2,130,325
Beverly Hills	10,308.7	0.73%	1,133,354
Burbank	13,354.6	0.94%	1,468,225
Calleguas MWD	96,573.4	6.81%	10,617,423
Central Basin MWD	34,311.0	2.42%	3,772,202
Compton	340.2	0.02%	37,402
Eastern MWD	97,570.2	6.88%	10,727,013
Foothill MWD	8,306.1	0.59%	913,185
Fullerton	7,280.1	0.51%	800,385
Glendale	16,256.7	1.15%	1,787,286
Inland Empire Utilities Agency	55,761.7	3.93%	6,130,524
Las Virgenes MWD	20,715.7	1.46%	2,277,515
Long Beach	29,251.8	2.06%	3,215,986
Los Angeles	273,537.0	19.28%	30,073,065
Municipal Water District of Orange County	195,277.4	13.76%	21,469,088
Pasadena	18,954.2	1.34%	2,083,853
San Diego County Water Authority	214,362.4	15.11%	23,567,321
San Fernando	29.7	0.00%	3,265
San Marino	974.0	0.07%	107,083
Santa Ana	9,606.6	0.68%	1,056,164
Santa Monica	4,607.4	0.32%	506,544
Three Valleys MWD	63,736.2	4.49%	7,007,253
Torrance	15,549.0	1.10%	1,709,480
Upper San Gabriel Valley MWD	30,096.0	2.12%	3,308,799
West Basin MWD	113,660.3	8.01%	12,495,982
Western MWD	69,139.3	4.87%	7,601,277
MWD Total	1,418,936.6	100.00%	\$ 156,000,000

Totals may not foot due to rounding

Purchase Order

Purchase Orders were developed to establish a financial commitment from the member agency to Metropolitan in exchange for the ability to purchase more water at the lower Tier 1 Supply Rate. In November 2014, the Metropolitan Board approved new Purchase Orders effective January 1, 2015 through December 31, 2024. Twenty-one of the twenty-six-member agencies have Purchase Orders, which commit the member agencies to purchase a minimum amount of supply from Metropolitan (the Purchase Order Commitment) over a ten-year period.

There is no annual minimum or maximum purchase commitment required by the Purchase Order. A member agency has the full ten-year term to fulfill the Purchase Order Commitment. In exchange for this commitment, the member agency can purchase an amount of firm water supply equal to 90 percent of its cumulative Base Period Demand over the full ten years at the lower Tier 1 Supply Rate. An agency that determined that a Purchase Order is not in its best interest may purchase up to 60 percent of its Revised Base Firm Demand annually at the lower Tier 1 Supply Rate. The terms and conditions of the Purchase Order are uniform for all member agencies.

The Base Period Demand was established for each member agency. Member agencies chose a base amount of (1) the member agency's Revised Base Firm Demand which is the highest fiscal year purchases during the 13-year period of fiscal year 1990 through fiscal year 2002, or (2) the highest year purchases in the most recent 12-year period of fiscal year 2003 through fiscal year 2014.

At the end of the Purchase Order Term, if the member agency has not purchased enough firm supply to meet its Purchase Order Commitment, it will be billed for the remaining balance of the Purchase Order Commitment at the average of the Tier 1 Supply Rate in effect during the Term. This payment may be prorated with interest evenly over the next 12 invoices.

If a member agency fulfills its Purchase Order Commitment prior to the end of the Purchase Order Term, (e.g. purchased ten times 60 percent of the Initial Base Period Demand) then the member agency has met its obligation under the Purchase Order. The member agency may continue to purchase up to 90 percent of its cumulative Base Period Demand over the Term at the Tier 1 Supply Rate for the duration of the Purchase Order Term.

Although the maximum amount of water that can be purchased at the Tier 1 Supply Rate may increase over time if the agency's Base Period Demand increases, the Purchase Order Commitment is fixed for the entire Purchase Order Term and does not increase.

Tier 1 Supply Rate

The Tier 1 Supply Rate is a volumetric rate charged on Metropolitan water transactions that are within a member agency's Tier 1 maximum. The Tier 1 Supply Rate would increase to \$325 per acre-foot in 2023 due to increasing Supply Program costs. The Tier 1 Supply Rate would increase to \$341 per acre-foot in 2024. The Tier 1 Supply Rate supports a regional approach through the uniform, postage stamp rate element. The Tier 1 Supply Rate is calculated as the amount of the total supply revenue requirement that is not recovered by the Tier 2 Supply Rate divided by the estimated amount of Tier 1 water transactions.

Tier 2 Supply Rate

The Tier 2 Supply Rate is a volumetric rate that reflects the costs in Tier 1, plus Metropolitan's cost of purchasing water transfers north of the Delta. The Tier 2 Supply Rate is charged on Metropolitan water transactions that exceed a member agency's Tier 1 maximum. The Tier 2 Supply Rate also encourages the member agencies and their customers to maintain existing local supplies and develop cost-effective local

supply resources and conservation. The Tier 2 Supply Rate would increase to \$531 per acre-foot in 2023 and to \$532 in 2024. At an expected average sales level of 1.59 MAF in cash year 2022/23 and 1.54 MAF in cash year 2023/24, it is estimated that no supply will be sold at the Tier 2 Supply Rate in either fiscal year.

Benefits

The use of the Tier 2 Supply Rate provides several benefits including, efficient resource management and clear price signals to accommodate a water transfer market. By pricing supplies that exceed 90 percent of a member agency's Base demand at a price reflecting Metropolitan's supply cost, a price incentive exists to encourage efficient regional resource management. Member agencies will be encouraged to invest in cost-effective conservation measures and local resources like water recycling. Metropolitan has historically set its water rates with the primary objective of recovering cost. The Tier 2 Supply Rate is a pricing tool designed specifically for the purpose of creating a greater incentive for member agencies to make economic resource management decisions, while recognizing additional costs associated with securing more supply resources.

The Tier 2 Supply Rate will reflect Metropolitan's cost of acquiring transfers from north of the Delta. In so doing, Metropolitan will be competing in the water transfer market along with other providers of imported water supplies. If other providers of imported supply can develop additional supply at a lower cost than Metropolitan's Tier 2 Supply Rate, the water transfer market will expand to meet the region's increasing demands.

Transactions

Staff estimates of water transactions used for developing the rate recommendation were based on current member agency demands and information and an expectation that demands will trend to levels expected under normal weather conditions. "Firm Transactions" refers to member agency purchases that are subject to the calculation of transactions subject to the Readiness-to-Serve Charge and to the calculation of Base Firm Demand used to determine the threshold for the applicability of Tier 2 to member agency purchases. Table 23 summarizes projected water transactions by service type for Cash Year 2022/23 and Cash Year 2023/24.

Schedule 23: Cash Year Transactions, by Type

Cash Year Ending	2023	2024
Transactions by Treatment Type		
Treated Firm Transactions	770	780
Untreated Firm Transactions	541	482
Untreated Exchange	279	278
Total Transactions	1,590	1,540
Firm Transactions by Type		
Tier 1	1,311	1,262
Tier 2	-	-
Total Firm Transactions	1,311	1,262

APPENDIX: COS TABLES

4/12/2022 Board Meeting

		1	2	3	4	5	6	7
		Labor And Labor Additive	Outside Services	Utilities	Chemicals	Other O&M	O&M Capitalization (pre-rated)	Projected Total To Be functionalized
Departmental O&M								
Group	Item							
Office of General Manager	Office of General Manager	6,774,464	1,000,000	-	-	226,200	(289,049)	7,711,614
Office of General Manager	Board of Directors	1,485,481	105,000	-	-	564,190	(77,598)	2,077,073
Bay Delta Initiatives	Bay Delta Initiatives	5,395,138	3,455,700	-	-	3,518,076	(443,885)	11,925,029
External Affairs	Legislative Services	3,951,053	1,320,500	5,250	-	1,090,348	(229,337)	6,137,814
External Affairs	Media Communications Services	4,956,486	351,449	-	-	549,290	(212,049)	5,645,176
External Affairs	Manager, External Affairs/Special Projects	6,489,882	775,172	-	-	2,835,058	(363,975)	9,736,137
External Affairs	Conservation & Community Services	3,752,587	1,050,500	-	-	1,091,650	(212,718)	5,691,019
Human Resources	Office of the Manager	11,753,659	2,180,692	-	-	2,006,325	(576,395)	15,364,261
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	8,050,407	245,000	3,000,000	-	251,715	(419,112)	11,128,009
Water Systems Operations	Office of the Manager, Treatment Section	829,117	-	-	-	51,930	(32,220)	848,827
Water Systems Operations	Office of the Manager, Operations Support Services	414,558	110,000	-	-	693,500	(43,722)	1,174,336
Water Systems Operations	Operations Support Services	1,626,089	323,000	6,500	-	275,350	(81,053)	2,149,886
Water Systems Operations	Desert Region / C&D CRA	6,926,957	195,000	45,600	-	812,750	(291,184)	7,895,124
Water Systems Operations	System Operations Unit	26,220,014	451,300	198,000	13,800	6,770,483	(1,224,584)	32,429,013
Water Systems Operations	Power Operations and Planning	7,460,619	69,700	66,580	-	1,892,461	(345,374)	9,143,987
Water Systems Operations	Operations Planning & Programs Unit	3,125,844	223,000	-	-	443,500	(135,188)	3,654,156
Water Systems Operations	Treatment Jensen	1,962,485	-	-	-	146,988	(77,119)	2,032,355
Water Systems Operations	Treatment Skinner	11,473,622	342,000	1,859,640	5,294,053	953,857	(701,630)	19,221,542
Water Systems Operations	Treatment Weymouth	11,008,113	223,600	2,994,449	6,201,492	551,864	(744,381)	20,245,137
Water Systems Operations	Treatment Mills	10,443,555	244,242	900,965	2,216,092	660,117	(528,079)	13,936,892
Water Systems Operations	Treatment Weymouth	10,238,882	144,070	2,127,753	3,759,531	605,099	(601,087)	16,274,247
Water Systems Operations	Water Quality Section	11,946,824	113,000	1,619,124	5,491,193	553,189	(754,192)	19,001,139
Water Systems Operations	C&D, Eastern Unit	21,945,169	3,296,696	461,000	-	3,458,755	(1,060,334)	28,103,287
Water Systems Operations	C&D, Western Unit	14,607,001	2,729,100	1,799,700	-	2,683,684	(791,276)	21,028,208
Water Systems Operations	CSS, Manufacturing Services Unit	12,282,162	1,525,000	2,985,705	-	1,751,990	(672,374)	17,872,482
Water Systems Operations	Environmental Health & Safety Section	7,581,013	223,700	236,100	-	547,800	(313,521)	8,275,092
Water Systems Operations	CSS, Fleet Services Unit	12,275,178	1,280,591	1,400,000	-	1,431,825	(595,757)	15,791,837
Water Systems Operations	CSS, Power Support Unit	7,599,860	455,100	13,100	-	5,171,000	(478,691)	12,760,369
Water Systems Operations	Office of the Manager, Operations & Planning Section	8,048,601	315,500	60,000	-	860,450	(338,868)	8,946,683
Water Systems Operations	Security Team & Security Management	723,031	23,000	-	-	81,922	(30,215)	797,738
Water Systems Operations	Sustainability, Resilience & Innovation	-	-	-	-	-	-	-
Diversity, Equity & Inclusion	Equal Employment Opportunity	6,150,206	3,709,091	-	-	338,574	(366,444)	9,831,427
Office of the Chief Financial Officer	Business Technology	981,639	400,000	-	-	42,540	(52,532)	1,371,646
Business Technology	Office of Manager	1,597,156	400,000	-	-	18,820	(72,750)	1,943,227
Engineering Services	Administrative Services	13,264,757	1,780,900	-	-	14,850,102	(1,065,619)	28,630,140
Business Technology	Information Technology	37,547,929	8,801,000	85,000	-	3,068,400	(1,804,658)	47,697,671
Water Resources Management	Resource Planning & Development	18,421,920	12,671,100	-	-	2,732,590	(1,220,048)	32,605,562
Water Resources Management	Resource Implementation	32,540,201	5,414,500	-	-	11,937,544	(1,810,194)	48,082,051
Water Resources Management	Office of the Group Manager	4,110,070	1,020,000	-	-	441,907	(202,894)	5,369,083
Ethics Office	Ethics Office	10,539,760	1,537,800	-	-	5,098,764	(622,845)	16,553,489
Real Property	Ethics Office	2,423,266	75,000	-	-	75,090	(94,346)	2,479,011
General Counsel	Ethics Office	1,833,374	270,369	-	-	80,460	(77,566)	2,106,637
General Auditor	Ethics Office	11,802,597	9,962,125	1,742,000	-	6,537,110	(1,081,221)	28,962,611
General Auditor	Ethics Office	13,057,727	2,810,000	-	-	549,000	(582,997)	15,833,730
General Auditor	Ethics Office	4,130,870	500,000	-	-	137,500	(169,336)	4,599,034
Total Departmental O&M		399,754,322	72,134,497	21,606,466	22,976,160	88,279,767	(21,891,413)	582,859,799
GENERAL DISTRICT REQUIREMENTS								
State Water Contract*								
Supply - O&M	Supply - O&M							110,115,149
Supply - Capital	Supply - Capital							80,437,139
Power - O&M & Off-Ag Capital	Power - O&M & Off-Ag Capital							211,574,465
Power - Capital (less Off-Ag)	Power - Capital (less Off-Ag)							(4,981,305)
Transmission - Capital - Commodity, Demand, & Standby	Transmission - Capital - Commodity, Demand, & Standby							60,506,317
Transmission - O&M - Commodity only	Transmission - O&M - Commodity only							194,057,356
Delta Conveyance - Other	Delta Conveyance - Other							30,000,000
Total State Water Contract								681,709,121
Colorado River Aqueduct Power Costs								105,857,041
Supply Programs (cash funded portion)								66,559,522
Demand Management (cash funded portion)								
Local Resources Program	Local Resources Program							22,175,417
Future Supply Actions & Stormwater Pilot	Future Supply Actions & Stormwater Pilot							3,639,900
Conservation Program (cash funded portion)	Conservation Program (cash funded portion)							25,000,000
Total Demand Management Costs								50,815,317
Capital Financing								
Revenue Bond Debt Service net of BABs Interest Subsidy Payment	Revenue Bond Debt Service net of BABs Interest Subsidy Payment							283,264,623
G.O. Bond Debt Service	G.O. Bond Debt Service							1,968,750
Debt Administration	Debt Administration							2,790,098
Bond Deleverage	Bond Deleverage							
PAYGO	PAYGO							135,000,000
Total Capital Financing Costs								423,023,470
Other Operating Costs								
Operating Equipment	Operating Equipment							9,394,884
Succession Planning Labor Pool	Succession Planning Labor Pool							5,000,000
OPEB/PEPS Pre-Funding	OPEB/PEPS Pre-Funding							-
Total Other Operating Costs								14,394,884
Increase/(Decrease) in Required Reserves								6,100,000
Total General District Requirements								1,348,559,356
REQUIREMENTS BEFORE OFFSETS:								1,931,419,155
Revenue Offsets								
Property Taxes - MWD Portion of SWC GO Debt Service	Property Taxes - MWD Portion of SWC GO Debt Service							564,249
Property Taxes - MWD GO Debt Service	Property Taxes - MWD GO Debt Service							1,968,750
Interest on Investments	Interest on Investments							6,434,537
Hydro-Power Revenue	Hydro-Power Revenue							12,611,274
CRA Power Revenue	CRA Power Revenue							3,376,627
Wadsworth Pumping Plant (DVL) Power Revenue	Wadsworth Pumping Plant (DVL) Power Revenue							679,733
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)	Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)							42,991,971
Misc. allocated to supply (PVID Lease)	Misc. allocated to supply (PVID Lease)							5,930,280
Property Taxes - SWC	Property Taxes - SWC							160,551,544
Revenue Reserve used for Revenue Bonds - I&P	Revenue Reserve used for Revenue Bonds - I&P							-
Annexation	Annexation							-
Total Revenue Offsets								235,108,965
NET REVENUE REQUIREMENTS:								1,696,310,190

[illegible]

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Departmental O&M

Group	Item
Office of General Manager	Board of Directors
Office of General Manager	Bay Delta Initiatives
External Affairs	Legislative Services
External Affairs	Media Communications Services
External Affairs	Manager, External Affairs/Special P
External Affairs	Conservation & Community Service
Human Resources	Office of the Manager
Water Systems Operations	Office of the Manager, Conveyance
Water Systems Operations	Office of the Manager, Treatment S
Water Systems Operations	Operations Support Services
Water Systems Operations	Desert Region / C&D CRA
Water Systems Operations	System Operations Unit
Water Systems Operations	Power Operations and Planning
Water Systems Operations	Operations Planning & Programs U
Water Systems Operations	Treatment Jensen
Water Systems Operations	Treatment Diemer
Water Systems Operations	Treatment Mills
Water Systems Operations	Treatment Skinner
Water Systems Operations	Treatment Weymouth
Water Systems Operations	Water Quality Section
Water Systems Operations	C&D, Eastern Unit
Water Systems Operations	C&D, Western Unit
Water Systems Operations	OSS, Manufacturing Services Unit
Water Systems Operations	Environmental Health & Safety Sect
Water Systems Operations	OSS, Fleet Services Unit
Water Systems Operations	OSS, Power Support Unit
Water Systems Operations	Office of the Manager, Operations &
Water Systems Operations	Security Team & Security Manag
Sustainability, Resilience & Inno	
Diversity, Equity & Inclusion	
Equal Employment Opportunity	
Office of the Chief Financial Officer	
Business Technology	Office of Manager
Engineering Services	
Business Technology	Administrative Services
Business Technology	Information Technology
Water Resources Management	Resource Planning & Development
Water Resources Management	Resource Implementation
Water Resources Management	Office of the Group Manager
Ethics Office	
Real Property	
General Counsel	
General Auditor	
Total Departmental O&M	

Conveyance & Aqueduct			Storage			Treatment			Distribution			Demand Management			Hydro-Electric			Administrative & General			Total \$ Functionalized		
CRA	SWP	Other Subsv	CRA Power	CRA All Other	SWP Power	SWP All Other	Other Conv. & Aqueduct	Emergency	Drought	Regulatory	Power	Jensen	Weymouth	Diemer	Mills	Skinner	Distribution	Demand Management	Hydro-Electric	Administrative & General	Total \$ Functionalized		
108,018	188,041	166,673	40,539	616,970	-	277,587	94,721	91,792	70,280	48,529	-	340,227	339,911	360,404	256,277	307,573	1,352,356	127,822	76,234	1,910,509	6,774,464		
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,485,481		
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,485,481		
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5,395,138		
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3,951,053		
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4,956,486		
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4,956,486		
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6,489,882		
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6,489,882		
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,876,293		
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,876,293		
187,412	326,251	289,176	477,638	1,070,440	-	481,613	164,340	159,259	121,936	84,198	-	590,293	589,743	625,299	444,638	533,638	2,346,331	221,770	132,265	3,314,723	11,753,659		
148,633	148,633	148,633	96,382	1,274,812	-	80,210	-	23,242	23,242	23,242	-	581,859	599,025	565,044	544,650	537,257	2,595,320	-	165,344	519,163	8,050,407		
-	-	-	-	420,809	-	29,894	-	-	-	-	-	-	-	-	-	-	346,983	-	11,873	19,567	829,117		
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	414,558		
30,022	30,022	30,022	18,621	257,497	-	16,201	-	4,695	4,695	4,695	-	74,998	78,105	71,956	68,265	66,927	54,307	-	33,398	104,865	1,626,089		
-	-	-	-	182,872	-	-	-	-	-	-	-	117,529	120,996	114,132	110,013	108,520	524,225	-	105,290	249,370	6,926,957		
-	-	-	-	26,220,014	-	-	-	-	-	-	-	86,448	86,448	86,448	86,448	86,448	5,957,183	-	-	-	26,220,014		
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7,460,619	-	-	-	7,460,619		
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,047,158	-	-	-	3,125,844		
654,162	654,162	654,162	-	-	-	-	-	-	-	-	-	9,970,578	-	-	-	-	1,503,045	-	-	-	1,503,045		
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,442,083	-	-	-	11,473,622		
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9,566,050	-	-	-	11,308,113		
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9,075,449	-	-	-	10,443,555		
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8,897,588	-	-	-	10,238,882		
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,341,294	-	-	-	11,948,624		
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,565,296	-	-	-	21,948,169		
2,948,371	2,948,371	2,948,371	2,163,953	-	-	-	-	563,336	563,336	563,336	-	2,282,610	2,282,610	2,282,610	2,282,610	2,282,610	-	-	-	-	379,782		
-	-	-	-	734,732	-	1,508,903	-	-	-	-	-	-	-	-	-	-	11,368,629	-	-	-	614,955		
-	-	-	-	246	-	405,311	-	-	-	-	-	-	-	-	-	-	10,857,431	-	-	-	14,607,001		
-	-	-	-	363,889	-	-	-	-	-	-	-	-	-	-	-	-	8,989,759	-	-	-	12,282,162		
-	-	-	-	1,879,330	-	-	-	-	-	-	-	128,301	128,301	128,301	128,301	128,301	6,989,759	-	-	-	7,581,013		
-	-	-	-	1,096,660	-	-	-	-	-	-	-	984,960	984,960	984,960	984,960	984,960	4,860,970	-	-	-	572,023		
-	-	-	-	-	-	-	-	-	-	-	-	328,770	328,770	328,770	328,770	328,770	4,023,366	-	-	-	12,275,178		
-	-	-	-	-	-	-	-	-	-	-	-	246,287	246,287	246,287	246,287	246,287	3,718,454	-	-	-	7,599,860		
-	-	-	-	-	-	-	-	-	-	-	-	52,259	53,800	50,748	48,917	48,253	233,093	-	-	-	8,048,601		
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	14,850		
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2,253,608		
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	46,628		
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	723,031		
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6,150,206		
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6,150,206		
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-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,597,156		
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-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13,264,757		
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2,271,650		
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	18,421,920		
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	32,540,201		
518,852	903,231	800,590	-	2,963,530	-	1,333,353	454,979	440,912	337,581	233,102	-	1,634,235	1,632,713	1,731,151	1,230,989	1,477,386	6,495,857	613,974	366,177	9,176,865	32,540,201		
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	312,365	-	-	-	4,110,070		
1,590,450	4,782,943	466,911	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3,645,703	-	-	-	10,539,760		
276,114	830,355	595,611	-	-	-	-	-	-	-	-	-	-	-	-	-	-	45,105	-	-	-	3,843		
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,833,374		
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,833,374		
271,460	460,301	-	-	1,675,969	-	2,171,676	-	306,868	525,216	123,927	-	-	-	-	-	-	1,446,996	-	-	-	4,820,180		
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11,802,597		
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13,057,727		
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	14,300,870		
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	14,300,870		
6,746,842	11,285,659	11,156,318	2,804,042	40,040,004	-	12,314,919	6,346,236	5,857,636	4,212,897	3,129,479	-	19,398,131	19,935,353	19,650,363	16,504,928	18,167,242	85,067,506	7,461,682	5,355,297	104,241,743	399,754,322		

		Functionalization	Allocation Percentages					% Total
			Demand	Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		122,961	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Office of General Manager	Board of Directors	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Bay Delta Initiatives	Bay Delta Initiatives	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Legislative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Media Communications Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Manager, External Affairs/Special Projects	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Conservation & Community Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Human Resources		244,983	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager	205,454	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Treatment Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations Support Services	39,693	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Support Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Desert Region / C&D CRA	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	System Operations Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Power Operations and Planning	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Planning & Programs Unit	677,452	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Jensen	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Diemer	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Mills	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Skinner	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Weymouth	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Water Quality Section	3,775,208	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Eastern Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Western Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Manufacturing Services Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Environmental Health & Safety Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Fleet Services Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Power Support Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations & Planning Section	14,728	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Security Team & Security Management	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Sustainability, Resilience & Innovation		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Diversity, Equity & Inclusion		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Equal Employment Opportunity		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Office of the Chief Financial Officer		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Office of Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Engineering Services		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Administrative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Information Technology	766,666	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Planning & Development	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Implementation	2,497,920	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Office of the Group Manager	282,466	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Ethics Office		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Real Property		666,140	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
General Counsel		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
General Auditor		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Departmental O&M		9,293,672	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
GENERAL DISTRICT REQUIREMENTS								
State Water Contract*								
Supply - O&M		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Supply - Capital		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Power - O&M & Off-Aq Capital		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Power - Capital (less Off-Aq)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Transmission - Capital - Commodity, Demand, & Standby		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Transmission - O&M - Commodity only		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Supply		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Power		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Other		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total State Water Contract		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Colorado River Aqueduct Power Costs								
		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Supply Programs (cash funded portion)								
		47,197,861	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Demand Management (cash funded portion)								
Local Resources Program		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Future Supply Actions & Stormwater Pilot		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Conservation Program (cash funded portion)		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Demand Management Costs		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Capital Financing								
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
G.O. Bond Debt Service		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Debt Administration		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Bond Defeasance		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
PAYGO		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total Capital Financing Costs		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Other Operating Costs								
Operating Equipment		149,801	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Succession Planning Labor Pool		79,725	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
OPEB/PERS Pre-Funding		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Other Operating Costs		229,526	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Increase/(Decrease) in Required Reserves								
		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total General District Requirements								
		47,427,387	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
REQUIREMENTS BEFORE OFFSETS:								
		56,721,059	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Revenue Offsets								
Property Taxes - MWD Portion of SWC GO Debt Service		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Property Taxes - MWD GO Debt Service		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Interest on Investments		188,967	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Hydro-Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
CRA Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Wadsworth Pumping Plant (DVL) Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to supply (PVID Lease)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Property Taxes - SWC		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Revenue Reserve used for Revenue Bonds - I&P		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Annexation		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total Revenue Offsets		188,967	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
NET REVENUE REQUIREMENTS:								
		56,532,092	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

	Functionalization	Allocation Percentages					Total
		Demand	Fixed Commodity	Standby	Variable Commodity	Other	
Departmental O&M							
Group	Item						
Office of General Manager		122,961	-	122,961	-	-	122,961
Office of General Manager	Board of Directors	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-
Human Resources		244,983	-	244,983	-	-	244,983
Water Systems Operations	Office of the Manager	205,454	-	205,454	-	-	205,454
Water Systems Operations	Office of the Manager, Conveyance & Distribution S	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations Support Services	39,693	-	39,693	-	-	39,693
Water Systems Operations	Operations Support Services	-	-	-	-	-	-
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	677,452	-	677,452	-	-	677,452
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	3,775,208	-	3,775,208	-	-	3,775,208
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	-	-	-	-	-	-
Water Systems Operations	Environmental Health & Safety Section	-	-	-	-	-	-
Water Systems Operations	OSS, Fleet Services Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Power Support Unit	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations & Planning Secti	14,728	-	14,728	-	-	14,728
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-
Sustainability, Resilience & Innova		-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-
Office of the Chief Financial Office		-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-
Engineering Services		-	-	-	-	-	-
Business Technology	Administrative Services	-	-	-	-	-	-
Business Technology	Information Technology	766,666	-	766,666	-	-	766,666
Water Resources Management	Resource Planning & Development	-	-	-	-	-	-
Water Resources Management	Resource Implementation	2,497,920	-	2,497,920	-	-	2,497,920
Water Resources Management	Office of the Group Manager	282,466	-	282,466	-	-	282,466
Ethics Office		-	-	-	-	-	-
Real Property		666,140	-	666,140	-	-	666,140
General Counsel		-	-	-	-	-	-
General Auditor		-	-	-	-	-	-
Total Departmental O&M	-	9,293,672	-	9,293,672	-	-	9,293,672
GENERAL DISTRICT REQUIREMENTS							
State Water Contract*	-	-	-	-	-	-	-
Supply - O&M	-	-	-	-	-	-	-
Supply - Capital	-	-	-	-	-	-	-
Power - O&M & Off-Aq Capital	-	-	-	-	-	-	-
Power - Capital (less Off-Aq)	-	-	-	-	-	-	-
Transmission - Capital - Commodity, Demand, & Standby	-	-	-	-	-	-	-
Transmission - O&M - Commodity only	-	-	-	-	-	-	-
Delta Conveyance - Supply	-	-	-	-	-	-	-
Delta Conveyance - Power	-	-	-	-	-	-	-
Delta Conveyance - Other	-	-	-	-	-	-	-
Total State Water Contract	-	-	-	-	-	-	-
Colorado River Aqueduct Power Costs	-	-	-	-	-	-	-
Supply Programs (cash funded portion)	47,197,861	-	47,197,861	-	-	-	47,197,861
Demand Management (cash funded portion)	-	-	-	-	-	-	-
Local Resources Program	-	-	-	-	-	-	-
Future Supply Actions & Stormwater Pilot	-	-	-	-	-	-	-
Conservation Program (cash funded portion)	-	-	-	-	-	-	-
Total Demand Management Costs	-	-	-	-	-	-	-
Capital Financing							
Revenue Bond Debt Service net of BABs Interest Subsidy Payment	-	-	-	-	-	-	-
G.O. Bond Debt Service	-	-	-	-	-	-	-
Debt Administration	-	-	-	-	-	-	-
Bond Defeasance	-	-	-	-	-	-	-
PAYGO	-	-	-	-	-	-	-
Total Capital Financing Costs	-	-	-	-	-	-	-
Other Operating Costs							
Operating Equipment	149,801	-	149,801	-	-	-	149,801
Succession Planning Labor Pool	79,725	-	79,725	-	-	-	79,725
OPEB/PERS Pre-Funding	-	-	-	-	-	-	-
Total Other Operating Costs	229,526	-	229,526	-	-	-	229,526
Increase/(Decrease) in Required Reserves	-	-	-	-	-	-	-
Total General District Requirements	47,427,387	-	47,427,387	-	-	-	47,427,387
REQUIREMENTS BEFORE OFFSETS:	56,721,059	-	56,721,059	-	-	-	56,721,059
Revenue Offsets							
Property Taxes - MWD Portion of SWC GO Debt Service	-	-	-	-	-	-	-
Property Taxes - MWD GO Debt Service	-	-	-	-	-	-	-
Interest on Investments	188,967	-	188,967	-	-	-	188,967
Hydro-Power Revenue	-	-	-	-	-	-	-
CRA Power Revenue	-	-	-	-	-	-	-
Wadsworth Pumping Plant (DVL) Power Revenue	-	-	-	-	-	-	-
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)	-	-	-	-	-	-	-
Misc. allocated to supply (PVID Lease)	-	-	-	-	-	-	-
Property Taxes - SWC	-	-	-	-	-	-	-
Revenue Reserve used for Revenue Bonds - I&P	-	-	-	-	-	-	-
Annexation	-	-	-	-	-	-	-
Total Revenue Offsets	188,967	-	188,967	-	-	-	188,967
NET REVENUE REQUIREMENTS:	56,532,092	-	56,532,092	-	-	-	56,532,092

		Functionalization	Allocation Percentages					Total	
			Fixed			Variable Commodity	Other		Hydroelectric
			Demand	Commodity	Standby				
Departmental O&M									
Group	Item								
Office of General Manager		108,018	-	108,018	-	-	-	-	108,018
Office of General Manager	Board of Directors	-	-	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-	-	-
Human Resources		187,412	-	187,412	-	-	-	-	187,412
Water Systems Operations	Office of the Manager	148,633	-	148,633	-	-	-	-	148,633
Water Systems Operations	Office of the Manager, Conveyance & Distribution Sec	-	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	-	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations Support Services	30,022	-	30,022	-	-	-	-	30,022
Water Systems Operations	Operations Support Services	-	-	-	-	-	-	-	-
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	654,162	-	654,162	-	-	-	-	654,162
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	2,948,371	-	2,948,371	-	-	-	-	2,948,371
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	-	-	-	-	-	-	-	-
Water Systems Operations	Environmental Health & Safety Section	-	-	-	-	-	-	-	-
Water Systems Operations	OSS, Fleet Services Unit	-	-	-	-	-	-	-	-
Water Systems Operations	OSS, Power Support Unit	-	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations & Planning Section	13,349	-	13,349	-	-	-	-	13,349
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-	-	-
Sustainability, Resilience & Innovati		-	-	-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-	-	-
Office of the Chief Financial Officer		-	-	-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-	-	-
Engineering Services		-	-	-	-	-	-	-	-
Business Technology	Administrative Services	-	-	-	-	-	-	-	-
Business Technology	Information Technology	518,852	-	518,852	-	-	-	-	518,852
Water Resources Management	Resource Planning & Development	-	-	-	-	-	-	-	-
Water Resources Management	Resource Implementation	1,590,450	-	1,590,450	-	-	-	-	1,590,450
Water Resources Management	Office of the Group Manager	276,114	-	276,114	-	-	-	-	276,114
Ethics Office		-	-	-	-	-	-	-	-
Real Property		271,460	-	271,460	-	-	-	-	271,460
General Counsel		-	-	-	-	-	-	-	-
General Auditor		-	-	-	-	-	-	-	-
Total Departmental O&M		6,746,842	-	6,746,842	-	-	-	-	6,746,842

	Functionalization	Allocation Percentages					% Total
		Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M							
Group	Item						
Office of General Manager		214,054	0.0%	100.0%	0.0%	0.0%	100.0%
Office of General Manager	Board of Directors	-	0.0%	100.0%	0.0%	0.0%	100.0%
Bay Delta Initiatives	Bay Delta Initiatives	-	0.0%	100.0%	0.0%	0.0%	100.0%
External Affairs	Legislative Services	-	0.0%	100.0%	0.0%	0.0%	100.0%
External Affairs	Media Communications Services	-	0.0%	100.0%	0.0%	0.0%	100.0%
External Affairs	Manager, External Affairs/Special Projects	-	0.0%	100.0%	0.0%	0.0%	100.0%
External Affairs	Conservation & Community Services	-	0.0%	100.0%	0.0%	0.0%	100.0%
Human Resources		426,472	0.0%	100.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager	205,454	0.0%	100.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	0.0%	100.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Treatment Section	-	0.0%	100.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations Support Services	39,693	0.0%	100.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Support Services	-	0.0%	100.0%	0.0%	0.0%	100.0%
Water Systems Operations	Desert Region / C&D CRA	-	0.0%	100.0%	0.0%	0.0%	100.0%
Water Systems Operations	System Operations Unit	-	0.0%	100.0%	0.0%	0.0%	100.0%
Water Systems Operations	Power Operations and Planning	-	0.0%	100.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Planning & Programs Unit	677,452	0.0%	100.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Jensen	-	0.0%	100.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Diemer	-	0.0%	100.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Mills	-	0.0%	100.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Skinner	-	0.0%	100.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Weymouth	-	0.0%	100.0%	0.0%	0.0%	100.0%
Water Systems Operations	Water Quality Section	3,775,208	0.0%	100.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Eastern Unit	-	0.0%	100.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Western Unit	-	0.0%	100.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Manufacturing Services Unit	-	0.0%	100.0%	0.0%	0.0%	100.0%
Water Systems Operations	Environmental Health & Safety Section	-	0.0%	100.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Fleet Services Unit	-	0.0%	100.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Power Support Unit	-	0.0%	100.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations & Planning Section	14,728	0.0%	100.0%	0.0%	0.0%	100.0%
Water Systems Operations	Security Team & Security Management	-	0.0%	100.0%	0.0%	0.0%	100.0%
Sustainability, Resilience & Innovation		-	0.0%	100.0%	0.0%	0.0%	100.0%
Diversity, Equity & Inclusion		-	0.0%	100.0%	0.0%	0.0%	100.0%
Equal Employment Opportunity		-	0.0%	100.0%	0.0%	0.0%	100.0%
Office of the Chief Financial Officer		-	0.0%	100.0%	0.0%	0.0%	100.0%
Business Technology	Office of Manager	-	0.0%	100.0%	0.0%	0.0%	100.0%
Engineering Services		-	0.0%	100.0%	0.0%	0.0%	100.0%
Business Technology	Administrative Services	-	0.0%	100.0%	0.0%	0.0%	100.0%
Business Technology	Information Technology	1,334,632	0.0%	100.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Planning & Development	-	0.0%	100.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Implementation	7,511,969	0.0%	100.0%	0.0%	0.0%	100.0%
Water Resources Management	Office of the Group Manager	849,456	0.0%	100.0%	0.0%	0.0%	100.0%
Ethics Office		-	0.0%	100.0%	0.0%	0.0%	100.0%
Real Property		1,129,542	0.0%	100.0%	0.0%	0.0%	100.0%
General Counsel		-	0.0%	100.0%	0.0%	0.0%	100.0%
General Auditor		-	0.0%	100.0%	0.0%	0.0%	100.0%
Total Departmental O&M		16,178,661	0.0%	0.0%	0.0%	0.0%	0.0%
GENERAL DISTRICT REQUIREMENTS							
State Water Contract*							
Supply - O&M		110,115,149	0.0%	100.0%	0.0%	0.0%	100.0%
Supply - Capital		80,437,139	0.0%	100.0%	0.0%	0.0%	100.0%
Power - O&M & Off-Aq Capital		-	0.0%	100.0%	0.0%	0.0%	100.0%
Power - Capital (less Off-Aq)		-	0.0%	100.0%	0.0%	0.0%	100.0%
Transmission - Capital - Commodity, Demand, & Standby		-	0.0%	100.0%	0.0%	0.0%	100.0%
Transmission - O&M - Commodity only		-	0.0%	100.0%	0.0%	0.0%	100.0%
Delta Conveyance - Supply		-	0.0%	100.0%	0.0%	0.0%	100.0%
Delta Conveyance - Power		-	0.0%	100.0%	0.0%	0.0%	100.0%
Delta Conveyance - Other		-	0.0%	100.0%	0.0%	0.0%	100.0%
Total State Water Contract		190,552,288	0.0%	0.0%	0.0%	0.0%	0.0%
Colorado River Aqueduct Power Costs		-	0.0%	0.0%	0.0%	0.0%	0.0%
Supply Programs (cash funded portion)		-	0.0%	100.0%	0.0%	0.0%	100.0%
Demand Management (cash funded portion)		-	0.0%	0.0%	0.0%	0.0%	0.0%
Local Resources Program		-	0.0%	100.0%	0.0%	0.0%	100.0%
Future Supply Actions & Stormwater Pilot		-	0.0%	100.0%	0.0%	0.0%	100.0%
Conservation Program (cash funded portion)		-	0.0%	100.0%	0.0%	0.0%	100.0%
Total Demand Management Costs		-	0.0%	0.0%	0.0%	0.0%	0.0%
Capital Financing		-	0.0%	0.0%	0.0%	0.0%	0.0%
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		-	0.0%	0.0%	0.0%	0.0%	0.0%
G.O. Bond Debt Service		-	0.0%	0.0%	0.0%	0.0%	0.0%
Debt Administration		-	0.0%	0.0%	0.0%	0.0%	0.0%
Bond Defeasance		-	0.0%	0.0%	0.0%	0.0%	0.0%
PAYGO		-	0.0%	0.0%	0.0%	0.0%	0.0%
Total Capital Financing Costs		-	0.0%	0.0%	0.0%	0.0%	0.0%
Other Operating Costs		-	0.0%	0.0%	0.0%	0.0%	0.0%
Operating Equipment		260,777	0.0%	100.0%	0.0%	0.0%	100.0%
Succession Planning Labor Pool		138,787	0.0%	100.0%	0.0%	0.0%	100.0%
OPEB/PERS Pre-Funding		-	0.0%	100.0%	0.0%	0.0%	100.0%
Total Other Operating Costs		399,564	0.0%	0.0%	0.0%	0.0%	0.0%
Increase/(Decrease) in Required Reserves		-	0.0%	100.0%	0.0%	0.0%	100.0%
Total General District Requirements		190,951,852	0.0%	0.0%	0.0%	0.0%	0.0%
REQUIREMENTS BEFORE OFFSETS:		207,130,513	0.0%	0.0%	0.0%	0.0%	0.0%
Revenue Offsets							
Property Taxes - MWD Portion of SWC GO Debt Service		-	0.0%	0.0%	0.0%	0.0%	0.0%
Property Taxes - MWD GO Debt Service		-	0.0%	0.0%	0.0%	0.0%	0.0%
Interest on Investments		690,057	0.0%	100.0%	0.0%	0.0%	100.0%
Hydro-Power Revenue		-	0.0%	0.0%	0.0%	100.0%	100.0%
CRA Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%
Wadsworth Pumping Plant (DVL) Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)		-	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to supply (PVID Lease)		5,930,280	0.0%	100.0%	0.0%	0.0%	100.0%
Property Taxes - SWC		46,943,434	0.0%	100.0%	0.0%	0.0%	100.0%
Revenue Reserve used for Revenue Bonds - I&P		-	0.0%	0.0%	0.0%	0.0%	0.0%
Annexation		-	0.0%	0.0%	0.0%	0.0%	0.0%
Total Revenue Offsets		53,563,771	0.0%	0.0%	0.0%	0.0%	0.0%
NET REVENUE REQUIREMENTS:		153,566,742	0.0%	0.0%	0.0%	0.0%	0.0%

	Functionalization	Allocation Percentages					Total
		Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M							
Group	Item						
Office of General Manager		214,054	-	214,054	-	-	214,054
Office of General Manager	Board of Directors	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-
Human Resources		426,472	-	426,472	-	-	426,472
Water Systems Operations	Office of the Manager	205,454	-	205,454	-	-	205,454
Water Systems Operations	Office of the Manager, Conveyance & Distribution S	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations Support Services	39,693	-	39,693	-	-	39,693
Water Systems Operations	Operations Support Services	-	-	-	-	-	-
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	677,452	-	677,452	-	-	677,452
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	3,775,208	-	3,775,208	-	-	3,775,208
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	-	-	-	-	-	-
Water Systems Operations	Environmental Health & Safety Section	-	-	-	-	-	-
Water Systems Operations	OSS, Fleet Services Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Power Support Unit	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations & Planning Secti	14,728	-	14,728	-	-	14,728
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-
Sustainability, Resilience & Inn		-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-
Engineering Services		-	-	-	-	-	-
Business Technology	Administrative Services	-	-	-	-	-	-
Business Technology	Information Technology	1,334,632	-	1,334,632	-	-	1,334,632
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	7,511,969	-	7,511,969	-	-	7,511,969
Water Resources Managemen	Office of the Group Manager	849,456	-	849,456	-	-	849,456
Ethics Office		-	-	-	-	-	-
Real Property		1,129,542	-	1,129,542	-	-	1,129,542
General Counsel		-	-	-	-	-	-
General Auditor		-	-	-	-	-	-
Total Departmental O&M		16,178,661	-	16,178,661	-	-	16,178,661
GENERAL DISTRICT REQUIREMENTS		-	-	-	-	-	-
State Water Contract*		-	-	-	-	-	-
Supply - O&M		110,115,149	-	110,115,149	-	-	110,115,149
Supply - Capital		80,437,139	-	80,437,139	-	-	80,437,139
Power - O&M & Off-Aq Capital		-	-	-	-	-	-
Power - Capital (less Off-Aq)		-	-	-	-	-	-
Transmission - Capital - Commodity, Demand, & Standby		-	-	-	-	-	-
Transmission - O&M - Commodity only		-	-	-	-	-	-
Delta Conveyance - Supply		-	-	-	-	-	-
Delta Conveyance - Power		-	-	-	-	-	-
Delta Conveyance - Other		-	-	-	-	-	-
Total State Water Contract		190,552,288	-	190,552,288	-	-	190,552,288
Colorado River Aqueduct Power Costs		-	-	-	-	-	-
Supply Programs (cash funded portion)		-	-	-	-	-	-
Demand Management (cash funded portion)		-	-	-	-	-	-
Local Resources Program		-	-	-	-	-	-
Future Supply Actions & Stormwater Pilot		-	-	-	-	-	-
Conservation Program (cash funded portion)		-	-	-	-	-	-
Total Demand Management Costs		-	-	-	-	-	-
Capital Financing		-	-	-	-	-	-
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		-	-	-	-	-	-
G.O. Bond Debt Service		-	-	-	-	-	-
Debt Administration		-	-	-	-	-	-
Bond Defeasance		-	-	-	-	-	-
PAYGO		-	-	-	-	-	-
Total Capital Financing Costs		-	-	-	-	-	-
Other Operating Costs		-	-	-	-	-	-
Operating Equipment		260,777	-	260,777	-	-	260,777
Succession Planning Labor Pool		138,787	-	138,787	-	-	138,787
OP&B/PERS Pre-Funding		-	-	-	-	-	-
Total Other Operating Costs		399,564	-	399,564	-	-	399,564
Increase/(Decrease) in Required Reserves		-	-	-	-	-	-
Total General District Requirements		190,951,852	-	190,951,852	-	-	190,951,852
REQUIREMENTS BEFORE OFFSETS:		207,130,513	-	207,130,513	-	-	207,130,513
Revenue Offsets		-	-	-	-	-	-
Property Taxes - MWD Portion of SWC GO Debt Service		-	-	-	-	-	-
Property Taxes - MWD GO Debt Service		-	-	-	-	-	-
Interest on Investments		690,057	-	690,057	-	-	690,057
Hydro-Power Revenue		-	-	-	-	-	-
CRA Power Revenue		-	-	-	-	-	-
Wadsworth Pumping Plant (DVL) Power Revenue		-	-	-	-	-	-
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)		-	-	-	-	-	-
Misc. allocated to supply (PVID Lease)		5,930,280	-	5,930,280	-	-	5,930,280
Property Taxes - SWC		46,943,434	-	46,943,434	-	-	46,943,434
Revenue Reserve used for Revenue Bonds - I&P		-	-	-	-	-	-
Annexation		-	-	-	-	-	-
Total Revenue Offsets		53,563,771	-	53,563,771	-	-	53,563,771
NET REVENUE REQUIREMENTS:		153,566,742	-	153,566,742	-	-	153,566,742

	Functionalization	Allocation Percentages					Total
		Fixed			Variable		
		Demand	Commodity	Standby	Commodity	Hydroelectric	
Departmental O&M							
Group	Item						
Office of General Manager		188,041	-	188,041	-	-	188,041
Office of General Manager	Board of Directors	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-
Human Resources		326,251	-	326,251	-	-	326,251
Water Systems Operations	Office of the Manager	148,633	-	148,633	-	-	148,633
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations Support Services	30,022	-	30,022	-	-	30,022
Water Systems Operations	Operations Support Services	-	-	-	-	-	-
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	654,162	-	654,162	-	-	654,162
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	2,948,371	-	2,948,371	-	-	2,948,371
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	-	-	-	-	-	-
Water Systems Operations	Environmental Health & Safety Section	-	-	-	-	-	-
Water Systems Operations	OSS, Fleet Services Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Power Support Unit	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations & Planning Section	13,349	-	13,349	-	-	13,349
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-
Sustainability, Resilience & Inr		-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-
Engineering Services		-	-	-	-	-	-
Business Technology	Administrative Services	-	-	-	-	-	-
Business Technology	Information Technology	903,231	-	903,231	-	-	903,231
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	4,782,943	-	4,782,943	-	-	4,782,943
Water Resources Managemen	Office of the Group Manager	830,355	-	830,355	-	-	830,355
Ethics Office		-	-	-	-	-	-
Real Property		460,301	-	460,301	-	-	460,301
General Counsel		-	-	-	-	-	-
General Auditor		-	-	-	-	-	-
Total Departmental O&M	-	11,285,659	-	11,285,659	-	-	11,285,659

	Functionalization	Allocation Percentages					% Total
		Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M							
Group	Item						
Office of General Manager		189,730	0.0%	100.0%	0.0%	0.0%	100.0%
Office of General Manager	Board of Directors	-	0.0%	100.0%	0.0%	0.0%	100.0%
Bay Delta Initiatives	Bay Delta Initiatives	-	0.0%	100.0%	0.0%	0.0%	100.0%
External Affairs	Legislative Services	-	0.0%	100.0%	0.0%	0.0%	100.0%
External Affairs	Media Communications Services	-	0.0%	100.0%	0.0%	0.0%	100.0%
External Affairs	Manager, External Affairs/Special Projects	-	0.0%	100.0%	0.0%	0.0%	100.0%
External Affairs	Conservation & Community Services	-	0.0%	100.0%	0.0%	0.0%	100.0%
Human Resources		378,009	0.0%	100.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager	205,454	0.0%	100.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	0.0%	100.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Treatment Section	-	0.0%	100.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations Support Services	39,693	0.0%	100.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Support Services	-	0.0%	100.0%	0.0%	0.0%	100.0%
Water Systems Operations	Desert Region / C&D CRA	-	0.0%	100.0%	0.0%	0.0%	100.0%
Water Systems Operations	System Operations Unit	-	0.0%	100.0%	0.0%	0.0%	100.0%
Water Systems Operations	Power Operations and Planning	-	0.0%	100.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Planning & Programs Unit	677,452	0.0%	100.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Jensen	-	0.0%	100.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Diemer	-	0.0%	100.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Mills	-	0.0%	100.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Skinner	-	0.0%	100.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Weymouth	-	0.0%	100.0%	0.0%	0.0%	100.0%
Water Systems Operations	Water Quality Section	3,775,208	0.0%	100.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Eastern Unit	-	0.0%	100.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Western Unit	-	0.0%	100.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Manufacturing Services Unit	-	0.0%	100.0%	0.0%	0.0%	100.0%
Water Systems Operations	Environmental Health & Safety Section	-	0.0%	100.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Fleet Services Unit	-	0.0%	100.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Power Support Unit	-	0.0%	100.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations & Planning Section	14,728	0.0%	100.0%	0.0%	0.0%	100.0%
Water Systems Operations	Security Team & Security Management	-	0.0%	100.0%	0.0%	0.0%	100.0%
Sustainability, Resilience & Innovation		-	0.0%	100.0%	0.0%	0.0%	100.0%
Diversity, Equity & Inclusion		-	0.0%	100.0%	0.0%	0.0%	100.0%
Equal Employment Opportunity		-	0.0%	100.0%	0.0%	0.0%	100.0%
Office of the Chief Financial Officer		-	0.0%	100.0%	0.0%	0.0%	100.0%
Business Technology	Office of Manager	-	0.0%	100.0%	0.0%	0.0%	100.0%
Engineering Services		1,879,288	0.0%	100.0%	0.0%	0.0%	100.0%
Business Technology	Administrative Services	-	0.0%	100.0%	0.0%	0.0%	100.0%
Business Technology	Information Technology	1,182,967	0.0%	100.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Planning & Development	4,654,995	0.0%	100.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Implementation	733,319	0.0%	100.0%	0.0%	0.0%	100.0%
Water Resources Management	Office of the Group Manager	609,312	0.0%	100.0%	0.0%	0.0%	100.0%
Ethics Office		-	0.0%	100.0%	0.0%	0.0%	100.0%
Real Property		-	0.0%	100.0%	0.0%	0.0%	100.0%
General Counsel		-	0.0%	100.0%	0.0%	0.0%	100.0%
General Auditor		-	0.0%	100.0%	0.0%	0.0%	100.0%
Total Departmental O&M		14,340,157	0.0%	0.0%	0.0%	0.0%	0.0%
GENERAL DISTRICT REQUIREMENTS							
State Water Contract*							
Supply - O&M		-	0.0%	0.0%	0.0%	0.0%	0.0%
Supply - Capital		-	0.0%	0.0%	0.0%	0.0%	0.0%
Power - O&M & Off-Aq Capital		-	0.0%	0.0%	0.0%	0.0%	0.0%
Power - Capital (less Off-Aq)		-	0.0%	0.0%	0.0%	0.0%	0.0%
Transmission - Capital - Commodity, Demand, & Standby		-	0.0%	0.0%	0.0%	0.0%	0.0%
Transmission - O&M - Commodity only		-	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Supply		-	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Power		-	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Other		-	0.0%	0.0%	0.0%	0.0%	0.0%
Total State Water Contract		-	0.0%	0.0%	0.0%	0.0%	0.0%
Colorado River Aqueduct Power Costs		-	0.0%	0.0%	0.0%	0.0%	0.0%
Supply Programs (cash funded portion)		1,250,000	0.0%	100.0%	0.0%	0.0%	100.0%
Demand Management (cash funded portion)		-	0.0%	0.0%	0.0%	0.0%	0.0%
Local Resources Program		-	0.0%	100.0%	0.0%	0.0%	100.0%
Future Supply Actions & Stormwater Pilot		-	0.0%	100.0%	0.0%	0.0%	100.0%
Conservation Program (cash funded portion)		-	0.0%	100.0%	0.0%	0.0%	100.0%
Total Demand Management Costs		-	0.0%	0.0%	0.0%	0.0%	0.0%
Capital Financing		-	0.0%	0.0%	0.0%	0.0%	0.0%
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		11,160,626	0.0%	100.0%	0.0%	0.0%	100.0%
G.O. Bond Debt Service		-	0.0%	100.0%	0.0%	0.0%	100.0%
Debt Administration		109,930	0.0%	100.0%	0.0%	0.0%	100.0%
Bond Defeasance		-	0.0%	100.0%	0.0%	0.0%	100.0%
PAYGO		5,319,000	0.0%	100.0%	0.0%	0.0%	100.0%
Total Capital Financing Costs		16,589,556	0.0%	0.0%	0.0%	0.0%	0.0%
Other Operating Costs		-	0.0%	0.0%	0.0%	0.0%	0.0%
Operating Equipment		231,143	0.0%	100.0%	0.0%	0.0%	100.0%
Succession Planning Labor Pool		123,015	0.0%	100.0%	0.0%	0.0%	100.0%
OPEB/PERS Pre-Funding		-	0.0%	100.0%	0.0%	0.0%	100.0%
Total Other Operating Costs		354,159	0.0%	0.0%	0.0%	0.0%	0.0%
Increase/(Decrease) in Required Reserves		-	0.0%	100.0%	0.0%	0.0%	100.0%
Total General District Requirements		18,193,715	0.0%	0.0%	0.0%	0.0%	0.0%
REQUIREMENTS BEFORE OFFSETS:		32,533,871	0.0%	0.0%	0.0%	0.0%	0.0%
Revenue Offsets							
Property Taxes - MWD Portion of SWC GO Debt Service		-	100.0%	0.0%	0.0%	0.0%	100.0%
Property Taxes - MWD GO Debt Service		-	100.0%	0.0%	0.0%	0.0%	100.0%
Interest on Investments		108,387	0.0%	100.0%	0.0%	0.0%	100.0%
Hydro-Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%
CRA Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%
Wadsworth Pumping Plant (DVL) Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)		-	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to supply (PVID Lease)		-	0.0%	0.0%	0.0%	0.0%	0.0%
Property Taxes - SWC		-	0.0%	0.0%	0.0%	0.0%	0.0%
Revenue Reserve used for Revenue Bonds - I&P		-	0.0%	0.0%	0.0%	0.0%	0.0%
Annexation		-	0.0%	0.0%	0.0%	0.0%	0.0%
Total Revenue Offsets		108,387	0.0%	0.0%	0.0%	0.0%	0.0%
NET REVENUE REQUIREMENTS:		-	0.0%	0.0%	0.0%	0.0%	0.0%

	Functionalization	Allocation Percentages					Total
		Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M							
Group	Item						
Office of General Manager		189,730	-	189,730	-	-	189,730
Office of General Manager	Board of Directors	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-
Human Resources		378,009	-	378,009	-	-	378,009
Water Systems Operations	Office of the Manager	205,454	-	205,454	-	-	205,454
Water Systems Operations	Office of the Manager, Conveyance & Distribution S	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations Support Services	39,693	-	39,693	-	-	39,693
Water Systems Operations	Operations Support Services	-	-	-	-	-	-
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	677,452	-	677,452	-	-	677,452
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	3,775,208	-	3,775,208	-	-	3,775,208
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	-	-	-	-	-	-
Water Systems Operations	Environmental Health & Safety Section	-	-	-	-	-	-
Water Systems Operations	OSS, Fleet Services Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Power Support Unit	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations & Planning Secti	14,728	-	14,728	-	-	14,728
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-
Sustainability, Resilience & Inn		-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-
Engineering Services		1,879,288	-	1,879,288	-	-	1,879,288
Business Technology	Administrative Services	-	-	-	-	-	-
Business Technology	Information Technology	1,182,967	-	1,182,967	-	-	1,182,967
Water Resources Managemen	Resource Planning & Development	4,654,995	-	4,654,995	-	-	4,654,995
Water Resources Managemen	Resource Implementation	733,319	-	733,319	-	-	733,319
Water Resources Managemen	Office of the Group Manager	609,312	-	609,312	-	-	609,312
Ethics Office		-	-	-	-	-	-
Real Property		-	-	-	-	-	-
General Counsel		-	-	-	-	-	-
General Auditor		-	-	-	-	-	-
Total Departmental O&M		14,340,157	-	14,340,157	-	-	14,340,157
GENERAL DISTRICT REQUIREMENTS		-	-	-	-	-	-
State Water Contract*		-	-	-	-	-	-
Supply - O&M		-	-	-	-	-	-
Supply - Capital		-	-	-	-	-	-
Power - O&M & Off-Aq Capital		-	-	-	-	-	-
Power - Capital (less Off-Aq)		-	-	-	-	-	-
Transmission - Capital - Commodity, Demand, & Standby		-	-	-	-	-	-
Transmission - O&M - Commodity only		-	-	-	-	-	-
Delta Conveyance - Supply		-	-	-	-	-	-
Delta Conveyance - Power		-	-	-	-	-	-
Delta Conveyance - Other		-	-	-	-	-	-
Total State Water Contract		-	-	-	-	-	-
Colorado River Aqueduct Power Costs		-	-	-	-	-	-
Supply Programs (cash funded portion)		1,250,000	-	1,250,000	-	-	1,250,000
Demand Management (cash funded portion)		-	-	-	-	-	-
Local Resources Program		-	-	-	-	-	-
Future Supply Actions & Stormwater Pilot		-	-	-	-	-	-
Conservation Program (cash funded portion)		-	-	-	-	-	-
Total Demand Management Costs		-	-	-	-	-	-
Capital Financing		-	-	-	-	-	-
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		11,160,626	-	11,160,626	-	-	11,160,626
G.O. Bond Debt Service		-	-	-	-	-	-
Debt Administration		109,930	-	109,930	-	-	109,930
Bond Defeasance		-	-	-	-	-	-
PAYGO		5,319,000	-	5,319,000	-	-	5,319,000
Total Capital Financing Costs		16,589,556	-	16,589,556	-	-	16,589,556
Other Operating Costs		-	-	-	-	-	-
Operating Equipment		231,143	-	231,143	-	-	231,143
Succession Planning Labor Pool		123,015	-	123,015	-	-	123,015
OPEB/PERS Pre-Funding		-	-	-	-	-	-
Total Other Operating Costs		354,159	-	354,159	-	-	354,159
Increase/(Decrease) in Required Reserves		-	-	-	-	-	-
Total General District Requirements		18,193,715	-	18,193,715	-	-	18,193,715
REQUIREMENTS BEFORE OFFSETS:		32,533,871	-	32,533,871	-	-	32,533,871
Revenue Offsets		-	-	-	-	-	-
Property Taxes - MWD Portion of SWC GO Debt Service		-	-	-	-	-	-
Property Taxes - MWD GO Debt Service		-	-	-	-	-	-
Interest on Investments		108,387	-	108,387	-	-	108,387
Hydro-Power Revenue		-	-	-	-	-	-
CRA Power Revenue		-	-	-	-	-	-
Wadsworth Pumping Plant (DVL) Power Revenue		-	-	-	-	-	-
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)		-	-	-	-	-	-
Misc. allocated to supply (PVID Lease)		-	-	-	-	-	-
Property Taxes - SWC		-	-	-	-	-	-
Revenue Reserve used for Revenue Bonds - I&P		-	-	-	-	-	-
Annexation		-	-	-	-	-	-
Total Revenue Offsets		108,387	-	108,387	-	-	108,387
NET REVENUE REQUIREMENTS:		32,425,485	-	32,425,485	-	-	32,425,485

		Functionalization	Allocation Percentages					Total
			Fixed			Variable		
			Demand	Commodity	Standby	Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		166,673	-	166,673	-	-	-	166,673
Office of General Manager	Board of Directors	-	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-	-
Human Resources		289,176	-	289,176	-	-	-	289,176
Water Systems Operations	Office of the Manager	148,633	-	148,633	-	-	-	148,633
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations Support Services	30,022	-	30,022	-	-	-	30,022
Water Systems Operations	Operations Support Services	-	-	-	-	-	-	-
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	654,162	-	654,162	-	-	-	654,162
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	2,948,371	-	2,948,371	-	-	-	2,948,371
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	-	-	-	-	-	-	-
Water Systems Operations	Environmental Health & Safety Section	-	-	-	-	-	-	-
Water Systems Operations	OSS, Fleet Services Unit	-	-	-	-	-	-	-
Water Systems Operations	OSS, Power Support Unit	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations & Planning Section	13,349	-	13,349	-	-	-	13,349
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-	-
Sustainability, Resilience & Inr		-	-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-	-
Engineering Services		1,479,388	-	1,479,388	-	-	-	1,479,388
Business Technology	Administrative Services	-	-	-	-	-	-	-
Business Technology	Information Technology	800,590	-	800,590	-	-	-	800,590
Water Resources Managemen	Resource Planning & Development	3,563,431	-	3,563,431	-	-	-	3,563,431
Water Resources Managemen	Resource Implementation	466,911	-	466,911	-	-	-	466,911
Water Resources Managemen	Office of the Group Manager	595,611	-	595,611	-	-	-	595,611
Ethics Office		-	-	-	-	-	-	-
Real Property		-	-	-	-	-	-	-
General Counsel		-	-	-	-	-	-	-
General Auditor		-	-	-	-	-	-	-
Total Departmental O&M	-	11,156,318	-	11,156,318	-	-	-	11,156,318

		Functionalization	Allocation Percentages					% Total
			Demand	Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
	Office of General Manager	46,147	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Office of General Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Bay Delta Initiatives	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	External Affairs	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	External Affairs	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	External Affairs	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	External Affairs	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Human Resources	91,940	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	99,657	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	19,253	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	1,191,255	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%		

		Functionalization	Allocation Percentages				Total
			Demand	Fixed Commodity	Standby	Variable Commodity	
Departmental O&M							
Group	Item						
	Office of General Manager	46,147	-	46,147	-	-	46,147
	Office of General Manager						
	Board of Directors	-	-	-	-	-	-
	Bay Delta Initiatives	-	-	-	-	-	-
	Bay Delta Initiatives	-	-	-	-	-	-
	External Affairs	-	-	-	-	-	-
	Legislative Services	-	-	-	-	-	-
	Media Communications Services	-	-	-	-	-	-
	Manager, External Affairs/Special Projects	-	-	-	-	-	-
	Conservation & Community Services	-	-	-	-	-	-
	Human Resources	91,940	-	91,940	-	-	91,940
	Office of the Manager	99,657	-	99,657	-	-	99,657
	Office of the Manager, Conveyance & Distribution S	-	-	-	-	-	-
	Office of the Manager, Treatment Section	-	-	-	-	-	-
	Office of the Manager, Operations Support Services	19,253	-	19,253	-	-	19,253
	Operations Support Services	-	-	-	-	-	-
	Desert Region / C&D CRA	-	-	-	-	-	-
	System Operations Unit	-	-	-	-	-	-
	Power Operations and Planning	1,191,255	-	1,191,255	-	-	1,191,255
	Operations Planning & Programs Unit	-	-	-	-	-	-
	Treatment Jensen	-	-	-	-	-	-
	Treatment Diemer	-	-	-	-	-	-
	Treatment Mills	-	-	-	-	-	-
	Treatment Skinner	-	-	-	-	-	-
	Treatment Weymouth	-	-	-	-	-	-
	Water Quality Section	-	-	-	-	-	-
	C&D, Eastern Unit	-	-	-	-	-	-
	C&D, Western Unit	-	-	-	-	-	-
	OSS, Manufacturing Services Unit	-	-	-	-	-	-
	Environmental Health & Safety Section	-	-	-	-	-	-
	OSS, Fleet Services Unit	-	-	-	-	-	-
	OSS, Power Support Unit	809,856	-	809,856	-	-	809,856
	Office of the Manager, Operations & Planning Secti	7,144	-	7,144	-	-	7,144
	Security Team & Security Management	-	-	-	-	-	-
	Sustainability, Resilience & Inn	-	-	-	-	-	-
	Diversity, Equity & Inclusion	-	-	-	-	-	-
	Equal Employment Opportunity	-	-	-	-	-	-
	Office of the Chief Financial O	-	-	-	-	-	-
	Office of Manager	-	-	-	-	-	-
	Business Technology	934,874	-	934,874	-	-	934,874
	Administrative Services	-	-	-	-	-	-
	Information Technology	287,724	-	287,724	-	-	287,724
	Resource Planning & Development	-	-	-	-	-	-
	Resource Implementation	-	-	-	-	-	-
	Office of the Group Manager	-	-	-	-	-	-
	Ethics Office	-	-	-	-	-	-
	Real Property	-	-	-	-	-	-
	General Counsel	-	-	-	-	-	-
	General Auditor	-	-	-	-	-	-
	Total Departmental O&M	3,487,850	-	3,487,850	-	-	3,487,850
GENERAL DISTRICT REQUIREMENTS							
		-	-	-	-	-	-
	State Water Contract*	-	-	-	-	-	-
	Supply - O&M	-	-	-	-	-	-
	Supply - Capital	-	-	-	-	-	-
	Power - O&M & Off-Aq Capital	-	-	-	-	-	-
	Power - Capital (less Off-Aq)	-	-	-	-	-	-
	Transmission - Capital - Commodity, Demand, & Standby	-	-	-	-	-	-
	Transmission - O&M - Commodity only	-	-	-	-	-	-
	Delta Conveyance - Supply	-	-	-	-	-	-
	Delta Conveyance - Power	-	-	-	-	-	-
	Delta Conveyance - Other	-	-	-	-	-	-
	Total State Water Contract	-	-	-	-	-	-
		-	-	-	-	-	-
	Colorado River Aqueduct Power Costs	105,857,041	-	-	105,857,041	-	105,857,041
		-	-	-	-	-	-
	Supply Programs (cash funded portion)	-	-	-	-	-	-
		-	-	-	-	-	-
	Demand Management (cash funded portion)	-	-	-	-	-	-
	Local Resources Program	-	-	-	-	-	-
	Future Supply Actions & Stormwater Pilot	-	-	-	-	-	-
	Conservation Program (cash funded portion)	-	-	-	-	-	-
	Total Demand Management Costs	-	-	-	-	-	-
		-	-	-	-	-	-
	Capital Financing	-	-	-	-	-	-
	Revenue Bond Debt Service net of BABs Interest Subsidy Payment	5,551,987	-	5,551,987	-	-	5,551,987
	G.O. Bond Debt Service	-	-	-	-	-	-
	Debt Administration	54,686	-	54,686	-	-	54,686
	Bond Defeasance	-	-	-	-	-	-
	PAYGO	2,646,000	-	2,646,000	-	-	2,646,000
	Total Capital Financing Costs	8,252,673	-	8,252,673	-	-	8,252,673
		-	-	-	-	-	-
	Other Operating Costs	-	-	-	-	-	-
	Operating Equipment	56,219	-	56,219	-	-	56,219
	Succession Planning Labor Pool	29,920	-	29,920	-	-	29,920
	OPEB/PERS Pre-Funding	-	-	-	-	-	-
	Total Other Operating Costs	86,139	-	86,139	-	-	86,139
		-	-	-	-	-	-
	Increase/(Decrease) in Required Reserves	-	-	-	-	-	-
		-	-	-	-	-	-
	Total General District Requirements	114,195,853	-	8,338,812	105,857,041	-	114,195,853
		-	-	-	-	-	-
	REQUIREMENTS BEFORE OFFSETS:	117,683,703	-	11,826,662	105,857,041	-	117,683,703
		-	-	-	-	-	-
	Revenue Offsets	-	-	-	-	-	-
	Property Taxes - MWD Portion of SWC GO Debt Service	-	-	-	-	-	-
	Property Taxes - MWD GO Debt Service	-	-	-	-	-	-
	Interest on Investments	392,064	-	-	392,064	-	392,064
	Hydro-Power Revenue	-	-	-	-	-	-
	CRA Power Revenue	3,376,627	-	-	3,376,627	-	3,376,627
	Wadsworth Pumping Plant (DVL) Power Revenue	-	-	-	-	-	-
	Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)	-	-	-	-	-	-
	Misc. allocated to supply (PVID Lease)	-	-	-	-	-	-
	Property Taxes - SWC	-	-	-	-	-	-
	Revenue Reserve used for Revenue Bonds - I&P	-	-	-	-	-	-
	Annexation	-	-	-	-	-	-
	Total Revenue Offsets	3,768,691	-	-	3,768,691	-	3,768,691
		-	-	-	-	-	-
	NET REVENUE REQUIREMENTS:	113,915,012	-	11,826,662	102,088,350	-	113,915,012

	Functionalization	Allocation Percentages					Total
		Fixed			Variable		
		Demand	Commodity	Standby	Commodity	Hydroelectric	
Departmental O&M							
Group	Item						
Office of General Manager		40,539	-	40,539	-	-	40,539
Office of General Manager	Board of Directors	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-
Human Resources		70,334	-	70,334	-	-	70,334
Water Systems Operations	Office of the Manager	72,095	-	72,095	-	-	72,095
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations Support Services	14,562	-	14,562	-	-	14,562
Water Systems Operations	Operations Support Services	-	-	-	-	-	-
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	1,019,025	-	1,019,025	-	-	1,019,025
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	-	-	-	-	-	-
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	-	-	-	-	-	-
Water Systems Operations	Environmental Health & Safety Section	-	-	-	-	-	-
Water Systems Operations	OSS, Fleet Services Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Power Support Unit	728,398	-	728,398	-	-	728,398
Water Systems Operations	Office of the Manager, Operations & Planning Section	6,475	-	6,475	-	-	6,475
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-
Sustainability, Resilience & Inr		-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-
Engineering Services		735,939	-	735,939	-	-	735,939
Business Technology	Administrative Services	-	-	-	-	-	-
Business Technology	Information Technology	194,722	-	194,722	-	-	194,722
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	-	-	-	-	-	-
Water Resources Managemen	Office of the Group Manager	-	-	-	-	-	-
Ethics Office		-	-	-	-	-	-
Real Property		-	-	-	-	-	-
General Counsel		-	-	-	-	-	-
General Auditor		-	-	-	-	-	-
Total Departmental O&M	-	2,882,090	-	2,882,090	-	-	2,882,090

		Functionalization	Allocation Percentages					% Total
			Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		702,319	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Office of General Manager	Board of Directors	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Bay Delta Initiatives	Bay Delta Initiatives	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Legislative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Media Communications Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Manager, External Affairs/Special Projects	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Conservation & Community Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Human Resources		1,399,270	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager	1,762,162	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	430,813	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Treatment Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations Support Services	340,442	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Support Services	202,993	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Desert Region / C&D CRA	32,429,013	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	System Operations Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Power Operations and Planning	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Planning & Programs Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Jensen	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Diemer	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Mills	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Skinner	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Weymouth	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Water Quality Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Eastern Unit	1,057,719	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Western Unit	357	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Manufacturing Services Unit	397,204	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Environmental Health & Safety Section	2,417,730	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Fleet Services Unit	1,841,321	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Power Support Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations & Planning Section	126,325	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Security Team & Security Management	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Sustainability, Resilience & Innovation		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Diversity, Equity & Inclusion		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Equal Employment Opportunity		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Office of the Chief Financial Officer		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Office of Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Engineering Services		1,483,398	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Administrative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Information Technology	4,378,972	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Planning & Development	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Implementation	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Office of the Group Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Ethics Office		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Real Property		4,112,691	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
General Counsel		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
General Auditor		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Departmental O&M		53,082,729	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
GENERAL DISTRICT REQUIREMENTS								
State Water Contract*								
Supply - O&M		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Supply - Capital		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Power - O&M & Off-Aq Capital		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Power - Capital (less Off-Aq)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Transmission - Capital - Commodity, Demand, & Standby		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Transmission - O&M - Commodity only		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Supply		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Power		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Other		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total State Water Contract		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Colorado River Aqueduct Power Costs								
		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Supply Programs (cash funded portion)								
		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Demand Management (cash funded portion)								
Local Resources Program		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Future Supply Actions & Stormwater Pilot		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Conservation Program (cash funded portion)		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Demand Management Costs		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Capital Financing								
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		8,809,530	8.3%	49.0%	42.7%	0.0%	0.0%	100.0%
G.O. Bond Debt Service		-	8.3%	49.0%	42.7%	0.0%	0.0%	100.0%
Debt Administration		86,772	8.3%	49.0%	42.7%	0.0%	0.0%	100.0%
Bond Defeasance		-	8.3%	49.0%	42.7%	0.0%	0.0%	100.0%
PAYGO		4,198,500	8.3%	49.0%	42.7%	0.0%	0.0%	100.0%
Total Capital Financing Costs		13,094,802	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Other Operating Costs								
Operating Equipment		855,619	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Succession Planning Labor Pool		455,364	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
OPEB/PERS Pre-Funding		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Other Operating Costs		1,310,984	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Increase/(Decrease) in Required Reserves								
		-	7.6%	53.7%	38.8%	0.0%	0.0%	100.0%
Total General District Requirements								
		14,405,786	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
REQUIREMENTS BEFORE OFFSETS:								
		67,488,515	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Revenue Offsets								
Property Taxes - MWD Portion of SWC GO Debt Service		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Property Taxes - MWD GO Debt Service		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Interest on Investments		224,838	8.3%	49.0%	42.7%	0.0%	0.0%	100.0%
Hydro-Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
CRA Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Wadsworth Pumping Plant (DVL) Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to supply (PVID Lease)		-	1.6%	90.1%	8.3%	0.0%	0.0%	100.0%
Property Taxes - SWC		-	8.3%	49.0%	42.7%	0.0%	0.0%	100.0%
Revenue Reserve used for Revenue Bonds - I&P		-	50.0%	50.0%	0.0%	0.0%	0.0%	100.0%
Annexation		-	8.3%	49.0%	42.7%	0.0%	0.0%	100.0%
Total Revenue Offsets		224,838	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
NET REVENUE REQUIREMENTS:								
	-	67,263,676	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

	Functionalization	Allocation Percentages					Total
		Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M							
Group	Item						
Office of General Manager		702,319	-	702,319	-	-	702,319
Office of General Manager	Board of Directors	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-
Human Resources		1,399,270	-	1,399,270	-	-	1,399,270
Water Systems Operations	Office of the Manager	1,762,162	-	1,762,162	-	-	1,762,162
Water Systems Operations	Office of the Manager, Conveyance & Distribution S	430,813	-	430,813	-	-	430,813
Water Systems Operations	Office of the Manager, Treatment Section	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations Support Services	340,442	-	340,442	-	-	340,442
Water Systems Operations	Operations Support Services	202,993	-	202,993	-	-	202,993
Water Systems Operations	Desert Region / C&D CRA	32,429,013	-	32,429,013	-	-	32,429,013
Water Systems Operations	System Operations Unit	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	-	-	-	-	-	-
Water Systems Operations	C&D, Eastern Unit	1,057,719	-	1,057,719	-	-	1,057,719
Water Systems Operations	C&D, Western Unit	357	-	357	-	-	357
Water Systems Operations	OSS, Manufacturing Services Unit	397,204	-	397,204	-	-	397,204
Water Systems Operations	Environmental Health & Safety Section	2,417,730	-	2,417,730	-	-	2,417,730
Water Systems Operations	OSS, Fleet Services Unit	1,841,321	-	1,841,321	-	-	1,841,321
Water Systems Operations	OSS, Power Support Unit	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations & Planning Secti	-	-	-	-	-	-
Water Systems Operations	Security Team & Security Management	126,325	-	126,325	-	-	126,325
Sustainability, Resilience & Inn		-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-
Engineering Services		1,483,398	-	1,483,398	-	-	1,483,398
Business Technology	Administrative Services	-	-	-	-	-	-
Business Technology	Information Technology	4,378,972	-	4,378,972	-	-	4,378,972
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	-	-	-	-	-	-
Water Resources Managemen	Office of the Group Manager	-	-	-	-	-	-
Ethics Office		-	-	-	-	-	-
Real Property		4,112,691	-	4,112,691	-	-	4,112,691
General Counsel		-	-	-	-	-	-
General Auditor		-	-	-	-	-	-
Total Departmental O&M		53,082,729	-	53,082,729	-	-	53,082,729
GENERAL DISTRICT REQUIREMENTS		-	-	-	-	-	-
State Water Contract*		-	-	-	-	-	-
Supply - O&M		-	-	-	-	-	-
Supply - Capital		-	-	-	-	-	-
Power - O&M & Off-Aq Capital		-	-	-	-	-	-
Power - Capital (less Off-Aq)		-	-	-	-	-	-
Transmission - Capital - Commodity, Demand, & Standby		-	-	-	-	-	-
Transmission - O&M - Commodity only		-	-	-	-	-	-
Delta Conveyance - Supply		-	-	-	-	-	-
Delta Conveyance - Power		-	-	-	-	-	-
Delta Conveyance - Other		-	-	-	-	-	-
Total State Water Contract		-	-	-	-	-	-
Colorado River Aqueduct Power Costs		-	-	-	-	-	-
Supply Programs (cash funded portion)		-	-	-	-	-	-
Demand Management (cash funded portion)		-	-	-	-	-	-
Local Resources Program		-	-	-	-	-	-
Future Supply Actions & Stormwater Pilot		-	-	-	-	-	-
Conservation Program (cash funded portion)		-	-	-	-	-	-
Total Demand Management Costs		-	-	-	-	-	-
Capital Financing		-	-	-	-	-	-
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		8,809,530	734,064	4,318,022	3,757,444	-	8,809,530
G.O. Bond Debt Service		-	-	-	-	-	-
Debt Administration		86,772	7,230	42,532	37,010	-	86,772
Bond Defeasance		-	-	-	-	-	-
PAYGO		4,198,500	349,845	2,057,909	1,790,746	-	4,198,500
Total Capital Financing Costs		13,094,802	1,091,139	6,418,463	5,585,200	-	13,094,802
Other Operating Costs		-	-	-	-	-	-
Operating Equipment		855,619	-	855,619	-	-	855,619
Succession Planning Labor Pool		455,364	-	455,364	-	-	455,364
OPEB/PERS Pre-Funding		-	-	-	-	-	-
Total Other Operating Costs		1,310,984	-	1,310,984	-	-	1,310,984
Increase/(Decrease) in Required Reserves		-	-	-	-	-	-
Total General District Requirements		14,405,786	1,091,139	7,729,447	5,585,200	-	14,405,786
REQUIREMENTS BEFORE OFFSETS:		67,488,515	1,091,139	60,812,176	5,585,200	-	67,488,515
Revenue Offsets		-	-	-	-	-	-
Property Taxes - MWD Portion of SWC GO Debt Service		-	-	-	-	-	-
Property Taxes - MWD GO Debt Service		-	-	-	-	-	-
Interest on Investments		224,838	18,735	110,205	95,898	-	224,838
Hydro-Power Revenue		-	-	-	-	-	-
CRA Power Revenue		-	-	-	-	-	-
Wadsworth Pumping Plant (DVL) Power Revenue		-	-	-	-	-	-
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)		-	-	-	-	-	-
Misc. allocated to supply (PVID Lease)		-	-	-	-	-	-
Property Taxes - SWC		-	-	-	-	-	-
Revenue Reserve used for Revenue Bonds - I&P		-	-	-	-	-	-
Annexation		-	-	-	-	-	-
Total Revenue Offsets		224,838	18,735	110,205	95,898	-	224,838
NET REVENUE REQUIREMENTS:		67,263,676	1,072,404	60,701,971	5,489,302	-	67,263,676

	Functionalization	Allocation Percentages					Total
		Fixed			Variable		
		Demand	Commodity	Standby	Commodity	Hydroelectric	
Departmental O&M							
Group	Item						
Office of General Manager		616,970	-	616,970	-	-	616,970
Office of General Manager	Board of Directors	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-
Human Resources		1,070,440	-	1,070,440	-	-	1,070,440
Water Systems Operations	Office of the Manager	1,274,812	-	1,274,812	-	-	1,274,812
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	420,809	-	420,809	-	-	420,809
Water Systems Operations	Office of the Manager, Treatment Section	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations Support Services	257,497	-	257,497	-	-	257,497
Water Systems Operations	Operations Support Services	182,872	-	182,872	-	-	182,872
Water Systems Operations	Desert Region / C&D CRA	26,220,014	-	26,220,014	-	-	26,220,014
Water Systems Operations	System Operations Unit	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	-	-	-	-	-	-
Water Systems Operations	C&D, Eastern Unit	734,732	-	734,732	-	-	734,732
Water Systems Operations	C&D, Western Unit	246	-	246	-	-	246
Water Systems Operations	OSS, Manufacturing Services Unit	363,889	-	363,889	-	-	363,889
Water Systems Operations	Environmental Health & Safety Section	1,879,330	-	1,879,330	-	-	1,879,330
Water Systems Operations	OSS, Fleet Services Unit	1,096,660	-	1,096,660	-	-	1,096,660
Water Systems Operations	OSS, Power Support Unit	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations & Planning Section	114,495	-	114,495	-	-	114,495
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-
Sustainability, Resilience & Inr		-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-
Engineering Services		1,167,741	-	1,167,741	-	-	1,167,741
Business Technology	Administrative Services	-	-	-	-	-	-
Business Technology	Information Technology	2,963,530	-	2,963,530	-	-	2,963,530
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	-	-	-	-	-	-
Water Resources Managemen	Office of the Group Manager	-	-	-	-	-	-
Ethics Office		-	-	-	-	-	-
Real Property		1,675,969	-	1,675,969	-	-	1,675,969
General Counsel		-	-	-	-	-	-
General Auditor		-	-	-	-	-	-
Total Departmental O&M	-	40,040,004	-	40,040,004	-	-	40,040,004

		Functionalization	Allocation Percentages					% Total
			Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Office of General Manager	Board of Directors	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Bay Delta Initiatives	Bay Delta Initiatives	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Legislative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Media Communications Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Manager, External Affairs/Special Projects	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Conservation & Community Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Human Resources		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Treatment Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations Support Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Support Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Desert Region / C&D CRA	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	System Operations Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Power Operations and Planning	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Planning & Programs Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Jensen	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Diemer	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Mills	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Skinner	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Weymouth	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Water Quality Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Eastern Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Western Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Manufacturing Services Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Environmental Health & Safety Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Fleet Services Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Power Support Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations & Planning Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Security Team & Security Management	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Sustainability, Resilience & Innovation		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Diversity, Equity & Inclusion		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Equal Employment Opportunity		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Office of the Chief Financial Officer		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Office of Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Engineering Services		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Administrative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Information Technology	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Planning & Development	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Implementation	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Office of the Group Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Ethics Office		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Real Property		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
General Counsel		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
General Auditor		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Departmental O&M		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
GENERAL DISTRICT REQUIREMENTS								
State Water Contract*								
Supply - O&M		-	0.0%	0.0%	0.0%	100.0%	0.0%	100.0%
Supply - Capital		-	0.0%	0.0%	0.0%	100.0%	0.0%	100.0%
Power - O&M & Off-Aq Capital	211,574,465	-	0.0%	0.0%	0.0%	100.0%	0.0%	100.0%
Power - Capital (less Off-Aq)	(4,981,305)	-	0.0%	0.0%	0.0%	100.0%	0.0%	100.0%
Transmission - Capital - Commodity, Demand, & Standby		-	0.0%	0.0%	0.0%	100.0%	0.0%	100.0%
Transmission - O&M - Commodity only		-	0.0%	0.0%	0.0%	100.0%	0.0%	100.0%
Delta Conveyance - Supply		-	0.0%	0.0%	0.0%	100.0%	0.0%	100.0%
Delta Conveyance - Power		-	0.0%	0.0%	0.0%	100.0%	0.0%	100.0%
Delta Conveyance - Other		-	0.0%	0.0%	0.0%	100.0%	0.0%	100.0%
Total State Water Contract	206,593,160	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Colorado River Aqueduct Power Costs			-	0.0%	0.0%	0.0%	0.0%	0.0%
Supply Programs (cash funded portion)			-	0.0%	0.0%	0.0%	0.0%	0.0%
Demand Management (cash funded portion)			-	0.0%	0.0%	0.0%	0.0%	0.0%
Local Resources Program		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Future Supply Actions & Stormwater Pilot		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Conservation Program (cash funded portion)		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Demand Management Costs		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Capital Financing			-	0.0%	0.0%	0.0%	0.0%	0.0%
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
G.O. Bond Debt Service		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Debt Administration		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Bond Defeasance		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
PAYGO		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total Capital Financing Costs		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Other Operating Costs								
Operating Equipment		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Succession Planning Labor Pool		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
OPEB/PERS Pre-Funding		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Other Operating Costs		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Increase/(Decrease) in Required Reserves			-	0.0%	0.0%	100.0%	0.0%	100.0%
Total General District Requirements			206,593,160	0.0%	0.0%	0.0%	0.0%	0.0%
REQUIREMENTS BEFORE OFFSETS:			206,593,160	0.0%	0.0%	0.0%	0.0%	0.0%
Revenue Offsets								
Property Taxes - MWD Portion of SWC GO Debt Service		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Property Taxes - MWD GO Debt Service		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Interest on Investments	688,267	-	0.0%	0.0%	0.0%	100.0%	0.0%	100.0%
Hydro-Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
CRA Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Wadsworth Pumping Plant (DVL) Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to supply (PVID Lease)		-	0.0%	0.0%	0.0%	100.0%	0.0%	100.0%
Property Taxes - SWC	50,895,177	-	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Revenue Reserve used for Revenue Bonds - I&P		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Annexation		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total Revenue Offsets	51,583,443	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
NET REVENUE REQUIREMENTS:			-	155,009,717	0.0%	0.0%	0.0%	0.0%

	Functionalization	Allocation Percentages					Total
		Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M							
Group	Item						
Office of General Manager	Office of General Manager	-	-	-	-	-	-
Office of General Manager	Board of Directors	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-
Human Resources		-	-	-	-	-	-
Water Systems Operations	Office of the Manager	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Conveyance & Distribution S	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations Support Services	-	-	-	-	-	-
Water Systems Operations	Operations Support Services	-	-	-	-	-	-
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	-	-	-	-	-	-
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	-	-	-	-	-	-
Water Systems Operations	Environmental Health & Safety Section	-	-	-	-	-	-
Water Systems Operations	OSS, Fleet Services Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Power Support Unit	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations & Planning Secti	-	-	-	-	-	-
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-
Sustainability, Resilience & Inn		-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-
Engineering Services		-	-	-	-	-	-
Business Technology	Administrative Services	-	-	-	-	-	-
Business Technology	Information Technology	-	-	-	-	-	-
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	-	-	-	-	-	-
Water Resources Managemen	Office of the Group Manager	-	-	-	-	-	-
Ethics Office		-	-	-	-	-	-
Real Property		-	-	-	-	-	-
General Counsel		-	-	-	-	-	-
General Auditor		-	-	-	-	-	-
Total Departmental O&M	-	-	-	-	-	-	-
GENERAL DISTRICT REQUIREMENTS		-	-	-	-	-	-
State Water Contract*		-	-	-	-	-	-
Supply - O&M		-	-	-	-	-	-
Supply - Capital		-	-	-	-	-	-
Power - O&M & Off-Aq Capital	211,574,465	-	-	-	211,574,465	-	211,574,465
Power - Capital (less Off-Aq)	(4,981,305)	-	-	-	(4,981,305)	-	(4,981,305)
Transmission - Capital - Commodity, Demand, & Standby	-	-	-	-	-	-	-
Transmission - O&M - Commodity only	-	-	-	-	-	-	-
Delta Conveyance - Supply	-	-	-	-	-	-	-
Delta Conveyance - Power	-	-	-	-	-	-	-
Delta Conveyance - Other	-	-	-	-	-	-	-
Total State Water Contract	206,593,160	-	-	-	206,593,160	-	206,593,160
Colorado River Aqueduct Power Costs		-	-	-	-	-	-
Supply Programs (cash funded portion)		-	-	-	-	-	-
Demand Management (cash funded portion)		-	-	-	-	-	-
Local Resources Program		-	-	-	-	-	-
Future Supply Actions & Stormwater Pilot		-	-	-	-	-	-
Conservation Program (cash funded portion)		-	-	-	-	-	-
Total Demand Management Costs		-	-	-	-	-	-
Capital Financing		-	-	-	-	-	-
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		-	-	-	-	-	-
G.O. Bond Debt Service		-	-	-	-	-	-
Debt Administration		-	-	-	-	-	-
Bond Defeasance		-	-	-	-	-	-
PAYGO		-	-	-	-	-	-
Total Capital Financing Costs		-	-	-	-	-	-
Other Operating Costs		-	-	-	-	-	-
Operating Equipment		-	-	-	-	-	-
Succession Planning Labor Pool		-	-	-	-	-	-
OPEB/PERS Pre-Funding		-	-	-	-	-	-
Total Other Operating Costs		-	-	-	-	-	-
Increase/(Decrease) in Required Reserves		-	-	-	-	-	-
Total General District Requirements	206,593,160	-	-	-	206,593,160	-	206,593,160
REQUIREMENTS BEFORE OFFSETS:	206,593,160	-	-	-	206,593,160	-	206,593,160
Revenue Offsets		-	-	-	-	-	-
Property Taxes - MWD Portion of SWC GO Debt Service		-	-	-	-	-	-
Property Taxes - MWD GO Debt Service		-	-	-	-	-	-
Interest on Investments	688,267	-	-	-	688,267	-	688,267
Hydro-Power Revenue		-	-	-	-	-	-
CRA Power Revenue		-	-	-	-	-	-
Wadsworth Pumping Plant (DVL) Power Revenue		-	-	-	-	-	-
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)		-	-	-	-	-	-
Misc. allocated to supply (PVID Lease)		-	-	-	-	-	-
Property Taxes - SWC	50,895,177	-	-	-	50,895,177	-	50,895,177
Revenue Reserve used for Revenue Bonds - I&P		-	-	-	-	-	-
Annexation		-	-	-	-	-	-
Total Revenue Offsets	51,583,443	-	-	-	51,583,443	-	51,583,443
NET REVENUE REQUIREMENTS:	155,009,717	-	-	-	155,009,717	-	155,009,717

	Functionalization	Allocation Percentages					Total
		Fixed			Variable		
		Demand	Commodity	Standby	Commodity	Hydroelectric	
Departmental O&M							
Group	Item						
Office of General Manager		-	-	-	-	-	-
Office of General Manager	Board of Directors	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-
Human Resources		-	-	-	-	-	-
Water Systems Operations	Office of the Manager	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations Support Services	-	-	-	-	-	-
Water Systems Operations	Operations Support Services	-	-	-	-	-	-
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	-	-	-	-	-	-
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	-	-	-	-	-	-
Water Systems Operations	Environmental Health & Safety Section	-	-	-	-	-	-
Water Systems Operations	OSS, Fleet Services Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Power Support Unit	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations & Planning Section	-	-	-	-	-	-
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-
Sustainability, Resilience & Inr		-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-
Engineering Services		-	-	-	-	-	-
Business Technology	Administrative Services	-	-	-	-	-	-
Business Technology	Information Technology	-	-	-	-	-	-
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	-	-	-	-	-	-
Water Resources Managemen	Office of the Group Manager	-	-	-	-	-	-
Ethics Office		-	-	-	-	-	-
Real Property		-	-	-	-	-	-
General Counsel		-	-	-	-	-	-
General Auditor		-	-	-	-	-	-
Total Departmental O&M	-	-	-	-	-	-	-

	Functionalization	Allocation Percentages					% Total
		Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M							
Group	Item						
Office of General Manager		315,988	0.0%	100.0%	0.0%	0.0%	100.0%
Office of General Manager	Board of Directors	-	0.0%	100.0%	0.0%	0.0%	100.0%
Bay Delta Initiatives	Bay Delta Initiatives	11,925,029	0.0%	100.0%	0.0%	0.0%	100.0%
External Affairs	Legislative Services	-	0.0%	100.0%	0.0%	0.0%	100.0%
External Affairs	Media Communications Services	-	0.0%	100.0%	0.0%	0.0%	100.0%
External Affairs	Manager, External Affairs/Special Projects	-	0.0%	100.0%	0.0%	0.0%	100.0%
External Affairs	Conservation & Community Services	-	0.0%	100.0%	0.0%	0.0%	100.0%
Human Resources		629,560	0.0%	100.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager	110,873	0.0%	100.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	30,594	0.0%	100.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Treatment Section	-	0.0%	100.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations Support Services	21,420	0.0%	100.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Support Services	-	0.0%	100.0%	0.0%	0.0%	100.0%
Water Systems Operations	Desert Region / C&D CRA	-	0.0%	100.0%	0.0%	0.0%	100.0%
Water Systems Operations	System Operations Unit	-	0.0%	100.0%	0.0%	0.0%	100.0%
Water Systems Operations	Power Operations and Planning	-	0.0%	100.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Planning & Programs Unit	-	0.0%	100.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Jensen	-	0.0%	100.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Diemer	-	0.0%	100.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Mills	-	0.0%	100.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Skinner	-	0.0%	100.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Weymouth	-	0.0%	100.0%	0.0%	0.0%	100.0%
Water Systems Operations	Water Quality Section	-	0.0%	100.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Eastern Unit	2,172,214	0.0%	100.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Western Unit	589,792	0.0%	100.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Manufacturing Services Unit	-	0.0%	100.0%	0.0%	0.0%	100.0%
Water Systems Operations	Environmental Health & Safety Section	-	0.0%	100.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Fleet Services Unit	-	0.0%	100.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Power Support Unit	-	0.0%	100.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations & Planning Section	7,948	0.0%	100.0%	0.0%	0.0%	100.0%
Water Systems Operations	Security Team & Security Management	-	0.0%	100.0%	0.0%	0.0%	100.0%
Sustainability, Resilience & Innovation		-	0.0%	100.0%	0.0%	0.0%	100.0%
Diversity, Equity & Inclusion		-	0.0%	100.0%	0.0%	0.0%	100.0%
Equal Employment Opportunity		-	0.0%	100.0%	0.0%	0.0%	100.0%
Office of the Chief Financial Officer		-	0.0%	100.0%	0.0%	0.0%	100.0%
Business Technology	Office of Manager	-	0.0%	100.0%	0.0%	0.0%	100.0%
Engineering Services		725,005	0.0%	100.0%	0.0%	0.0%	100.0%
Business Technology	Administrative Services	-	0.0%	100.0%	0.0%	0.0%	100.0%
Business Technology	Information Technology	1,970,189	0.0%	100.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Planning & Development	-	0.0%	100.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Implementation	49,660	0.0%	100.0%	0.0%	0.0%	100.0%
Water Resources Management	Office of the Group Manager	5,616	0.0%	100.0%	0.0%	0.0%	100.0%
Ethics Office		-	0.0%	100.0%	0.0%	0.0%	100.0%
Real Property		5,329,120	0.0%	100.0%	0.0%	0.0%	100.0%
General Counsel		-	0.0%	100.0%	0.0%	0.0%	100.0%
General Auditor		-	0.0%	100.0%	0.0%	0.0%	100.0%
Total Departmental O&M		23,883,009	0.0%	0.0%	0.0%	0.0%	0.0%
GENERAL DISTRICT REQUIREMENTS							
State Water Contract*							
Supply - O&M		-	0.0%	0.0%	0.0%	0.0%	0.0%
Supply - Capital		-	0.0%	0.0%	0.0%	0.0%	0.0%
Power - O&M & Off-Aq Capital		-	0.0%	0.0%	0.0%	0.0%	0.0%
Power - Capital (less Off-Aq)		-	0.0%	0.0%	0.0%	0.0%	0.0%
Transmission - Capital - Commodity, Demand, & Standby		60,506,317	8.3%	49.0%	42.7%	0.0%	100.0%
Transmission - O&M - Commodity only		194,057,356	0.0%	100.0%	0.0%	0.0%	100.0%
Delta Conveyance - Supply		-	0.0%	100.0%	0.0%	0.0%	100.0%
Delta Conveyance - Power		-	0.0%	100.0%	0.0%	0.0%	100.0%
Delta Conveyance - Other		30,000,000	8.3%	49.0%	42.7%	0.0%	100.0%
Total State Water Contract		284,563,673	0.0%	0.0%	0.0%	0.0%	0.0%
Colorado River Aqueduct Power Costs		-	0.0%	0.0%	0.0%	0.0%	0.0%
Supply Programs (cash funded portion)		-	0.0%	0.0%	0.0%	0.0%	0.0%
Demand Management (cash funded portion)		-	0.0%	0.0%	0.0%	0.0%	0.0%
Local Resources Program		-	0.0%	100.0%	0.0%	0.0%	100.0%
Future Supply Actions & Stormwater Pilot		-	0.0%	100.0%	0.0%	0.0%	100.0%
Conservation Program (cash funded portion)		-	0.0%	100.0%	0.0%	0.0%	100.0%
Total Demand Management Costs		-	0.0%	0.0%	0.0%	0.0%	0.0%
Capital Financing		-	0.0%	0.0%	0.0%	0.0%	0.0%
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		4,305,622	0.0%	100.0%	0.0%	0.0%	100.0%
G.O. Bond Debt Service		-	0.0%	100.0%	0.0%	0.0%	100.0%
Debt Administration		42,409	0.0%	100.0%	0.0%	0.0%	100.0%
Bond Defeasance		-	0.0%	100.0%	0.0%	0.0%	100.0%
PAYGO		2,052,000	0.0%	100.0%	0.0%	0.0%	100.0%
Total Capital Financing Costs		6,400,032	0.0%	0.0%	0.0%	0.0%	0.0%
Other Operating Costs		-	0.0%	0.0%	0.0%	0.0%	0.0%
Operating Equipment		384,961	0.0%	100.0%	0.0%	0.0%	100.0%
Succession Planning Labor Pool		204,878	0.0%	100.0%	0.0%	0.0%	100.0%
OPEB/PERS Pre-Funding		-	0.0%	100.0%	0.0%	0.0%	100.0%
Total Other Operating Costs		589,839	0.0%	0.0%	0.0%	0.0%	0.0%
Increase/(Decrease) in Required Reserves		-	2.6%	84.2%	13.2%	0.0%	100.0%
Total General District Requirements		291,553,543	0.0%	0.0%	0.0%	0.0%	0.0%
REQUIREMENTS BEFORE OFFSETS:		315,436,552	0.0%	0.0%	0.0%	0.0%	0.0%
Revenue Offsets							
Property Taxes - MWD Portion of SWC GO Debt Service		564,249	8.3%	49.0%	42.7%	0.0%	100.0%
Property Taxes - MWD GO Debt Service		-	0.0%	0.0%	0.0%	0.0%	0.0%
Interest on Investments		1,050,879	8.3%	49.0%	42.7%	0.0%	100.0%
Hydro-Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%
CRA Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%
Wadsworth Pumping Plant (DVL) Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)		-	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to supply (PVID Lease)		-	2.4%	85.4%	12.2%	0.0%	100.0%
Property Taxes - SWC		62,712,933	2.0%	87.9%	10.1%	0.0%	100.0%
Revenue Reserve used for Revenue Bonds - I&P		-	0.0%	0.0%	0.0%	0.0%	0.0%
Annexation		-	8.3%	49.0%	42.7%	0.0%	100.0%
Total Revenue Offsets		64,328,062	0.0%	0.0%	0.0%	0.0%	0.0%
NET REVENUE REQUIREMENTS:		-	0.0%	0.0%	0.0%	0.0%	0.0%

	Functionalization	Allocation Percentages					Total
		Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M							
Group	Item						
Office of General Manager		315,988	-	315,988	-	-	315,988
Office of General Manager	Board of Directors	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	11,925,029	-	11,925,029	-	-	11,925,029
External Affairs	Legislative Services	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-
Human Resources		629,560	-	629,560	-	-	629,560
Water Systems Operations	Office of the Manager	110,873	-	110,873	-	-	110,873
Water Systems Operations	Office of the Manager, Conveyance & Distribution S	30,594	-	30,594	-	-	30,594
Water Systems Operations	Office of the Manager, Treatment Section	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations Support Services	21,420	-	21,420	-	-	21,420
Water Systems Operations	Operations Support Services	-	-	-	-	-	-
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	-	-	-	-	-	-
Water Systems Operations	C&D, Eastern Unit	2,172,214	-	2,172,214	-	-	2,172,214
Water Systems Operations	C&D, Western Unit	589,792	-	589,792	-	-	589,792
Water Systems Operations	OSS, Manufacturing Services Unit	-	-	-	-	-	-
Water Systems Operations	Environmental Health & Safety Section	-	-	-	-	-	-
Water Systems Operations	OSS, Fleet Services Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Power Support Unit	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations & Planning Secti	7,948	-	7,948	-	-	7,948
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-
Sustainability, Resilience & Inn		-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-
Engineering Services		725,005	-	725,005	-	-	725,005
Business Technology	Administrative Services	-	-	-	-	-	-
Business Technology	Information Technology	1,970,189	-	1,970,189	-	-	1,970,189
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	49,660	-	49,660	-	-	49,660
Water Resources Managemen	Office of the Group Manager	5,616	-	5,616	-	-	5,616
Ethics Office		-	-	-	-	-	-
Real Property		5,329,120	-	5,329,120	-	-	5,329,120
General Counsel		-	-	-	-	-	-
General Auditor		-	-	-	-	-	-
Total Departmental O&M		23,883,009	-	23,883,009	-	-	23,883,009
GENERAL DISTRICT REQUIREMENTS		-	-	-	-	-	-
State Water Contract*		-	-	-	-	-	-
Supply - O&M		-	-	-	-	-	-
Supply - Capital		-	-	-	-	-	-
Power - O&M & Off-Aq Capital		-	-	-	-	-	-
Power - Capital (less Off-Aq)		-	-	-	-	-	-
Transmission - Capital - Commodity, Demand, & Standby		60,506,317	5,041,755	29,657,383	25,807,178	-	60,506,317
Transmission - O&M - Commodity only		194,057,356	-	194,057,356	-	-	194,057,356
Delta Conveyance - Supply		-	-	-	-	-	-
Delta Conveyance - Power		-	-	-	-	-	-
Delta Conveyance - Other		30,000,000	2,499,783	14,704,605	12,795,612	-	30,000,000
Total State Water Contract		284,563,673	7,541,538	238,419,345	38,602,790	-	284,563,673
Colorado River Aqueduct Power Costs		-	-	-	-	-	-
Supply Programs (cash funded portion)		-	-	-	-	-	-
Demand Management (cash funded portion)		-	-	-	-	-	-
Local Resources Program		-	-	-	-	-	-
Future Supply Actions & Stormwater Pilot		-	-	-	-	-	-
Conservation Program (cash funded portion)		-	-	-	-	-	-
Total Demand Management Costs		-	-	-	-	-	-
Capital Financing		-	-	-	-	-	-
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		4,305,622	-	4,305,622	-	-	4,305,622
G.O. Bond Debt Service		-	-	-	-	-	-
Debt Administration		42,409	-	42,409	-	-	42,409
Bond Defeasance		-	-	-	-	-	-
PAYGO		2,052,000	-	2,052,000	-	-	2,052,000
Total Capital Financing Costs		6,400,032	-	6,400,032	-	-	6,400,032
Other Operating Costs		-	-	-	-	-	-
Operating Equipment		384,961	-	384,961	-	-	384,961
Succession Planning Labor Pool		204,878	-	204,878	-	-	204,878
OPEB/PERS Pre-Funding		-	-	-	-	-	-
Total Other Operating Costs		589,839	-	589,839	-	-	589,839
Increase/(Decrease) in Required Reserves		-	-	-	-	-	-
Total General District Requirements		291,553,543	7,541,538	245,409,215	38,602,790	-	291,553,543
REQUIREMENTS BEFORE OFFSETS:		315,436,552	7,541,538	269,292,224	38,602,790	-	315,436,552
Revenue Offsets							
Property Taxes - MWD Portion of SWC GO Debt Service		564,249	47,017	276,569	240,664	-	564,249
Property Taxes - MWD GO Debt Service		-	-	-	-	-	-
Interest on Investments		1,050,879	87,566	515,092	448,221	-	1,050,879
Hydro-Power Revenue		-	-	-	-	-	-
CRA Power Revenue		-	-	-	-	-	-
Wadsworth Pumping Plant (DVL) Power Revenue		-	-	-	-	-	-
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)		-	-	-	-	-	-
Misc. allocated to supply (PVID Lease)		-	-	-	-	-	-
Property Taxes - SWC		62,712,933	1,242,060	55,113,157	6,357,717	-	62,712,933
Revenue Reserve used for Revenue Bonds - I&P		-	-	-	-	-	-
Annexation		-	-	-	-	-	-
Total Revenue Offsets		64,328,062	1,376,642	55,904,817	7,046,602	-	64,328,062
NET REVENUE REQUIREMENTS:		251,108,491	6,164,896	213,387,406	31,556,188	-	251,108,491

		Functionalization	Allocation Percentages					Total
			Fixed			Variable		
			Demand	Commodity	Standby	Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		277,587	-	277,587	-	-	-	277,587
Office of General Manager	Board of Directors	-	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	5,395,138	-	5,395,138	-	-	-	5,395,138
External Affairs	Legislative Services	-	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-	-
Human Resources		481,613	-	481,613	-	-	-	481,613
Water Systems Operations	Office of the Manager	80,210	-	80,210	-	-	-	80,210
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	29,884	-	29,884	-	-	-	29,884
Water Systems Operations	Office of the Manager, Treatment Section	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations Support Services	16,201	-	16,201	-	-	-	16,201
Water Systems Operations	Operations Support Services	-	-	-	-	-	-	-
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	-	-	-	-	-	-	-
Water Systems Operations	C&D, Eastern Unit	1,508,903	-	1,508,903	-	-	-	1,508,903
Water Systems Operations	C&D, Western Unit	405,311	-	405,311	-	-	-	405,311
Water Systems Operations	OSS, Manufacturing Services Unit	-	-	-	-	-	-	-
Water Systems Operations	Environmental Health & Safety Section	-	-	-	-	-	-	-
Water Systems Operations	OSS, Fleet Services Unit	-	-	-	-	-	-	-
Water Systems Operations	OSS, Power Support Unit	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations & Planning Section	7,204	-	7,204	-	-	-	7,204
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-	-
Sustainability, Resilience & Inr		-	-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-	-
Engineering Services		570,729	-	570,729	-	-	-	570,729
Business Technology	Administrative Services	-	-	-	-	-	-	-
Business Technology	Information Technology	1,333,353	-	1,333,353	-	-	-	1,333,353
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	31,619	-	31,619	-	-	-	31,619
Water Resources Managemen	Office of the Group Manager	5,489	-	5,489	-	-	-	5,489
Ethics Office		-	-	-	-	-	-	-
Real Property		2,171,678	-	2,171,678	-	-	-	2,171,678
General Counsel		-	-	-	-	-	-	-
General Auditor		-	-	-	-	-	-	-
Total Departmental O&M	-	12,314,919	-	12,314,919	-	-	-	12,314,919

		Functionalization	Allocation Percentages					% Total
			Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
	Office of General Manager	107,824	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Office of General Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Bay Delta Initiatives	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	External Affairs	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	External Affairs	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	External Affairs	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	External Affairs	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Human Resources	214,824	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations							

	Functionalization	Allocation Percentages					Total
		Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M							
Group	Item						
Office of General Manager		107,824	-	107,824	-	-	107,824
Office of General Manager	Board of Directors	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-
Human Resources		214,824	-	214,824	-	-	214,824
Water Systems Operations	Office of the Manager	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Conveyance & Distribution S	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations Support Services	-	-	-	-	-	-
Water Systems Operations	Operations Support Services	-	-	-	-	-	-
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	-	-	-	-	-	-
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	-	-	-	-	-	-
Water Systems Operations	Environmental Health & Safety Section	-	-	-	-	-	-
Water Systems Operations	OSS, Fleet Services Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Power Support Unit	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations & Planning Secti	-	-	-	-	-	-
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-
Sustainability, Resilience & Inn		-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-
Engineering Services		7,154,651	-	7,154,651	-	-	7,154,651
Business Technology	Administrative Services	-	-	-	-	-	-
Business Technology	Information Technology	672,287	-	672,287	-	-	672,287
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	-	-	-	-	-	-
Water Resources Managemen	Office of the Group Manager	-	-	-	-	-	-
Ethics Office		-	-	-	-	-	-
Real Property		-	-	-	-	-	-
General Counsel		-	-	-	-	-	-
General Auditor		-	-	-	-	-	-
Total Departmental O&M		8,149,586	-	8,149,586	-	-	8,149,586
GENERAL DISTRICT REQUIREMENTS		-	-	-	-	-	-
State Water Contract*		-	-	-	-	-	-
Supply - O&M		-	-	-	-	-	-
Supply - Capital		-	-	-	-	-	-
Power - O&M & Off-Aq Capital		-	-	-	-	-	-
Power - Capital (less Off-Aq)		-	-	-	-	-	-
Transmission - Capital - Commodity, Demand, & Standby		-	-	-	-	-	-
Transmission - O&M - Commodity only		-	-	-	-	-	-
Delta Conveyance - Supply		-	-	-	-	-	-
Delta Conveyance - Power		-	-	-	-	-	-
Delta Conveyance - Other		-	-	-	-	-	-
Total State Water Contract		-	-	-	-	-	-
Colorado River Aqueduct Power Costs		-	-	-	-	-	-
Supply Programs (cash funded portion)		-	-	-	-	-	-
Demand Management (cash funded portion)		-	-	-	-	-	-
Local Resources Program		-	-	-	-	-	-
Future Supply Actions & Stormwater Pilot		-	-	-	-	-	-
Conservation Program (cash funded portion)		-	-	-	-	-	-
Total Demand Management Costs		-	-	-	-	-	-
Capital Financing		-	-	-	-	-	-
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		42,489,693	3,540,500	20,826,472	18,122,721	-	42,489,693
G.O. Bond Debt Service		-	-	-	-	-	-
Debt Administration		418,515	34,873	205,136	178,505	-	418,515
Bond Defeasance		-	-	-	-	-	-
PAYGO		20,250,000	1,687,353	9,925,609	8,637,038	-	20,250,000
Total Capital Financing Costs		63,158,208	5,262,727	30,957,217	26,938,264	-	63,158,208
Other Operating Costs		-	-	-	-	-	-
Operating Equipment		131,360	-	131,360	-	-	131,360
Succession Planning Labor Pool		69,910	-	69,910	-	-	69,910
OPEB/PERS Pre-Funding		-	-	-	-	-	-
Total Other Operating Costs		201,270	-	201,270	-	-	201,270
Increase/(Decrease) in Required Reserves		-	-	-	-	-	-
Total General District Requirements		63,359,478	5,262,727	31,158,487	26,938,264	-	63,359,478
REQUIREMENTS BEFORE OFFSETS:		71,509,064	5,262,727	39,308,073	26,938,264	-	71,509,064
Revenue Offsets		-	-	-	-	-	-
Property Taxes - MWD Portion of SWC GO Debt Service		-	-	-	-	-	-
Property Taxes - MWD GO Debt Service		-	-	-	-	-	-
Interest on Investments		238,233	238,233	-	-	-	238,233
Hydro-Power Revenue		-	-	-	-	-	-
CRA Power Revenue		-	-	-	-	-	-
Wadsworth Pumping Plant (DVL) Power Revenue		-	-	-	-	-	-
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)		-	-	-	-	-	-
Misc. allocated to supply (PVID Lease)		-	-	-	-	-	-
Property Taxes - SWC		-	-	-	-	-	-
Revenue Reserve used for Revenue Bonds - I&P		-	-	-	-	-	-
Annexation		-	-	-	-	-	-
Total Revenue Offsets		238,233	238,233	-	-	-	238,233
NET REVENUE REQUIREMENTS:		71,270,831	5,024,494	39,308,073	26,938,264	-	71,270,831

	Functionalization	Allocation Percentages					Total
		Fixed			Variable		
		Demand	Commodity	Standby	Commodity	Hydroelectric	
Departmental O&M							
Group	Item						
Office of General Manager		94,721	-	94,721	-	-	94,721
Office of General Manager	Board of Directors	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-
Human Resources		164,340	-	164,340	-	-	164,340
Water Systems Operations	Office of the Manager	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations Support Services	-	-	-	-	-	-
Water Systems Operations	Operations Support Services	-	-	-	-	-	-
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	-	-	-	-	-	-
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	-	-	-	-	-	-
Water Systems Operations	Environmental Health & Safety Section	-	-	-	-	-	-
Water Systems Operations	OSS, Fleet Services Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Power Support Unit	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations & Planning Section	-	-	-	-	-	-
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-
Sustainability, Resilience & Inr		-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-
Engineering Services		5,632,189	-	5,632,189	-	-	5,632,189
Business Technology	Administrative Services	-	-	-	-	-	-
Business Technology	Information Technology	454,979	-	454,979	-	-	454,979
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	-	-	-	-	-	-
Water Resources Managemen	Office of the Group Manager	-	-	-	-	-	-
Ethics Office		-	-	-	-	-	-
Real Property		-	-	-	-	-	-
General Counsel		-	-	-	-	-	-
General Auditor		-	-	-	-	-	-
Total Departmental O&M	-	6,346,230	-	6,346,230	-	-	6,346,230

		Functionalization	Allocation Percentages					% Total
			Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		104,491	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Office of General Manager	Board of Directors	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Bay Delta Initiatives	Bay Delta Initiatives	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Legislative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Media Communications Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Manager, External Affairs/Special Projects	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Conservation & Community Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Human Resources		208,182	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager	32,127	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Treatment Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations Support Services	6,207	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Support Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Desert Region / C&D CRA	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	System Operations Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Power Operations and Planning	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Planning & Programs Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Jensen	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Diemer	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Mills	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Skinner	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Weymouth	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Water Quality Section	721,318	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Eastern Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Western Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Manufacturing Services Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Environmental Health & Safety Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Fleet Services Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Power Support Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations & Planning Section	2,303	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Security Team & Security Management	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Sustainability, Resilience & Innovation		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Diversity, Equity & Inclusion		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Equal Employment Opportunity		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Office of the Chief Financial Officer		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Office of Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Engineering Services		5,418,455	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Administrative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Information Technology	651,500	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Planning & Development	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Implementation	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Office of the Group Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Ethics Office		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Real Property		753,028	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
General Counsel		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
General Auditor		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Departmental O&M		7,897,612	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
GENERAL DISTRICT REQUIREMENTS								
State Water Contract*								
Supply - O&M		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Supply - Capital		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Power - O&M & Off-Aq Capital		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Power - Capital (less Off-Aq)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Transmission - Capital - Commodity, Demand, & Standby		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Transmission - O&M - Commodity only		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Supply		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Power		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Other		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total State Water Contract		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Colorado River Aqueduct Power Costs								
		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Supply Programs (cash funded portion)								
		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Demand Management (cash funded portion)								
Local Resources Program		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Future Supply Actions & Stormwater Pilot		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Conservation Program (cash funded portion)		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Demand Management Costs		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Capital Financing								
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
G.O. Bond Debt Service	32,178,861	-	0.0%	0.0%	100.0%	0.0%	0.0%	100.0%
Debt Administration	316,955	-	0.0%	0.0%	100.0%	0.0%	0.0%	100.0%
Bond Defeasance	-	-	0.0%	0.0%	100.0%	0.0%	0.0%	100.0%
PAYGO	15,336,000	-	0.0%	0.0%	100.0%	0.0%	0.0%	100.0%
Total Capital Financing Costs	47,831,816	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Other Operating Costs								
Operating Equipment	127,298	-	0.0%	0.0%	100.0%	0.0%	0.0%	100.0%
Succession Planning Labor Pool	67,749	-	0.0%	0.0%	100.0%	0.0%	0.0%	100.0%
OPEB/PERS Pre-Funding	-	-	0.0%	0.0%	100.0%	0.0%	0.0%	100.0%
Total Other Operating Costs	195,047	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Increase/(Decrease) in Required Reserves								
		-	0.0%	0.0%	100.0%	0.0%	0.0%	100.0%
Total General District Requirements								
		48,026,863	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
REQUIREMENTS BEFORE OFFSETS:								
		55,924,475	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Revenue Offsets								
Property Taxes - MWD Portion of SWC GO Debt Service		-	0.0%	0.0%	100.0%	0.0%	0.0%	100.0%
Property Taxes - MWD GO Debt Service		-	0.0%	0.0%	100.0%	0.0%	0.0%	100.0%
Interest on Investments	186,313	-	0.0%	0.0%	100.0%	0.0%	0.0%	100.0%
Hydro-Power Revenue	-	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
CRA Power Revenue	-	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Wadsworth Pumping Plant (DVL) Power Revenue	-	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)	-	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to supply (PVID Lease)	-	-	0.0%	0.0%	100.0%	0.0%	0.0%	100.0%
Property Taxes - SWC	-	-	0.0%	0.0%	100.0%	0.0%	0.0%	100.0%
Revenue Reserve used for Revenue Bonds - I&P	-	-	0.0%	0.0%	100.0%	0.0%	0.0%	100.0%
Annexation	-	-	0.0%	0.0%	100.0%	0.0%	0.0%	100.0%
Total Revenue Offsets	186,313	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
NET REVENUE REQUIREMENTS:								
-		55,738,162	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

	Functionalization	Allocation Percentages					Total
		Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M							
Group	Item						
Office of General Manager	Office of General Manager	104,491	-	104,491	-	-	104,491
Office of General Manager	Board of Directors	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-
Human Resources	Human Resources	208,182	-	208,182	-	-	208,182
Water Systems Operations	Office of the Manager	32,127	-	32,127	-	-	32,127
Water Systems Operations	Office of the Manager, Conveyance & Distribution S	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations Support Services	6,207	-	6,207	-	-	6,207
Water Systems Operations	Operations Support Services	-	-	-	-	-	-
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	721,318	-	721,318	-	-	721,318
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	-	-	-	-	-	-
Water Systems Operations	Environmental Health & Safety Section	-	-	-	-	-	-
Water Systems Operations	OSS, Fleet Services Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Power Support Unit	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations & Planning Secti	2,303	-	2,303	-	-	2,303
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-
Sustainability, Resilience & Inn	Sustainability, Resilience & Inn	-	-	-	-	-	-
Diversity, Equity & Inclusion	Diversity, Equity & Inclusion	-	-	-	-	-	-
Equal Employment Opportunity	Equal Employment Opportunity	-	-	-	-	-	-
Office of the Chief Financial O	Office of the Chief Financial O	-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-
Engineering Services	Engineering Services	5,418,455	-	5,418,455	-	-	5,418,455
Business Technology	Administrative Services	-	-	-	-	-	-
Business Technology	Information Technology	651,500	-	651,500	-	-	651,500
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	-	-	-	-	-	-
Water Resources Managemen	Office of the Group Manager	-	-	-	-	-	-
Ethics Office	Ethics Office	-	-	-	-	-	-
Real Property	Real Property	753,028	-	753,028	-	-	753,028
General Counsel	General Counsel	-	-	-	-	-	-
General Auditor	General Auditor	-	-	-	-	-	-
Total Departmental O&M	-	7,897,612	-	7,897,612	-	-	7,897,612
GENERAL DISTRICT REQUIREMENTS							
State Water Contract*							
Supply - O&M	Supply - O&M	-	-	-	-	-	-
Supply - Capital	Supply - Capital	-	-	-	-	-	-
Power - O&M & Off-Aq Capital	Power - O&M & Off-Aq Capital	-	-	-	-	-	-
Power - Capital (less Off-Aq)	Power - Capital (less Off-Aq)	-	-	-	-	-	-
Transmission - Capital - Commodity, Demand, & Standby	Transmission - Capital - Commodity, Demand, & Standby	-	-	-	-	-	-
Transmission - O&M - Commodity only	Transmission - O&M - Commodity only	-	-	-	-	-	-
Delta Conveyance - Supply	Delta Conveyance - Supply	-	-	-	-	-	-
Delta Conveyance - Power	Delta Conveyance - Power	-	-	-	-	-	-
Delta Conveyance - Other	Delta Conveyance - Other	-	-	-	-	-	-
Total State Water Contract							
Colorado River Aqueduct Power Costs							
Supply Programs (cash funded portion)							
Demand Management (cash funded portion)							
Local Resources Program	Local Resources Program	-	-	-	-	-	-
Future Supply Actions & Stormwater Pilot	Future Supply Actions & Stormwater Pilot	-	-	-	-	-	-
Conservation Program (cash funded portion)	Conservation Program (cash funded portion)	-	-	-	-	-	-
Total Demand Management Costs							
Capital Financing							
Revenue Bond Debt Service net of BABs Interest Subsidy Payment	Revenue Bond Debt Service net of BABs Interest Subsidy Payment	32,178,861	-	32,178,861	-	-	32,178,861
G.O. Bond Debt Service	G.O. Bond Debt Service	-	-	-	-	-	-
Debt Administration	Debt Administration	316,955	-	316,955	-	-	316,955
Bond Defeasance	Bond Defeasance	-	-	-	-	-	-
PAYGO	PAYGO	15,336,000	-	15,336,000	-	-	15,336,000
Total Capital Financing Costs		47,831,816	-	47,831,816	-	-	47,831,816
Other Operating Costs							
Operating Equipment	Operating Equipment	127,298	-	127,298	-	-	127,298
Succession Planning Labor Pool	Succession Planning Labor Pool	67,749	-	67,749	-	-	67,749
OPEB/PERS Pre-Funding	OPEB/PERS Pre-Funding	-	-	-	-	-	-
Total Other Operating Costs		195,047	-	195,047	-	-	195,047
Increase/(Decrease) in Required Reserves							
Total General District Requirements		48,026,863	-	48,026,863	-	-	48,026,863
REQUIREMENTS BEFORE OFFSETS:		55,924,475	-	7,897,612	48,026,863	-	55,924,475
Revenue Offsets							
Property Taxes - MWD Portion of SWC GO Debt Service	Property Taxes - MWD Portion of SWC GO Debt Service	-	-	-	-	-	-
Property Taxes - MWD GO Debt Service	Property Taxes - MWD GO Debt Service	-	-	-	-	-	-
Interest on Investments	Interest on Investments	186,313	-	186,313	-	-	186,313
Hydro-Power Revenue	Hydro-Power Revenue	-	-	-	-	-	-
CRA Power Revenue	CRA Power Revenue	-	-	-	-	-	-
Wadsworth Pumping Plant (DVL) Power Revenue	Wadsworth Pumping Plant (DVL) Power Revenue	-	-	-	-	-	-
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)	Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)	-	-	-	-	-	-
Misc. allocated to supply (PVID Lease)	Misc. allocated to supply (PVID Lease)	-	-	-	-	-	-
Property Taxes - SWC	Property Taxes - SWC	-	-	-	-	-	-
Revenue Reserve used for Revenue Bonds - I&P	Revenue Reserve used for Revenue Bonds - I&P	-	-	-	-	-	-
Annexation	Annexation	-	-	-	-	-	-
Total Revenue Offsets		186,313	-	186,313	-	-	186,313
NET REVENUE REQUIREMENTS:		55,738,162	-	7,897,612	47,840,551	-	55,738,162

		Functionalization	Allocation Percentages					Total
			Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		91,792	-	91,792	-	-	-	91,792
Office of General Manager	Board of Directors	-	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-	-
Human Resources		159,259	-	159,259	-	-	-	159,259
Water Systems Operations	Office of the Manager	23,242	-	23,242	-	-	-	23,242
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations Support Services	4,695	-	4,695	-	-	-	4,695
Water Systems Operations	Operations Support Services	-	-	-	-	-	-	-
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	563,336	-	563,336	-	-	-	563,336
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	-	-	-	-	-	-	-
Water Systems Operations	Environmental Health & Safety Section	-	-	-	-	-	-	-
Water Systems Operations	OSS, Fleet Services Unit	-	-	-	-	-	-	-
Water Systems Operations	OSS, Power Support Unit	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations & Planning Section	2,087	-	2,087	-	-	-	2,087
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-	-
Sustainability, Resilience & Inr		-	-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-	-
Equal Employment Opportunit		-	-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-	-
Engineering Services		4,265,445	-	4,265,445	-	-	-	4,265,445
Business Technology	Administrative Services	-	-	-	-	-	-	-
Business Technology	Information Technology	440,912	-	440,912	-	-	-	440,912
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	-	-	-	-	-	-	-
Water Resources Managemen	Office of the Group Manager	-	-	-	-	-	-	-
Ethics Office		-	-	-	-	-	-	-
Real Property		306,868	-	306,868	-	-	-	306,868
General Counsel		-	-	-	-	-	-	-
General Auditor		-	-	-	-	-	-	-
Total Departmental O&M		5,857,636	-	5,857,636	-	-	-	5,857,636

		Functionalization	Allocation Percentages					% Total
			Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		80,003	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Office of General Manager	Board of Directors	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Bay Delta Initiatives	Bay Delta Initiatives	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Legislative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Media Communications Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Manager, External Affairs/Special Projects	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Conservation & Community Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Human Resources		159,393	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager	32,127	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Treatment Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations Support Services	6,207	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Support Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Desert Region / C&D CRA	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	System Operations Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Power Operations and Planning	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Planning & Programs Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Jensen	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Diemer	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Mills	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Skinner	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Weymouth	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Water Quality Section	721,318	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Eastern Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Western Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Manufacturing Services Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Environmental Health & Safety Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Fleet Services Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Power Support Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations & Planning Section	2,303	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Security Team & Security Management	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Sustainability, Resilience & Innovation		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Diversity, Equity & Inclusion		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Equal Employment Opportunity		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Office of the Chief Financial Officer		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Office of Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Engineering Services		3,257,751	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Administrative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Information Technology	498,817	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Planning & Development	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Implementation	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Office of the Group Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Ethics Office		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Real Property		1,288,836	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
General Counsel		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
General Auditor		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Departmental O&M		6,046,755	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
GENERAL DISTRICT REQUIREMENTS								
State Water Contract*								
Supply - O&M		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Supply - Capital		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Power - O&M & Off-Aq Capital		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Power - Capital (less Off-Aq)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Transmission - Capital - Commodity, Demand, & Standby		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Transmission - O&M - Commodity only		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Supply		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Power		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Other		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total State Water Contract		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Colorado River Aqueduct Power Costs								
		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Supply Programs (cash funded portion)								
		18,211,661	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Demand Management (cash funded portion)								
Local Resources Program		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Future Supply Actions & Stormwater Pilot		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Conservation Program (cash funded portion)		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Demand Management Costs		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Capital Financing								
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		19,346,974	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
G.O. Bond Debt Service		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Debt Administration		190,564	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Bond Defeasance		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
PAYGO		9,220,500	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Capital Financing Costs		28,758,037	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Other Operating Costs								
Operating Equipment		97,465	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Succession Planning Labor Pool		51,871	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
OPEB/PERS Pre-Funding		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Other Operating Costs		149,337	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Increase/(Decrease) in Required Reserves								
		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total General District Requirements								
		47,119,035	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
REQUIREMENTS BEFORE OFFSETS:								
		53,165,790	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Revenue Offsets								
Property Taxes - MWD Portion of SWC GO Debt Service		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Property Taxes - MWD GO Debt Service		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Interest on Investments		177,122	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Hydro-Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
CRA Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Wadsworth Pumping Plant (DVL) Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to supply (PVID Lease)		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Property Taxes - SWC		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Revenue Reserve used for Revenue Bonds - I&P		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Annexation		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Revenue Offsets		177,122	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
NET REVENUE REQUIREMENTS:								
-		52,988,668	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

	Functionalization	Allocation Percentages					Total
		Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M							
Group	Item						
Office of General Manager		80,003	-	80,003	-	-	80,003
Office of General Manager	Board of Directors	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-
Human Resources		159,393	-	159,393	-	-	159,393
Water Systems Operations	Office of the Manager	32,127	-	32,127	-	-	32,127
Water Systems Operations	Office of the Manager, Conveyance & Distribution S	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations Support Services	6,207	-	6,207	-	-	6,207
Water Systems Operations	Operations Support Services	-	-	-	-	-	-
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	721,318	-	721,318	-	-	721,318
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	-	-	-	-	-	-
Water Systems Operations	Environmental Health & Safety Section	-	-	-	-	-	-
Water Systems Operations	OSS, Fleet Services Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Power Support Unit	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations & Planning Secti	2,303	-	2,303	-	-	2,303
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-
Sustainability, Resilience & Inn		-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-
Engineering Services		3,257,751	-	3,257,751	-	-	3,257,751
Business Technology	Administrative Services	-	-	-	-	-	-
Business Technology	Information Technology	498,817	-	498,817	-	-	498,817
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	-	-	-	-	-	-
Water Resources Managemen	Office of the Group Manager	-	-	-	-	-	-
Ethics Office		-	-	-	-	-	-
Real Property		1,288,836	-	1,288,836	-	-	1,288,836
General Counsel		-	-	-	-	-	-
General Auditor		-	-	-	-	-	-
Total Departmental O&M		6,046,755	-	6,046,755	-	-	6,046,755
GENERAL DISTRICT REQUIREMENTS		-	-	-	-	-	-
State Water Contract*		-	-	-	-	-	-
Supply - O&M		-	-	-	-	-	-
Supply - Capital		-	-	-	-	-	-
Power - O&M & Off-Aq Capital		-	-	-	-	-	-
Power - Capital (less Off-Aq)		-	-	-	-	-	-
Transmission - Capital - Commodity, Demand, & Standby		-	-	-	-	-	-
Transmission - O&M - Commodity only		-	-	-	-	-	-
Delta Conveyance - Supply		-	-	-	-	-	-
Delta Conveyance - Power		-	-	-	-	-	-
Delta Conveyance - Other		-	-	-	-	-	-
Total State Water Contract		-	-	-	-	-	-
Colorado River Aqueduct Power Costs		-	-	-	-	-	-
Supply Programs (cash funded portion)		18,211,661	-	18,211,661	-	-	18,211,661
Demand Management (cash funded portion)		-	-	-	-	-	-
Local Resources Program		-	-	-	-	-	-
Future Supply Actions & Stormwater Pilot		-	-	-	-	-	-
Conservation Program (cash funded portion)		-	-	-	-	-	-
Total Demand Management Costs		-	-	-	-	-	-
Capital Financing		-	-	-	-	-	-
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		19,346,974	-	19,346,974	-	-	19,346,974
G.O. Bond Debt Service		-	-	-	-	-	-
Debt Administration		190,564	-	190,564	-	-	190,564
Bond Defeasance		-	-	-	-	-	-
PAYGO		9,220,500	-	9,220,500	-	-	9,220,500
Total Capital Financing Costs		28,758,037	-	28,758,037	-	-	28,758,037
Other Operating Costs		-	-	-	-	-	-
Operating Equipment		97,465	-	97,465	-	-	97,465
Succession Planning Labor Pool		51,871	-	51,871	-	-	51,871
OPEB/PERS Pre-Funding		-	-	-	-	-	-
Total Other Operating Costs		149,337	-	149,337	-	-	149,337
Increase/(Decrease) in Required Reserves		-	-	-	-	-	-
Total General District Requirements		47,119,035	-	47,119,035	-	-	47,119,035
REQUIREMENTS BEFORE OFFSETS:		53,165,790	-	53,165,790	-	-	53,165,790
Revenue Offsets		-	-	-	-	-	-
Property Taxes - MWD Portion of SWC GO Debt Service		-	-	-	-	-	-
Property Taxes - MWD GO Debt Service		-	-	-	-	-	-
Interest on Investments		177,122	-	177,122	-	-	177,122
Hydro-Power Revenue		-	-	-	-	-	-
CRA Power Revenue		-	-	-	-	-	-
Wadsworth Pumping Plant (DVL) Power Revenue		-	-	-	-	-	-
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)		-	-	-	-	-	-
Misc. allocated to supply (PVID Lease)		-	-	-	-	-	-
Property Taxes - SWC		-	-	-	-	-	-
Revenue Reserve used for Revenue Bonds - I&P		-	-	-	-	-	-
Annexation		-	-	-	-	-	-
Total Revenue Offsets		177,122	-	177,122	-	-	177,122
NET REVENUE REQUIREMENTS:		52,988,668	-	52,988,668	-	-	52,988,668

		Functionalization	Allocation Percentages					Total
			Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		70,280	-	70,280	-	-	-	70,280
Office of General Manager	Board of Directors	-	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-	-
Human Resources		121,936	-	121,936	-	-	-	121,936
Water Systems Operations	Office of the Manager	23,242	-	23,242	-	-	-	23,242
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations Support Services	4,695	-	4,695	-	-	-	4,695
Water Systems Operations	Operations Support Services	-	-	-	-	-	-	-
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	563,336	-	563,336	-	-	-	563,336
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	-	-	-	-	-	-	-
Water Systems Operations	Environmental Health & Safety Section	-	-	-	-	-	-	-
Water Systems Operations	OSS, Fleet Services Unit	-	-	-	-	-	-	-
Water Systems Operations	OSS, Power Support Unit	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations & Planning Section	2,087	-	2,087	-	-	-	2,087
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-	-
Sustainability, Resilience & Inr		-	-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-	-
Equal Employment Opportuniti		-	-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-	-
Engineering Services		2,564,524	-	2,564,524	-	-	-	2,564,524
Business Technology	Administrative Services	-	-	-	-	-	-	-
Business Technology	Information Technology	337,581	-	337,581	-	-	-	337,581
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	-	-	-	-	-	-	-
Water Resources Managemen	Office of the Group Manager	-	-	-	-	-	-	-
Ethics Office		-	-	-	-	-	-	-
Real Property		525,216	-	525,216	-	-	-	525,216
General Counsel		-	-	-	-	-	-	-
General Auditor		-	-	-	-	-	-	-
Total Departmental O&M		4,212,897	-	4,212,897	-	-	-	4,212,897

		Functionalization	Allocation Percentages					% Total
			Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		55,242	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Office of General Manager	Board of Directors	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Bay Delta Initiatives	Bay Delta Initiatives	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Legislative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Media Communications Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Manager, External Affairs/Special Projects	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Conservation & Community Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Human Resources		110,062	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager	32,127	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Treatment Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations Support Services	6,207	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Support Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Desert Region / C&D CRA	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	System Operations Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Power Operations and Planning	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Planning & Programs Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Jensen	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Diemer	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Mills	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Skinner	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Weymouth	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Water Quality Section	721,318	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Eastern Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Western Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Manufacturing Services Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Environmental Health & Safety Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Fleet Services Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Power Support Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations & Planning Section	2,303	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Security Team & Security Management	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Sustainability, Resilience & Innovation		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Diversity, Equity & Inclusion		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Equal Employment Opportunity		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Office of the Chief Financial Officer		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Office of Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Engineering Services		2,599,523	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Administrative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Information Technology	344,437	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Planning & Development	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Implementation	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Office of the Group Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Ethics Office		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Real Property		304,107	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
General Counsel		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
General Auditor		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Departmental O&M		4,175,327	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
GENERAL DISTRICT REQUIREMENTS								
State Water Contract*								
Supply - O&M		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Supply - Capital		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Power - O&M & Off-Aq Capital		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Power - Capital (less Off-Aq)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Transmission - Capital - Commodity, Demand, & Standby		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Transmission - O&M - Commodity only		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Supply		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Power		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Other		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total State Water Contract		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Colorado River Aqueduct Power Costs								
		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Supply Programs (cash funded portion)								
		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Demand Management (cash funded portion)								
Local Resources Program		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Future Supply Actions & Stormwater Pilot		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Conservation Program (cash funded portion)		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Demand Management Costs		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Capital Financing								
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		15,437,922	33.5%	39.9%	26.7%	0.0%	0.0%	100.0%
G.O. Bond Debt Service		-	33.5%	39.9%	26.7%	0.0%	0.0%	100.0%
Debt Administration		152,060	33.5%	39.9%	26.7%	0.0%	0.0%	100.0%
Bond Defeasance		-	33.5%	39.9%	26.7%	0.0%	0.0%	100.0%
PAYGO		7,357,500	33.5%	39.9%	26.7%	0.0%	0.0%	100.0%
Total Capital Financing Costs		22,947,482	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Other Operating Costs								
Operating Equipment		67,300	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Succession Planning Labor Pool		35,818	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
OPEB/PERS Pre-Funding		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Other Operating Costs		103,118	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Increase/(Decrease) in Required Reserves								
		-	33.3%	40.1%	26.5%	0.0%	0.0%	100.0%
Total General District Requirements								
		23,050,600	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
REQUIREMENTS BEFORE OFFSETS:								
		27,225,927	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Revenue Offsets								
Property Taxes - MWD Portion of SWC GO Debt Service		-	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Property Taxes - MWD GO Debt Service		-	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Interest on Investments		90,703	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Hydro-Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
CRA Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Wadsworth Pumping Plant (DVL) Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to supply (PVID Lease)		-	28.2%	49.3%	22.5%	0.0%	0.0%	100.0%
Property Taxes - SWC		-	33.5%	39.9%	26.7%	0.0%	0.0%	100.0%
Revenue Reserve used for Revenue Bonds - I&P		-	33.5%	39.9%	26.7%	0.0%	0.0%	100.0%
Annexation		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total Revenue Offsets		90,703	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
NET REVENUE REQUIREMENTS:								
	-	27,135,224	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

	Functionalization	Allocation Percentages					Total
		Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M							
Group	Item						
Office of General Manager	Office of General Manager	55,242	-	55,242	-	-	55,242
Office of General Manager	Board of Directors	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-
Human Resources	Human Resources	110,062	-	110,062	-	-	110,062
Water Systems Operations	Office of the Manager	32,127	-	32,127	-	-	32,127
Water Systems Operations	Office of the Manager, Conveyance & Distribution S	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations Support Services	6,207	-	6,207	-	-	6,207
Water Systems Operations	Operations Support Services	-	-	-	-	-	-
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	721,318	-	721,318	-	-	721,318
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	-	-	-	-	-	-
Water Systems Operations	Environmental Health & Safety Section	-	-	-	-	-	-
Water Systems Operations	OSS, Fleet Services Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Power Support Unit	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations & Planning Secti	2,303	-	2,303	-	-	2,303
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-
Sustainability, Resilience & Inn	Sustainability, Resilience & Inn	-	-	-	-	-	-
Diversity, Equity & Inclusion	Diversity, Equity & Inclusion	-	-	-	-	-	-
Equal Employment Opportunity	Equal Employment Opportunity	-	-	-	-	-	-
Office of the Chief Financial O	Office of the Chief Financial O	-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-
Engineering Services	Engineering Services	2,599,523	-	2,599,523	-	-	2,599,523
Business Technology	Administrative Services	-	-	-	-	-	-
Business Technology	Information Technology	344,437	-	344,437	-	-	344,437
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	-	-	-	-	-	-
Water Resources Managemen	Office of the Group Manager	-	-	-	-	-	-
Ethics Office	Ethics Office	-	-	-	-	-	-
Real Property	Real Property	304,107	-	304,107	-	-	304,107
General Counsel	General Counsel	-	-	-	-	-	-
General Auditor	General Auditor	-	-	-	-	-	-
Total Departmental O&M		4,175,327	-	4,175,327	-	-	4,175,327
GENERAL DISTRICT REQUIREMENTS		-	-	-	-	-	-
State Water Contract*		-	-	-	-	-	-
Supply - O&M	Supply - O&M	-	-	-	-	-	-
Supply - Capital	Supply - Capital	-	-	-	-	-	-
Power - O&M & Off-Aq Capital	Power - O&M & Off-Aq Capital	-	-	-	-	-	-
Power - Capital (less Off-Aq)	Power - Capital (less Off-Aq)	-	-	-	-	-	-
Transmission - Capital - Commodity, Demand, & Standby	Transmission - Capital - Commodity, Demand, & Standby	-	-	-	-	-	-
Transmission - O&M - Commodity only	Transmission - O&M - Commodity only	-	-	-	-	-	-
Delta Conveyance - Supply	Delta Conveyance - Supply	-	-	-	-	-	-
Delta Conveyance - Power	Delta Conveyance - Power	-	-	-	-	-	-
Delta Conveyance - Other	Delta Conveyance - Other	-	-	-	-	-	-
Total State Water Contract		-	-	-	-	-	-
Colorado River Aqueduct Power Costs		-	-	-	-	-	-
Supply Programs (cash funded portion)		-	-	-	-	-	-
Demand Management (cash funded portion)		-	-	-	-	-	-
Local Resources Program	Local Resources Program	-	-	-	-	-	-
Future Supply Actions & Stormwater Pilot	Future Supply Actions & Stormwater Pilot	-	-	-	-	-	-
Conservation Program (cash funded portion)	Conservation Program (cash funded portion)	-	-	-	-	-	-
Total Demand Management Costs		-	-	-	-	-	-
Capital Financing		-	-	-	-	-	-
Revenue Bond Debt Service net of BABs Interest Subsidy Payment	Revenue Bond Debt Service net of BABs Interest Subsidy Payment	15,437,922	5,169,484	6,153,813	4,114,625	-	15,437,922
G.O. Bond Debt Service	G.O. Bond Debt Service	-	-	-	-	-	-
Debt Administration	Debt Administration	152,060	50,918	60,814	40,528	-	152,060
Bond Defeasance	Bond Defeasance	-	-	-	-	-	-
PAYGO	PAYGO	7,357,500	2,463,704	2,932,822	1,960,973	-	7,357,500
Total Capital Financing Costs		22,947,482	7,684,107	9,147,249	6,116,127	-	22,947,482
Other Operating Costs		-	-	-	-	-	-
Operating Equipment	Operating Equipment	67,300	-	67,300	-	-	67,300
Succession Planning Labor Pool	Succession Planning Labor Pool	35,818	-	35,818	-	-	35,818
OPEB/PERS Pre-Funding	OPEB/PERS Pre-Funding	-	-	-	-	-	-
Total Other Operating Costs		103,118	-	103,118	-	-	103,118
Increase/(Decrease) in Required Reserves		-	-	-	-	-	-
Total General District Requirements		23,050,600	7,684,107	9,250,367	6,116,127	-	23,050,600
REQUIREMENTS BEFORE OFFSETS:		27,225,927	7,684,107	13,425,694	6,116,127	-	27,225,927
Revenue Offsets		-	-	-	-	-	-
Property Taxes - MWD Portion of SWC GO Debt Service	Property Taxes - MWD Portion of SWC GO Debt Service	-	-	-	-	-	-
Property Taxes - MWD GO Debt Service	Property Taxes - MWD GO Debt Service	-	-	-	-	-	-
Interest on Investments	Interest on Investments	90,703	-	90,703	-	-	90,703
Hydro-Power Revenue	Hydro-Power Revenue	-	-	-	-	-	-
CRA Power Revenue	CRA Power Revenue	-	-	-	-	-	-
Wadsworth Pumping Plant (DVL) Power Revenue	Wadsworth Pumping Plant (DVL) Power Revenue	-	-	-	-	-	-
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)	Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)	-	-	-	-	-	-
Misc. allocated to supply (PVID Lease)	Misc. allocated to supply (PVID Lease)	-	-	-	-	-	-
Property Taxes - SWC	Property Taxes - SWC	-	-	-	-	-	-
Revenue Reserve used for Revenue Bonds - I&P	Revenue Reserve used for Revenue Bonds - I&P	-	-	-	-	-	-
Annexation	Annexation	-	-	-	-	-	-
Total Revenue Offsets		90,703	-	90,703	-	-	90,703
NET REVENUE REQUIREMENTS:		27,135,224	7,684,107	13,334,990	6,116,127	-	27,135,224

		Functionalization	Allocation Percentages					Total
			Fixed			Variable		
			Demand	Commodity	Standby	Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		48,529	-	48,529	-	-	-	48,529
Office of General Manager	Board of Directors	-	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-	-
Human Resources		84,198	-	84,198	-	-	-	84,198
Water Systems Operations	Office of the Manager	23,242	-	23,242	-	-	-	23,242
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations Support Services	4,695	-	4,695	-	-	-	4,695
Water Systems Operations	Operations Support Services	-	-	-	-	-	-	-
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	563,336	-	563,336	-	-	-	563,336
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	-	-	-	-	-	-	-
Water Systems Operations	Environmental Health & Safety Section	-	-	-	-	-	-	-
Water Systems Operations	OSS, Fleet Services Unit	-	-	-	-	-	-	-
Water Systems Operations	OSS, Power Support Unit	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations & Planning Section	2,087	-	2,087	-	-	-	2,087
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-	-
Sustainability, Resilience & Inr		-	-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-	-
Engineering Services		2,046,362	-	2,046,362	-	-	-	2,046,362
Business Technology	Administrative Services	-	-	-	-	-	-	-
Business Technology	Information Technology	233,102	-	233,102	-	-	-	233,102
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	-	-	-	-	-	-	-
Water Resources Managemen	Office of the Group Manager	-	-	-	-	-	-	-
Ethics Office		-	-	-	-	-	-	-
Real Property		123,927	-	123,927	-	-	-	123,927
General Counsel		-	-	-	-	-	-	-
General Auditor		-	-	-	-	-	-	-
Total Departmental O&M	-	3,129,479	-	3,129,479	-	-	-	3,129,479

		Functionalization	Allocation Percentages					% Total
			Fixed			Variable	Hydroelectric	
			Demand	Commodity	Standby	Commodity		
Departmental O&M								
Group	Item							
	Office of General Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Office of General Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Bay Delta Initiatives	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	External Affairs	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	External Affairs	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	External Affairs	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	External Affairs	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Human Resources	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	

	Functionalization	Allocation Percentages					Total
		Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M							
Group	Item						
Office of General Manager	Office of General Manager	-	-	-	-	-	-
Office of General Manager	Board of Directors	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-
Human Resources		-	-	-	-	-	-
Water Systems Operations	Office of the Manager	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Conveyance & Distribution S	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations Support Services	-	-	-	-	-	-
Water Systems Operations	Operations Support Services	-	-	-	-	-	-
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	-	-	-	-	-	-
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	-	-	-	-	-	-
Water Systems Operations	Environmental Health & Safety Section	-	-	-	-	-	-
Water Systems Operations	OSS, Fleet Services Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Power Support Unit	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations & Planning Secti	-	-	-	-	-	-
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-
Sustainability, Resilience & Inn		-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-
Engineering Services		-	-	-	-	-	-
Business Technology	Administrative Services	-	-	-	-	-	-
Business Technology	Information Technology	-	-	-	-	-	-
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	-	-	-	-	-	-
Water Resources Managemen	Office of the Group Manager	-	-	-	-	-	-
Ethics Office		-	-	-	-	-	-
Real Property		-	-	-	-	-	-
General Counsel		-	-	-	-	-	-
General Auditor		-	-	-	-	-	-
Total Departmental O&M	-	-	-	-	-	-	-
GENERAL DISTRICT REQUIREMENTS		-	-	-	-	-	-
State Water Contract*		-	-	-	-	-	-
Supply - O&M		-	-	-	-	-	-
Supply - Capital		-	-	-	-	-	-
Power - O&M & Off-Aq Capital		-	-	-	-	-	-
Power - Capital (less Off-Aq)		-	-	-	-	-	-
Transmission - Capital - Commodity, Demand, & Standby		-	-	-	-	-	-
Transmission - O&M - Commodity only		-	-	-	-	-	-
Delta Conveyance - Supply		-	-	-	-	-	-
Delta Conveyance - Power		-	-	-	-	-	-
Delta Conveyance - Other		-	-	-	-	-	-
Total State Water Contract		-	-	-	-	-	-
Colorado River Aqueduct Power Costs		-	-	-	-	-	-
Supply Programs (cash funded portion)		-	-	-	-	-	-
Demand Management (cash funded portion)		-	-	-	-	-	-
Local Resources Program		-	-	-	-	-	-
Future Supply Actions & Stormwater Pilot		-	-	-	-	-	-
Conservation Program (cash funded portion)		-	-	-	-	-	-
Total Demand Management Costs		-	-	-	-	-	-
Capital Financing		-	-	-	-	-	-
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		-	-	-	-	-	-
G.O. Bond Debt Service		-	-	-	-	-	-
Debt Administration		-	-	-	-	-	-
Bond Defeasance		-	-	-	-	-	-
PAYGO		-	-	-	-	-	-
Total Capital Financing Costs		-	-	-	-	-	-
Other Operating Costs		-	-	-	-	-	-
Operating Equipment		-	-	-	-	-	-
Succession Planning Labor Pool		-	-	-	-	-	-
OPEB/PERS Pre-Funding		-	-	-	-	-	-
Total Other Operating Costs		-	-	-	-	-	-
Increase/(Decrease) in Required Reserves		-	-	-	-	-	-
Total General District Requirements		-	-	-	-	-	-
REQUIREMENTS BEFORE OFFSETS:		-	-	-	-	-	-
Revenue Offsets		-	-	-	-	-	-
Property Taxes - MWD Portion of SWC GO Debt Service		-	-	-	-	-	-
Property Taxes - MWD GO Debt Service		-	-	-	-	-	-
Interest on Investments		-	-	-	-	-	-
Hydro-Power Revenue		-	-	-	-	-	-
CRA Power Revenue		-	-	-	-	-	-
Wadsworth Pumping Plant (DVL) Power Revenue	679,733	-	-	-	679,733	-	679,733
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)		-	-	-	-	-	-
Misc. allocated to supply (PVID Lease)		-	-	-	-	-	-
Property Taxes - SWC		-	-	-	-	-	-
Revenue Reserve used for Revenue Bonds - I&P		-	-	-	-	-	-
Annexation		-	-	-	-	-	-
Total Revenue Offsets	679,733	-	-	-	679,733	-	679,733
NET REVENUE REQUIREMENTS:	(679,733)	-	-	-	(679,733)	-	(679,733)

	Functionalization	Allocation Percentages					Total
		Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M							
Group	Item						
Office of General Manager		-	-	-	-	-	-
Office of General Manager	Board of Directors	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-
Human Resources		-	-	-	-	-	-
Water Systems Operations	Office of the Manager	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations Support Services	-	-	-	-	-	-
Water Systems Operations	Operations Support Services	-	-	-	-	-	-
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	-	-	-	-	-	-
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	-	-	-	-	-	-
Water Systems Operations	Environmental Health & Safety Section	-	-	-	-	-	-
Water Systems Operations	OSS, Fleet Services Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Power Support Unit	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations & Planning Section	-	-	-	-	-	-
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-
Sustainability, Resilience & Inr		-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-
Equal Employment Opportuniti		-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-
Engineering Services		-	-	-	-	-	-
Business Technology	Administrative Services	-	-	-	-	-	-
Business Technology	Information Technology	-	-	-	-	-	-
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	-	-	-	-	-	-
Water Resources Managemen	Office of the Group Manager	-	-	-	-	-	-
Ethics Office		-	-	-	-	-	-
Real Property		-	-	-	-	-	-
General Counsel		-	-	-	-	-	-
General Auditor		-	-	-	-	-	-
Total Departmental O&M	-	-	-	-	-	-	-

		Functionalization	Allocation Percentages					% Total
			Demand	Fixed		Variable Commodity	Hydroelectric	
				Commodity	Standby			
Departmental O&M								
Group	Item							
	Office of General Manager	387,293	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Office of General Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Bay Delta Initiatives	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	External Affairs	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	External Affairs	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	External Affairs	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	External Affairs	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Human Resources	771,626	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	804,299	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	212,451	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	155,387	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	95,960	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	16,703,520	0.0%	64.1%	0.0%	35.9%	0.0%	100.0%
	Water Systems Operations	-	0.0%	56.2%	0.0%	43.8%	0.0%	100.0%
	Water Systems Operations	-	0.0%	78.5%	0.0%	21.5%	0.0%	100.0%
	Water Systems Operations	-	0.0%	65.1%	0.0%	34.9%	0.0%	100.0%
	Water Systems Operations	-	0.0%	64.0%	0.0%	36.0%	0.0%	100.0%
	Water Systems Operations	2,922,742	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	140,048	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	1,267,137	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	552,014	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	273,830	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	57,658	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Sustainability, Resilience & Innovation	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Diversity, Equity & Inclusion	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Equal Employment Opportunity	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Office of the Chief Financial Officer	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Business Technology	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Engineering Services	2,513,667	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Business Technology	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Business Technology	2,414,779	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Resources Management	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Resources Management	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Resources Management	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Ethics Office	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Real Property	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	General Counsel	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	General Auditor	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Total Departmental O&M	29,272,411	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
GENERAL DISTRICT REQUIREMENTS								
State Water Contract*								
	Supply - O&M	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Supply - Capital	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Power - O&M & Off-Aq Capital	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Power - Capital (less Off-Aq)	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Transmission - Capital - Commodity, Demand, & Standby	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Transmission - O&M - Commodity only	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Delta Conveyance - Supply	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Delta Conveyance - Power	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Delta Conveyance - Other	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Total State Water Contract	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Colorado River Aqueduct Power Costs	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Supply Programs (cash funded portion)	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Demand Management (cash funded portion)	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Local Resources Program	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Future Supply Actions & Stormwater Pilot	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Conservation Program (cash funded portion)	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Total Demand Management Costs	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Capital Financing	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Revenue Bond Debt Service net of BABs Interest Subsidy Payment	14,928,046	31.4%	29.1%	39.4%	0.0%	0.0%	100.0%
	G.O. Bond Debt Service	103,753	31.4%	29.1%	39.4%	0.0%	0.0%	100.0%
	Debt Administration	147,038	31.4%	29.1%	39.4%	0.0%	0.0%	100.0%
	Bond Defeasance	-	31.4%	29.1%	39.4%	0.0%	0.0%	100.0%
	PAYGO	7,114,500	31.4%	29.1%	39.4%	0.0%	0.0%	100.0%
	Total Capital Financing Costs	22,293,337	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Other Operating Costs							
	Operating Equipment	471,830	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Succession Planning Labor Pool	251,110	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	OPEB/PERS Pre-Funding	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Total Other Operating Costs	722,941	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Increase/(Decrease) in Required Reserves	-	30.5%	31.3%	38.2%	0.0%	0.0%	100.0%
	Total General District Requirements	23,016,277	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	REQUIREMENTS BEFORE OFFSETS:	52,288,688	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Revenue Offsets							
	Property Taxes - MWD Portion of SWC GO Debt Service	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Property Taxes - MWD GO Debt Service	103,753	0.0%	0.0%	100.0%	0.0%	0.0%	100.0%
	Interest on Investments	174,200	31.4%	29.1%	39.4%	0.0%	0.0%	100.0%
	Hydro-Power Revenue	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	CRA Power Revenue	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Wadsworth Pumping Plant (DVL) Power Revenue	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Misc. allocated to supply (PVID Lease)	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Property Taxes - SWC	-	31.4%	29.1%	39.4%	0.0%	0.0%	100.0%
	Revenue Reserve used for Revenue Bonds - I&P	-	31.4%	29.1%	39.4%	0.0%	0.0%	100.0%
	Annexation	-	31.4%	29.1%	39.4%	0.0%	0.0%	100.0%
	Total Revenue Offsets	277,953	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	NET REVENUE REQUIREMENTS:	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

	Functionalization	Allocation Percentages					Total
		Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M							
Group	Item						
Office of General Manager		387,293	-	387,293	-	-	387,293
Office of General Manager	Board of Directors	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-
Human Resources		771,626	-	771,626	-	-	771,626
Water Systems Operations	Office of the Manager	804,299	-	804,299	-	-	804,299
Water Systems Operations	Office of the Manager, Conveyance & Distribution S	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	212,451	-	212,451	-	-	212,451
Water Systems Operations	Office of the Manager, Operations Support Services	155,387	-	155,387	-	-	155,387
Water Systems Operations	Operations Support Services	95,960	-	95,960	-	-	95,960
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	16,703,520	10,705,888		5,997,632		16,703,520
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	2,922,742	2,922,742		-		2,922,742
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	140,048	140,048		-		140,048
Water Systems Operations	Environmental Health & Safety Section	1,267,137	1,267,137		-		1,267,137
Water Systems Operations	OSS, Fleet Services Unit	552,014	552,014		-		552,014
Water Systems Operations	OSS, Power Support Unit	273,830	273,830		-		273,830
Water Systems Operations	Office of the Manager, Operations & Planning Secti	57,658	57,658		-		57,658
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-
Sustainability, Resilience & Inn		-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-
Engineering Services		2,513,667	2,513,667		-		2,513,667
Business Technology	Administrative Services	-	-	-	-	-	-
Business Technology	Information Technology	2,414,779	2,414,779		-		2,414,779
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	-	-	-	-	-	-
Water Resources Managemen	Office of the Group Manager	-	-	-	-	-	-
Ethics Office		-	-	-	-	-	-
Real Property		-	-	-	-	-	-
General Counsel		-	-	-	-	-	-
General Auditor		-	-	-	-	-	-
Total Departmental O&M	-	29,272,411	23,274,779		5,997,632		29,272,411
GENERAL DISTRICT REQUIREMENTS							
		-	-	-	-	-	-
State Water Contract*							
Supply - O&M		-	-	-	-	-	-
Supply - Capital		-	-	-	-	-	-
Power - O&M & Off-Aq Capital		-	-	-	-	-	-
Power - Capital (less Off-Aq)		-	-	-	-	-	-
Transmission - Capital - Commodity, Demand, & Standby		-	-	-	-	-	-
Transmission - O&M - Commodity only		-	-	-	-	-	-
Delta Conveyance - Supply		-	-	-	-	-	-
Delta Conveyance - Power		-	-	-	-	-	-
Delta Conveyance - Other		-	-	-	-	-	-
Total State Water Contract		-	-	-	-	-	-
Colorado River Aqueduct Power Costs							
		-	-	-	-	-	-
Supply Programs (cash funded portion)							
		-	-	-	-	-	-
Demand Management (cash funded portion)							
Local Resources Program		-	-	-	-	-	-
Future Supply Actions & Stormwater Pilot		-	-	-	-	-	-
Conservation Program (cash funded portion)		-	-	-	-	-	-
Total Demand Management Costs		-	-	-	-	-	-
Capital Financing							
Revenue Bond Debt Service net of BABs Interest Subsidy Payment	14,928,046	4,694,800	4,347,037	5,886,208			14,928,046
G.O. Bond Debt Service	103,753	32,630	30,213	40,910			103,753
Debt Administration	147,038	46,243	42,817	57,978			147,038
Bond Defeasance	-	-	-	-	-	-	-
PAYGO	7,114,500	2,237,477	2,071,738	2,805,285			7,114,500
Total Capital Financing Costs	22,293,337	7,011,150	6,491,806	8,790,381			22,293,337
Other Operating Costs							
Operating Equipment	471,830	-	471,830	-	-	-	471,830
Succession Planning Labor Pool	251,110	-	251,110	-	-	-	251,110
OPEB\PERS Pre-Funding	-	-	-	-	-	-	-
Total Other Operating Costs	722,941	-	722,941	-	-	-	722,941
Increase/(Decrease) in Required Reserves							
	-	-	-	-	-	-	-
Total General District Requirements	23,016,277	7,011,150	7,214,746	8,790,381	-	-	23,016,277
REQUIREMENTS BEFORE OFFSETS:							
	52,288,688	7,011,150	30,489,525	8,790,381	5,997,632	-	52,288,688
Revenue Offsets							
Property Taxes - MWD Portion of SWC GO Debt Service	-	-	-	-	-	-	-
Property Taxes - MWD GO Debt Service	103,753			103,753			103,753
Interest on Investments	174,200	54,785	50,727	68,688			174,200
Hydro-Power Revenue	-	-	-	-	-	-	-
CRA Power Revenue	-	-	-	-	-	-	-
Wadsworth Pumping Plant (DVL) Power Revenue	-	-	-	-	-	-	-
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)	-	-	-	-	-	-	-
Misc. allocated to supply (PVID Lease)	-	-	-	-	-	-	-
Property Taxes - SWC	-	-	-	-	-	-	-
Revenue Reserve used for Revenue Bonds - I&P	-	-	-	-	-	-	-
Annexation	-	-	-	-	-	-	-
Total Revenue Offsets	277,953	54,785	50,727	172,441	-	-	277,953
NET REVENUE REQUIREMENTS:							
	52,010,735	6,956,365	30,438,798	8,617,940	5,997,632	-	52,010,735

		Functionalization	Allocation Percentages					Total
			Fixed			Variable		
			Demand	Commodity	Standby	Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		340,227	-	340,227	-	-	-	340,227
Office of General Manager	Board of Directors	-	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-	-
Human Resources		590,293	-	590,293	-	-	-	590,293
Water Systems Operations	Office of the Manager	581,859	-	581,859	-	-	-	581,859
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	74,998	-	74,998	-	-	-	74,998
Water Systems Operations	Office of the Manager, Operations Support Services	117,529	-	117,529	-	-	-	117,529
Water Systems Operations	Operations Support Services	86,448	-	86,448	-	-	-	86,448
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	9,970,578	-	9,970,578	-	-	-	9,970,578
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	2,282,610	-	2,282,610	-	-	-	2,282,610
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	128,301	-	128,301	-	-	-	128,301
Water Systems Operations	Environmental Health & Safety Section	984,960	-	984,960	-	-	-	984,960
Water Systems Operations	OSS, Fleet Services Unit	328,770	-	328,770	-	-	-	328,770
Water Systems Operations	OSS, Power Support Unit	246,287	-	246,287	-	-	-	246,287
Water Systems Operations	Office of the Manager, Operations & Planning Section	52,259	-	52,259	-	-	-	52,259
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-	-
Sustainability, Resilience & Inr		-	-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-	-
Engineering Services		1,978,776	-	1,978,776	-	-	-	1,978,776
Business Technology	Administrative Services	-	-	-	-	-	-	-
Business Technology	Information Technology	1,634,235	-	1,634,235	-	-	-	1,634,235
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	-	-	-	-	-	-	-
Water Resources Managemen	Office of the Group Manager	-	-	-	-	-	-	-
Ethics Office		-	-	-	-	-	-	-
Real Property		-	-	-	-	-	-	-
General Counsel		-	-	-	-	-	-	-
General Auditor		-	-	-	-	-	-	-
Total Departmental O&M	-	19,398,131	-	19,398,131	-	-	-	19,398,131

		Functionalization	Allocation Percentages					% Total
			Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		386,932	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Office of General Manager	Board of Directors	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Bay Delta Initiatives	Bay Delta Initiatives	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Legislative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Media Communications Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Manager, External Affairs/Special Projects	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Conservation & Community Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Human Resources		770,907	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager	828,027	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Treatment Section	221,250	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations Support Services	159,971	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Support Services	95,960	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Desert Region / C&D CRA	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	System Operations Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Power Operations and Planning	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Planning & Programs Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Jensen	-	0.0%	64.1%	0.0%	35.9%	0.0%	100.0%
Water Systems Operations	Treatment Diemer	-	0.0%	56.2%	0.0%	43.8%	0.0%	100.0%
Water Systems Operations	Treatment Mills	-	0.0%	78.5%	0.0%	21.5%	0.0%	100.0%
Water Systems Operations	Treatment Skinner	-	0.0%	65.1%	0.0%	34.9%	0.0%	100.0%
Water Systems Operations	Treatment Weymouth	16,511,990	0.0%	64.0%	0.0%	36.0%	0.0%	100.0%
Water Systems Operations	Water Quality Section	2,922,742	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Eastern Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Western Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Manufacturing Services Unit	140,048	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Environmental Health & Safety Section	1,267,137	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Fleet Services Unit	552,014	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Power Support Unit	273,830	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations & Planning Section	59,359	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Security Team & Security Management	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Sustainability, Resilience & Innovation		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Diversity, Equity & Inclusion		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Equal Employment Opportunity		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Office of the Chief Financial Officer		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Office of Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Engineering Services		2,642,451	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Administrative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Information Technology	2,412,530	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Planning & Development	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Implementation	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Office of the Group Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Ethics Office		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Real Property		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
General Counsel		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
General Auditor		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Departmental O&M		29,245,148	0.0%		0.0%	0.0%	0.0%	0.0%
GENERAL DISTRICT REQUIREMENTS								
State Water Contract*								
Supply - O&M		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Supply - Capital		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Power - O&M & Off-Aq Capital		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Power - Capital (less Off-Aq)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Transmission - Capital - Commodity, Demand, & Standby		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Transmission - O&M - Commodity only		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Supply		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Power		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Other		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total State Water Contract		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Colorado River Aqueduct Power Costs								
		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Supply Programs (cash funded portion)								
		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Demand Management (cash funded portion)								
Local Resources Program		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Future Supply Actions & Stormwater Pilot		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Conservation Program (cash funded portion)		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Demand Management Costs		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Capital Financing								
		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		15,692,860	31.4%	29.1%	39.4%	0.0%	0.0%	100.0%
G.O. Bond Debt Service		109,069	31.4%	29.1%	39.4%	0.0%	0.0%	100.0%
Debt Administration		154,571	31.4%	29.1%	39.4%	0.0%	0.0%	100.0%
Bond Defeasance		-	31.4%	29.1%	39.4%	0.0%	0.0%	100.0%
PAYGO		7,479,000	31.4%	29.1%	39.4%	0.0%	0.0%	100.0%
Total Capital Financing Costs		23,435,500	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Other Operating Costs								
Operating Equipment		471,391	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Succession Planning Labor Pool		250,876	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
OPEB/PERS Pre-Funding		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Other Operating Costs		722,267	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Increase/(Decrease) in Required Reserves								
		-	30.5%	31.2%	38.3%	0.0%	0.0%	100.0%
Total General District Requirements								
		24,157,767	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
REQUIREMENTS BEFORE OFFSETS:								
		53,402,916	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Revenue Offsets								
Property Taxes - MWD Portion of SWC GO Debt Service		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Property Taxes - MWD GO Debt Service		109,069	0.0%	0.0%	100.0%	0.0%	0.0%	100.0%
Interest on Investments		177,912	31.4%	29.1%	39.4%	0.0%	0.0%	100.0%
Hydro-Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
CRA Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Wadsworth Pumping Plant (DVL) Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to supply (PVID Lease)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Property Taxes - SWC		-	31.4%	29.1%	39.4%	0.0%	0.0%	100.0%
Revenue Reserve used for Revenue Bonds - I&P		-	31.4%	29.1%	39.4%	0.0%	0.0%	100.0%
Annexation		-	31.4%	29.1%	39.4%	0.0%	0.0%	100.0%
Total Revenue Offsets		286,981	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
NET REVENUE REQUIREMENTS:								
-		53,115,935	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

	Functionalization	Allocation Percentages					Total
		Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M							
Group	Item						
Office of General Manager		386,932	-	386,932	-	-	386,932
Office of General Manager	Board of Directors	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-
Human Resources		770,907	-	770,907	-	-	770,907
Water Systems Operations	Office of the Manager	828,027	-	828,027	-	-	828,027
Water Systems Operations	Office of the Manager, Conveyance & Distribution S	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	221,250	-	221,250	-	-	221,250
Water Systems Operations	Office of the Manager, Operations Support Services	159,971	-	159,971	-	-	159,971
Water Systems Operations	Operations Support Services	95,960	-	95,960	-	-	95,960
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	16,511,990	-	10,569,012	5,942,978	-	16,511,990
Water Systems Operations	Water Quality Section	2,922,742	-	2,922,742	-	-	2,922,742
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	140,048	-	140,048	-	-	140,048
Water Systems Operations	Environmental Health & Safety Section	1,267,137	-	1,267,137	-	-	1,267,137
Water Systems Operations	OSS, Fleet Services Unit	552,014	-	552,014	-	-	552,014
Water Systems Operations	OSS, Power Support Unit	273,830	-	273,830	-	-	273,830
Water Systems Operations	Office of the Manager, Operations & Planning Secti	59,359	-	59,359	-	-	59,359
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-
Sustainability, Resilience & Inn		-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-
Engineering Services		2,642,451	-	2,642,451	-	-	2,642,451
Business Technology	Administrative Services	-	-	-	-	-	-
Business Technology	Information Technology	2,412,530	-	2,412,530	-	-	2,412,530
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	-	-	-	-	-	-
Water Resources Managemen	Office of the Group Manager	-	-	-	-	-	-
Ethics Office		-	-	-	-	-	-
Real Property		-	-	-	-	-	-
General Counsel		-	-	-	-	-	-
General Auditor		-	-	-	-	-	-
Total Departmental O&M		29,245,148	-	23,302,171	5,942,978	-	29,245,148
GENERAL DISTRICT REQUIREMENTS		-	-	-	-	-	-
State Water Contract*		-	-	-	-	-	-
Supply - O&M		-	-	-	-	-	-
Supply - Capital		-	-	-	-	-	-
Power - O&M & Off-Aq Capital		-	-	-	-	-	-
Power - Capital (less Off-Aq)		-	-	-	-	-	-
Transmission - Capital - Commodity, Demand, & Standby		-	-	-	-	-	-
Transmission - O&M - Commodity only		-	-	-	-	-	-
Delta Conveyance - Supply		-	-	-	-	-	-
Delta Conveyance - Power		-	-	-	-	-	-
Delta Conveyance - Other		-	-	-	-	-	-
Total State Water Contract		-	-	-	-	-	-
Colorado River Aqueduct Power Costs		-	-	-	-	-	-
Supply Programs (cash funded portion)		-	-	-	-	-	-
Demand Management (cash funded portion)		-	-	-	-	-	-
Local Resources Program		-	-	-	-	-	-
Future Supply Actions & Stormwater Pilot		-	-	-	-	-	-
Conservation Program (cash funded portion)		-	-	-	-	-	-
Total Demand Management Costs		-	-	-	-	-	-
Capital Financing		-	-	-	-	-	-
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		15,692,860	4,935,331	4,569,751	6,187,778	-	15,692,860
G.O. Bond Debt Service		109,069	34,302	31,761	43,006	-	109,069
Debt Administration		154,571	48,612	45,011	60,948	-	154,571
Bond Defeasance		-	-	-	-	-	-
PAYGO		7,479,000	2,352,110	2,177,880	2,949,009	-	7,479,000
Total Capital Financing Costs		23,435,500	7,370,355	6,824,403	9,240,742	-	23,435,500
Other Operating Costs		-	-	-	-	-	-
Operating Equipment		471,391	-	471,391	-	-	471,391
Succession Planning Labor Pool		250,876	-	250,876	-	-	250,876
OPEB/PERS Pre-Funding		-	-	-	-	-	-
Total Other Operating Costs		722,267	-	722,267	-	-	722,267
Increase/(Decrease) in Required Reserves		-	-	-	-	-	-
Total General District Requirements		24,157,767	7,370,355	7,546,670	9,240,742	-	24,157,767
REQUIREMENTS BEFORE OFFSETS:		53,402,916	7,370,355	30,848,841	9,240,742	5,942,978	53,402,916
Revenue Offsets		-	-	-	-	-	-
Property Taxes - MWD Portion of SWC GO Debt Service		-	-	-	-	-	-
Property Taxes - MWD GO Debt Service		109,069	-	-	109,069	-	109,069
Interest on Investments		177,912	55,953	51,808	70,152	-	177,912
Hydro-Power Revenue		-	-	-	-	-	-
CRA Power Revenue		-	-	-	-	-	-
Wadsworth Pumping Plant (DVL) Power Revenue		-	-	-	-	-	-
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)		-	-	-	-	-	-
Misc. allocated to supply (PVID Lease)		-	-	-	-	-	-
Property Taxes - SWC		-	-	-	-	-	-
Revenue Reserve used for Revenue Bonds - I&P		-	-	-	-	-	-
Annexation		-	-	-	-	-	-
Total Revenue Offsets		286,981	55,953	51,808	179,220	-	286,981
NET REVENUE REQUIREMENTS:		53,115,935	7,314,403	30,797,033	9,061,522	5,942,978	53,115,935

	Functionalization	Allocation Percentages					Total
		Fixed			Variable		
		Demand	Commodity	Standby	Commodity	Hydroelectric	
Departmental O&M							
Group	Item						
Office of General Manager		339,911	-	339,911	-	-	339,911
Office of General Manager	Board of Directors	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-
Human Resources		589,743	-	589,743	-	-	589,743
Water Systems Operations	Office of the Manager	599,025	-	599,025	-	-	599,025
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	78,105	-	78,105	-	-	78,105
Water Systems Operations	Office of the Manager, Operations Support Services	120,996	-	120,996	-	-	120,996
Water Systems Operations	Operations Support Services	86,448	-	86,448	-	-	86,448
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	10,383,528	-	10,383,528	-	-	10,383,528
Water Systems Operations	Water Quality Section	2,282,610	-	2,282,610	-	-	2,282,610
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	128,301	-	128,301	-	-	128,301
Water Systems Operations	Environmental Health & Safety Section	984,960	-	984,960	-	-	984,960
Water Systems Operations	OSS, Fleet Services Unit	328,770	-	328,770	-	-	328,770
Water Systems Operations	OSS, Power Support Unit	246,287	-	246,287	-	-	246,287
Water Systems Operations	Office of the Manager, Operations & Planning Section	53,800	-	53,800	-	-	53,800
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-
Sustainability, Resilience & Inr		-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-
Engineering Services		2,080,155	-	2,080,155	-	-	2,080,155
Business Technology	Administrative Services	-	-	-	-	-	-
Business Technology	Information Technology	1,632,713	-	1,632,713	-	-	1,632,713
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	-	-	-	-	-	-
Water Resources Managemen	Office of the Group Manager	-	-	-	-	-	-
Ethics Office		-	-	-	-	-	-
Real Property		-	-	-	-	-	-
General Counsel		-	-	-	-	-	-
General Auditor		-	-	-	-	-	-
Total Departmental O&M	-	19,935,353	-	19,935,353	-	-	19,935,353

		Functionalization	Allocation Percentages					% Total
			Demand	Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
	Office of General Manager	410,261	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Office of General Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Bay Delta Initiatives	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	External Affairs	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	External Affairs	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	External Affairs	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	External Affairs	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Human Resources	817,386	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	781,056	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	203,831	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	150,897	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	95,960	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%

	Functionalization	Allocation Percentages					Total
		Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M							
Group	Item						
Office of General Manager		410,261	-	410,261	-	-	410,261
Office of General Manager	Board of Directors	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-
Human Resources		817,386	-	817,386	-	-	817,386
Water Systems Operations	Office of the Manager	781,056	-	781,056	-	-	781,056
Water Systems Operations	Office of the Manager, Conveyance & Distribution S	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	203,831	-	203,831	-	-	203,831
Water Systems Operations	Office of the Manager, Operations Support Services	150,897	-	150,897	-	-	150,897
Water Systems Operations	Operations Support Services	95,960	-	95,960	-	-	95,960
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	17,593,024	-	9,885,157	7,707,867	-	17,593,024
Water Systems Operations	Treatment Mills	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	2,922,742	-	2,922,742	-	-	2,922,742
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	140,048	-	140,048	-	-	140,048
Water Systems Operations	Environmental Health & Safety Section	1,267,137	-	1,267,137	-	-	1,267,137
Water Systems Operations	OSS, Fleet Services Unit	552,014	-	552,014	-	-	552,014
Water Systems Operations	OSS, Power Support Unit	273,830	-	273,830	-	-	273,830
Water Systems Operations	Office of the Manager, Operations & Planning Secti	55,992	-	55,992	-	-	55,992
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-
Sustainability, Resilience & Inn		-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-
Engineering Services		3,186,204	-	3,186,204	-	-	3,186,204
Business Technology	Administrative Services	-	-	-	-	-	-
Business Technology	Information Technology	2,557,983	-	2,557,983	-	-	2,557,983
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	-	-	-	-	-	-
Water Resources Managemen	Office of the Group Manager	-	-	-	-	-	-
Ethics Office		-	-	-	-	-	-
Real Property		-	-	-	-	-	-
General Counsel		-	-	-	-	-	-
General Auditor		-	-	-	-	-	-
Total Departmental O&M		31,008,364	-	23,300,497	7,707,867	-	31,008,364
GENERAL DISTRICT REQUIREMENTS		-	-	-	-	-	-
State Water Contract*		-	-	-	-	-	-
Supply - O&M		-	-	-	-	-	-
Supply - Capital		-	-	-	-	-	-
Power - O&M & Off-Aq Capital		-	-	-	-	-	-
Power - Capital (less Off-Aq)		-	-	-	-	-	-
Transmission - Capital - Commodity, Demand, & Standby		-	-	-	-	-	-
Transmission - O&M - Commodity only		-	-	-	-	-	-
Delta Conveyance - Supply		-	-	-	-	-	-
Delta Conveyance - Power		-	-	-	-	-	-
Delta Conveyance - Other		-	-	-	-	-	-
Total State Water Contract		-	-	-	-	-	-
Colorado River Aqueduct Power Costs		-	-	-	-	-	-
Supply Programs (cash funded portion)		-	-	-	-	-	-
Demand Management (cash funded portion)		-	-	-	-	-	-
Local Resources Program		-	-	-	-	-	-
Future Supply Actions & Stormwater Pilot		-	-	-	-	-	-
Conservation Program (cash funded portion)		-	-	-	-	-	-
Total Demand Management Costs		-	-	-	-	-	-
Capital Financing		-	-	-	-	-	-
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		18,922,077	5,950,905	5,510,097	7,461,075	-	18,922,077
G.O. Bond Debt Service		131,513	41,360	38,296	51,856	-	131,513
Debt Administration		186,379	58,615	54,273	73,490	-	186,379
Bond Defeasance		-	-	-	-	-	-
PAYGO		9,018,000	2,836,119	2,626,036	3,555,845	-	9,018,000
Total Capital Financing Costs		28,257,968	8,886,999	8,228,702	11,142,267	-	28,257,968
Other Operating Costs		-	-	-	-	-	-
Operating Equipment		499,811	-	499,811	-	-	499,811
Succession Planning Labor Pool		266,002	-	266,002	-	-	266,002
OPEB/PERS Pre-Funding		-	-	-	-	-	-
Total Other Operating Costs		765,813	-	765,813	-	-	765,813
Increase/(Decrease) in Required Reserves		-	-	-	-	-	-
Total General District Requirements		29,023,781	8,886,999	8,994,516	11,142,267	-	29,023,781
REQUIREMENTS BEFORE OFFSETS:		60,032,145	8,886,999	32,295,013	11,142,267	7,707,867	60,032,145
Revenue Offsets							
Property Taxes - MWD Portion of SWC GO Debt Service		-	-	-	-	-	-
Property Taxes - MWD GO Debt Service		131,513	-	-	131,513	-	131,513
Interest on Investments		199,998	62,898	58,239	78,860	-	199,998
Hydro-Power Revenue		-	-	-	-	-	-
CRA Power Revenue		-	-	-	-	-	-
Wadsworth Pumping Plant (DVL) Power Revenue		-	-	-	-	-	-
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)		-	-	-	-	-	-
Misc. allocated to supply (PVID Lease)		-	-	-	-	-	-
Property Taxes - SWC		-	-	-	-	-	-
Revenue Reserve used for Revenue Bonds - I&P		-	-	-	-	-	-
Annexation		-	-	-	-	-	-
Total Revenue Offsets		331,510	62,898	58,239	210,373	-	331,510
NET REVENUE REQUIREMENTS:		59,700,635	8,824,100	32,236,774	10,931,894	7,707,867	59,700,635

		Functionalization	Allocation Percentages					Total
			Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		360,404	-	360,404	-	-	-	360,404
Office of General Manager	Board of Directors	-	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-	-
Human Resources		625,299	-	625,299	-	-	-	625,299
Water Systems Operations	Office of the Manager	565,044	-	565,044	-	-	-	565,044
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	71,956	-	71,956	-	-	-	71,956
Water Systems Operations	Office of the Manager, Operations Support Services	114,132	-	114,132	-	-	-	114,132
Water Systems Operations	Operations Support Services	86,448	-	86,448	-	-	-	86,448
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	9,566,050	-	9,566,050	-	-	-	9,566,050
Water Systems Operations	Treatment Mills	-	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	2,282,610	-	2,282,610	-	-	-	2,282,610
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	128,301	-	128,301	-	-	-	128,301
Water Systems Operations	Environmental Health & Safety Section	984,960	-	984,960	-	-	-	984,960
Water Systems Operations	OSS, Fleet Services Unit	328,770	-	328,770	-	-	-	328,770
Water Systems Operations	OSS, Power Support Unit	246,287	-	246,287	-	-	-	246,287
Water Systems Operations	Office of the Manager, Operations & Planning Section	50,748	-	50,748	-	-	-	50,748
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-	-
Sustainability, Resilience & Inr		-	-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-	-
Equal Employment Opportuniti		-	-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-	-
Engineering Services		2,508,202	-	2,508,202	-	-	-	2,508,202
Business Technology	Administrative Services	-	-	-	-	-	-	-
Business Technology	Information Technology	1,731,151	-	1,731,151	-	-	-	1,731,151
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	-	-	-	-	-	-	-
Water Resources Managemen	Office of the Group Manager	-	-	-	-	-	-	-
Ethics Office		-	-	-	-	-	-	-
Real Property		-	-	-	-	-	-	-
General Counsel		-	-	-	-	-	-	-
General Auditor		-	-	-	-	-	-	-
Total Departmental O&M		19,650,363	-	19,650,363	-	-	-	19,650,363

		Functionalization	Allocation Percentages					Total
			Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		291,729	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Office of General Manager	Board of Directors	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Bay Delta Initiatives	Bay Delta Initiatives	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Legislative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Media Communications Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Manager, External Affairs/Special Projects	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Conservation & Community Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Human Resources		581,228	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager	752,866	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Treatment Section	193,378	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations Support Services	145,451	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Support Services	95,960	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Desert Region / C&D CRA	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	System Operations Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Power Operations and Planning	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Planning & Programs Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Jensen	-	0.0%	64.1%	0.0%	35.9%	0.0%	100.0%
Water Systems Operations	Treatment Diemer	-	0.0%	56.2%	0.0%	43.8%	0.0%	100.0%
Water Systems Operations	Treatment Mills	12,111,159	0.0%	78.5%	0.0%	21.5%	0.0%	100.0%
Water Systems Operations	Treatment Skinner	-	0.0%	65.1%	0.0%	34.9%	0.0%	100.0%
Water Systems Operations	Treatment Weymouth	-	0.0%	64.0%	0.0%	36.0%	0.0%	100.0%
Water Systems Operations	Water Quality Section	2,922,742	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Eastern Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Western Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Manufacturing Services Unit	140,048	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Environmental Health & Safety Section	1,267,137	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Fleet Services Unit	552,014	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Power Support Unit	273,830	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations & Planning Section	53,971	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Security Team & Security Management	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Sustainability, Resilience & Innovation		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Diversity, Equity & Inclusion		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Equal Employment Opportunity		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Office of the Chief Financial Officer		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Office of Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Engineering Services		849,019	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Administrative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Information Technology	1,818,934	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Planning & Development	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Implementation	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Office of the Group Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Ethics Office		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Real Property		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
General Counsel		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
General Auditor		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Departmental O&M		22,049,463	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
GENERAL DISTRICT REQUIREMENTS								
State Water Contract*								
Supply - O&M		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Supply - Capital		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Power - O&M & Off-Aq Capital		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Power - Capital (less Off-Aq)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Transmission - Capital - Commodity, Demand, & Standby		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Transmission - O&M - Commodity only		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Supply		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Power		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Other		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total State Water Contract		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Colorado River Aqueduct Power Costs		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Supply Programs (cash funded portion)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Demand Management (cash funded portion)								
Local Resources Program		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Future Supply Actions & Stormwater Pilot		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Conservation Program (cash funded portion)		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Demand Management Costs		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Capital Financing								
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
G.O. Bond Debt Service	5,042,110	31.4%	29.1%	39.4%	0.0%	0.0%	0.0%	100.0%
Debt Administration	35,044	31.4%	29.1%	39.4%	0.0%	0.0%	0.0%	100.0%
Bond Defeasance	49,664	31.4%	29.1%	39.4%	0.0%	0.0%	0.0%	100.0%
PAYGO	-	31.4%	29.1%	39.4%	0.0%	0.0%	0.0%	100.0%
Total Capital Financing Costs	2,403,000	31.4%	29.1%	39.4%	0.0%	0.0%	0.0%	100.0%
	7,529,818	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Other Operating Costs								
Operating Equipment	355,406	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Succession Planning Labor Pool	189,149	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%
OPEB/PERS Pre-Funding	-	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Total Other Operating Costs	544,555	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Increase/(Decrease) in Required Reserves	-	29.3%	33.9%	36.8%	0.0%	0.0%	0.0%	100.0%
Total General District Requirements	8,074,373	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
REQUIREMENTS BEFORE OFFSETS:	30,123,836	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Revenue Offsets								
Property Taxes - MWD Portion of SWC GO Debt Service	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Property Taxes - MWD GO Debt Service	35,044	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Interest on Investments	100,358	31.4%	29.1%	39.4%	0.0%	0.0%	0.0%	100.0%
Hydro-Power Revenue	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
CRA Power Revenue	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Wadsworth Pumping Plant (DVL) Power Revenue	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to supply (PVID Lease)	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Property Taxes - SWC	-	31.4%	29.1%	39.4%	0.0%	0.0%	0.0%	100.0%
Revenue Reserve used for Revenue Bonds - I&P	-	31.4%	29.1%	39.4%	0.0%	0.0%	0.0%	100.0%
Annexation	-	31.4%	29.1%	39.4%	0.0%	0.0%	0.0%	100.0%
Total Revenue Offsets	135,402	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
NET REVENUE REQUIREMENTS:	-	29,988,435	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

	Functionalization	Allocation Percentages					Total
		Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M							
Group	Item						
Office of General Manager		291,729	-	291,729	-	-	291,729
Office of General Manager	Board of Directors	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-
Human Resources		581,228	-	581,228	-	-	581,228
Water Systems Operations	Office of the Manager	752,866	-	752,866	-	-	752,866
Water Systems Operations	Office of the Manager, Conveyance & Distribution S	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	193,378	-	193,378	-	-	193,378
Water Systems Operations	Office of the Manager, Operations Support Services	145,451	-	145,451	-	-	145,451
Water Systems Operations	Operations Support Services	95,960	-	95,960	-	-	95,960
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	12,111,159	-	9,501,325	2,609,834	-	12,111,159
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	2,922,742	-	2,922,742	-	-	2,922,742
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	140,048	-	140,048	-	-	140,048
Water Systems Operations	Environmental Health & Safety Section	1,267,137	-	1,267,137	-	-	1,267,137
Water Systems Operations	OSS, Fleet Services Unit	552,014	-	552,014	-	-	552,014
Water Systems Operations	OSS, Power Support Unit	273,830	-	273,830	-	-	273,830
Water Systems Operations	Office of the Manager, Operations & Planning Secti	53,971	-	53,971	-	-	53,971
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-
Sustainability, Resilience & Inn		-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-
Engineering Services		849,019	-	849,019	-	-	849,019
Business Technology	Administrative Services	-	-	-	-	-	-
Business Technology	Information Technology	1,818,934	-	1,818,934	-	-	1,818,934
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	-	-	-	-	-	-
Water Resources Managemen	Office of the Group Manager	-	-	-	-	-	-
Ethics Office		-	-	-	-	-	-
Real Property		-	-	-	-	-	-
General Counsel		-	-	-	-	-	-
General Auditor		-	-	-	-	-	-
Total Departmental O&M		22,049,463	-	19,439,629	2,609,834	-	22,049,463
GENERAL DISTRICT REQUIREMENTS		-	-	-	-	-	-
State Water Contract*		-	-	-	-	-	-
Supply - O&M		-	-	-	-	-	-
Supply - Capital		-	-	-	-	-	-
Power - O&M & Off-Aq Capital		-	-	-	-	-	-
Power - Capital (less Off-Aq)		-	-	-	-	-	-
Transmission - Capital - Commodity, Demand, & Standby		-	-	-	-	-	-
Transmission - O&M - Commodity only		-	-	-	-	-	-
Delta Conveyance - Supply		-	-	-	-	-	-
Delta Conveyance - Power		-	-	-	-	-	-
Delta Conveyance - Other		-	-	-	-	-	-
Total State Water Contract		-	-	-	-	-	-
Colorado River Aqueduct Power Costs		-	-	-	-	-	-
Supply Programs (cash funded portion)		-	-	-	-	-	-
Demand Management (cash funded portion)		-	-	-	-	-	-
Local Resources Program		-	-	-	-	-	-
Future Supply Actions & Stormwater Pilot		-	-	-	-	-	-
Conservation Program (cash funded portion)		-	-	-	-	-	-
Total Demand Management Costs		-	-	-	-	-	-
Capital Financing		-	-	-	-	-	-
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		5,042,110	1,585,720	1,468,259	1,988,131	-	5,042,110
G.O. Bond Debt Service		35,044	11,021	10,205	13,818	-	35,044
Debt Administration		49,664	15,619	14,462	19,583	-	49,664
Bond Defeasance		-	-	-	-	-	-
PAYGO		2,403,000	755,732	699,752	947,516	-	2,403,000
Total Capital Financing Costs		7,529,818	2,368,092	2,192,678	2,969,047	-	7,529,818
Other Operating Costs		-	-	-	-	-	-
Operating Equipment		355,406	-	355,406	-	-	355,406
Succession Planning Labor Pool		189,149	-	189,149	-	-	189,149
OPEB/PERS Pre-Funding		-	-	-	-	-	-
Total Other Operating Costs		544,555	-	544,555	-	-	544,555
Increase/(Decrease) in Required Reserves		-	-	-	-	-	-
Total General District Requirements		8,074,373	2,368,092	2,737,234	2,969,047	-	8,074,373
REQUIREMENTS BEFORE OFFSETS:		30,123,836	2,368,092	22,176,863	2,969,047	2,609,834	30,123,836
Revenue Offsets		-	-	-	-	-	-
Property Taxes - MWD Portion of SWC GO Debt Service		-	-	-	-	-	-
Property Taxes - MWD GO Debt Service		35,044	-	-	35,044	-	35,044
Interest on Investments		100,358	31,562	29,224	39,572	-	100,358
Hydro-Power Revenue		-	-	-	-	-	-
CRA Power Revenue		-	-	-	-	-	-
Wadsworth Pumping Plant (DVL) Power Revenue		-	-	-	-	-	-
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)		-	-	-	-	-	-
Misc. allocated to supply (PVID Lease)		-	-	-	-	-	-
Property Taxes - SWC		-	-	-	-	-	-
Revenue Reserve used for Revenue Bonds - I&P		-	-	-	-	-	-
Annexation		-	-	-	-	-	-
Total Revenue Offsets		135,402	31,562	29,224	74,615	-	135,402
NET REVENUE REQUIREMENTS:		29,988,435	2,336,530	22,147,639	2,894,432	2,609,834	29,988,435

		Functionalization	Allocation Percentages					Total
			Fixed			Variable		
			Demand	Commodity	Standby	Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		256,277	-	256,277	-	-	-	256,277
Office of General Manager	Board of Directors	-	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-	-
Human Resources		444,638	-	444,638	-	-	-	444,638
Water Systems Operations	Office of the Manager	544,650	-	544,650	-	-	-	544,650
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	68,265	-	68,265	-	-	-	68,265
Water Systems Operations	Office of the Manager, Operations Support Services	110,013	-	110,013	-	-	-	110,013
Water Systems Operations	Operations Support Services	86,448	-	86,448	-	-	-	86,448
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	9,075,449	-	9,075,449	-	-	-	9,075,449
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	2,282,610	-	2,282,610	-	-	-	2,282,610
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	128,301	-	128,301	-	-	-	128,301
Water Systems Operations	Environmental Health & Safety Section	984,960	-	984,960	-	-	-	984,960
Water Systems Operations	OSS, Fleet Services Unit	328,770	-	328,770	-	-	-	328,770
Water Systems Operations	OSS, Power Support Unit	246,287	-	246,287	-	-	-	246,287
Water Systems Operations	Office of the Manager, Operations & Planning Section	48,917	-	48,917	-	-	-	48,917
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-	-
Sustainability, Resilience & Inr		-	-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-	-
Engineering Services		668,353	-	668,353	-	-	-	668,353
Business Technology	Administrative Services	-	-	-	-	-	-	-
Business Technology	Information Technology	1,230,989	-	1,230,989	-	-	-	1,230,989
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	-	-	-	-	-	-	-
Water Resources Managemen	Office of the Group Manager	-	-	-	-	-	-	-
Ethics Office		-	-	-	-	-	-	-
Real Property		-	-	-	-	-	-	-
General Counsel		-	-	-	-	-	-	-
General Auditor		-	-	-	-	-	-	-
Total Departmental O&M	-	16,504,928	-	16,504,928	-	-	-	16,504,928

		Functionalization	Allocation Percentages					Total
			Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		350,122	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Office of General Manager	Board of Directors	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Bay Delta Initiatives	Bay Delta Initiatives	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Legislative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Media Communications Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Manager, External Affairs/Special Projects	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Conservation & Community Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Human Resources		697,567	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager	742,646	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Treatment Section	189,588	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations Support Services	143,476	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Support Services	95,960	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Desert Region / C&D CRA	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	System Operations Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Power Operations and Planning	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Planning & Programs Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Jensen	-	0.0%	64.1%	0.0%	35.9%	0.0%	100.0%
Water Systems Operations	Treatment Diemer	-	0.0%	56.2%	0.0%	43.8%	0.0%	100.0%
Water Systems Operations	Treatment Mills	-	0.0%	78.5%	0.0%	21.5%	0.0%	100.0%
Water Systems Operations	Treatment Skinner	14,142,321	0.0%	65.1%	0.0%	34.9%	0.0%	100.0%
Water Systems Operations	Treatment Weymouth	-	0.0%	64.0%	0.0%	36.0%	0.0%	100.0%
Water Systems Operations	Water Quality Section	2,922,742	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Eastern Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Western Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Manufacturing Services Unit	140,048	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Environmental Health & Safety Section	1,267,137	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Fleet Services Unit	552,014	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Power Support Unit	273,830	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations & Planning Section	53,238	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Security Team & Security Management	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Sustainability, Resilience & Innovation		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Diversity, Equity & Inclusion		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Equal Employment Opportunity		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Office of the Chief Financial Officer		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Office of Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Engineering Services		2,709,228	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Administrative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Information Technology	2,183,016	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Planning & Development	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Implementation	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Office of the Group Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Ethics Office		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Real Property		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
General Counsel		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
General Auditor		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Departmental O&M		26,462,932	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
GENERAL DISTRICT REQUIREMENTS								
State Water Contract*								
Supply - O&M		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Supply - Capital		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Power - O&M & Off-Aq Capital		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Power - Capital (less Off-Aq)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Transmission - Capital - Commodity, Demand, & Standby		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Transmission - O&M - Commodity only		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Supply		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Power		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Other		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total State Water Contract		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Colorado River Aqueduct Power Costs								
		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Supply Programs (cash funded portion)								
		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Demand Management (cash funded portion)								
Local Resources Program		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Future Supply Actions & Stormwater Pilot		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Conservation Program (cash funded portion)		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Demand Management Costs		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Capital Financing								
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
G.O. Bond Debt Service	16,089,431	31.4%	29.1%	39.4%	0.0%	0.0%	0.0%	100.0%
	111,825	31.4%	29.1%	39.4%	0.0%	0.0%	0.0%	100.0%
Debt Administration	158,478	31.4%	29.1%	39.4%	0.0%	0.0%	0.0%	100.0%
Bond Defeasance	-	31.4%	29.1%	39.4%	0.0%	0.0%	0.0%	100.0%
PAYGO	7,668,000	31.4%	29.1%	39.4%	0.0%	0.0%	0.0%	100.0%
Total Capital Financing Costs	24,027,733	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Other Operating Costs								
Operating Equipment	426,545	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Succession Planning Labor Pool	227,009	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%
OPEB/PERS Pre-Funding	-	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Total Other Operating Costs	653,555	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Increase/(Decrease) in Required Reserves								
	-	30.6%	31.0%	38.4%	0.0%	0.0%	0.0%	100.0%
Total General District Requirements								
	24,681,288	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
REQUIREMENTS BEFORE OFFSETS:								
	51,144,220	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Revenue Offsets								
Property Taxes - MWD Portion of SWC GO Debt Service	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Property Taxes - MWD GO Debt Service	111,825	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Interest on Investments	170,387	31.4%	29.1%	39.4%	0.0%	0.0%	0.0%	100.0%
Hydro-Power Revenue	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
CRA Power Revenue	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Wadsworth Pumping Plant (DVL) Power Revenue	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to supply (PVID Lease)	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Property Taxes - SWC	-	31.4%	29.1%	39.4%	0.0%	0.0%	0.0%	100.0%
Revenue Reserve used for Revenue Bonds - I&P	-	31.4%	29.1%	39.4%	0.0%	0.0%	0.0%	100.0%
Annexation	-	31.4%	29.1%	39.4%	0.0%	0.0%	0.0%	100.0%
Total Revenue Offsets	282,212	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
NET REVENUE REQUIREMENTS:								
-	50,862,008	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

	Functionalization	Allocation Percentages					Total
		Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M							
Group	Item						
Office of General Manager		350,122	-	350,122	-	-	350,122
Office of General Manager	Board of Directors	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-
Human Resources		697,567	-	697,567	-	-	697,567
Water Systems Operations	Office of the Manager	742,646	-	742,646	-	-	742,646
Water Systems Operations	Office of the Manager, Conveyance & Distribution S	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	189,588	-	189,588	-	-	189,588
Water Systems Operations	Office of the Manager, Operations Support Services	143,476	-	143,476	-	-	143,476
Water Systems Operations	Operations Support Services	95,960	-	95,960	-	-	95,960
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	14,142,321	-	9,208,502	4,933,819	-	14,142,321
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	2,922,742	-	2,922,742	-	-	2,922,742
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	140,048	-	140,048	-	-	140,048
Water Systems Operations	Environmental Health & Safety Section	1,267,137	-	1,267,137	-	-	1,267,137
Water Systems Operations	OSS, Fleet Services Unit	552,014	-	552,014	-	-	552,014
Water Systems Operations	OSS, Power Support Unit	273,830	-	273,830	-	-	273,830
Water Systems Operations	Office of the Manager, Operations & Planning Secti	53,238	-	53,238	-	-	53,238
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-
Sustainability, Resilience & Inn		-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-
Engineering Services		2,709,228	-	2,709,228	-	-	2,709,228
Business Technology	Administrative Services	-	-	-	-	-	-
Business Technology	Information Technology	2,183,016	-	2,183,016	-	-	2,183,016
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	-	-	-	-	-	-
Water Resources Managemen	Office of the Group Manager	-	-	-	-	-	-
Ethics Office		-	-	-	-	-	-
Real Property		-	-	-	-	-	-
General Counsel		-	-	-	-	-	-
General Auditor		-	-	-	-	-	-
Total Departmental O&M		26,462,932	-	21,529,113	4,933,819	-	26,462,932
GENERAL DISTRICT REQUIREMENTS		-	-	-	-	-	-
State Water Contract*		-	-	-	-	-	-
Supply - O&M		-	-	-	-	-	-
Supply - Capital		-	-	-	-	-	-
Power - O&M & Off-Aq Capital		-	-	-	-	-	-
Power - Capital (less Off-Aq)		-	-	-	-	-	-
Transmission - Capital - Commodity, Demand, & Standby		-	-	-	-	-	-
Transmission - O&M - Commodity only		-	-	-	-	-	-
Delta Conveyance - Supply		-	-	-	-	-	-
Delta Conveyance - Power		-	-	-	-	-	-
Delta Conveyance - Other		-	-	-	-	-	-
Total State Water Contract		-	-	-	-	-	-
Colorado River Aqueduct Power Costs		-	-	-	-	-	-
Supply Programs (cash funded portion)		-	-	-	-	-	-
Demand Management (cash funded portion)		-	-	-	-	-	-
Local Resources Program		-	-	-	-	-	-
Future Supply Actions & Stormwater Pilot		-	-	-	-	-	-
Conservation Program (cash funded portion)		-	-	-	-	-	-
Total Demand Management Costs		-	-	-	-	-	-
Capital Financing		-	-	-	-	-	-
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		16,089,431	5,060,051	4,685,232	6,344,148	-	16,089,431
G.O. Bond Debt Service		111,825	35,168	32,563	44,093	-	111,825
Debt Administration		158,478	49,840	46,149	62,489	-	158,478
Bond Defeasance		-	-	-	-	-	-
PAYGO		7,668,000	2,411,550	2,232,917	3,023,533	-	7,668,000
Total Capital Financing Costs		24,027,733	7,556,610	6,996,861	9,474,263	-	24,027,733
Other Operating Costs		-	-	-	-	-	-
Operating Equipment		426,545	-	426,545	-	-	426,545
Succession Planning Labor Pool		227,009	-	227,009	-	-	227,009
OPEB/PERS Pre-Funding		-	-	-	-	-	-
Total Other Operating Costs		653,555	-	653,555	-	-	653,555
Increase/(Decrease) in Required Reserves		-	-	-	-	-	-
Total General District Requirements		24,681,288	7,556,610	7,650,416	9,474,263	-	24,681,288
REQUIREMENTS BEFORE OFFSETS:		51,144,220	7,556,610	29,179,528	9,474,263	4,933,819	51,144,220
Revenue Offsets		-	-	-	-	-	-
Property Taxes - MWD Portion of SWC GO Debt Service		-	-	-	-	-	-
Property Taxes - MWD GO Debt Service		111,825	-	-	111,825	-	111,825
Interest on Investments		170,387	53,586	49,617	67,185	-	170,387
Hydro-Power Revenue		-	-	-	-	-	-
CRA Power Revenue		-	-	-	-	-	-
Wadsworth Pumping Plant (DVL) Power Revenue		-	-	-	-	-	-
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)		-	-	-	-	-	-
Misc. allocated to supply (PVID Lease)		-	-	-	-	-	-
Property Taxes - SWC		-	-	-	-	-	-
Revenue Reserve used for Revenue Bonds - I&P		-	-	-	-	-	-
Annexation		-	-	-	-	-	-
Total Revenue Offsets		282,212	53,586	49,617	179,010	-	282,212
NET REVENUE REQUIREMENTS:		50,862,008	7,503,024	29,129,912	9,295,253	4,933,819	50,862,008

		Functionalization	Allocation Percentages					Total
			Fixed			Variable		
			Demand	Commodity	Standby	Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		307,573	-	307,573	-	-	-	307,573
Office of General Manager	Board of Directors	-	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-	-
Human Resources		533,638	-	533,638	-	-	-	533,638
Water Systems Operations	Office of the Manager	537,257	-	537,257	-	-	-	537,257
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	66,927	-	66,927	-	-	-	66,927
Water Systems Operations	Office of the Manager, Operations Support Services	108,520	-	108,520	-	-	-	108,520
Water Systems Operations	Operations Support Services	86,448	-	86,448	-	-	-	86,448
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	8,897,588	-	8,897,588	-	-	-	8,897,588
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	2,282,610	-	2,282,610	-	-	-	2,282,610
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	128,301	-	128,301	-	-	-	128,301
Water Systems Operations	Environmental Health & Safety Section	984,960	-	984,960	-	-	-	984,960
Water Systems Operations	OSS, Fleet Services Unit	328,770	-	328,770	-	-	-	328,770
Water Systems Operations	OSS, Power Support Unit	246,287	-	246,287	-	-	-	246,287
Water Systems Operations	Office of the Manager, Operations & Planning Section	48,253	-	48,253	-	-	-	48,253
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-	-
Sustainability, Resilience & Inr		-	-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-	-
Engineering Services		2,132,722	-	2,132,722	-	-	-	2,132,722
Business Technology	Administrative Services	-	-	-	-	-	-	-
Business Technology	Information Technology	1,477,386	-	1,477,386	-	-	-	1,477,386
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	-	-	-	-	-	-	-
Water Resources Managemen	Office of the Group Manager	-	-	-	-	-	-	-
Ethics Office		-	-	-	-	-	-	-
Real Property		-	-	-	-	-	-	-
General Counsel		-	-	-	-	-	-	-
General Auditor		-	-	-	-	-	-	-
Total Departmental O&M	-	18,167,242	-	18,167,242	-	-	-	18,167,242

		Functionalization	Allocation Percentages					% Total
			Demand	Fixed Commodity	Standby	Variable Commodity	Other	
Departmental O&M								
Group	Item							
Office of General Manager		1,539,436	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Office of General Manager	Board of Directors	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Bay Delta Initiatives	Bay Delta Initiatives	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Legislative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Media Communications Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Manager, External Affairs/Special Projects	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Conservation & Community Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Human Resources		3,067,104	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager	3,587,489	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	355,232	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Treatment Section	153,838	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations Support Services	693,088	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Support Services	6,612,646	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Desert Region / C&D CRA	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	System Operations Unit	9,143,987	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Power Operations and Planning	1,224,142	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Planning & Programs Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Jensen	2,518,022	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Diemer	2,652,113	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Mills	1,825,733	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Skinner	2,131,926	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Weymouth	2,489,149	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Water Quality Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Eastern Unit	16,366,254	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Western Unit	15,799,275	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Manufacturing Services Unit	6,538,150	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Environmental Health & Safety Section	6,253,567	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Fleet Services Unit	6,755,339	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Power Support Unit	4,134,292	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations & Planning Section	257,178	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Security Team & Security Management	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Sustainability, Resilience & Innovation		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Diversity, Equity & Inclusion		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Equal Employment Opportunity		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Office of the Chief Financial Officer		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Office of Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Engineering Services		8,652,358	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Administrative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Information Technology	9,598,408	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Planning & Development	408,050	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Implementation	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Office of the Group Manager	46,142	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Ethics Office		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Real Property		3,550,816	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
General Counsel		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
General Auditor		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Departmental O&M		116,353,735	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
GENERAL DISTRICT REQUIREMENTS								
State Water Contract*								
Supply - O&M		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Supply - Capital		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Power - O&M & Off-Aq Capital		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Power - Capital (less Off-Aq)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Transmission - Capital - Commodity, Demand, & Standby		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Transmission - O&M - Commodity only		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Supply		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Power		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Other		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total State Water Contract		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Colorado River Aqueduct Power Costs								
		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Supply Programs (cash funded portion)								
		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Demand Management (cash funded portion)								
Local Resources Program		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Future Supply Actions & Stormwater Pilot		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Conservation Program (cash funded portion)		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Demand Management Costs		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Capital Financing								
		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		51,384,203	33.5%	39.9%	26.7%	0.0%	0.0%	100.0%
G.O. Bond Debt Service		1,477,547	33.5%	39.9%	26.7%	0.0%	0.0%	100.0%
Debt Administration		506,124	33.5%	39.9%	26.7%	0.0%	0.0%	100.0%
Bond Defeasance		-	33.5%	39.9%	26.7%	0.0%	0.0%	100.0%
PAYGO		24,489,000	33.5%	39.9%	26.7%	0.0%	0.0%	100.0%
Total Capital Financing Costs		77,856,873	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Other Operating Costs								
Operating Equipment		1,875,459	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Succession Planning Labor Pool		998,128	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
OPEB/PERS Pre-Funding		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Other Operating Costs		2,873,587	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Increase/(Decrease) in Required Reserves								
		-	32.3%	42.0%	25.7%	0.0%	0.0%	100.0%
Total General District Requirements								
		80,730,461	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
REQUIREMENTS BEFORE OFFSETS:								
		197,084,195	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Revenue Offsets								
Property Taxes - MWD Portion of SWC GO Debt Service		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Property Taxes - MWD GO Debt Service		1,477,547	33.5%	39.9%	26.7%	0.0%	0.0%	100.0%
Interest on Investments		656,587	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Hydro-Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
CRA Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Wadsworth Pumping Plant (DVL) Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to supply (PVID Lease)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Property Taxes - SWC		-	33.5%	39.9%	26.7%	0.0%	0.0%	100.0%
Revenue Reserve used for Revenue Bonds - I&P		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Annexation		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Revenue Offsets		2,134,134	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
NET REVENUE REQUIREMENTS:								
		194,950,061	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

	Functionalization	Allocation Percentages					Total
		Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M							
Group	Item						
Office of General Manager		1,539,436	-	1,539,436	-	-	1,539,436
Office of General Manager	Board of Directors	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-
Human Resources		3,067,104	-	3,067,104	-	-	3,067,104
Water Systems Operations	Office of the Manager	3,587,489	-	3,587,489	-	-	3,587,489
Water Systems Operations	Office of the Manager, Conveyance & Distribution S	355,232	-	355,232	-	-	355,232
Water Systems Operations	Office of the Manager, Treatment Section	153,838	-	153,838	-	-	153,838
Water Systems Operations	Office of the Manager, Operations Support Services	693,088	-	693,088	-	-	693,088
Water Systems Operations	Operations Support Services	6,612,646	-	6,612,646	-	-	6,612,646
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	9,143,987	-	9,143,987	-	-	9,143,987
Water Systems Operations	Power Operations and Planning	1,224,142	-	1,224,142	-	-	1,224,142
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	2,518,022	-	2,518,022	-	-	2,518,022
Water Systems Operations	Treatment Diemer	2,652,113	-	2,652,113	-	-	2,652,113
Water Systems Operations	Treatment Mills	1,825,733	-	1,825,733	-	-	1,825,733
Water Systems Operations	Treatment Skinner	2,131,926	-	2,131,926	-	-	2,131,926
Water Systems Operations	Treatment Weymouth	2,489,149	-	2,489,149	-	-	2,489,149
Water Systems Operations	Water Quality Section	-	-	-	-	-	-
Water Systems Operations	C&D, Eastern Unit	16,366,254	-	16,366,254	-	-	16,366,254
Water Systems Operations	C&D, Western Unit	15,799,275	-	15,799,275	-	-	15,799,275
Water Systems Operations	OSS, Manufacturing Services Unit	6,538,150	-	6,538,150	-	-	6,538,150
Water Systems Operations	Environmental Health & Safety Section	6,253,567	-	6,253,567	-	-	6,253,567
Water Systems Operations	OSS, Fleet Services Unit	6,755,339	-	6,755,339	-	-	6,755,339
Water Systems Operations	OSS, Power Support Unit	4,134,292	-	4,134,292	-	-	4,134,292
Water Systems Operations	Office of the Manager, Operations & Planning Secti	257,178	-	257,178	-	-	257,178
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-
Sustainability, Resilience & Inn		-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-
Engineering Services		8,652,358	-	8,652,358	-	-	8,652,358
Business Technology	Administrative Services	-	-	-	-	-	-
Business Technology	Information Technology	9,598,408	-	9,598,408	-	-	9,598,408
Water Resources Managemen	Resource Planning & Development	408,050	-	408,050	-	-	408,050
Water Resources Managemen	Resource Implementation	-	-	-	-	-	-
Water Resources Managemen	Office of the Group Manager	46,142	-	46,142	-	-	46,142
Ethics Office		-	-	-	-	-	-
Real Property		3,550,816	-	3,550,816	-	-	3,550,816
General Counsel		-	-	-	-	-	-
General Auditor		-	-	-	-	-	-
Total Departmental O&M	-	116,353,735	-	116,353,735	-	-	116,353,735
GENERAL DISTRICT REQUIREMENTS							
		-	-	-	-	-	-
State Water Contract*							
Supply - O&M		-	-	-	-	-	-
Supply - Capital		-	-	-	-	-	-
Power - O&M & Off-Aq Capital		-	-	-	-	-	-
Power - Capital (less Off-Aq)		-	-	-	-	-	-
Transmission - Capital - Commodity, Demand, & Standby		-	-	-	-	-	-
Transmission - O&M - Commodity only		-	-	-	-	-	-
Delta Conveyance - Supply		-	-	-	-	-	-
Delta Conveyance - Power		-	-	-	-	-	-
Delta Conveyance - Other		-	-	-	-	-	-
Total State Water Contract		-	-	-	-	-	-
Colorado River Aqueduct Power Costs							
		-	-	-	-	-	-
Supply Programs (cash funded portion)							
		-	-	-	-	-	-
Demand Management (cash funded portion)							
Local Resources Program		-	-	-	-	-	-
Future Supply Actions & Stormwater Pilot		-	-	-	-	-	-
Conservation Program (cash funded portion)		-	-	-	-	-	-
Total Demand Management Costs		-	-	-	-	-	-
Capital Financing							
Revenue Bond Debt Service net of BABs Interest Subsidy Payment	51,384,203	17,206,319	20,482,600	13,695,284	-	-	51,384,203
G.O. Bond Debt Service	1,477,547	494,766	588,975	393,806	-	-	1,477,547
Debt Administration	506,124	169,479	201,749	134,896	-	-	506,124
Bond Defeasance	-	-	-	-	-	-	-
PAYGO	24,489,000	8,200,293	9,761,724	6,526,983	-	-	24,489,000
Total Capital Financing Costs	77,856,873	26,070,857	31,035,048	20,750,969	-	-	77,856,873
Other Operating Costs							
Operating Equipment	1,875,459	-	1,875,459	-	-	-	1,875,459
Succession Planning Labor Pool	998,128	-	998,128	-	-	-	998,128
OPEB/PERS Pre-Funding	-	-	-	-	-	-	-
Total Other Operating Costs	2,873,587	-	2,873,587	-	-	-	2,873,587
Increase/(Decrease) in Required Reserves							
	-	-	-	-	-	-	-
Total General District Requirements	80,730,461	26,070,857	33,908,635	20,750,969	-	-	80,730,461
REQUIREMENTS BEFORE OFFSETS:	197,084,195	26,070,857	150,262,370	20,750,969	-	-	197,084,195
Revenue Offsets							
Property Taxes - MWD Portion of SWC GO Debt Service	-	-	-	-	-	-	-
Property Taxes - MWD GO Debt Service	1,477,547	494,766	588,975	393,806	-	-	1,477,547
Interest on Investments	656,587	-	656,587	-	-	-	656,587
Hydro-Power Revenue	-	-	-	-	-	-	-
CRA Power Revenue	-	-	-	-	-	-	-
Wadsworth Pumping Plant (DVL) Power Revenue	-	-	-	-	-	-	-
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)	-	-	-	-	-	-	-
Misc. allocated to supply (PVID Lease)	-	-	-	-	-	-	-
Property Taxes - SWC	-	-	-	-	-	-	-
Revenue Reserve used for Revenue Bonds - I&P	-	-	-	-	-	-	-
Annexation	-	-	-	-	-	-	-
Total Revenue Offsets	2,134,134	494,766	1,245,562	393,806	-	-	2,134,134
NET REVENUE REQUIREMENTS:	194,950,061	25,576,091	149,016,808	20,357,163	-	-	194,950,061

		Functionalization	Allocation Percentages					Total
			Fixed			Variable		
			Demand	Commodity	Standby	Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		1,352,356	-	1,352,356	-	-	-	1,352,356
Office of General Manager	Board of Directors	-	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-	-
Human Resources		2,346,331	-	2,346,331	-	-	-	2,346,331
Water Systems Operations	Office of the Manager	2,595,320	-	2,595,320	-	-	-	2,595,320
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	346,983	-	346,983	-	-	-	346,983
Water Systems Operations	Office of the Manager, Treatment Section	54,307	-	54,307	-	-	-	54,307
Water Systems Operations	Office of the Manager, Operations Support Services	524,225	-	524,225	-	-	-	524,225
Water Systems Operations	Operations Support Services	5,957,183	-	5,957,183	-	-	-	5,957,183
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	7,460,619	-	7,460,619	-	-	-	7,460,619
Water Systems Operations	Power Operations and Planning	1,047,158	-	1,047,158	-	-	-	1,047,158
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	1,503,045	-	1,503,045	-	-	-	1,503,045
Water Systems Operations	Treatment Diemer	1,442,063	-	1,442,063	-	-	-	1,442,063
Water Systems Operations	Treatment Mills	1,368,106	-	1,368,106	-	-	-	1,368,106
Water Systems Operations	Treatment Skinner	1,341,294	-	1,341,294	-	-	-	1,341,294
Water Systems Operations	Treatment Weymouth	1,565,296	-	1,565,296	-	-	-	1,565,296
Water Systems Operations	Water Quality Section	-	-	-	-	-	-	-
Water Systems Operations	C&D, Eastern Unit	11,368,629	-	11,368,629	-	-	-	11,368,629
Water Systems Operations	C&D, Western Unit	10,857,431	-	10,857,431	-	-	-	10,857,431
Water Systems Operations	OSS, Manufacturing Services Unit	5,989,759	-	5,989,759	-	-	-	5,989,759
Water Systems Operations	Environmental Health & Safety Section	4,860,970	-	4,860,970	-	-	-	4,860,970
Water Systems Operations	OSS, Fleet Services Unit	4,023,366	-	4,023,366	-	-	-	4,023,366
Water Systems Operations	OSS, Power Support Unit	3,718,454	-	3,718,454	-	-	-	3,718,454
Water Systems Operations	Office of the Manager, Operations & Planning Section	233,093	-	233,093	-	-	-	233,093
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-	-
Sustainability, Resilience & Inr		-	-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-	-
Engineering Services		6,811,194	-	6,811,194	-	-	-	6,811,194
Business Technology	Administrative Services	-	-	-	-	-	-	-
Business Technology	Information Technology	6,495,857	-	6,495,857	-	-	-	6,495,857
Water Resources Managemen	Resource Planning & Development	312,365	-	312,365	-	-	-	312,365
Water Resources Managemen	Resource Implementation	-	-	-	-	-	-	-
Water Resources Managemen	Office of the Group Manager	45,105	-	45,105	-	-	-	45,105
Ethics Office		-	-	-	-	-	-	-
Real Property		1,446,998	-	1,446,998	-	-	-	1,446,998
General Counsel		-	-	-	-	-	-	-
General Auditor		-	-	-	-	-	-	-
Total Departmental O&M	-	85,067,506	-	85,067,506	-	-	-	85,067,506

		Functionalization	Allocation Percentages					% Total
			Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		86,779	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Office of General Manager	Board of Directors	-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Bay Delta Initiatives	Bay Delta Initiatives	-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
External Affairs	Legislative Services	-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
External Affairs	Media Communications Services	-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
External Affairs	Manager, External Affairs/Special Projects	-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
External Affairs	Conservation & Community Services	-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Human Resources		172,895	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Water Systems Operations	Office of the Manager	228,554	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	12,155	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Water Systems Operations	Office of the Manager, Treatment Section	-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Water Systems Operations	Office of the Manager, Operations Support Services	44,156	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Water Systems Operations	Operations Support Services	116,875	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Water Systems Operations	Desert Region / C&D CRA	-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Water Systems Operations	System Operations Unit	-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Water Systems Operations	Power Operations and Planning	891,614	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Water Systems Operations	Operations Planning & Programs Unit	-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Water Systems Operations	Treatment Jensen	-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Water Systems Operations	Treatment Diemer	-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Water Systems Operations	Treatment Mills	-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Water Systems Operations	Treatment Skinner	-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Water Systems Operations	Treatment Weymouth	-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Water Systems Operations	Water Quality Section	-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Water Systems Operations	C&D, Eastern Unit	546,733	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Water Systems Operations	C&D, Western Unit	554,047	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Water Systems Operations	OSS, Manufacturing Services Unit	82,420	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Water Systems Operations	Environmental Health & Safety Section	48,955	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Water Systems Operations	OSS, Fleet Services Unit	-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Water Systems Operations	OSS, Power Support Unit	2,505,631	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Water Systems Operations	Office of the Manager, Operations & Planning Section	16,384	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Water Systems Operations	Security Team & Security Management	-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Sustainability, Resilience & Innovation		-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Diversity, Equity & Inclusion		-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Equal Employment Opportunity		-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Office of the Chief Financial Officer		-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Business Technology	Office of Manager	-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Engineering Services		710,695	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Business Technology	Administrative Services	-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Business Technology	Information Technology	541,071	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Water Resources Management	Resource Planning & Development	-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Water Resources Management	Resource Implementation	-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Water Resources Management	Office of the Group Manager	-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Ethics Office		-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Real Property		-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
General Counsel		-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
General Auditor		-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Total Departmental O&M		6,558,965	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
GENERAL DISTRICT REQUIREMENTS								
State Water Contract*								
Supply - O&M		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Supply - Capital		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Power - O&M & Off-Aq Capital		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Power - Capital (less Off-Aq)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Transmission - Capital - Commodity, Demand, & Standby		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Transmission - O&M - Commodity only		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Supply		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Power		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Other		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total State Water Contract		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Colorado River Aqueduct Power Costs		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Supply Programs (cash funded portion)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Demand Management (cash funded portion)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Local Resources Program		-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Future Supply Actions & Stormwater Pilot		-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Conservation Program (cash funded portion)		-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Total Demand Management Costs		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Capital Financing		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		4,220,643	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
G.O. Bond Debt Service		-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Debt Administration		41,572	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Bond Defeasance		-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
PAYGO		2,011,500	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Total Capital Financing Costs		6,273,715	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Other Operating Costs								
Operating Equipment		105,721	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Succession Planning Labor Pool		56,265	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
OPEB/PERS Pre-Funding		-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Total Other Operating Costs		161,987	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Increase/(Decrease) in Required Reserves		-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Total General District Requirements		6,435,702	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
REQUIREMENTS BEFORE OFFSETS:		12,994,667	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Revenue Offsets								
Property Taxes - MWD Portion of SWC GO Debt Service		-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Property Taxes - MWD GO Debt Service		-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Interest on Investments		43,292	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Hydro-Power Revenue		12,611,274	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
CRA Power Revenue		-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Wadsworth Pumping Plant (DVL) Power Revenue		-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)		-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Misc. allocated to supply (PVID Lease)		-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Property Taxes - SWC		-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Revenue Reserve used for Revenue Bonds - I&P		-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Annexation		-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Total Revenue Offsets		12,654,566	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
NET REVENUE REQUIREMENTS:		-	340,101	0.0%	0.0%	0.0%	0.0%	0.0%

	Functionalization	Allocation Percentages					Total
		Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M							
Group	Item						
Office of General Manager		86,779	-	-	-	86,779	86,779
Office of General Manager	Board of Directors	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-
Human Resources		172,895	-	-	-	172,895	172,895
Water Systems Operations	Office of the Manager	228,554	-	-	-	228,554	228,554
Water Systems Operations	Office of the Manager, Conveyance & Distribution S	12,155	-	-	-	12,155	12,155
Water Systems Operations	Office of the Manager, Treatment Section	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations Support Services	44,156	-	-	-	44,156	44,156
Water Systems Operations	Operations Support Services	116,875	-	-	-	116,875	116,875
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	891,614	-	-	-	891,614	891,614
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	-	-	-	-	-	-
Water Systems Operations	C&D, Eastern Unit	546,733	-	-	-	546,733	546,733
Water Systems Operations	C&D, Western Unit	554,047	-	-	-	554,047	554,047
Water Systems Operations	OSS, Manufacturing Services Unit	82,420	-	-	-	82,420	82,420
Water Systems Operations	Environmental Health & Safety Section	48,955	-	-	-	48,955	48,955
Water Systems Operations	OSS, Fleet Services Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Power Support Unit	2,505,631	-	-	-	2,505,631	2,505,631
Water Systems Operations	Office of the Manager, Operations & Planning Sect	16,384	-	-	-	16,384	16,384
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-
Sustainability, Resilience & Inr		-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-
Equal Employment Opportunit		-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-
Engineering Services		710,695	-	-	-	710,695	710,695
Business Technology	Administrative Services	-	-	-	-	-	-
Business Technology	Information Technology	541,071	-	-	-	541,071	541,071
Water Resources Management	Resource Planning & Development	-	-	-	-	-	-
Water Resources Management	Resource Implementation	-	-	-	-	-	-
Water Resources Management	Office of the Group Manager	-	-	-	-	-	-
Ethics Office		-	-	-	-	-	-
Real Property		-	-	-	-	-	-
General Counsel		-	-	-	-	-	-
General Auditor		-	-	-	-	-	-
Total Departmental O&M	-	6,558,965	-	-	-	6,558,965	6,558,965
GENERAL DISTRICT REQUIREMENTS		-	-	-	-	-	-
State Water Contract*		-	-	-	-	-	-
Supply - O&M		-	-	-	-	-	-
Supply - Capital		-	-	-	-	-	-
Power - O&M & Off-Aq Capital		-	-	-	-	-	-
Power - Capital (less Off-Aq)		-	-	-	-	-	-
Transmission - Capital - Commodity, Demand, & Standby		-	-	-	-	-	-
Transmission - O&M - Commodity only		-	-	-	-	-	-
Delta Conveyance - Supply		-	-	-	-	-	-
Delta Conveyance - Power		-	-	-	-	-	-
Delta Conveyance - Other		-	-	-	-	-	-
Total State Water Contract		-	-	-	-	-	-
Colorado River Aqueduct Power Costs		-	-	-	-	-	-
Supply Programs (cash funded portion)		-	-	-	-	-	-
Demand Management (cash funded portion)		-	-	-	-	-	-
Local Resources Program		-	-	-	-	-	-
Future Supply Actions & Stormwater Pilot		-	-	-	-	-	-
Conservation Program (cash funded portion)		-	-	-	-	-	-
Total Demand Management Costs		-	-	-	-	-	-
Capital Financing		-	-	-	-	-	-
Revenue Bond Debt Service net of BABs Interest Subsidy Payment	4,220,643	-	-	-	-	4,220,643	4,220,643
G.O. Bond Debt Service	-	-	-	-	-	-	-
Debt Administration	41,572	-	-	-	-	41,572	41,572
Bond Defeasance	-	-	-	-	-	-	-
PAYGO	2,011,500	-	-	-	-	2,011,500	2,011,500
Total Capital Financing Costs	6,273,715	-	-	-	-	6,273,715	6,273,715
Other Operating Costs		-	-	-	-	-	-
Operating Equipment	105,721	-	-	-	-	105,721	105,721
Succession Planning Labor Pool	56,265	-	-	-	-	56,265	56,265
OPEB/PERS Pre-Funding	-	-	-	-	-	-	-
Total Other Operating Costs	161,987	-	-	-	-	161,987	161,987
Increase/(Decrease) in Required Reserves		-	-	-	-	-	-
Total General District Requirements	6,435,702	-	-	-	-	6,435,702	6,435,702
REQUIREMENTS BEFORE OFFSETS:	12,994,667	-	-	-	-	12,994,667	12,994,667
Revenue Offsets		-	-	-	-	-	-
Property Taxes - MWD Portion of SWC GO Debt Service	-	-	-	-	-	-	-
Property Taxes - MWD GO Debt Service	-	-	-	-	-	-	-
Interest on Investments	43,292	-	-	-	-	43,292	43,292
Hydro-Power Revenue	12,611,274	-	-	-	-	12,611,274	12,611,274
CRA Power Revenue	-	-	-	-	-	-	-
Wadsworth Pumping Plant (DVL) Power Revenue	-	-	-	-	-	-	-
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)	-	-	-	-	-	-	-
Misc. allocated to supply (PVID Lease)	-	-	-	-	-	-	-
Property Taxes - SWC	-	-	-	-	-	-	-
Revenue Reserve used for Revenue Bonds - I&P	-	-	-	-	-	-	-
Annexation	-	-	-	-	-	-	-
Total Revenue Offsets	12,654,566	-	-	-	-	12,654,566	12,654,566
NET REVENUE REQUIREMENTS:	340,101	-	-	-	-	340,101	340,101

		Functionalization	Allocation Percentages					Total	
			Fixed			Variable Commodity	Other		Hydroelectric
			Demand	Commodity	Standby				
Departmental O&M									
Group	Item								
Office of General Manager		76,234	-	-	-	-	76,234	76,234	
Office of General Manager	Board of Directors	-	-	-	-	-	-	-	
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-	-	
External Affairs	Legislative Services	-	-	-	-	-	-	-	
External Affairs	Media Communications Services	-	-	-	-	-	-	-	
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-	-	
External Affairs	Conservation & Community Services	-	-	-	-	-	-	-	
Human Resources		132,265	-	-	-	-	132,265	132,265	
Water Systems Operations	Office of the Manager	165,344	-	-	-	-	165,344	165,344	
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	11,873	-	-	-	-	11,873	11,873	
Water Systems Operations	Office of the Manager, Treatment Section	-	-	-	-	-	-	-	
Water Systems Operations	Office of the Manager, Operations Support Services	33,398	-	-	-	-	33,398	33,398	
Water Systems Operations	Operations Support Services	105,290	-	-	-	-	105,290	105,290	
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-	-	
Water Systems Operations	System Operations Unit	-	-	-	-	-	-	-	
Water Systems Operations	Power Operations and Planning	762,706	-	-	-	-	762,706	762,706	
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-	-	
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-	-	
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-	-	
Water Systems Operations	Treatment Mills	-	-	-	-	-	-	-	
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-	-	
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-	-	
Water Systems Operations	Water Quality Section	-	-	-	-	-	-	-	
Water Systems Operations	C&D, Eastern Unit	379,782	-	-	-	-	379,782	379,782	
Water Systems Operations	C&D, Western Unit	380,747	-	-	-	-	380,747	380,747	
Water Systems Operations	OSS, Manufacturing Services Unit	75,507	-	-	-	-	75,507	75,507	
Water Systems Operations	Environmental Health & Safety Section	38,053	-	-	-	-	38,053	38,053	
Water Systems Operations	OSS, Fleet Services Unit	-	-	-	-	-	-	-	
Water Systems Operations	OSS, Power Support Unit	2,253,608	-	-	-	-	2,253,608	2,253,608	
Water Systems Operations	Office of the Manager, Operations & Planning Section	14,850	-	-	-	-	14,850	14,850	
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-	-	
Sustainability, Resilience & Inr		-	-	-	-	-	-	-	
Diversity, Equity & Inclusion		-	-	-	-	-	-	-	
Equal Employment Opportunity		-	-	-	-	-	-	-	
Office of the Chief Financial O		-	-	-	-	-	-	-	
Business Technology	Office of Manager	-	-	-	-	-	-	-	
Engineering Services		559,464	-	-	-	-	559,464	559,464	
Business Technology	Administrative Services	-	-	-	-	-	-	-	
Business Technology	Information Technology	366,177	-	-	-	-	366,177	366,177	
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-	-	
Water Resources Managemen	Resource Implementation	-	-	-	-	-	-	-	
Water Resources Managemen	Office of the Group Manager	-	-	-	-	-	-	-	
Ethics Office		-	-	-	-	-	-	-	
Real Property		-	-	-	-	-	-	-	
General Counsel		-	-	-	-	-	-	-	
General Auditor		-	-	-	-	-	-	-	
Total Departmental O&M	-	5,355,297	-	-	-	-	5,355,297	5,355,297	

		Functionalization	Allocation Percentages					% Total
			Demand	Fixed	Standby	Variable	Hydroelectric	
				Commodity		Commodity		
Departmental O&M								
Group	Item							
	Office of General Manager	145,504	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Office of General Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Bay Delta Initiatives	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	External Affairs	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	External Affairs	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	External Affairs	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	External Affairs	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	External Affairs	2,845,509	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Human Resources	289,896	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems							

	Functionalization	Allocation Percentages					Total
		Demand	Fixed Commodity	Standby	Variable Commodity	Other Hydroelectric	
Departmental O&M							
Group	Item						
Office of General Manager		145,504	-	145,504	-	-	145,504
Office of General Manager	Board of Directors	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-
External Affairs	Conservation & Community Services	2,845,509	-	2,845,509	-	-	2,845,509
Human Resources		289,896	-	289,896	-	-	289,896
Water Systems Operations	Office of the Manager	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Conveyance & Distribution S	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations Support Services	-	-	-	-	-	-
Water Systems Operations	Operations Support Services	-	-	-	-	-	-
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	-	-	-	-	-	-
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	-	-	-	-	-	-
Water Systems Operations	Environmental Health & Safety Section	-	-	-	-	-	-
Water Systems Operations	OSS, Fleet Services Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Power Support Unit	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations & Planning Sect	-	-	-	-	-	-
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-
Sustainability, Resilience & Inr		-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-
Engineering Services		95,395	-	95,395	-	-	95,395
Business Technology	Administrative Services	-	-	-	-	-	-
Business Technology	Information Technology	907,220	-	907,220	-	-	907,220
Water Resources Managemen	Resource Planning & Development	306,038	-	306,038	-	-	306,038
Water Resources Managemen	Resource Implementation	5,725,849	-	5,725,849	-	-	5,725,849
Water Resources Managemen	Office of the Group Manager	682,088	-	682,088	-	-	682,088
Ethics Office		-	-	-	-	-	-
Real Property		-	-	-	-	-	-
General Counsel		-	-	-	-	-	-
General Auditor		-	-	-	-	-	-
Total Departmental O&M	-	10,997,499	-	10,997,499	-	-	10,997,499
GENERAL DISTRICT REQUIREMENTS		-	-	-	-	-	-
State Water Contract*		-	-	-	-	-	-
Supply - O&M		-	-	-	-	-	-
Supply - Capital		-	-	-	-	-	-
Power - O&M & Off-Aq Capital		-	-	-	-	-	-
Power - Capital (less Off-Aq)		-	-	-	-	-	-
Transmission - Capital - Commodity, Demand, & Standby		-	-	-	-	-	-
Transmission - O&M - Commodity only		-	-	-	-	-	-
Delta Conveyance - Supply		-	-	-	-	-	-
Delta Conveyance - Power		-	-	-	-	-	-
Delta Conveyance - Other		-	-	-	-	-	-
Total State Water Contract		-	-	-	-	-	-
Colorado River Aqueduct Power Costs		-	-	-	-	-	-
Supply Programs (cash funded portion)		-	-	-	-	-	-
Demand Management (cash funded portion)		-	-	-	-	-	-
Local Resources Program		22,175,417	-	22,175,417	-	-	22,175,417
Future Supply Actions & Stormwater Pilot		3,639,900	-	3,639,900	-	-	3,639,900
Conservation Program (cash funded portion)		25,000,000	-	25,000,000	-	-	25,000,000
Total Demand Management Costs		50,815,317	-	50,815,317	-	-	50,815,317
Capital Financing		-	-	-	-	-	-
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		566,529	-	566,529	-	-	566,529
G.O. Bond Debt Service		-	-	-	-	-	-
Debt Administration		5,580	-	5,580	-	-	5,580
Bond Defeasance		-	-	-	-	-	-
PAYGO		270,000	-	270,000	-	-	270,000
Total Capital Financing Costs		842,109	-	842,109	-	-	842,109
Other Operating Costs		-	-	-	-	-	-
Operating Equipment		177,264	-	177,264	-	-	177,264
Succession Planning Labor Pool		94,341	-	94,341	-	-	94,341
OPEB/PERS Pre-Funding		-	-	-	-	-	-
Total Other Operating Costs		271,605	-	271,605	-	-	271,605
Increase/(Decrease) in Required Reserves		-	-	-	-	-	-
Total General District Requirements		51,929,032	-	51,929,032	-	-	51,929,032
REQUIREMENTS BEFORE OFFSETS:		62,926,531	-	62,926,531	-	-	62,926,531
Revenue Offsets		-	-	-	-	-	-
Property Taxes - MWD Portion of SWC GO Debt Service		-	-	-	-	-	-
Property Taxes - MWD GO Debt Service		-	-	-	-	-	-
Interest on Investments		209,640	-	209,640	-	-	209,640
Hydro-Power Revenue		-	-	-	-	-	-
CRA Power Revenue		-	-	-	-	-	-
Wadsworth Pumping Plant (DVL) Power Revenue		-	-	-	-	-	-
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)		-	-	-	-	-	-
Misc. allocated to supply (PVID Lease)		-	-	-	-	-	-
Property Taxes - SWC		-	-	-	-	-	-
Revenue Reserve used for Revenue Bonds - I&P		-	-	-	-	-	-
Annexation		-	-	-	-	-	-
Total Revenue Offsets		209,640	-	209,640	-	-	209,640
NET REVENUE REQUIREMENTS:		62,716,891	-	62,716,891	-	-	62,716,891

		Functionalization	Allocation Percentages					Total
			Fixed			Variable		
			Demand	Commodity	Standby	Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		127,822	-	127,822	-	-	-	127,822
Office of General Manager	Board of Directors	-	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-	-
External Affairs	Conservation & Community Services	1,876,293	-	1,876,293	-	-	-	1,876,293
Human Resources		221,770	-	221,770	-	-	-	221,770
Water Systems Operations	Office of the Manager	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations Support Services	-	-	-	-	-	-	-
Water Systems Operations	Operations Support Services	-	-	-	-	-	-	-
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	-	-	-	-	-	-	-
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	-	-	-	-	-	-	-
Water Systems Operations	Environmental Health & Safety Section	-	-	-	-	-	-	-
Water Systems Operations	OSS, Fleet Services Unit	-	-	-	-	-	-	-
Water Systems Operations	OSS, Power Support Unit	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations & Planning Section	-	-	-	-	-	-	-
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-	-
Sustainability, Resilience & Inr		-	-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-	-
Equal Employment Opportunit		-	-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-	-
Engineering Services		75,096	-	75,096	-	-	-	75,096
Business Technology	Administrative Services	-	-	-	-	-	-	-
Business Technology	Information Technology	613,974	-	613,974	-	-	-	613,974
Water Resources Managemen	Resource Planning & Development	234,274	-	234,274	-	-	-	234,274
Water Resources Managemen	Resource Implementation	3,645,703	-	3,645,703	-	-	-	3,645,703
Water Resources Managemen	Office of the Group Manager	666,750	-	666,750	-	-	-	666,750
Ethics Office		-	-	-	-	-	-	-
Real Property		-	-	-	-	-	-	-
General Counsel		-	-	-	-	-	-	-
General Auditor		-	-	-	-	-	-	-
Total Departmental O&M	-	7,461,682	-	7,461,682	-	-	-	7,461,682

		Functionalization	Allocation Percentages					% Total
			Demand	Commodity	Standby	Variable Commodity	Other	
Departmental O&M								
Group	Item							
Office of General Manager		2,174,800	0.0%	1.6%	0.0%	0.0%	0.0%	1.6%
Office of General Manager	Board of Directors	2,077,073	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Bay Delta Initiatives	Bay Delta Initiatives	-	0.0%	1.8%	0.0%	0.0%	0.0%	1.8%
External Affairs	Legislative Services	6,137,814	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
External Affairs	Media Communications Services	5,645,176	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
External Affairs	Manager, External Affairs/Special Projects	9,736,137	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
External Affairs	Conservation & Community Services	2,845,509	0.0%	0.6%	0.0%	0.0%	0.0%	0.6%
Human Resources		4,332,977	0.0%	2.8%	0.0%	0.0%	0.0%	2.9%
Water Systems Operations	Office of the Manager	717,635	0.0%	2.5%	0.0%	0.0%	0.1%	2.5%
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	20,032	0.0%	0.3%	0.0%	0.0%	0.0%	0.3%
Water Systems Operations	Office of the Manager, Treatment Section	-	0.0%	0.1%	0.0%	0.0%	0.0%	0.1%
Water Systems Operations	Office of the Manager, Operations Support Services	138,644	0.0%	0.5%	0.0%	0.0%	0.0%	0.5%
Water Systems Operations	Operations Support Services	276,808	0.0%	2.2%	0.0%	0.0%	0.0%	2.3%
Water Systems Operations	Desert Region / C&D CRA	-	0.0%	8.9%	0.0%	0.0%	0.0%	8.9%
Water Systems Operations	System Operations Unit	-	0.0%	2.5%	0.0%	0.0%	0.0%	2.5%
Water Systems Operations	Power Operations and Planning	347,145	0.0%	0.7%	0.0%	0.0%	0.3%	1.0%
Water Systems Operations	Operations Planning & Programs Unit	-	0.0%	0.7%	0.0%	0.0%	0.0%	0.7%
Water Systems Operations	Treatment Jensen	-	0.0%	3.9%	0.0%	0.0%	0.0%	3.9%
Water Systems Operations	Treatment Diemer	-	0.0%	3.7%	0.0%	0.0%	0.0%	3.7%
Water Systems Operations	Treatment Mills	-	0.0%	3.5%	0.0%	0.0%	0.0%	3.5%
Water Systems Operations	Treatment Skinner	-	0.0%	3.5%	0.0%	0.0%	0.0%	3.5%
Water Systems Operations	Treatment Weymouth	-	0.0%	4.0%	0.0%	0.0%	0.0%	4.0%
Water Systems Operations	Water Quality Section	-	0.0%	7.4%	0.0%	0.0%	0.0%	7.4%
Water Systems Operations	C&D, Eastern Unit	885,288	0.0%	4.6%	0.0%	0.0%	0.1%	4.7%
Water Systems Operations	C&D, Western Unit	929,012	0.0%	3.8%	0.0%	0.0%	0.1%	3.9%
Water Systems Operations	OSS, Manufacturing Services Unit	557,079	0.0%	2.4%	0.0%	0.0%	0.0%	2.4%
Water Systems Operations	Environmental Health & Safety Section	735,900	0.0%	3.9%	0.0%	0.0%	0.0%	4.0%
Water Systems Operations	OSS, Fleet Services Unit	1,403,641	0.0%	2.3%	0.0%	0.0%	0.0%	2.3%
Water Systems Operations	OSS, Power Support Unit	129,756	0.0%	1.9%	0.0%	0.0%	0.8%	2.7%
Water Systems Operations	Office of the Manager, Operations & Planning Section	51,445	0.0%	0.2%	0.0%	0.0%	0.0%	0.2%
Water Systems Operations	Security Team & Security Management	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Sustainability, Resilience & Innovation		9,831,427	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Diversity, Equity & Inclusion		1,371,646	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Equal Employment Opportunity		1,943,227	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Office of the Chief Financial Officer		28,630,140	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Business Technology	Office of Manager	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Engineering Services		2,885,709	0.0%	11.7%	0.0%	0.0%	0.2%	11.9%
Business Technology	Administrative Services	32,605,562	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Business Technology	Information Technology	13,559,919	0.0%	7.8%	0.0%	0.0%	0.1%	7.9%
Water Resources Management	Resource Planning & Development	-	0.0%	1.4%	0.0%	0.0%	0.0%	1.4%
Water Resources Management	Resource Implementation	34,762	0.0%	3.6%	0.0%	0.0%	0.0%	3.6%
Water Resources Management	Office of the Group Manager	3,931	0.0%	0.8%	0.0%	0.0%	0.0%	0.8%
Ethics Office		2,106,637	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Real Property		11,828,330	0.0%	2.4%	0.0%	0.0%	0.0%	2.4%
General Counsel		15,833,730	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
General Auditor		4,589,034	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total Departmental O&M		164,375,925	0.0%	98.2%	0.0%	0.0%	1.8%	100.0%
GENERAL DISTRICT REQUIREMENTS								
State Water Contract*								
Supply - O&M	-	0.0%	8.4%	0.0%	0.0%	0.0%	0.0%	8.4%
Supply - Capital	-	0.0%	6.1%	0.0%	0.0%	0.0%	0.0%	6.1%
Power - O&M & Off-Aq Capital	-	0.0%	0.0%	0.0%	16.1%	0.0%	0.0%	16.1%
Power - Capital (less Off-Aq)	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Transmission - Capital - Commodity, Demand, & Standby	-	0.4%	2.3%	2.0%	0.0%	0.0%	0.0%	4.6%
Transmission - O&M - Commodity only	-	0.0%	14.7%	0.0%	0.0%	0.0%	0.0%	14.7%
Delta Conveyance - Supply	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Power	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Other	-	0.2%	1.1%	1.0%	0.0%	0.0%	0.0%	2.3%
Total State Water Contract	-	0.6%	32.5%	2.9%	16.1%	0.0%	0.0%	52.1%
Colorado River Aqueduct Power Costs	-	0.0%	0.0%	0.0%	8.0%	0.0%	0.0%	8.0%
Supply Programs (cash funded portion)	-	0.0%	5.1%	0.0%	0.0%	0.0%	0.0%	5.1%
Demand Management (cash funded portion)	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Local Resources Program	-	0.0%	1.7%	0.0%	0.0%	0.0%	0.0%	1.7%
Future Supply Actions & Stormwater Pilot	-	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.3%
Conservation Program (cash funded portion)	-	0.0%	1.9%	0.0%	0.0%	0.0%	0.0%	1.9%
Total Demand Management Costs	-	0.0%	3.9%	0.0%	0.0%	0.0%	0.0%	3.9%
Capital Financing	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Revenue Bond Debt Service net of BABs Interest Subsidy Payment	17,137,510	3.7%	8.6%	7.6%	0.0%	0.0%	0.3%	20.2%
G.O. Bond Debt Service	-	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.1%
Debt Administration	168,801	0.0%	0.1%	0.1%	0.0%	0.0%	0.0%	0.2%
Bond Defeasance	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
PAYGO	8,167,500	1.8%	4.1%	3.6%	0.0%	0.0%	0.2%	9.6%
Total Capital Financing Costs	25,473,811	5.6%	12.8%	11.3%	0.0%	0.0%	0.5%	30.2%
Other Operating Costs								
Operating Equipment	2,649,510	0.0%	0.5%	0.0%	0.0%	0.0%	0.0%	0.5%
Succession Planning Labor Pool	1,410,081	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.3%
OPEB/PERS Pre-Funding	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total Other Operating Costs	4,059,591	0.0%	0.8%	0.0%	0.0%	0.0%	0.0%	0.8%
Increase/(Decrease) in Required Reserves	6,100,000	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total General District Requirements	35,633,402	6.1%	55.1%	14.2%	24.1%	0.0%	0.5%	100.0%
REQUIREMENTS BEFORE OFFSETS:	200,009,327	5.0%	63.0%	11.6%	19.7%	0.0%	0.7%	100.0%
Revenue Offsets								
Property Taxes - MWD Portion of SWC GO Debt Service	-	5.0%	63.0%	11.6%	19.7%	0.0%	0.7%	100.0%
Property Taxes - MWD GO Debt Service	-	5.0%	63.0%	11.6%	19.7%	0.0%	0.7%	100.0%
Interest on Investments	666,332	5.0%	63.0%	11.6%	19.7%	0.0%	0.7%	100.0%
Hydro-Power Revenue	-	5.0%	63.0%	11.6%	19.7%	0.0%	0.7%	100.0%
CRA Power Revenue	-	5.0%	63.0%	11.6%	19.7%	0.0%	0.7%	100.0%
Wadsworth Pumping Plant (DVL) Power Revenue	-	5.0%	63.0%	11.6%	19.7%	0.0%	0.7%	100.0%
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)	42,991,971	5.0%	63.0%	11.6%	19.7%	0.0%	0.7%	100.0%
Misc. allocated to supply (PVID Lease)	-	5.0%	63.0%	11.6%	19.7%	0.0%	0.7%	100.0%
Property Taxes - SWC	-	5.0%	63.0%	11.6%	19.7%	0.0%	0.7%	100.0%
Revenue Reserve used for Revenue Bonds - I&P	-	5.0%	63.0%	11.6%	19.7%	0.0%	0.7%	100.0%
Annexation	-	5.0%	63.0%	11.6%	19.7%	0.0%	0.7%	100.0%
Total Revenue Offsets	43,658,303	5.0%	63.0%	11.6%	19.7%	0.0%	0.7%	100.0%
NET REVENUE REQUIREMENTS:	-	156,351,024	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

	Functionalization	Allocation Percentages						Total
		Demand	Commodity	Standby	Variable Commodity	Other	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		-	2,663,122	-	-	-	42,404	2,705,526
Office of General Manager	Board of Directors	-						
Bay Delta Initiatives	Bay Delta Initiatives	-	3,000,992	-	-	-	-	3,000,992
External Affairs	Legislative Services	-						
External Affairs	Media Communications Services	-						
External Affairs	Manager, External Affairs/Special Projects	-						
External Affairs	Conservation & Community Services	-	1,043,669	-	-	-	-	1,043,669
Human Resources		-	4,620,503	-	-	-	73,571	4,694,074
Water Systems Operations	Office of the Manager	-	4,097,208	-	-	-	91,971	4,189,179
Water Systems Operations	Office of the Manager, Conveyance & Distribution S	-	443,700	-	-	-	6,604	450,304
Water Systems Operations	Office of the Manager, Treatment Section	-	230,594	-	-	-	-	230,594
Water Systems Operations	Office of the Manager, Operations Support Services	-	827,589	-	-	-	18,577	846,166
Water Systems Operations	Operations Support Services	-	3,655,775	-	-	-	58,566	3,714,341
Water Systems Operations	Desert Region / C&D CRA	-	14,584,621	-	-	-	-	14,584,621
Water Systems Operations	System Operations Unit	-	4,149,895	-	-	-	-	4,149,895
Water Systems Operations	Power Operations and Planning	-	1,149,294	-	-	-	424,248	1,573,541
Water Systems Operations	Operations Planning & Programs Unit	-	1,091,613	-	-	-	-	1,091,613
Water Systems Operations	Treatment Jensen	-	6,382,088	-	-	-	-	6,382,088
Water Systems Operations	Treatment Diemer	-	6,123,153	-	-	-	-	6,123,153
Water Systems Operations	Treatment Mills	-	5,809,123	-	-	-	-	5,809,123
Water Systems Operations	Treatment Skinner	-	5,695,276	-	-	-	-	5,695,276
Water Systems Operations	Treatment Weymouth	-	6,646,414	-	-	-	-	6,646,414
Water Systems Operations	Water Quality Section	-	12,208,450	-	-	-	-	12,208,450
Water Systems Operations	C&D, Eastern Unit	-	7,571,686	-	-	-	211,250	7,782,936
Water Systems Operations	C&D, Western Unit	-	6,264,925	-	-	-	211,787	6,476,711
Water Systems Operations	OSS, Manufacturing Services Unit	-	3,890,984	-	-	-	42,000	3,932,984
Water Systems Operations	Environmental Health & Safety Section	-	6,488,596	-	-	-	21,167	6,509,763
Water Systems Operations	OSS, Fleet Services Unit	-	3,762,338	-	-	-	-	3,762,338
Water Systems Operations	OSS, Power Support Unit	-	3,158,491	-	-	-	1,253,547	4,412,038
Water Systems Operations	Office of the Manager, Operations & Planning Secti	-	367,983	-	-	-	8,260	376,243
Water Systems Operations	Security Team & Security Management	-		-	-	-		
Sustainability, Resilience & Inn		-		-	-	-		
Diversity, Equity & Inclusion		-		-	-	-		
Equal Employment Opportunity		-		-	-	-		
Office of the Chief Financial O		-		-	-	-		
Business Technology	Office of Manager	-		-	-	-		
Engineering Services		-	19,310,882	-	-	-	311,196	19,622,079
Business Technology	Administrative Services	-		-	-	-		
Business Technology	Information Technology	-	12,791,940	-	-	-	203,682	12,995,623
Water Resources Managemen	Resource Planning & Development	-	2,286,186	-	-	-	-	2,286,186
Water Resources Managemen	Resource Implementation	-	5,850,325	-	-	-	-	5,850,325
Water Resources Managemen	Office of the Group Manager	-	1,345,780	-	-	-	-	1,345,780
Ethics Office		-		-	-	-		
Real Property		-	3,883,899	-	-	-	-	3,883,899
General Counsel		-		-	-	-		
General Auditor		-		-	-	-		
Total Departmental O&M	-	-	161,397,095	-	-	-	2,978,831	164,375,925
GENERAL DISTRICT REQUIREMENTS								
		-		-	-	-		
State Water Contract*		-		-	-	-		
Supply - O&M		-	2,977,279	-	-	-	-	2,977,279
Supply - Capital		-	2,174,849	-	-	-	-	2,174,849
Power - O&M & Off-Aq Capital		-		-	5,720,522	-	-	5,720,522
Power - Capital (less Off-Aq)		-		-	-	-	-	
Transmission - Capital - Commodity, Demand, & Standby		136,318	801,872	697,771	-	-	-	1,635,962
Transmission - O&M - Commodity only		-	5,246,897	-	-	-	-	5,246,897
Delta Conveyance - Supply		-		-	-	-	-	
Delta Conveyance - Power		-		-	-	-	-	
Delta Conveyance - Other		67,589	397,581	345,966	-	-	-	811,136
Total State Water Contract		203,907	11,598,478	1,043,737	5,720,522	-	-	18,566,645
Colorado River Aqueduct Power Costs		-		-	2,862,149	-	-	2,862,149
Supply Programs (cash funded portion)		-	1,802,331	-	-	-	-	1,802,331
Demand Management (cash funded portion)		-		-	-	-	-	
Local Resources Program		-	599,576	-	-	-	-	599,576
Future Supply Actions & Stormwater Pilot		-	98,415	-	-	-	-	98,415
Conservation Program (cash funded portion)		-	675,947	-	-	-	-	675,947
Total Demand Management Costs		-	1,373,938	-	-	-	-	1,373,938
Capital Financing		-		-	-	-	-	
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		1,321,535	3,063,202	2,696,656	-	-	114,117	7,195,510
G.O. Bond Debt Service		17,554	19,792	15,884	-	-	-	53,231
Debt Administration		13,017	30,172	26,562	-	-	1,124	70,874
Bond Defeasance		-		-	-	-	-	
PAYGO		629,825	1,459,880	1,285,189	-	-	54,387	3,429,280
Total Capital Financing Costs		1,981,931	4,573,045	4,024,291	-	-	169,628	10,748,895
Other Operating Costs		-		-	-	-	-	
Operating Equipment		-	176,080	3,442	-	-	2,858	182,381
Succession Planning Labor Pool		-	93,711	1,832	-	-	1,521	97,064
OPEB/PERS Pre-Funding		-		-	-	-	-	
Total Other Operating Costs		-	269,791	5,274	-	-	4,380	279,444
Increase/(Decrease) in Required Reserves		-		-	-	-	-	
Total General District Requirements		-	2,185,838	19,617,583	5,073,302	8,582,671	174,008	35,633,402
REQUIREMENTS BEFORE OFFSETS:	200,009,327		2,185,838	181,014,678	5,073,302	8,582,671	3,152,838	200,009,327
Revenue Offsets								
Property Taxes - MWD Portion of SWC GO Debt Service		-		-	-	-	-	
Property Taxes - MWD GO Debt Service		-		-	-	-	-	
Interest on Investments	666,332	33,388	419,485	77,493	131,097	-	4,870	666,332
Hydro-Power Revenue		-		-	-	-	-	
CRA Power Revenue		-		-	-	-	-	
Wadsworth Pumping Plant (DVL) Power Revenue		-		-	-	-	-	
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)	42,991,971	2,154,197	27,065,286	4,999,865	8,458,434	-	314,189	42,991,971
Misc. allocated to supply (PVID Lease)		-		-	-	-	-	
Property Taxes - SWC		-		-	-	-	-	
Revenue Reserve used for Revenue Bonds - I&P		-		-	-	-	-	
Annexation		-		-	-	-	-	
Total Revenue Offsets	43,658,303	2,187,585	27,484,771	5,077,357	8,589,532	-	319,058	43,658,303
NET REVENUE REQUIREMENTS:	156,351,024	(1,747)	153,529,907	(4,055)	(6,861)	-	2,833,780	156,351,024

	Total Costs to Be Allocated	A&G Cost Redistribution	Adjusted Costs	Allocation Categories					Total
				Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M									
Group	Item								
Office of General Manager		2,174,800	6,067,540	8,242,340	-	8,113,157	-	129,184	8,242,340
Office of General Manager	Board of Directors	2,077,073	(2,077,073)	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	14,926,021	14,926,021	-	14,926,021	-	-	14,926,021
External Affairs	Legislative Services	6,137,814	(6,137,814)	-	-	-	-	-	-
External Affairs	Media Communications Services	5,645,176	(5,645,176)	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	9,736,137	(9,736,137)	-	-	-	-	-	-
External Affairs	Conservation & Community Services	2,845,509	1,043,669	3,889,179	-	3,889,179	-	-	3,889,179
Human Resources		4,332,977	11,392,402	15,725,378	-	15,478,912	-	246,466	15,725,378
Water Systems Operations	Office of the Manager	717,635	13,881,918	14,599,553	-	14,279,028	-	320,525	14,599,553
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	20,032	1,259,066	1,279,098	-	1,260,339	-	18,760	1,279,098
Water Systems Operations	Office of the Manager, Treatment Section	-	1,404,930	1,404,930	-	1,404,930	-	-	1,404,930
Water Systems Operations	Office of the Manager, Operations Support Services	138,644	2,718,763	2,857,407	-	2,794,674	-	62,733	2,857,407
Water Systems Operations	Operations Support Services	276,808	10,849,848	11,126,656	-	10,961,215	-	175,441	11,126,656
Water Systems Operations	Desert Region / C&D CRA	-	47,013,635	47,013,635	-	47,013,635	-	-	47,013,635
Water Systems Operations	System Operations Unit	-	13,293,882	13,293,882	-	13,293,882	-	-	13,293,882
Water Systems Operations	Power Operations and Planning	347,145	4,533,407	4,880,552	-	3,564,691	-	1,315,862	4,880,552
Water Systems Operations	Operations Planning & Programs Unit	-	3,123,968	3,123,968	-	3,123,968	-	-	3,123,968
Water Systems Operations	Treatment Jensen	-	25,603,630	25,603,630	-	19,605,998	5,997,632	-	25,603,630
Water Systems Operations	Treatment Diemer	-	26,368,290	26,368,290	-	18,660,424	7,707,867	-	26,368,290
Water Systems Operations	Treatment Mills	-	19,746,016	19,746,016	-	17,136,181	2,609,834	-	19,746,016
Water Systems Operations	Treatment Skinner	-	21,969,523	21,969,523	-	17,035,704	4,933,819	-	21,969,523
Water Systems Operations	Treatment Weymouth	-	25,647,554	25,647,554	-	19,704,576	5,942,978	-	25,647,554
Water Systems Operations	Water Quality Section	-	40,311,737	40,311,737	-	40,311,737	-	-	40,311,737
Water Systems Operations	C&D, Eastern Unit	885,288	27,040,569	27,925,857	-	27,167,873	-	757,983	27,925,857
Water Systems Operations	C&D, Western Unit	929,012	22,491,171	23,420,182	-	22,654,349	-	765,834	23,420,182
Water Systems Operations	OSS, Manufacturing Services Unit	557,079	11,093,917	11,650,997	-	11,526,577	-	124,420	11,650,997
Water Systems Operations	Environmental Health & Safety Section	735,900	20,829,801	21,565,700	-	21,495,579	-	70,121	21,565,700
Water Systems Operations	OSS, Fleet Services Unit	1,403,641	13,715,426	15,119,066	-	15,119,066	-	-	15,119,066
Water Systems Operations	OSS, Power Support Unit	129,756	13,101,209	13,230,965	-	9,471,787	3,759,178	-	13,230,965
Water Systems Operations	Office of the Manager, Operations & Planning Section	51,445	1,071,090	1,122,535	-	1,097,891	24,645	-	1,122,535
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-	-	-
Sustainability, Resilience & Innovation		9,831,427	(9,831,427)	-	-	-	-	-	-
Diversity, Equity & Inclusion		1,371,646	(1,371,646)	-	-	-	-	-	-
Equal Employment Opportunity		1,943,227	(1,943,227)	-	-	-	-	-	-
Office of the Chief Financial Officer		28,630,140	(28,630,140)	-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-	-	-
Engineering Services		2,885,709	61,548,332	64,434,041	-	63,412,149	-	1,021,892	64,434,041
Business Technology	Administrative Services	32,605,562	(32,605,562)	-	-	-	-	-	-
Business Technology	Information Technology	13,559,919	33,957,836	47,517,755	-	46,773,001	-	744,753	47,517,755
Water Resources Management	Resource Planning & Development	-	7,655,269	7,655,269	-	7,655,269	-	-	7,655,269
Water Resources Management	Resource Implementation	34,762	22,334,280	22,369,042	-	22,369,042	-	-	22,369,042
Water Resources Management	Office of the Group Manager	3,931	3,816,929	3,820,860	-	3,820,860	-	-	3,820,860
Ethics Office		2,106,637	(2,106,637)	-	-	-	-	-	-
Real Property		11,828,330	9,189,850	21,018,180	-	21,018,180	-	-	21,018,180
General Counsel		15,833,730	(15,833,730)	-	-	-	-	-	-
General Auditor		4,599,034	(4,599,034)	-	-	-	-	-	-
Total Departmental O&M		164,375,925	418,483,874	582,859,799	-	546,129,874	27,192,129	9,537,796	582,859,799
GENERAL DISTRICT REQUIREMENTS									
State Water Contract*									
Supply - O&M		110,115,149	2,977,279	113,092,428	-	113,092,428	-	-	113,092,428
Supply - Capital		80,437,139	2,174,849	82,611,988	-	82,611,988	-	-	82,611,988
Power - O&M & Off-Aq Capital		211,574,465	5,720,522	217,294,987	-	-	217,294,987	-	217,294,987
Power - Capital (less Off-Aq)		(4,981,305)	-	(4,981,305)	-	-	(4,981,305)	-	(4,981,305)
Transmission - Capital - Commodity, Demand, & Standby		60,506,317	1,635,962	62,142,279	5,178,073	30,459,256	26,504,949	-	62,142,279
Transmission - O&M - Commodity only		194,057,356	5,246,897	199,304,253	-	199,304,253	-	-	199,304,253
Delta Conveyance - Supply		-	-	-	-	-	-	-	-
Delta Conveyance - Power		-	-	-	-	-	-	-	-
Delta Conveyance - Other		-	-	-	-	-	-	-	-
Total State Water Contract		30,000,000	811,136	30,811,136	2,567,372	15,102,186	13,141,578	-	30,811,136
		681,709,121	18,566,645	700,275,765	7,745,445	440,570,111	39,646,527	212,313,682	700,275,765
Colorado River Aqueduct Power Costs		105,857,041	2,862,149	108,719,190	-	-	108,719,190	-	108,719,190
Supply Programs (cash funded portion)		66,659,522	1,802,331	68,461,853	-	68,461,853	-	-	68,461,853
Demand Management (cash funded portion)									
Local Resources Program		22,175,417	599,576	22,774,993	-	22,774,993	-	-	22,774,993
Future Supply Actions & Stormwater Pilot		3,639,900	98,415	3,738,315	-	3,738,315	-	-	3,738,315
Conservation Program (cash funded portion)		25,000,000	675,947	25,675,947	-	25,675,947	-	-	25,675,947
Total Demand Management Costs		50,815,317	1,373,938	52,189,255	-	52,189,255	-	-	52,189,255
Capital Financing									
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		283,264,623	(9,942,000)	273,322,623	50,198,708	116,356,223	102,432,931	-	273,322,623
G.O. Bond Debt Service		1,968,750	53,231	2,021,981	666,801	751,805	603,375	-	2,021,981
Debt Administration		2,790,098	(97,927)	2,692,171	494,447	1,146,085	1,008,943	-	2,692,171
Bond Defeasance		-	-	-	-	-	-	-	-
PAYGO		135,000,000	(4,738,220)	130,261,780	23,924,010	55,453,766	48,818,118	-	130,261,780
Total Capital Financing Costs		423,023,470	(14,724,916)	408,298,555	75,283,966	173,707,879	152,863,367	6,443,343	408,298,555
Other Operating Costs									
Operating Equipment		9,394,884	(2,467,129)	6,927,755	-	6,688,435	130,740	-	6,927,755
Succession Planning Labor Pool		5,000,000	(1,313,017)	3,686,983	-	3,559,615	69,581	-	3,686,983
OP&B/PER'S Pre-Funding		-	-	-	-	-	-	-	-
Total Other Operating Costs		14,394,884	(3,780,147)	10,614,738	-	10,248,050	200,321	-	10,614,738
Increase/(Decrease) in Required Reserves		6,100,000	(6,100,000)	-	-	-	-	-	-
Total General District Requirements		1,348,559,356	0	1,348,559,356	83,029,411	745,177,148	192,710,215	321,032,872	1,348,559,356
REQUIREMENTS BEFORE OFFSETS:		1,512,935,281	418,483,874	1,931,419,155	83,029,411	1,291,307,022	192,710,215	348,225,001	1,931,419,155
Revenue Offsets									
Property Taxes - MWD Portion of SWC GO Debt Service		564,249	-	564,249	47,017	276,569	240,664	-	564,249
Property Taxes - MWD GO Debt Service		1,968,750	-	1,968,750	494,766	588,975	885,009	-	1,968,750
Interest on Investments		6,434,537	-	6,434,537	636,705	3,405,860	1,132,381	1,211,428	6,434,537
Hydro-Power Revenue		12,611,274	-	12,611,274	-	-	-	-	12,611,274
CRA Power Revenue		3,376,627	-	3,376,627	-	-	-	-	3,376,627
Wadsworth Pumping Plant (DVL) Power Revenue		679,733	-	679,733	-	-	-	-	679,733
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)		42,991,971	(0)	42,991,971	2,154,197	27,065,286	4,999,865	8,458,434	42,991,971
Misc. allocated to supply (PVID Lease)		5,930,280	-	5,930,280	-	-	-	-	5,930,280
Property Taxes - SWC		160,551,544	-	160,551,544	1,242,060	102,056,591	6,357,717	50,895,177	160,551,544
Revenue Reserve used for Revenue Bonds - I&P		-	-	-	-	-	-	-	-
Annexation		-	-	-	-	-	-	-	-
Total Revenue Offsets		235,108,965	(0)	235,108,965	4,574,745	139,323,560	13,615,636	64,621,399	235,108,965
NET REVENUE REQUIREMENTS:		\$ 1,696,310,190	\$ 418,483,874	\$ 1,696,310,190	\$ 78,454,666	\$ 1,151,983,462	\$ 179,094,579	\$ 283,603,602	\$ 1,696,310,190

		Total to Be Allocated Excluding A&G and Negative Values	Line Item Costs by Allocation Category (w/o A&G)					Total Allocations	
			Fixed			Variable Commodity	Hydro- Electric		
			Demand	Commodity	Standby				
Departmental O&M									
Group	Item								
Office of General Manager	Board of Directors	4,863,955	-	4,787,721	-	-	76,234	4,863,955	
Office of General Manager	Bay Delta Initiatives	-	-	-	-	-	-	-	
Bay Delta Initiatives	Legislative Services	5,395,138	-	5,395,138	-	-	-	5,395,138	
External Affairs	Media Communications Services	-	-	-	-	-	-	-	
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-	-	
External Affairs	Conservation & Community Services	1,876,293	-	1,876,293	-	-	-	1,876,293	
Human Resources	Office of the Manager	8,438,936	-	8,306,671	-	-	132,265	8,438,936	
Water Systems Operations	Office of the Manager, Conveyance & Treatment	7,531,243	-	7,365,899	-	-	165,344	7,531,243	
Water Systems Operations	Office of the Manager, Treatment Services	809,549	-	797,676	-	-	11,873	809,549	
Water Systems Operations	Office of the Manager, Operations Support Services	414,558	-	414,558	-	-	-	414,558	
Water Systems Operations	Office of the Manager, Operations Support Services	1,521,224	-	1,487,826	-	-	33,398	1,521,224	
Water Systems Operations	Desert Region / C&D CRA	6,677,587	-	6,572,297	-	-	105,290	6,677,587	
Water Systems Operations	System Operations Unit	26,220,014	-	26,220,014	-	-	-	26,220,014	
Water Systems Operations	Power Operations and Planning	7,460,619	-	7,460,619	-	-	-	7,460,619	
Water Systems Operations	Operations Planning & Programs Unit	2,828,889	-	2,066,183	-	-	762,706	2,828,889	
Water Systems Operations	Treatment Jensen	1,962,485	-	1,962,485	-	-	-	1,962,485	
Water Systems Operations	Treatment Diemer	11,473,622	-	11,473,622	-	-	-	11,473,622	
Water Systems Operations	Treatment Mills	11,008,113	-	11,008,113	-	-	-	11,008,113	
Water Systems Operations	Treatment Skinner	10,443,555	-	10,443,555	-	-	-	10,443,555	
Water Systems Operations	Treatment Weymouth	10,238,882	-	10,238,882	-	-	-	10,238,882	
Water Systems Operations	Water Quality Section	11,948,824	-	11,948,824	-	-	-	11,948,824	
Water Systems Operations	C&D, Eastern Unit	21,948,169	-	21,948,169	-	-	-	21,948,169	
Water Systems Operations	C&D, Western Unit	13,992,046	-	13,612,264	-	-	379,782	13,992,046	
Water Systems Operations	OSS, Manufacturing Services Unit	11,643,735	-	11,262,988	-	-	380,747	11,643,735	
Water Systems Operations	Environmental Health & Safety Section	7,070,659	-	6,995,153	-	-	75,507	7,070,659	
Water Systems Operations	OSS, Fleet Services Unit	11,703,154	-	11,665,101	-	-	38,053	11,703,154	
Water Systems Operations	OSS, Power Support Unit	6,763,875	-	6,763,875	-	-	-	6,763,875	
Water Systems Operations	Office of the Manager, Operations & Security Team & Security Management	7,931,896	-	5,678,288	-	-	2,253,608	7,931,896	
Water Systems Operations	Security Team & Security Management	676,403	-	661,553	-	-	14,850	676,403	
Sustainability, Resilience & Inclusion		-	-	-	-	-	-	-	
Diversity, Equity & Inclusion		-	-	-	-	-	-	-	
Equal Employment Opportunity		-	-	-	-	-	-	-	
Office of the Chief Financial Officer		-	-	-	-	-	-	-	
Business Technology	Office of Manager	-	-	-	-	-	-	-	
Engineering Services	Administrative Services	35,276,279	-	34,716,815	-	-	559,464	35,276,279	
Business Technology	Information Technology	-	-	-	-	-	-	-	
Business Technology	Resource Planning & Development	23,363,336	-	22,997,159	-	-	366,177	23,363,336	
Water Resources Management	Resource Implementation	4,110,070	-	4,110,070	-	-	-	4,110,070	
Water Resources Management	Office of the Group Manager	10,517,627	-	10,517,627	-	-	-	10,517,627	
Water Resources Management		2,419,424	-	2,419,424	-	-	-	2,419,424	
Ethics Office		-	-	-	-	-	-	-	
Real Property		6,982,416	-	6,982,416	-	-	-	6,982,416	
General Counsel		-	-	-	-	-	-	-	
General Auditor		-	-	-	-	-	-	-	
Total Departmental O&M		295,512,578	-	290,157,281	-	-	5,355,297	295,512,578	
GENERAL DISTRICT REQUIREMENTS									
State Water Contract*									
Supply - O&M		110,115,149	-	110,115,149	-	-	-	110,115,149	
Supply - Capital		80,437,139	-	80,437,139	-	-	-	80,437,139	
Power - O&M & Off-Aq Capital		211,574,465	-	-	-	211,574,465	-	211,574,465	
Power - Capital (less Off-Aq)		-	-	-	-	-	-	-	
Transmission - Capital - Commodity, Demand, & Standby		60,506,317	5,041,755	29,657,383	25,807,178	-	-	60,506,317	
Transmission - O&M - Commodity only		194,057,356	-	194,057,356	-	-	-	194,057,356	
Delta Conveyance - Supply		-	-	-	-	-	-	-	
Delta Conveyance - Power		-	-	-	-	-	-	-	
Delta Conveyance - Other		30,000,000	2,499,783	14,704,605	12,795,612	-	-	30,000,000	
Total State Water Contract		686,690,426	7,541,538	428,971,633	38,602,790	211,574,465	-	686,690,426	
Colorado River Aqueduct Power Costs		105,857,041	-	-	-	105,857,041	-	105,857,041	
Supply Programs (cash funded portion)		66,659,522	-	66,659,522	-	-	-	66,659,522	
Demand Management (cash funded portion)									
Local Resources Program		22,175,417	-	22,175,417	-	-	-	22,175,417	
Future Supply Actions & Stormwater Pilot		3,639,900	-	3,639,900	-	-	-	3,639,900	
Conservation Program (cash funded portion)		25,000,000	-	25,000,000	-	-	-	25,000,000	
Total Demand Management Costs		50,815,317	-	50,815,317	-	-	-	50,815,317	
Capital Financing									
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		266,127,113	48,877,173	113,293,022	99,736,275	-	4,220,643	266,127,113	
G.O. Bond Debt Service		1,968,750	649,247	732,013	587,490	-	-	1,968,750	
Debt Administration		2,621,297	481,430	1,115,913	982,382	-	41,572	2,621,297	
Bond Defeasance		-	-	-	-	-	-	-	
PAYGO		126,832,500	23,294,185	53,993,887	47,532,929	-	2,011,500	126,832,500	
Total Capital Financing Costs		397,549,660	73,302,035	169,134,834	148,839,076	-	6,273,715	397,549,660	
Other Operating Costs									
Operating Equipment		6,745,374	-	6,512,355	127,298	-	105,721	6,745,374	
Succession Planning Labor Pool		3,589,919	-	3,465,905	67,749	-	56,265	3,589,919	
OPEB/PERS Pre-Funding		-	-	-	-	-	-	-	
Total Other Operating Costs		10,335,293	-	9,978,259	195,047	-	161,987	10,335,293	
Increase/(Decrease) in Required Reserves		-	-	-	-	-	-	-	
Total General District Requirements		1,317,907,259	80,843,573	725,559,565	187,636,913	317,431,506	6,435,702	1,317,907,259	
REQUIREMENTS BEFORE OFFSETS:		1,613,419,838	80,843,573	1,015,716,846	187,636,913	317,431,506	11,790,999	1,613,419,838	
Revenue Offsets									
Property Taxes - MWD Portion of SWC GO Debt Service		564,249	47,017	276,569	240,664	-	-	564,249	
Property Taxes - MWD GO Debt Service		1,968,750	494,766	588,975	885,009	-	-	1,968,750	
Interest on Investments		5,768,204	603,318	2,986,376	1,054,888	1,080,331	43,292	5,768,204	
Hydro-Power Revenue		12,611,274	-	-	-	-	12,611,274	12,611,274	
CRA Power Revenue		3,376,627	-	-	-	3,376,627	-	3,376,627	
Wadsworth Pumping Plant (DVL) Power Revenue		679,733	-	-	-	679,733	-	679,733	
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)		-	-	-	-	-	-	-	
Misc. allocated to supply (PVID Lease)		5,930,280	-	5,930,280	-	-	-	5,930,280	
Property Taxes - SWC		160,551,544	1,242,060	102,056,591	6,357,717	50,895,177	-	160,551,544	
Revenue Reserve used for Revenue Bonds - I&P		-	-	-	-	-	-	-	
Annexation		-	-	-	-	-	-	-	
Total Revenue Offsets		191,450,662	2,387,160	111,838,790	8,538,279	56,031,867	12,654,566	191,450,662	
NET REVENUE REQUIREMENTS:		\$ 1,421,969,176	\$ 78,456,413	\$ 903,878,057	\$ 179,098,634	\$ 261,399,638	\$ (863,567)	\$ 1,421,969,176	

		A&G Line Item Allocators by Allocation Category						Total
		Fixed			Variable	Demand	Hydro-Electric	
		Demand	Commodity	Standby	Commodity	Management		
Departmental O&M								
Group	Item							
Office of General Manager		0.00%	1.62%	0.00%	0.00%	0.00%	0.03%	1.65%
Office of General Manager	Board of Directors	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Bay Delta Initiatives	Bay Delta Initiatives	0.00%	1.83%	0.00%	0.00%	0.00%	0.00%	1.83%
External Affairs	Legislative Services	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
External Affairs	Media Communications Services	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
External Affairs	Manager, External Affairs/Special Projects	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
External Affairs	Conservation & Community Services	0.00%	0.63%	0.00%	0.00%	0.00%	0.00%	0.63%
Human Resources		0.00%	2.81%	0.00%	0.00%	0.00%	0.04%	2.86%
Water Systems Operations	Office of the Manager	0.00%	2.49%	0.00%	0.00%	0.00%	0.06%	2.55%
Water Systems Operations	Office of the Manager, Conveyance & Dis	0.00%	0.27%	0.00%	0.00%	0.00%	0.00%	0.27%
Water Systems Operations	Office of the Manager, Treatment Section	0.00%	0.14%	0.00%	0.00%	0.00%	0.00%	0.14%
Water Systems Operations	Office of the Manager, Operations Support	0.00%	0.50%	0.00%	0.00%	0.00%	0.01%	0.51%
Water Systems Operations	Operations Support Services	0.00%	2.22%	0.00%	0.00%	0.00%	0.04%	2.26%
Water Systems Operations	Desert Region / C&D CRA	0.00%	8.87%	0.00%	0.00%	0.00%	0.00%	8.87%
Water Systems Operations	System Operations Unit	0.00%	2.52%	0.00%	0.00%	0.00%	0.00%	2.52%
Water Systems Operations	Power Operations and Planning	0.00%	0.70%	0.00%	0.00%	0.00%	0.26%	0.96%
Water Systems Operations	Operations Planning & Programs Unit	0.00%	0.66%	0.00%	0.00%	0.00%	0.00%	0.66%
Water Systems Operations	Treatment Jensen	0.00%	3.88%	0.00%	0.00%	0.00%	0.00%	3.88%
Water Systems Operations	Treatment Diemer	0.00%	3.73%	0.00%	0.00%	0.00%	0.00%	3.73%
Water Systems Operations	Treatment Mills	0.00%	3.53%	0.00%	0.00%	0.00%	0.00%	3.53%
Water Systems Operations	Treatment Skinner	0.00%	3.46%	0.00%	0.00%	0.00%	0.00%	3.46%
Water Systems Operations	Treatment Weymouth	0.00%	4.04%	0.00%	0.00%	0.00%	0.00%	4.04%
Water Systems Operations	Water Quality Section	0.00%	7.43%	0.00%	0.00%	0.00%	0.00%	7.43%
Water Systems Operations	C&D, Eastern Unit	0.00%	4.61%	0.00%	0.00%	0.00%	0.13%	4.73%
Water Systems Operations	C&D, Western Unit	0.00%	3.81%	0.00%	0.00%	0.00%	0.13%	3.94%
Water Systems Operations	OSS, Manufacturing Services Unit	0.00%	2.37%	0.00%	0.00%	0.00%	0.03%	2.39%
Water Systems Operations	Environmental Health & Safety Section	0.00%	3.95%	0.00%	0.00%	0.00%	0.01%	3.96%
Water Systems Operations	OSS, Fleet Services Unit	0.00%	2.29%	0.00%	0.00%	0.00%	0.00%	2.29%
Water Systems Operations	OSS, Power Support Unit	0.00%	1.92%	0.00%	0.00%	0.00%	0.76%	2.68%
Water Systems Operations	Office of the Manager, Operations & Planr	0.00%	0.22%	0.00%	0.00%	0.00%	0.01%	0.23%
Water Systems Operations	Security Team & Security Management	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Sustainability, Resilience & Innovati	-	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Diversity, Equity & Inclusion	-	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Equal Employment Opportunity	-	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Office of the Chief Financial Officer		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Business Technology	Office of Manager	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Engineering Services		0.00%	11.75%	0.00%	0.00%	0.00%	0.19%	11.94%
Business Technology	Administrative Services	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Business Technology	Information Technology	0.00%	7.78%	0.00%	0.00%	0.00%	0.12%	7.91%
Water Resources Management	Resource Planning & Development	0.00%	1.39%	0.00%	0.00%	0.00%	0.00%	1.39%
Water Resources Management	Resource Implementation	0.00%	3.56%	0.00%	0.00%	0.00%	0.00%	3.56%
Water Resources Management	Office of the Group Manager	0.00%	0.82%	0.00%	0.00%	0.00%	0.00%	0.82%
Ethics Office		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Real Property		0.00%	2.36%	0.00%	0.00%	0.00%	0.00%	2.36%
General Counsel		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
General Auditor		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Total Departmental O&M	-	0.00%	98.19%	0.00%	0.00%	0.00%	1.81%	100.00%
GENERAL DISTRICT REQUIREMENTS								
State Water Contract*								
Supply - O&M		0.00%	8.36%	0.00%	0.00%	0.00%	0.00%	8.36%
Supply - Capital		0.00%	6.10%	0.00%	0.00%	0.00%	0.00%	6.10%
Power - O&M & Off-Aq Capital		0.00%	0.00%	0.00%	16.05%	0.00%	0.00%	16.05%
Power - Capital (less Off-Aq)		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Transmission - Capital - Commodity, Demand, & Standby		0.38%	2.25%	1.96%	0.00%	0.00%	0.00%	4.59%
Transmission - O&M - Commodity only		0.00%	14.72%	0.00%	0.00%	0.00%	0.00%	14.72%
Delta Conveyance - Supply		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Delta Conveyance - Power		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Delta Conveyance - Other		0.19%	1.12%	0.97%	0.00%	0.00%	0.00%	2.28%
Total State Water Contract		0.57%	32.55%	2.93%	16.05%	0.00%	0.00%	52.10%
Colorado River Aqueduct Power Costs		0.00%	0.00%	0.00%	8.03%	0.00%	0.00%	8.03%
Supply Programs (cash funded portion)		0.00%	5.06%	0.00%	0.00%	0.00%	0.00%	5.06%
Demand Management (cash funded portion)								
Local Resources Program		0.00%	1.68%	0.00%	0.00%	0.00%	0.00%	1.68%
Future Supply Actions & Stormwater Pilot		0.00%	0.28%	0.00%	0.00%	0.00%	0.00%	0.28%
Conservation Program (cash funded portion)		0.00%	1.90%	0.00%	0.00%	0.00%	0.00%	1.90%
Total Demand Management Costs		0.00%	3.86%	0.00%	0.00%	0.00%	0.00%	3.86%
Capital Financing								
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		3.71%	8.60%	7.57%	0.00%	0.00%	0.32%	20.19%
G.O. Bond Debt Service		0.05%	0.06%	0.04%	0.00%	0.00%	0.00%	0.15%
Debt Administration		0.04%	0.08%	0.07%	0.00%	0.00%	0.00%	0.20%
Bond Defeasance		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
PAYGO		1.77%	4.10%	3.61%	0.00%	0.00%	0.15%	9.62%
Total Capital Financing Costs		5.56%	12.83%	11.29%	0.00%	0.00%	0.48%	30.17%
Other Operating Costs		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Operating Equipment		0.00%	0.49%	0.01%	0.00%	0.00%	0.01%	0.51%
Succession Planning Labor Pool		0.00%	0.26%	0.01%	0.00%	0.00%	0.00%	0.27%
OPEB/PERS Pre-Funding		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Total Other Operating Costs		0.00%	0.76%	0.01%	0.00%	0.00%	0.01%	0.78%
Increase/(Decrease) in Required Reserves		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Total General District Requirements		6.13%	55.05%	14.24%	24.09%	0.00%	0.49%	100.00%
REQUIREMENTS BEFORE OFFSETS:		5.01%	62.95%	11.63%	19.67%	0.00%	0.73%	100.00%

Functionalization of A&G Costs
 Summary of Allocation Results before Inclusion of Administrative and General Costs
 Fiscal Year Ending 2023

Functional Categories	Functional Costs Allocated for FY 2023	Allocation Categories (Costs Exclude Administrative and General)						Total Allocated Excluding A&G
		Fixed			Variable			
		Demand	Commodity	Standby	Commodity	Hydro-Electric		
Source of Supply								
CRA	\$ 56,532,091.90	\$ -	\$ 56,532,092	\$ -	\$ -	\$ -	\$ -	\$ 56,532,092
SWP	153,566,742	-	153,566,742	-	-	-	-	153,566,742
Other Supply	32,425,485	-	32,425,485	-	-	-	-	32,425,485
Subtotal: Source of Supply	242,524,319	-	242,524,319	-	-	-	-	242,524,319
Conveyance & Aqueduct								
CRA								
CRA Power	113,915,012	-	11,826,662	-	102,088,350	-	-	113,915,012
CRA All Other	67,263,676	1,072,404	60,701,971	5,489,302	-	-	-	67,263,676
SWP*	-	-	-	-	-	-	-	-
SWP Power	155,009,717	-	-	-	155,009,717	-	-	155,009,717
SWP All Other	251,108,491	6,164,896	213,387,406	31,556,188	-	-	-	251,108,491
Other Conveyance & Aqueduct	71,270,831	5,024,494	39,308,073	26,938,264	-	-	-	71,270,831
Subtotal: Conveyance & Aqueduct	658,567,727	12,261,794	325,224,112	63,983,754	257,098,067	-	-	658,567,727
Storage								
Storage Costs Other Than Power								
Emergency	55,738,162	-	7,897,612	47,840,551	-	-	-	55,738,162
Drought	52,988,668	-	52,988,668	-	-	-	-	52,988,668
Regulatory	27,135,224	7,684,107	13,334,990	6,116,127	-	-	-	27,135,224
Storage Power	(679,733)	-	-	-	(679,733)	-	-	(679,733)
Subtotal: Storage	135,182,321	7,684,107	74,221,270	53,956,677	(679,733)	-	-	135,182,321
Treatment								
Jensen	52,010,735	6,956,365	30,438,798	8,617,940	5,997,632	-	-	52,010,735
Weymouth	53,115,935	7,314,403	30,797,033	9,061,522	5,942,978	-	-	53,115,935
Diemer	59,700,635	8,824,100	32,236,774	10,931,894	7,707,867	-	-	59,700,635
Mills	29,988,435	2,336,530	22,147,639	2,894,432	2,609,834	-	-	29,988,435
Skinner	50,862,008	7,503,024	29,129,912	9,295,253	4,933,819	-	-	50,862,008
Subtotal: Treatment	245,677,747	32,934,422	144,750,155	40,801,041	27,192,129	-	-	245,677,747
Distribution	194,950,061	25,576,091	149,016,808	20,357,163	-	-	-	194,950,061
Demand Management	62,716,891	-	62,716,891	-	-	-	-	62,716,891
Hydro-Electric	340,101	-	-	-	-	-	340,101	340,101
Total Costs Allocated	\$ 1,539,959,166	\$ 78,456,413	\$ 998,453,555	\$ 179,098,634	\$ 283,610,463	\$ 340,101	\$ -	\$ 1,539,959,166
A&G Costs to be Functionalized		\$ (1,747)	\$ 153,529,907	\$ (4,055,481)	\$ (6,861)	\$ 2,833,780	\$ -	\$ 156,351,024

Percentages Used for Functionalization of A&G Costs

Allocation Categories				
Fixed			Variable Commodity	Hydro-Electric
Demand	Commodity	Standby		
0.0%	5.7%	0.0%	0.0%	0.0%
0.0%	15.4%	0.0%	0.0%	0.0%
0.0%	3.2%	0.0%	0.0%	0.0%
0.0%	24.3%	0.0%	0.0%	0.0%
0.0%	1.2%	0.0%	36.0%	0.0%
1.4%	6.1%	3.1%	0.0%	0.0%
0.0%	0.0%	0.0%	0.0%	0.0%
0.0%	0.0%	0.0%	54.7%	0.0%
7.9%	21.4%	17.6%	0.0%	0.0%
6.4%	3.9%	15.0%	0.0%	0.0%
15.6%	32.6%	35.7%	90.7%	0.0%
0.0%	0.8%	26.7%	0.0%	0.0%
0.0%	5.3%	0.0%	0.0%	0.0%
9.8%	1.3%	3.4%	0.0%	0.0%
0.0%	0.0%	0.0%	-0.2%	0.0%
9.8%	7.4%	30.1%	-0.2%	0.0%
8.9%	3.0%	4.8%	2.1%	0.0%
9.3%	3.1%	5.1%	2.1%	0.0%
11.2%	3.2%	6.1%	2.7%	0.0%
3.0%	2.2%	1.6%	0.9%	0.0%
9.6%	2.9%	5.2%	1.7%	0.0%
42.0%	14.5%	22.8%	9.6%	0.0%
32.6%	14.9%	11.4%	0.0%	0.0%
0.0%	6.3%	0.0%	0.0%	0.0%
0.0%	0.0%	0.0%	0.0%	100.0%
100.0%	100.0%	100.0%	100.0%	100.0%

Administrative and General Costs Redistributed Among Functional Categories

Administrative and General Costs by Allocation Categories						Total A&G Costs Allocated	Functional Categories
Fixed			Variable				
Demand	Commodity	Standby	Commodity	Hydro-Electric			
\$	-	\$ 8,692,810	\$ -	\$ -	\$ -	\$ 8,692,810	Source of Supply
-	-	23,613,605	-	-	-	23,613,605	CRA
-	-	4,985,992	-	-	-	4,985,992	SWP
-	-	37,292,407	-	-	-	37,292,407	Other Supply
							Subtotal: Source of Supply
							Conveyance & Aqueduct
-	-	1,818,559	-	(2,470)	-	1,816,089	CRA
(24)	-	9,334,002	(124)	-	-	9,333,854	
-	-	-	-	-	-	-	SWP*
-	-	-	-	(3,750)	-	(3,750)	
(137)	-	32,812,091	(715)	-	-	32,811,239	
(112)	-	6,044,312	(610)	-	-	6,043,590	Other Conveyance & Aqueduct
(273)	-	50,008,964	(1,449)	(6,219)	-	50,001,023	Subtotal: Conveyance & Aqueduct
							Storage
-	-	1,214,398	(1,083)	-	-	1,213,314	Storage Costs Other Than Power
-	-	8,147,946	-	-	-	8,147,946	
(171)	-	2,050,491	(138)	-	-	2,050,181	
-	-	-	-	16	-	16	Storage Power
(171)	-	11,412,834	(1,222)	16	-	11,411,458	Subtotal: Storage
							Treatment
(155)	-	4,680,504	(195)	(145)	-	4,680,009	Jensen
(163)	-	4,735,589	(205)	(144)	-	4,735,077	Weymouth
(197)	-	4,956,975	(248)	(186)	-	4,956,344	Diemer
(52)	-	3,405,591	(66)	(63)	-	3,405,411	Mills
(167)	-	4,479,240	(210)	(119)	-	4,478,743	Skinner
(733)	-	22,257,898	(924)	(658)	-	22,255,583	Subtotal: Treatment
(570)	-	22,913,972	(461)	-	-	22,912,941	Distribution
-	-	9,643,832	-	-	-	9,643,832	Demand Management
-	-	-	-	2,833,780	-	2,833,780	Hydro-Electric
\$ (1,747)	\$	153,529,907	\$ (4,055)	\$ (6,861)	\$ 2,833,780	\$ 156,351,024	Total Costs Allocated

Summary of Functionalization Percentages

Fiscal Year Ending 2023

	Source of Supply	Conveyance & Aqueduct	Storage	Water Quality	Treatment	Distribution	Demand Management	Hydro-Electric	Administrative & General	Total Allocated
Departmental Operations & Maintenance										
Office of General Manager	5%	12%	2%	0%	19%	16%	1%	1%	43%	100%
Water Systems Operations	5%	17%	1%	0%	40%	33%	0%	2%	2%	100%
Water Resources Management	70%	0%	0%	0%	0%	2%	28%	0%	0%	100%
Engineering Services	4%	22%	24%	0%	25%	18%	0%	1%	6%	100%
Bay Delta Initiatives	0%	100%	0%	0%	0%	0%	0%	0%	0%	100%
Business Technology	4%	9%	2%	0%	14%	12%	1%	1%	57%	100%
Real Property	6%	33%	8%	0%	0%	12%	0%	0%	41%	100%
Human Resources	7%	15%	3%	0%	24%	20%	2%	1%	28%	100%
Office of the Chief Financial Officer	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%
External Affairs	0%	0%	0%	0%	0%	0%	10%	0%	90%	100%
General Counsel	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%
General Auditor	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%
Ethics Office	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%
Sustainability, Resilience & Innovation	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%
Diversity, Equity & Inclusion	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%
Equal Employment Opportunity	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%
Total Departmental O&M	7%	15%	3%	0%	24%	20%	2%	1%	28%	100%
General District Requirements										
State Water Contract*	28%	72%	0%	0%	0%	0%	0%	0%	0%	100%
Colorado River Aqueduct Power Costs	0%	100%	0%	0%	0%	0%	0%	0%	0%	100%
Supply Programs (cash funded portion)	73%	0%	27%	0%	0%	0%	0%	0%	0%	100%
Demand Management (cash funded portion)	0%	0%	0%	0%	0%	0%	100%	0%	0%	100%
Capital Financing	4%	21%	24%	0%	25%	18%	0%	1%	6%	100%
Other Operating Costs	7%	15%	3%	0%	24%	20%	2%	1%	28%	100%
Increase/(Decrease) in Required Reserves	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%
Total General District Requirements	19%	51%	9%	0%	8%	6%	4%	0%	3%	100%
Revenue Offsets	23%	51%	0%	0%	1%	1%	0%	5%	19%	100%
Net Revenue Requirements	14%	39%	8%	0%	14%	11%	4%	0%	9%	100%

* Includes Delta Conveyance planning costs net of California WaterFix refund

Cost Allocation Summary (by budget line item)

Fiscal Year Ending 2023

	Allocation Categories						Total Allocated
	Fixed			Variable	Other	Hydro-Electric	
	Demand	Commodity	Standby	Commodity			
Departmental Operations & Maintenance							
Office of General Manager	\$ -	\$ 8,113,157	\$ -	\$ -	\$ -	\$ 129,184	\$ 8,242,340
Water Systems Operations	-	338,674,103	-	27,192,129	-	7,395,501	373,261,734
Water Resources Management	-	33,845,171	-	-	-	-	33,845,171
Engineering Services	-	63,412,149	-	-	-	1,021,892	64,434,041
Bay Delta Initiatives	-	14,926,021	-	-	-	-	14,926,021
Business Technology	-	46,773,001	-	-	-	744,753	47,517,755
Real Property	-	21,018,180	-	-	-	-	21,018,180
Human Resources	-	15,478,912	-	-	-	246,466	15,725,378
Office of the Chief Financial Officer	-	-	-	-	-	-	-
External Affairs	-	3,889,179	-	-	-	-	3,889,179
General Counsel	-	-	-	-	-	-	-
General Auditor	-	-	-	-	-	-	-
Ethics Office	-	-	-	-	-	-	-
Sustainability, Resilience & Innovation	-	-	-	-	-	-	-
Diversity, Equity & Inclusion	-	-	-	-	-	-	-
Equal Employment Opportunity	-	-	-	-	-	-	-
Total Departmental O&M (including Administrative and General)	-	546,129,874	-	27,192,129	-	9,537,796	582,859,799
General District Requirements							
State Water Contract*	7,745,445	440,570,111	39,646,527	212,313,682	-	-	700,275,765
Colorado River Aqueduct Power Costs	-	-	-	108,719,190	-	-	108,719,190
Supply Programs (cash funded portion)	-	68,461,853	-	-	-	-	68,461,853
Demand Management (cash funded portion)	-	52,189,255	-	-	-	-	52,189,255
Capital Financing	75,283,966	173,707,879	152,863,367	-	-	6,443,343	408,298,555
Other Operating Costs	-	10,248,050	200,321	-	-	166,366	10,614,738
Increase/(Decrease) in Required Reserves	-	-	-	-	Other	-	-
Total General District Requirements (including Administrative and General)	83,029,411	745,177,148	192,710,215	321,032,872	-	6,609,710	1,348,559,356
Revenue Offsets	(4,574,745)	(139,323,560)	(13,615,636)	(64,621,399)	-	(12,973,625)	(235,108,965)
Net Revenue Requirements	\$ 78,454,666	\$ 1,151,983,462	\$ 179,094,579	\$ 283,603,602	\$ -	\$ 3,173,881	\$ 1,696,310,190

* Includes Delta Conveyance planning costs net of California WaterFix refund

Fiscal Year Ending 2023	Supply			Conveyance & Aqueduct					Storage				Treatment	Distribution	Demand Mgt.	Hydro	Total
	CRA	SWC	Other	CRA power	CRA other	SWC power	SWC other	Other C&A	Emergency	Drought	Regulatory	Power					
Dept. Operations & Maintenance	9,293,672	16,178,661	14,340,157	3,487,850	53,082,729	-	23,883,009	8,149,586	7,897,612	6,046,755	4,175,327	-	138,038,318	116,353,735	10,997,499	6,558,965	418,483,874
General District Requirements																	
State Water Contract*	-	-	-	-	-	(4,981,305)	90,506,317	-	-	-	-	-	-	-	-	-	165,962,151
Capital	-	80,437,139	-	-	-	-	194,057,356	-	-	-	-	-	-	-	-	-	515,746,970
O&M	-	110,115,149	-	-	-	211,574,465	-	-	-	-	-	-	-	-	-	-	105,857,041
Colorado River Aqueduct Power	-	-	-	105,857,041	-	-	-	-	-	-	-	-	-	-	-	-	66,659,522
Supply Programs (cash funded portion)	47,197,861	-	1,250,000	-	-	-	-	-	-	18,211,661	-	-	-	-	-	-	50,815,317
Demand Management (cash funded portion)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	50,815,317	-	397,549,660
Capital Financing Program	-	-	16,589,556	8,252,673	13,094,802	-	6,400,032	63,158,208	47,831,816	28,758,037	22,947,482	-	105,544,356	77,856,873	842,109	6,273,715	397,549,660
Other Operating Costs	229,526	399,564	354,159	86,139	1,310,984	-	589,839	201,270	195,047	149,337	103,118	-	3,409,131	2,873,587	271,605	161,987	10,335,293
Revenue Offsets	(188,967)	(53,563,771)	(108,387)	(3,768,691)	(224,838)	(51,583,443)	(64,328,062)	(238,233)	(186,313)	(177,122)	(90,703)	(679,733)	(1,314,058)	(2,134,134)	(209,640)	(12,654,566)	(191,450,662)
Admin. & General	8,692,810	23,613,605	4,985,992	1,816,089	9,333,854	(3,750)	32,811,239	6,043,590	1,213,314	8,147,946	2,050,181	16	22,255,583	22,912,941	9,643,832	2,833,780	156,351,024
Net Revenue Requirement	65,224,902	177,180,347	37,411,477	115,731,101	76,597,530	155,005,967	283,919,730	77,314,422	56,951,477	61,136,614	29,185,405	(679,717)	267,933,330	217,863,002	72,360,723	3,173,881	1,696,310,190
* Includes Delta Conveyance planning costs net of California WaterFix refund																	

Fiscal Year Ending 2023	Supply			Conveyance & Aqueduct					Storage				Treatment	Distribution	Demand Mgt.	Hydro	Total
	CRA	SWC	Other	CRA power	CRA other	SWC power	SWC other	Other C&A	Emergency	Drought	Regulatory	Power					
Fixed Demand																	
engineering factors	-	-	-	0.0%	8.3%	0.0%	8.3%	8.3%	0.0%	0.0%	33.5%	0.0%	31.4%	33.5%	-	-	-
SWC Capital	-	-	-	-	-	-	7,541,538	-	-	-	-	-	-	-	-	-	7,541,538
Capital Financing	-	-	-	-	1,091,139	-	533,290	5,262,727	-	-	7,684,107	-	33,193,206	26,070,857	-	-	73,835,324
A&G less Offsets	-	-	-	-	(18,759)	-	(1,910,069)	(238,345)	-	-	(171)	-	(259,518)	(495,335)	-	-	(2,922,197)
Total fixed demand	-	-	-	-	1,072,380	-	6,164,759	5,024,382	-	-	7,683,936	-	32,933,688	25,575,521	-	-	78,454,666
Fixed Commodity																	
engineering factors	100%	100%	100%	100%	49.0%	0%	49.0%	49.0%	0%	100%	39.9%	0%	29.1%	39.9%	1	-	-
Capital Financing	-	-	16,589,556	8,252,673	6,418,463	-	3,136,988	30,957,217	-	28,758,037	9,147,249	-	30,734,450	31,035,048	842,109	-	165,871,800
SWC Capital*	-	80,437,139	-	-	-	-	44,361,989	-	-	-	-	-	-	-	-	-	124,799,128
SWC O&M	-	110,115,149	-	-	-	-	194,057,356	-	-	-	-	-	-	-	-	-	304,172,505
Dept. O&M	9,293,672	16,178,661	14,340,157	3,487,850	53,082,729	-	23,883,009	8,149,586	7,897,612	6,046,755	4,175,327	-	105,574,027	116,353,735	10,997,499	-	379,460,618
Supply Programs (cash funded portion)	47,197,861	-	1,250,000	-	-	-	-	-	-	18,211,661	-	-	-	-	-	-	66,659,522
Demand Management (cash funded portion)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	50,815,317
Other Operating Costs	229,526	399,564	354,159	86,139	1,310,984	-	589,839	201,270	195,047	149,337	103,118	-	3,409,131	2,873,587	271,605	-	10,173,307
A&G less Offsets	8,503,843	(29,950,166)	4,877,605	1,818,559	9,223,797	-	(19,829,693)	6,044,312	1,019,350	7,970,823	1,959,787	-	27,290,445	21,668,410	9,434,192	-	50,031,266
Total fixed commodity	65,224,902	177,180,347	37,411,477	13,645,221	70,035,973	-	246,199,497	45,352,385	9,112,009	61,136,614	15,385,481	-	167,008,053	171,930,779	72,360,723	-	1,151,983,462
Fixed Standby																	
engineering factors	-	-	-	0%	43%	0%	42.7%	42.7%	100%	0%	26.7%	0%	39.4%	26.7%	-	-	-
SWC Capital*	-	-	-	-	-	-	38,602,790	-	-	-	-	-	-	-	-	-	38,602,790
Capital Financing	-	-	-	-	5,585,200	-	2,729,744	26,938,264	47,831,816	-	6,116,127	-	41,616,700	20,750,969	-	-	151,568,820
A&G less Offsets	-	-	-	-	(96,022)	-	(9,777,061)	(610)	7,651	-	(138)	-	(816,583)	(394,267)	-	-	(11,077,031)
Total fixed standby	-	-	-	-	5,489,178	-	31,555,473	26,937,654	47,839,467	-	6,115,988	-	40,800,117	20,356,702	-	-	179,094,579
Variable Commodity																	
SWC Power	-	-	-	-	-	206,593,160	-	-	-	-	-	-	-	-	-	-	206,593,160
CRA Power	-	-	-	105,857,041	-	-	-	-	-	-	-	-	-	-	-	-	105,857,041
Variable Treatment	-	-	-	-	-	-	-	-	-	-	-	-	32,464,291	-	-	-	32,464,291
A&G less Offsets	-	-	-	(3,771,160)	-	(51,587,193)	-	-	-	-	-	(679,717)	(5,272,819)	-	-	-	(61,310,890)
Total variable commodity	-	-	-	102,085,881	-	155,005,967	-	-	-	-	-	(679,717)	27,191,472	-	-	-	283,603,602
Hydroelectric																	
A&G less Offsets	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12,994,667	12,994,667
Total hydroelectric	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	(9,820,786)	(9,820,786)
Total Costs	65,224,902	177,180,347	37,411,477	115,731,101	76,597,530	155,005,967	283,919,730	77,314,422	56,951,477	61,136,614	29,185,405	(679,717)	267,933,330	217,863,002	72,360,723	3,173,881	1,696,310,190

4/12/2022 Board Meeting

		1	2	3	4	5	6	7
		Labor And Labor Additive	Outside Services	Utilities	Chemicals	Other O&M	O&M Capitalization (pre-rated)	Projected Total To Be functionalized
Departmental O&M								
Group	Item							
Office of General Manager	Office of General Manager	7,001,710	1,000,000	-	-	226,300	(294,202)	7,933,808
Office of General Manager	Board of Directors	1,536,568	105,000	-	-	576,440	(79,055)	2,138,953
Bay Delta Initiatives	Bay Delta Initiatives	5,598,517	3,570,700	-	-	3,563,267	(452,228)	12,280,257
External Affairs	Legislative Services	4,083,089	1,340,500	5,250	-	1,091,368	(232,442)	6,287,765
External Affairs	Media Communications Services	5,131,275	351,599	-	-	544,255	(215,960)	5,811,169
External Affairs	Manager, External Affairs/Special Projects	6,731,221	377,195	-	-	2,935,073	(368,402)	9,685,087
External Affairs	Conservation & Community Services	3,880,862	1,154,500	-	-	1,091,960	(218,471)	5,908,851
Human Resources	Office of the Manager	12,249,264	1,935,692	-	-	2,012,460	(579,856)	15,617,559
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	8,284,729	245,000	3,000,000	-	250,475	(423,242)	11,356,962
Water Systems Operations	Office of the Manager, Treatment Section	854,156	-	-	-	51,830	(32,733)	873,193
Water Systems Operations	Office of the Manager, Operations Support Services	427,078	110,000	-	-	894,350	(43,753)	1,187,675
Water Systems Operations	Operations Support Services	1,675,110	329,500	6,500	-	275,150	(82,216)	2,204,043
Water Systems Operations	Desert Region / C&D CRA	7,170,763	195,900	45,600	-	812,950	(297,084)	7,928,150
Water Systems Operations	System Operations Unit	27,371,189	451,300	198,000	13,800	6,658,022	(1,249,750)	33,442,561
Water Systems Operations	Power Operations and Planning	7,700,524	69,700	66,580	-	1,934,787	(352,000)	9,419,591
Water Systems Operations	Operations Planning & Programs Unit	3,285,909	223,000	-	-	443,500	(142,568)	3,809,841
Water Systems Operations	Treatment Jensen	2,054,383	-	-	-	146,888	(79,656)	2,121,715
Water Systems Operations	Treatment Skinner	11,892,774	342,000	1,998,206	5,688,524	954,880	(782,719)	20,093,665
Water Systems Operations	Treatment Weymouth	11,424,173	223,600	3,217,571	6,663,578	562,550	(736,672)	21,354,800
Water Systems Operations	Treatment Mills	10,859,070	244,242	968,098	2,381,218	660,920	(552,017)	14,561,531
Water Systems Operations	Treatment Skinner	10,602,059	144,070	2,286,296	4,039,661	605,824	(626,019)	17,051,890
Water Systems Operations	Water Quality Section	12,364,907	113,000	1,739,769	5,900,353	553,850	(756,323)	19,945,556
Water Systems Operations	C&D, Eastern Unit	22,808,038	2,078,896	461,000	-	3,420,548	(1,040,031)	27,826,551
Water Systems Operations	C&D, Western Unit	15,085,632	2,757,700	1,963,099	-	2,438,705	(798,605)	21,446,531
Water Systems Operations	CSS, Manufacturing Services Unit	12,712,582	1,525,000	1,675,348	-	1,756,990	(635,168)	17,034,752
Water Systems Operations	Environmental Health & Safety Section	7,909,078	228,750	255,350	-	547,950	(322,977)	8,616,151
Water Systems Operations	CSS, Fleet Services Unit	12,738,079	1,355,984	1,400,000	-	1,538,754	(612,806)	16,420,011
Water Systems Operations	CSS, Power Support Unit	7,932,962	455,100	13,100	-	5,169,800	(485,784)	13,085,179
Water Systems Operations	Office of the Manager, Operations & Planning Section	8,353,062	319,000	60,000	-	661,800	(346,482)	9,247,381
Water Systems Operations	Security Team & Security Management	744,774	23,000	-	-	81,922	(30,692)	819,004
Water Systems Operations	Office of the Manager	-	-	-	-	-	-	-
Sustainability, Resilience & Innovation	Office of the Manager	6,418,226	2,803,731	-	-	334,574	(340,290)	9,216,241
Diversity, Equity & Inclusion	Office of the Manager	1,037,572	400,000	-	-	42,540	(54,040)	1,426,072
Equal Employment Opportunity	Office of the Manager	1,692,893	400,000	-	-	18,820	(75,428)	2,036,286
Office of the Chief Financial Officer	Office of the Manager	13,622,537	1,665,600	-	-	10,817,574	(935,873)	25,369,838
Business Technology	Office of the Manager	-	-	-	-	-	-	-
Engineering Services	Office of the Manager	38,914,338	5,835,600	85,000	-	3,160,400	(1,734,648)	46,260,690
Business Technology	Administrative Services	19,347,106	12,664,900	-	-	2,854,470	(1,244,692)	33,621,784
Business Technology	Information Technology	33,623,620	6,074,600	-	-	12,824,841	(1,885,141)	50,637,919
Water Resources Management	Resource Planning & Development	4,295,043	890,000	-	-	446,265	(203,097)	5,428,211
Water Resources Management	Resource Implementation	10,967,558	1,577,600	-	-	5,114,001	(633,966)	17,025,292
Water Resources Management	Office of the Group Manager	2,527,324	75,000	-	-	77,349	(97,229)	2,582,444
Ethics Office	Office of the Group Manager	1,883,922	270,369	-	-	80,460	(78,538)	2,156,213
Real Property	Office of the Group Manager	12,329,947	9,245,551	1,742,000	-	6719,460	(1,070,376)	28,965,582
General Counsel	Office of the Group Manager	13,540,273	2,180,000	-	-	569,000	(572,467)	15,716,806
General Auditor	Office of the Group Manager	4,256,013	550,000	-	-	104,500	(172,574)	4,737,939
Total Departmental O&M		415,217,907	65,900,979	21,186,766	24,687,134	85,656,921	(21,958,211)	590,691,497
GENERAL DISTRICT REQUIREMENTS								
State Water Contract*								
Supply - O&M								107,000,290
Supply - Capital								85,494,959
Power - O&M & Off-Ag Capital								258,551,833
Power - Capital (less Off-Ag)								(3,654,765)
Transmission - Capital - Commodity, Demand, & Standby								80,660,127
Transmission - O&M - Commodity only								198,687,447
Delta Conveyance - Other								34,500,000
Total State Water Contract								761,239,991
Colorado River Aqueduct Power Costs								85,626,149
Supply Programs (cash funded portion)								64,100,985
Demand Management (cash funded portion)								
Local Resources Program								21,685,717
Future Supply Actions & Stormwater Pilot								2,422,500
Conservation Program (cash funded portion)								25,000,000
Total Demand Management Costs								49,108,217
Capital Financing								
Revenue Bond Debt Service net of BABs Interest Subsidy Payment								296,356,173
G.O. Bond Debt Service								1,965,750
Debt Administration								2,703,320
Bond Deleassance								-
PAYGO								135,000,000
Total Capital Financing Costs								436,025,242
Other Operating Costs								
Operating Equipment								8,836,761
Succession Planning Labor Pool								5,000,000
OPEB/PEPS Pre-Funding								-
Total Other Operating Costs								13,836,761
Increase/(Decrease) in Required Reserves								6,900,000
Total General District Requirements								1,416,837,345
REQUIREMENTS BEFORE OFFSETS:								2,007,528,842
Revenue Offsets								
Property Taxes - MWD Portion of SWC GO Debt Service								36,010
Property Taxes - MWD GO Debt Service								1,965,750
Interest on Investments								9,519,345
Hydro-Power Revenue								10,710,879
CRA Power Revenue								2,989,504
Wadsworth Pumping Plant (DVL) Power Revenue								545,067
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)								27,575,443
Misc. allocated to supply (PVID Lease)								6,048,886
Property Taxes - SWC								166,313,250
Revenue Reserve used for Revenue Bonds - I&P								-
Amortization								-
Total Revenue Offsets								225,704,132
NET REVENUE REQUIREMENTS:								1,781,824,709

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Departmental O&M

Group	Item
Office of General Manager	Board of Directors
Office of General Manager	Bay Delta Initiatives
External Affairs	Legislative Services
External Affairs	Media Communications Services
External Affairs	Manager, External Affairs/Special P
External Affairs	Conservation & Community Service
Human Resources	Office of the Manager
Water Systems Operations	Office of the Manager, Conveyance
Water Systems Operations	Office of the Manager, Treatment S
Water Systems Operations	Operations Support Services
Water Systems Operations	Desert Region / C&D CRA
Water Systems Operations	System Operations Unit
Water Systems Operations	Power Operations and Planning
Water Systems Operations	Operations Planning & Programs U
Water Systems Operations	Treatment Jensen
Water Systems Operations	Treatment Diemer
Water Systems Operations	Treatment Mills
Water Systems Operations	Treatment Skinner
Water Systems Operations	Treatment Weymouth
Water Systems Operations	Water Quality Section
Water Systems Operations	C&D, Eastern Unit
Water Systems Operations	C&D, Western Unit
Water Systems Operations	OSS, Manufacturing Services Unit
Water Systems Operations	Environmental Health & Safety Sec
Water Systems Operations	OSS, Fleet Services Unit
Water Systems Operations	OSS, Power Support Unit
Water Systems Operations	Office of the Manager, Operations &
Water Systems Operations	Security Team & Security Manag
Sustainability, Resilience & Inno	
Diversity, Equity & Inclusion	
Equal Employment Opportunity	
Office of the Chief Financial Officer	
Business Technology	Office of Manager
Engineering Services	
Business Technology	Administrative Services
Business Technology	Information Technology
Water Resources Management	Resource Planning & Development
Water Resources Management	Resource Implementation
Water Resources Management	Office of the Group Manager
Ethics Office	
Real Property	
General Counsel	
General Auditor	

Conveyance & Aqueduct			Storage			Treatment			Distribution			Demand Management			Hydro-Electric			Administrative & General			Total \$ Functionalized		
CRA	SWP	Other Subsv	CRA Power	CRA All Other	SWP Power	SWP All Other	Other Conv. & Aqueduct	Emergency	Drought	Regulatory	Power	Jensen	Weymouth	Diemer	Mills	Skinner	Distribution	Demand Management	Hydro-Electric	Administrative & General	Total \$ Functionalized		
111,740	195,971	171,371	42,794	647,933	-	288,970	92,123	90,379	72,872	48,422	-	358,344	358,805	381,471	270,040	322,928	1,405,100	136,124	78,922	1,927,403	7,001,710		
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,536,568		
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5,598,517		
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4,083,089		
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5,131,275		
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6,731,221		
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3,880,862		
195,485	342,844	299,808	472,145	1,133,537	-	505,543	161,165	158,115	127,488	84,713	-	626,911	627,718	667,371	472,426	564,951	2,458,177	238,144	138,072	3,371,929	12,249,264		
153,683	153,683	153,683	98,776	1,316,681	-	82,053	-	24,018	24,018	24,018	-	598,029	614,916	581,269	561,057	551,864	2,663,490	-	170,209	537,412	8,284,729		
-	-	-	-	435,524	-	30,622	-	-	-	-	-	-	-	-	-	-	355,772	-	12,174	-	854,156		
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	427,078		
31,074	31,074	31,074	19,169	266,223	-	16,590	-	4,856	4,856	4,856	-	120,917	124,331	117,528	113,441	111,583	538,538	-	34,415	108,661	1,675,110		
-	-	-	-	189,308	-	-	-	-	-	-	-	89,491	89,491	89,491	89,491	89,491	6,166,856	-	108,996	258,147	7,170,763		
-	-	-	-	27,371,189	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	27,371,189		
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7,700,524	-	-	-	7,700,524		
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3,285,909	-	-	-	3,285,909		
684,794	684,794	684,794	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,100,780	-	801,762	312,161	2,054,383		
-	-	-	-	-	-	-	-	-	-	-	-	10,334,821	-	-	-	-	-	-	-	-	11,892,774		
-	-	-	-	-	-	-	-	-	-	-	-	-	-	9,927,606	-	-	-	-	-	-	11,424,173		
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9,436,532	-	-	-	-	-	10,859,070		
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9,213,189	-	-	-	-	10,602,059		
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,388,870	-	-	-	-	12,364,907		
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,619,803	-	-	-	-	22,906,038		
3,077,044	3,077,044	3,077,044	2,142,644	-	-	-	-	587,922	587,922	587,922	-	2,382,228	2,382,228	2,382,228	2,382,228	2,382,228	-	-	-	-	15,085,632		
-	-	-	-	758,807	-	1,558,346	-	-	-	-	-	-	-	-	-	-	11,741,148	-	392,226	635,105	660,800		
-	-	-	-	254	-	419,515	-	-	-	-	-	-	-	-	-	-	11,237,923	-	-	-	12,712,582		
-	-	-	-	379,636	-	-	-	-	-	-	-	133,853	133,853	133,853	133,853	133,853	6,248,962	-	394,090	78,774	7,909,078		
-	-	-	-	1,950,200	-	-	-	-	-	-	-	1,022,103	1,022,103	1,022,103	1,022,103	1,022,103	5,044,279	-	39,488	593,594	12,738,079		
-	-	-	-	1,144,726	-	-	-	-	-	-	-	343,180	343,180	343,180	343,180	343,180	4,199,710	-	-	-	8,732,626		
-	-	-	-	-	-	-	-	-	-	-	-	255,604	255,604	255,604	255,604	255,604	3,859,115	-	2,338,857	121,119	8,353,062		
13,816	13,816	13,816	7,123	118,366	-	7,376	-	2,159	2,159	2,159	-	53,761	55,279	52,254	50,437	49,611	239,440	-	15,301	48,312	744,774		
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6,418,226		
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,037,572		
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,692,893		
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13,822,537		
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2,393,232		
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	19,347,106		
536,597	941,090	822,958	-	3,111,503	-	1,387,690	442,391	434,018	349,947	232,532	-	1,720,840	1,723,055	1,831,899	1,296,786	1,550,764	6,747,572	653,693	379,001	9,255,779	33,623,620		
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3,295,043		
1,655,004	4,977,076	485,893	-	-	-	32,903	-	-	-	-	-	-	-	-	-	-	326,423	244,817	-	-	10,967,558		
289,175	869,633	614,621	-	-	-	5,749	-	-	-	-	-	-	-	-	-	-	46,435	697,687	-	-	4,024		
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,883,922		
283,589	480,868	-	-	1,750,852	-	2,268,710	-	320,579	548,683	129,464	-	-	-	-	-	-	1,511,652	-	-	-	5,035,550		
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12,329,947		
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13,540,273		
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4,256,013		
7,032,002	11,767,894	11,627,623	2,782,651	41,757,736	-	12,790,191	6,412,195	5,960,995	4,519,778	3,227,136	-	20,148,651	20,692,373	20,436,185	17,163,141	18,804,387	88,317,159	7,852,449	5,530,980	108,132,517	415,217,907		

		Functionalization	Allocation Percentages					% Total
			Demand	Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		126,615	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Office of General Manager	Board of Directors	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Bay Delta Initiatives	Bay Delta Initiatives	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Legislative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Media Communications Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Manager, External Affairs/Special Projects	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Conservation & Community Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Human Resources		249,240	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager	210,673	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Treatment Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations Support Services	40,885	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Support Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Desert Region / C&D CRA	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	System Operations Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Power Operations and Planning	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Planning & Programs Unit	707,238	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Jensen	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Diemer	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Mills	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Skinner	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Weymouth	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Water Quality Section	3,738,033	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Eastern Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Western Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Manufacturing Services Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Environmental Health & Safety Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Fleet Services Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Power Support Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations & Planning Section	15,193	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Security Team & Security Management	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Sustainability, Resilience & Innovation		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Diversity, Equity & Inclusion		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Equal Employment Opportunity		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Office of the Chief Financial Officer		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Office of Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Engineering Services		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Administrative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Information Technology	808,128	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Planning & Development	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Implementation	2,569,117	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Office of the Group Manager	295,482	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Ethics Office		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Real Property		666,208	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
General Counsel		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
General Auditor		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Departmental O&M		9,426,812	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
GENERAL DISTRICT REQUIREMENTS								
State Water Contract*								
Supply - O&M		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Supply - Capital		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Power - O&M & Off-Aq Capital		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Power - Capital (less Off-Aq)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Transmission - Capital - Commodity, Demand, & Standby		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Transmission - O&M - Commodity only		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Supply		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Power		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Other		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total State Water Contract		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Colorado River Aqueduct Power Costs								
		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Supply Programs (cash funded portion)								
		51,129,998	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Demand Management (cash funded portion)								
Local Resources Program		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Future Supply Actions & Stormwater Pilot		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Conservation Program (cash funded portion)		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Demand Management Costs		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Capital Financing								
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
G.O. Bond Debt Service		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Debt Administration		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Bond Defeasance		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
PAYGO		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total Capital Financing Costs		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Other Operating Costs								
Operating Equipment		141,025	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Succession Planning Labor Pool		79,795	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
OPEB/PERS Pre-Funding		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Other Operating Costs		220,820	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Increase/(Decrease) in Required Reserves								
		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total General District Requirements								
		51,350,818	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
REQUIREMENTS BEFORE OFFSETS:								
		60,777,630	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Revenue Offsets								
Property Taxes - MWD Portion of SWC GO Debt Service		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Property Taxes - MWD GO Debt Service		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Interest on Investments		288,197	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Hydro-Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
CRA Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Wadsworth Pumping Plant (DVL) Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to supply (PVID Lease)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Property Taxes - SWC		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Revenue Reserve used for Revenue Bonds - I&P		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Annexation		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total Revenue Offsets		288,197	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
NET REVENUE REQUIREMENTS:								
		60,489,433	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

		Functionalization	Allocation Percentages					Total	
			Demand	Fixed Commodity	Standby	Variable Commodity	Other		Hydroelectric
Departmental O&M									
Group	Item								
Office of General Manager		126,615	-	126,615	-	-	-	-	126,615
Office of General Manager	Board of Directors	-	-	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-	-	-
Human Resources		249,240	-	249,240	-	-	-	-	249,240
Water Systems Operations	Office of the Manager	210,673	-	210,673	-	-	-	-	210,673
Water Systems Operations	Office of the Manager, Conveyance & Distribution S	-	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	-	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations Support Services	40,885	-	40,885	-	-	-	-	40,885
Water Systems Operations	Operations Support Services	-	-	-	-	-	-	-	-
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	707,238	-	707,238	-	-	-	-	707,238
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	3,738,033	-	3,738,033	-	-	-	-	3,738,033
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	-	-	-	-	-	-	-	-
Water Systems Operations	Environmental Health & Safety Section	-	-	-	-	-	-	-	-
Water Systems Operations	OSS, Fleet Services Unit	-	-	-	-	-	-	-	-
Water Systems Operations	OSS, Power Support Unit	-	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations & Planning Sect	15,193	-	15,193	-	-	-	-	15,193
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-	-	-
Sustainability, Resilience & Innova		-	-	-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-	-	-
Office of the Chief Financial Office		-	-	-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-	-	-
Engineering Services		-	-	-	-	-	-	-	-
Business Technology	Administrative Services	-	-	-	-	-	-	-	-
Business Technology	Information Technology	808,128	-	808,128	-	-	-	-	808,128
Water Resources Management	Resource Planning & Development	-	-	-	-	-	-	-	-
Water Resources Management	Resource Implementation	2,569,117	-	2,569,117	-	-	-	-	2,569,117
Water Resources Management	Office of the Group Manager	295,482	-	295,482	-	-	-	-	295,482
Ethics Office		-	-	-	-	-	-	-	-
Real Property		666,208	-	666,208	-	-	-	-	666,208
General Counsel		-	-	-	-	-	-	-	-
General Auditor		-	-	-	-	-	-	-	-
Total Departmental O&M	-	9,426,812	-	9,426,812	-	-	-	-	9,426,812
GENERAL DISTRICT REQUIREMENTS									
State Water Contract*		-	-	-	-	-	-	-	-
Supply - O&M		-	-	-	-	-	-	-	-
Supply - Capital		-	-	-	-	-	-	-	-
Power - O&M & Off-Aq Capital		-	-	-	-	-	-	-	-
Power - Capital (less Off-Aq)		-	-	-	-	-	-	-	-
Transmission - Capital - Commodity, Demand, & Standby		-	-	-	-	-	-	-	-
Transmission - O&M - Commodity only		-	-	-	-	-	-	-	-
Delta Conveyance - Supply	-	-	-	-	-	-	-	-	-
Delta Conveyance - Power	-	-	-	-	-	-	-	-	-
Delta Conveyance - Other	-	-	-	-	-	-	-	-	-
Total State Water Contract		-	-	-	-	-	-	-	-
Colorado River Aqueduct Power Costs		-	-	-	-	-	-	-	-
Supply Programs (cash funded portion)		51,129,998	-	51,129,998	-	-	-	-	51,129,998
Demand Management (cash funded portion)		-	-	-	-	-	-	-	-
Local Resources Program		-	-	-	-	-	-	-	-
Future Supply Actions & Stormwater Pilot		-	-	-	-	-	-	-	-
Conservation Program (cash funded portion)		-	-	-	-	-	-	-	-
Total Demand Management Costs		-	-	-	-	-	-	-	-
Capital Financing		-	-	-	-	-	-	-	-
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		-	-	-	-	-	-	-	-
G.O. Bond Debt Service		-	-	-	-	-	-	-	-
Debt Administration		-	-	-	-	-	-	-	-
Bond Defeasance		-	-	-	-	-	-	-	-
PAYGO		-	-	-	-	-	-	-	-
Total Capital Financing Costs		-	-	-	-	-	-	-	-
Other Operating Costs		-	-	-	-	-	-	-	-
Operating Equipment		141,025	-	141,025	-	-	-	-	141,025
Succession Planning Labor Pool	-	79,795	-	79,795	-	-	-	-	79,795
OPEB/IPERS Pre-Funding		-	-	-	-	-	-	-	-
Total Other Operating Costs		220,820	-	220,820	-	-	-	-	220,820
Increase/(Decrease) in Required Reserves		-	-	-	-	-	-	-	-
Total General District Requirements		51,350,818	-	51,350,818	-	-	-	-	51,350,818
REQUIREMENTS BEFORE OFFSETS:		60,777,630	-	60,777,630	-	-	-	-	60,777,630
Revenue Offsets		-	-	-	-	-	-	-	-
Property Taxes - MWD Portion of SWC GO Debt Service		-	-	-	-	-	-	-	-
Property Taxes - MWD GO Debt Service		-	-	-	-	-	-	-	-
Interest on Investments		288,197	-	288,197	-	-	-	-	288,197
Hydro-Power Revenue		-	-	-	-	-	-	-	-
CRA Power Revenue		-	-	-	-	-	-	-	-
Wadsworth Pumping Plant (DVL) Power Revenue		-	-	-	-	-	-	-	-
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)		-	-	-	-	-	-	-	-
Misc. allocated to supply (FVID Lease)		-	-	-	-	-	-	-	-
Property Taxes - SWC		-	-	-	-	-	-	-	-
Revenue Reserve used for Revenue Bonds - I&P		-	-	-	-	-	-	-	-
Annexation		-	-	-	-	-	-	-	-
Total Revenue Offsets		288,197	-	288,197	-	-	-	-	288,197
NET REVENUE REQUIREMENTS:		60,489,433	-	60,489,433	-	-	-	-	60,489,433

		Functionalization	Allocation Percentages					Total	
			Fixed			Variable Commodity	Other		Hydroelectric
			Demand	Commodity	Standby				
Departmental O&M									
Group	Item								
Office of General Manager		111,740	-	111,740	-	-	-	111,740	
Office of General Manager	Board of Directors	-	-	-	-	-	-	-	
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-	-	
External Affairs	Legislative Services	-	-	-	-	-	-	-	
External Affairs	Media Communications Services	-	-	-	-	-	-	-	
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-	-	
External Affairs	Conservation & Community Services	-	-	-	-	-	-	-	
Human Resources		195,485	-	195,485	-	-	-	195,485	
Water Systems Operations	Office of the Manager	153,683	-	153,683	-	-	-	153,683	
Water Systems Operations	Office of the Manager, Conveyance & Distribution Sec	-	-	-	-	-	-	-	
Water Systems Operations	Office of the Manager, Treatment Section	-	-	-	-	-	-	-	
Water Systems Operations	Office of the Manager, Operations Support Services	31,074	-	31,074	-	-	-	31,074	
Water Systems Operations	Operations Support Services	-	-	-	-	-	-	-	
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-	-	
Water Systems Operations	System Operations Unit	-	-	-	-	-	-	-	
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-	-	
Water Systems Operations	Operations Planning & Programs Unit	684,794	-	684,794	-	-	-	684,794	
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-	-	
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-	-	
Water Systems Operations	Treatment Mills	-	-	-	-	-	-	-	
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-	-	
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-	-	
Water Systems Operations	Water Quality Section	3,077,044	-	3,077,044	-	-	-	3,077,044	
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-	-	
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-	-	
Water Systems Operations	OSS, Manufacturing Services Unit	-	-	-	-	-	-	-	
Water Systems Operations	Environmental Health & Safety Section	-	-	-	-	-	-	-	
Water Systems Operations	OSS, Fleet Services Unit	-	-	-	-	-	-	-	
Water Systems Operations	OSS, Power Support Unit	-	-	-	-	-	-	-	
Water Systems Operations	Office of the Manager, Operations & Planning Section	13,816	-	13,816	-	-	-	13,816	
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-	-	
Sustainability, Resilience & Innovati		-	-	-	-	-	-	-	
Diversity, Equity & Inclusion		-	-	-	-	-	-	-	
Equal Employment Opportunity		-	-	-	-	-	-	-	
Office of the Chief Financial Officer		-	-	-	-	-	-	-	
Business Technology	Office of Manager	-	-	-	-	-	-	-	
Engineering Services		-	-	-	-	-	-	-	
Business Technology	Administrative Services	-	-	-	-	-	-	-	
Business Technology	Information Technology	536,597	-	536,597	-	-	-	536,597	
Water Resources Management	Resource Planning & Development	-	-	-	-	-	-	-	
Water Resources Management	Resource Implementation	1,655,004	-	1,655,004	-	-	-	1,655,004	
Water Resources Management	Office of the Group Manager	289,175	-	289,175	-	-	-	289,175	
Ethics Office		-	-	-	-	-	-	-	
Real Property		283,589	-	283,589	-	-	-	283,589	
General Counsel		-	-	-	-	-	-	-	
General Auditor		-	-	-	-	-	-	-	
Total Departmental O&M	-	7,032,002	-	7,032,002	-	-	-	7,032,002	

		Functionalization	Allocation Percentages					% Total
			Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		222,059	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Office of General Manager	Board of Directors	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Bay Delta Initiatives	Bay Delta Initiatives	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Legislative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Media Communications Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Manager, External Affairs/Special Projects	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Conservation & Community Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Human Resources		437,119	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager	210,673	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Treatment Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations Support Services	40,885	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Support Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Desert Region / C&D CRA	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	System Operations Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Power Operations and Planning	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Planning & Programs Unit	707,238	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Jensen	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Diemer	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Mills	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Skinner	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Weymouth	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Water Quality Section	3,738,033	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Eastern Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Western Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Manufacturing Services Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Environmental Health & Safety Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Fleet Services Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Power Support Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations & Planning Section	15,193	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Security Team & Security Management	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Sustainability, Resilience & Innovation		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Diversity, Equity & Inclusion		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Equal Employment Opportunity		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Office of the Chief Financial Officer		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Office of Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Engineering Services		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Administrative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Information Technology	1,417,302	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Planning & Development	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Implementation	7,726,078	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Office of the Group Manager	888,599	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Ethics Office		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Real Property		1,129,658	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
General Counsel		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
General Auditor		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Departmental O&M		16,532,838	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
GENERAL DISTRICT REQUIREMENTS								
State Water Contract*								
Supply - O&M		107,000,290	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Supply - Capital		85,494,959	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Power - O&M & Off-Aq Capital		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Power - Capital (less Off-Aq)		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Transmission - Capital - Commodity, Demand, & Standby		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Transmission - O&M - Commodity only		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Delta Conveyance - Supply		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Delta Conveyance - Power		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Delta Conveyance - Other		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total State Water Contract		192,495,249	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Colorado River Aqueduct Power Costs								
		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Supply Programs (cash funded portion)								
		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Demand Management (cash funded portion)								
Local Resources Program		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Future Supply Actions & Stormwater Pilot		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Conservation Program (cash funded portion)		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Demand Management Costs		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Capital Financing								
		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
G.O. Bond Debt Service		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Debt Administration		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Bond Defeasance		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
PAYGO		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total Capital Financing Costs		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Other Operating Costs								
Operating Equipment		247,332	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Succession Planning Labor Pool		139,945	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
OPEB/PERS Pre-Funding		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Other Operating Costs		387,276	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Increase/(Decrease) in Required Reserves								
		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total General District Requirements								
		192,882,525	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
REQUIREMENTS BEFORE OFFSETS:								
		209,415,364	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Revenue Offsets								
Property Taxes - MWD Portion of SWC GO Debt Service		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Property Taxes - MWD GO Debt Service		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Interest on Investments	993,010	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Hydro-Power Revenue		-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
CRA Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Wadsworth Pumping Plant (DVL) Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to supply (PVID Lease)	6,048,886	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Property Taxes - SWC	44,052,221	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Revenue Reserve used for Revenue Bonds - I&P		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Annexation		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total Revenue Offsets	51,094,117	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
NET REVENUE REQUIREMENTS:								
-		158,321,247	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

	Functionalization	Allocation Percentages					Total
		Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M							
Group	Item						
Office of General Manager		222,059	-	222,059	-	-	222,059
Office of General Manager	Board of Directors	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-
Human Resources		437,119	-	437,119	-	-	437,119
Water Systems Operations	Office of the Manager	210,673	-	210,673	-	-	210,673
Water Systems Operations	Office of the Manager, Conveyance & Distribution S	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations Support Services	40,885	-	40,885	-	-	40,885
Water Systems Operations	Operations Support Services	-	-	-	-	-	-
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	707,238	-	707,238	-	-	707,238
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	3,738,033	-	3,738,033	-	-	3,738,033
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	-	-	-	-	-	-
Water Systems Operations	Environmental Health & Safety Section	-	-	-	-	-	-
Water Systems Operations	OSS, Fleet Services Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Power Support Unit	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations & Planning Secti	15,193	-	15,193	-	-	15,193
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-
Sustainability, Resilience & Inn		-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-
Engineering Services		-	-	-	-	-	-
Business Technology	Administrative Services	-	-	-	-	-	-
Business Technology	Information Technology	1,417,302	-	1,417,302	-	-	1,417,302
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	7,726,078	-	7,726,078	-	-	7,726,078
Water Resources Managemen	Office of the Group Manager	888,599	-	888,599	-	-	888,599
Ethics Office		-	-	-	-	-	-
Real Property		1,129,658	-	1,129,658	-	-	1,129,658
General Counsel		-	-	-	-	-	-
General Auditor		-	-	-	-	-	-
Total Departmental O&M		16,532,838	-	16,532,838	-	-	16,532,838
GENERAL DISTRICT REQUIREMENTS		-	-	-	-	-	-
State Water Contract*		-	-	-	-	-	-
Supply - O&M		107,000,290	-	107,000,290	-	-	107,000,290
Supply - Capital		85,494,959	-	85,494,959	-	-	85,494,959
Power - O&M & Off-Aq Capital		-	-	-	-	-	-
Power - Capital (less Off-Aq)		-	-	-	-	-	-
Transmission - Capital - Commodity, Demand, & Standby		-	-	-	-	-	-
Transmission - O&M - Commodity only		-	-	-	-	-	-
Delta Conveyance - Supply		-	-	-	-	-	-
Delta Conveyance - Power		-	-	-	-	-	-
Delta Conveyance - Other		-	-	-	-	-	-
Total State Water Contract		192,495,249	-	192,495,249	-	-	192,495,249
Colorado River Aqueduct Power Costs		-	-	-	-	-	-
Supply Programs (cash funded portion)		-	-	-	-	-	-
Demand Management (cash funded portion)		-	-	-	-	-	-
Local Resources Program		-	-	-	-	-	-
Future Supply Actions & Stormwater Pilot		-	-	-	-	-	-
Conservation Program (cash funded portion)		-	-	-	-	-	-
Total Demand Management Costs		-	-	-	-	-	-
Capital Financing		-	-	-	-	-	-
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		-	-	-	-	-	-
G.O. Bond Debt Service		-	-	-	-	-	-
Debt Administration		-	-	-	-	-	-
Bond Defeasance		-	-	-	-	-	-
PAYGO		-	-	-	-	-	-
Total Capital Financing Costs		-	-	-	-	-	-
Other Operating Costs		-	-	-	-	-	-
Operating Equipment		247,332	-	247,332	-	-	247,332
Succession Planning Labor Pool		139,945	-	139,945	-	-	139,945
OPEB/PERS Pre-Funding		-	-	-	-	-	-
Total Other Operating Costs		387,276	-	387,276	-	-	387,276
Increase/(Decrease) in Required Reserves		-	-	-	-	-	-
Total General District Requirements		192,882,525	-	192,882,525	-	-	192,882,525
REQUIREMENTS BEFORE OFFSETS:		209,415,364	-	209,415,364	-	-	209,415,364
Revenue Offsets		-	-	-	-	-	-
Property Taxes - MWD Portion of SWC GO Debt Service		-	-	-	-	-	-
Property Taxes - MWD GO Debt Service		-	-	-	-	-	-
Interest on Investments		993,010	-	993,010	-	-	993,010
Hydro-Power Revenue		-	-	-	-	-	-
CRA Power Revenue		-	-	-	-	-	-
Wadsworth Pumping Plant (DVL) Power Revenue		-	-	-	-	-	-
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)		-	-	-	-	-	-
Misc. allocated to supply (PVID Lease)		6,048,886	-	6,048,886	-	-	6,048,886
Property Taxes - SWC		44,052,221	-	44,052,221	-	-	44,052,221
Revenue Reserve used for Revenue Bonds - I&P		-	-	-	-	-	-
Annexation		-	-	-	-	-	-
Total Revenue Offsets		51,094,117	-	51,094,117	-	-	51,094,117
NET REVENUE REQUIREMENTS:		158,321,247	-	158,321,247	-	-	158,321,247

	Functionalization	Allocation Percentages					Total
		Fixed			Variable		
		Demand	Commodity	Standby	Commodity	Hydroelectric	
Departmental O&M							
Group	Item						
Office of General Manager		195,971	-	195,971	-	-	195,971
Office of General Manager	Board of Directors	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-
Human Resources		342,844	-	342,844	-	-	342,844
Water Systems Operations	Office of the Manager	153,683	-	153,683	-	-	153,683
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations Support Services	31,074	-	31,074	-	-	31,074
Water Systems Operations	Operations Support Services	-	-	-	-	-	-
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	684,794	-	684,794	-	-	684,794
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	3,077,044	-	3,077,044	-	-	3,077,044
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	-	-	-	-	-	-
Water Systems Operations	Environmental Health & Safety Section	-	-	-	-	-	-
Water Systems Operations	OSS, Fleet Services Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Power Support Unit	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations & Planning Section	13,816	-	13,816	-	-	13,816
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-
Sustainability, Resilience & Inr		-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-
Engineering Services		-	-	-	-	-	-
Business Technology	Administrative Services	-	-	-	-	-	-
Business Technology	Information Technology	941,090	-	941,090	-	-	941,090
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	4,977,078	-	4,977,078	-	-	4,977,078
Water Resources Managemen	Office of the Group Manager	869,633	-	869,633	-	-	869,633
Ethics Office		-	-	-	-	-	-
Real Property		480,868	-	480,868	-	-	480,868
General Counsel		-	-	-	-	-	-
General Auditor		-	-	-	-	-	-
Total Departmental O&M	-	11,767,894	-	11,767,894	-	-	11,767,894

		Functionalization	Allocation Percentages					% Total
			Demand	Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
	Office of General Manager	194,185	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Office of General Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Bay Delta Initiatives	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	External Affairs	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	External Affairs	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	External Affairs	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	External Affairs	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Human Resources	382,249	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	210,673	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	40,885	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%			

	Functionalization	Allocation Percentages					Total
		Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M							
Group	Item						
Office of General Manager	Office of General Manager	194,185	-	194,185	-	-	194,185
Office of General Manager	Board of Directors	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-
Human Resources	Human Resources	382,249	-	382,249	-	-	382,249
Water Systems Operations	Office of the Manager	210,673	-	210,673	-	-	210,673
Water Systems Operations	Office of the Manager, Conveyance & Distribution S	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations Support Services	40,885	-	40,885	-	-	40,885
Water Systems Operations	Operations Support Services	-	-	-	-	-	-
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	707,238	-	707,238	-	-	707,238
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	3,738,033	-	3,738,033	-	-	3,738,033
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	-	-	-	-	-	-
Water Systems Operations	Environmental Health & Safety Section	-	-	-	-	-	-
Water Systems Operations	OSS, Fleet Services Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Power Support Unit	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations & Planning Secti	15,193	-	15,193	-	-	15,193
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-
Sustainability, Resilience & Inn	Sustainability, Resilience & Inn	-	-	-	-	-	-
Diversity, Equity & Inclusion	Diversity, Equity & Inclusion	-	-	-	-	-	-
Equal Employment Opportunity	Equal Employment Opportunity	-	-	-	-	-	-
Office of the Chief Financial O	Office of the Chief Financial O	-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-
Engineering Services	Engineering Services	1,841,175	-	1,841,175	-	-	1,841,175
Business Technology	Administrative Services	-	-	-	-	-	-
Business Technology	Information Technology	1,239,394	-	1,239,394	-	-	1,239,394
Water Resources Managemen	Resource Planning & Development	4,706,259	-	4,706,259	-	-	4,706,259
Water Resources Managemen	Resource Implementation	754,220	-	754,220	-	-	754,220
Water Resources Managemen	Office of the Group Manager	628,026	-	628,026	-	-	628,026
Ethics Office	Ethics Office	-	-	-	-	-	-
Real Property	Real Property	-	-	-	-	-	-
General Counsel	General Counsel	-	-	-	-	-	-
General Auditor	General Auditor	-	-	-	-	-	-
Total Departmental O&M	-	14,457,531	-	14,457,531	-	-	14,457,531
GENERAL DISTRICT REQUIREMENTS		-	-	-	-	-	-
State Water Contract*		-	-	-	-	-	-
Supply - O&M	Supply - O&M	-	-	-	-	-	-
Supply - Capital	Supply - Capital	-	-	-	-	-	-
Power - O&M & Off-Aq Capital	Power - O&M & Off-Aq Capital	-	-	-	-	-	-
Power - Capital (less Off-Aq)	Power - Capital (less Off-Aq)	-	-	-	-	-	-
Transmission - Capital - Commodity, Demand, & Standby	Transmission - Capital - Commodity, Demand, & Standby	-	-	-	-	-	-
Transmission - O&M - Commodity only	Transmission - O&M - Commodity only	-	-	-	-	-	-
Delta Conveyance - Supply	Delta Conveyance - Supply	-	-	-	-	-	-
Delta Conveyance - Power	Delta Conveyance - Power	-	-	-	-	-	-
Delta Conveyance - Other	Delta Conveyance - Other	-	-	-	-	-	-
Total State Water Contract		-	-	-	-	-	-
Colorado River Aqueduct Power Costs		-	-	-	-	-	-
Supply Programs (cash funded portion)		1,250,000	-	1,250,000	-	-	1,250,000
Demand Management (cash funded portion)		-	-	-	-	-	-
Local Resources Program	Local Resources Program	-	-	-	-	-	-
Future Supply Actions & Stormwater Pilot	Future Supply Actions & Stormwater Pilot	-	-	-	-	-	-
Conservation Program (cash funded portion)	Conservation Program (cash funded portion)	-	-	-	-	-	-
Total Demand Management Costs		-	-	-	-	-	-
Capital Financing		-	-	-	-	-	-
Revenue Bond Debt Service net of BABs Interest Subsidy Payment	Revenue Bond Debt Service net of BABs Interest Subsidy Payment	11,794,976	-	11,794,976	-	-	11,794,976
G.O. Bond Debt Service	G.O. Bond Debt Service	-	-	-	-	-	-
Debt Administration	Debt Administration	107,592	-	107,592	-	-	107,592
Bond Defeasance	Bond Defeasance	-	-	-	-	-	-
PAYGO	PAYGO	5,373,000	-	5,373,000	-	-	5,373,000
Total Capital Financing Costs		17,275,568	-	17,275,568	-	-	17,275,568
Other Operating Costs		-	-	-	-	-	-
Operating Equipment	Operating Equipment	216,285	-	216,285	-	-	216,285
Succession Planning Labor Pool	Succession Planning Labor Pool	122,378	-	122,378	-	-	122,378
OPEB/PERS Pre-Funding	OPEB/PERS Pre-Funding	-	-	-	-	-	-
Total Other Operating Costs		338,663	-	338,663	-	-	338,663
Increase/(Decrease) in Required Reserves		-	-	-	-	-	-
Total General District Requirements		18,864,231	-	18,864,231	-	-	18,864,231
REQUIREMENTS BEFORE OFFSETS:		33,321,762	-	33,321,762	-	-	33,321,762
Revenue Offsets		-	-	-	-	-	-
Property Taxes - MWD Portion of SWC GO Debt Service	Property Taxes - MWD Portion of SWC GO Debt Service	-	-	-	-	-	-
Property Taxes - MWD GO Debt Service	Property Taxes - MWD GO Debt Service	-	-	-	-	-	-
Interest on Investments	Interest on Investments	158,006	-	158,006	-	-	158,006
Hydro-Power Revenue	Hydro-Power Revenue	-	-	-	-	-	-
CRA Power Revenue	CRA Power Revenue	-	-	-	-	-	-
Wadsworth Pumping Plant (DVL) Power Revenue	Wadsworth Pumping Plant (DVL) Power Revenue	-	-	-	-	-	-
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)	Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)	-	-	-	-	-	-
Misc. allocated to supply (PVID Lease)	Misc. allocated to supply (PVID Lease)	-	-	-	-	-	-
Property Taxes - SWC	Property Taxes - SWC	-	-	-	-	-	-
Revenue Reserve used for Revenue Bonds - I&P	Revenue Reserve used for Revenue Bonds - I&P	-	-	-	-	-	-
Annexation	Annexation	-	-	-	-	-	-
Total Revenue Offsets		158,006	-	158,006	-	-	158,006
NET REVENUE REQUIREMENTS:		33,163,756	-	33,163,756	-	-	33,163,756

		Functionalization	Allocation Percentages					Total
			Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		171,371	-	171,371	-	-	-	171,371
Office of General Manager	Board of Directors	-	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-	-
Human Resources		299,808	-	299,808	-	-	-	299,808
Water Systems Operations	Office of the Manager	153,683	-	153,683	-	-	-	153,683
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations Support Services	31,074	-	31,074	-	-	-	31,074
Water Systems Operations	Operations Support Services	-	-	-	-	-	-	-
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	684,794	-	684,794	-	-	-	684,794
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	3,077,044	-	3,077,044	-	-	-	3,077,044
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	-	-	-	-	-	-	-
Water Systems Operations	Environmental Health & Safety Section	-	-	-	-	-	-	-
Water Systems Operations	OSS, Fleet Services Unit	-	-	-	-	-	-	-
Water Systems Operations	OSS, Power Support Unit	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations & Planning Section	13,816	-	13,816	-	-	-	13,816
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-	-
Sustainability, Resilience & Inr		-	-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-	-
Equal Employment Opportuniti		-	-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-	-
Engineering Services		1,548,791	-	1,548,791	-	-	-	1,548,791
Business Technology	Administrative Services	-	-	-	-	-	-	-
Business Technology	Information Technology	822,958	-	822,958	-	-	-	822,958
Water Resources Managemen	Resource Planning & Development	3,723,802	-	3,723,802	-	-	-	3,723,802
Water Resources Managemen	Resource Implementation	485,863	-	485,863	-	-	-	485,863
Water Resources Managemen	Office of the Group Manager	614,621	-	614,621	-	-	-	614,621
Ethics Office		-	-	-	-	-	-	-
Real Property		-	-	-	-	-	-	-
General Counsel		-	-	-	-	-	-	-
General Auditor		-	-	-	-	-	-	-
Total Departmental O&M		-	11,627,625	11,627,625	-	-	-	11,627,625

		Functionalization	Allocation Percentages					% Total
			Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		48,491	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Office of General Manager	Board of Directors	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Bay Delta Initiatives	Bay Delta Initiatives	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Legislative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Media Communications Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Manager, External Affairs/Special Projects	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Conservation & Community Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Human Resources		95,453	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager	102,326	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Treatment Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations Support Services	19,858	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Support Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Desert Region / C&D CRA	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	System Operations Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Power Operations and Planning	1,242,008	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Planning & Programs Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Jensen	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Diemer	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Mills	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Skinner	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Weymouth	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Water Quality Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Eastern Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Western Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Manufacturing Services Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Environmental Health & Safety Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Fleet Services Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Power Support Unit	836,888	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations & Planning Section	7,379	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Security Team & Security Management	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Sustainability, Resilience & Innovation		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Diversity, Equity & Inclusion		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Equal Employment Opportunity		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Office of the Chief Financial Officer		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Office of Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Engineering Services		948,344	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Administrative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Information Technology	309,493	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Planning & Development	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Implementation	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Office of the Group Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Ethics Office		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Real Property		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
General Counsel		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
General Auditor		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Departmental O&M		3,610,240	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
GENERAL DISTRICT REQUIREMENTS								
State Water Contract*								
Supply - O&M		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Supply - Capital		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Power - O&M & Off-Aq Capital		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Power - Capital (less Off-Aq)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Transmission - Capital - Commodity, Demand, & Standby		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Transmission - O&M - Commodity only		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Supply		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Power		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Other		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total State Water Contract		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Colorado River Aqueduct Power Costs		85,626,149	0.0%	0.0%	0.0%	100.0%	0.0%	100.0%
Supply Programs (cash funded portion)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Demand Management (cash funded portion)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Local Resources Program		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Future Supply Actions & Stormwater Pilot		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Conservation Program (cash funded portion)		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Demand Management Costs		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Capital Financing		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		6,075,302	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
G.O. Bond Debt Service		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Debt Administration		55,418	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Bond Defeasance		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
PAYGO		2,767,500	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Capital Financing Costs		8,898,220	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Other Operating Costs								
Operating Equipment		54,009	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Succession Planning Labor Pool		30,559	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
OPEB/PERS Pre-Funding		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Other Operating Costs		84,569	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Increase/(Decrease) in Required Reserves		-	0.0%	9.5%	0.0%	90.5%	0.0%	100.0%
Total General District Requirements		94,608,937	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
REQUIREMENTS BEFORE OFFSETS:			98,219,177	0.0%	0.0%	0.0%	0.0%	0.0%
Revenue Offsets								
Property Taxes - MWD Portion of SWC GO Debt Service		-	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Property Taxes - MWD GO Debt Service		-	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Interest on Investments		465,738	0.0%	0.0%	0.0%	100.0%	0.0%	100.0%
Hydro-Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
CRA Power Revenue		2,989,504	0.0%	0.0%	0.0%	100.0%	0.0%	100.0%
Wadsworth Pumping Plant (DVL) Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to supply (PVID Lease)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Property Taxes - SWC		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Revenue Reserve used for Revenue Bonds - I&P		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Annexation		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Revenue Offsets		3,455,242	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
NET REVENUE REQUIREMENTS:			94,763,935	0.0%	0.0%	0.0%	0.0%	0.0%

	Functionalization	Allocation Percentages					Total
		Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M							
Group	Item						
Office of General Manager		48,491	-	48,491	-	-	48,491
Office of General Manager	Board of Directors	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-
Human Resources		95,453	-	95,453	-	-	95,453
Water Systems Operations	Office of the Manager	102,326	-	102,326	-	-	102,326
Water Systems Operations	Office of the Manager, Conveyance & Distribution S	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations Support Services	19,858	-	19,858	-	-	19,858
Water Systems Operations	Operations Support Services	-	-	-	-	-	-
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	1,242,008	-	1,242,008	-	-	1,242,008
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	-	-	-	-	-	-
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	-	-	-	-	-	-
Water Systems Operations	Environmental Health & Safety Section	-	-	-	-	-	-
Water Systems Operations	OSS, Fleet Services Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Power Support Unit	836,888	-	836,888	-	-	836,888
Water Systems Operations	Office of the Manager, Operations & Planning Secti	7,379	-	7,379	-	-	7,379
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-
Sustainability, Resilience & Inn		-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-
Engineering Services		948,344	-	948,344	-	-	948,344
Business Technology	Administrative Services	-	-	-	-	-	-
Business Technology	Information Technology	309,493	-	309,493	-	-	309,493
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	-	-	-	-	-	-
Water Resources Managemen	Office of the Group Manager	-	-	-	-	-	-
Ethics Office		-	-	-	-	-	-
Real Property		-	-	-	-	-	-
General Counsel		-	-	-	-	-	-
General Auditor		-	-	-	-	-	-
Total Departmental O&M	-	3,610,240	-	3,610,240	-	-	3,610,240
GENERAL DISTRICT REQUIREMENTS							
		-	-	-	-	-	-
State Water Contract*							
Supply - O&M		-	-	-	-	-	-
Supply - Capital		-	-	-	-	-	-
Power - O&M & Off-Aq Capital		-	-	-	-	-	-
Power - Capital (less Off-Aq)		-	-	-	-	-	-
Transmission - Capital - Commodity, Demand, & Standby		-	-	-	-	-	-
Transmission - O&M - Commodity only		-	-	-	-	-	-
Delta Conveyance - Supply		-	-	-	-	-	-
Delta Conveyance - Power		-	-	-	-	-	-
Delta Conveyance - Other		-	-	-	-	-	-
Total State Water Contract		-	-	-	-	-	-
Colorado River Aqueduct Power Costs	85,626,149	-	-	-	85,626,149	-	85,626,149
Supply Programs (cash funded portion)		-	-	-	-	-	-
Demand Management (cash funded portion)		-	-	-	-	-	-
Local Resources Program		-	-	-	-	-	-
Future Supply Actions & Stormwater Pilot		-	-	-	-	-	-
Conservation Program (cash funded portion)		-	-	-	-	-	-
Total Demand Management Costs		-	-	-	-	-	-
Capital Financing		-	-	-	-	-	-
Revenue Bond Debt Service net of BABs Interest Subsidy Payment	6,075,302	-	6,075,302	-	-	-	6,075,302
G.O. Bond Debt Service		-	-	-	-	-	-
Debt Administration	55,418	-	55,418	-	-	-	55,418
Bond Defeasance		-	-	-	-	-	-
PAYGO	2,767,500	-	2,767,500	-	-	-	2,767,500
Total Capital Financing Costs	8,898,220	-	8,898,220	-	-	-	8,898,220
Other Operating Costs		-	-	-	-	-	-
Operating Equipment	54,009	-	54,009	-	-	-	54,009
Succession Planning Labor Pool	30,559	-	30,559	-	-	-	30,559
OPEB/PERS Pre-Funding		-	-	-	-	-	-
Total Other Operating Costs	84,569	-	84,569	-	-	-	84,569
Increase/(Decrease) in Required Reserves		-	-	-	-	-	-
Total General District Requirements	94,608,937	-	8,982,788	-	85,626,149	-	94,608,937
REQUIREMENTS BEFORE OFFSETS:	98,219,177	-	12,593,029	-	85,626,149	-	98,219,177
Revenue Offsets							
Property Taxes - MWD Portion of SWC GO Debt Service	-	-	-	-	-	-	-
Property Taxes - MWD GO Debt Service	-	-	-	-	-	-	-
Interest on Investments	465,738	-	-	-	465,738	-	465,738
Hydro-Power Revenue	-	-	-	-	-	-	-
CRA Power Revenue	2,989,504	-	-	-	2,989,504	-	2,989,504
Wadsworth Pumping Plant (DVL) Power Revenue	-	-	-	-	-	-	-
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)	-	-	-	-	-	-	-
Misc. allocated to supply (PVID Lease)	-	-	-	-	-	-	-
Property Taxes - SWC	-	-	-	-	-	-	-
Revenue Reserve used for Revenue Bonds - I&P	-	-	-	-	-	-	-
Annexation	-	-	-	-	-	-	-
Total Revenue Offsets	3,455,242	-	-	-	3,455,242	-	3,455,242
NET REVENUE REQUIREMENTS:	94,763,935	-	12,593,029	-	82,170,907	-	94,763,935

		Functionalization	Allocation Percentages					Total
			Fixed			Variable		
			Demand	Commodity	Standby	Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		42,794	-	42,794	-	-	-	42,794
Office of General Manager	Board of Directors	-	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-	-
Human Resources		74,866	-	74,866	-	-	-	74,866
Water Systems Operations	Office of the Manager	74,645	-	74,645	-	-	-	74,645
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations Support Services	15,093	-	15,093	-	-	-	15,093
Water Systems Operations	Operations Support Services	-	-	-	-	-	-	-
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	1,071,206	-	1,071,206	-	-	-	1,071,206
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	-	-	-	-	-	-	-
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	-	-	-	-	-	-	-
Water Systems Operations	Environmental Health & Safety Section	-	-	-	-	-	-	-
Water Systems Operations	OSS, Fleet Services Unit	-	-	-	-	-	-	-
Water Systems Operations	OSS, Power Support Unit	755,952	-	755,952	-	-	-	755,952
Water Systems Operations	Office of the Manager, Operations & Planning Section	6,710	-	6,710	-	-	-	6,710
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-	-
Sustainability, Resilience & Inr		-	-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-	-
Equal Employment Opportuniti		-	-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-	-
Engineering Services		797,744	-	797,744	-	-	-	797,744
Business Technology	Administrative Services	-	-	-	-	-	-	-
Business Technology	Information Technology	205,504	-	205,504	-	-	-	205,504
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	-	-	-	-	-	-	-
Water Resources Managemen	Office of the Group Manager	-	-	-	-	-	-	-
Ethics Office		-	-	-	-	-	-	-
Real Property		-	-	-	-	-	-	-
General Counsel		-	-	-	-	-	-	-
General Auditor		-	-	-	-	-	-	-
Total Departmental O&M		3,044,514	-	3,044,514	-	-	-	3,044,514

		Functionalization	Allocation Percentages					% Total
			Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
	Office of General Manager	734,188	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Office of General Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Bay Delta Initiatives	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	External Affairs	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	External Affairs	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	External Affairs	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	External Affairs	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Human Resources	1,445,236	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	1,804,947	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	445,231	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	350,286	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	209,303	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	33,442,561	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%</		

	Functionalization	Allocation Percentages				Total	
		Demand	Fixed Commodity	Standby	Variable Commodity		Hydroelectric
Departmental O&M							
Group	Item						
Office of General Manager		734,188	-	734,188	-	-	734,188
Office of General Manager	Board of Directors	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-
Human Resources		1,445,236	-	1,445,236	-	-	1,445,236
Water Systems Operations	Office of the Manager	1,804,947	-	1,804,947	-	-	1,804,947
Water Systems Operations	Office of the Manager, Conveyance & Distribution S	445,231	-	445,231	-	-	445,231
Water Systems Operations	Office of the Manager, Treatment Section	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations Support Services	350,286	-	350,286	-	-	350,286
Water Systems Operations	Operations Support Services	209,303	-	209,303	-	-	209,303
Water Systems Operations	Desert Region / C&D CRA	33,442,561	-	33,442,561	-	-	33,442,561
Water Systems Operations	System Operations Unit	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	-	-	-	-	-	-
Water Systems Operations	C&D, Eastern Unit	1,078,761	-	1,078,761	-	-	1,078,761
Water Systems Operations	C&D, Western Unit	341	-	341	-	-	341
Water Systems Operations	OSS, Manufacturing Services Unit	413,575	-	413,575	-	-	413,575
Water Systems Operations	Environmental Health & Safety Section	2,513,904	-	2,513,904	-	-	2,513,904
Water Systems Operations	OSS, Fleet Services Unit	1,888,191	-	1,888,191	-	-	1,888,191
Water Systems Operations	OSS, Power Support Unit	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations & Planning Secti	130,163	-	130,163	-	-	130,163
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-
Sustainability, Resilience & Inn		-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-
Engineering Services		1,406,325	-	1,406,325	-	-	1,406,325
Business Technology	Administrative Services	-	-	-	-	-	-
Business Technology	Information Technology	4,685,992	-	4,685,992	-	-	4,685,992
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	-	-	-	-	-	-
Water Resources Managemen	Office of the Group Manager	-	-	-	-	-	-
Ethics Office		-	-	-	-	-	-
Real Property		4,113,113	-	4,113,113	-	-	4,113,113
General Counsel		-	-	-	-	-	-
General Auditor		-	-	-	-	-	-
Total Departmental O&M	-	54,662,118	-	54,662,118	-	-	54,662,118
GENERAL DISTRICT REQUIREMENTS							
		-	-	-	-	-	-
State Water Contract*		-	-	-	-	-	-
Supply - O&M		-	-	-	-	-	-
Supply - Capital		-	-	-	-	-	-
Power - O&M & Off-Aq Capital		-	-	-	-	-	-
Power - Capital (less Off-Aq)		-	-	-	-	-	-
Transmission - Capital - Commodity, Demand, & Standby		-	-	-	-	-	-
Transmission - O&M - Commodity only		-	-	-	-	-	-
Delta Conveyance - Supply		-	-	-	-	-	-
Delta Conveyance - Power		-	-	-	-	-	-
Delta Conveyance - Other		-	-	-	-	-	-
Total State Water Contract		-	-	-	-	-	-
Colorado River Aqueduct Power Costs							
		-	-	-	-	-	-
Supply Programs (cash funded portion)		-	-	-	-	-	-
Demand Management (cash funded portion)							
Local Resources Program		-	-	-	-	-	-
Future Supply Actions & Stormwater Pilot		-	-	-	-	-	-
Conservation Program (cash funded portion)		-	-	-	-	-	-
Total Demand Management Costs		-	-	-	-	-	-
Capital Financing							
Revenue Bond Debt Service net of BABs Interest Subsidy Payment	9,009,228	726,896	4,275,857	4,006,475	-	-	9,009,228
G.O. Bond Debt Service	-	-	-	-	-	-	-
Debt Administration	82,181	6,631	39,004	36,547	-	-	82,181
Bond Defeasance	-	-	-	-	-	-	-
PAYGO	4,104,000	331,125	1,947,794	1,825,082	-	-	4,104,000
Total Capital Financing Costs	13,195,409	1,064,651	6,262,654	5,868,103	-	-	13,195,409
Other Operating Costs							
Operating Equipment	817,747	-	817,747	-	-	-	817,747
Succession Planning Labor Pool	462,696	-	462,696	-	-	-	462,696
OPEB/PERS Pre-Funding	-	-	-	-	-	-	-
Total Other Operating Costs	1,280,443	-	1,280,443	-	-	-	1,280,443
Increase/(Decrease) in Required Reserves							
	-	-	-	-	-	-	-
Total General District Requirements	14,475,851	1,064,651	7,543,097	5,868,103	-	-	14,475,851
REQUIREMENTS BEFORE OFFSETS:	69,137,969	1,064,651	62,205,215	5,868,103	-	-	69,137,969
Revenue Offsets							
Property Taxes - MWD Portion of SWC GO Debt Service	-	-	-	-	-	-	-
Property Taxes - MWD GO Debt Service	-	-	-	-	-	-	-
Interest on Investments	327,840	26,451	155,596	145,793	-	-	327,840
Hydro-Power Revenue	-	-	-	-	-	-	-
CRA Power Revenue	-	-	-	-	-	-	-
Wadsworth Pumping Plant (DVL) Power Revenue	-	-	-	-	-	-	-
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)	-	-	-	-	-	-	-
Misc. allocated to supply (PVID Lease)	-	-	-	-	-	-	-
Property Taxes - SWC	-	-	-	-	-	-	-
Revenue Reserve used for Revenue Bonds - I&P	-	-	-	-	-	-	-
Annexation	-	-	-	-	-	-	-
Total Revenue Offsets	327,840	26,451	155,596	145,793	-	-	327,840
NET REVENUE REQUIREMENTS:	68,810,129	1,038,200	62,049,619	5,722,310	-	-	68,810,129

		Functionalization	Allocation Percentages					Total
			Fixed			Variable		
			Demand	Commodity	Standby	Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		647,933	-	647,933	-	-	-	647,933
Office of General Manager	Board of Directors	-	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-	-
Human Resources		1,133,537	-	1,133,537	-	-	-	1,133,537
Water Systems Operations	Office of the Manager	1,316,681	-	1,316,681	-	-	-	1,316,681
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	435,524	-	435,524	-	-	-	435,524
Water Systems Operations	Office of the Manager, Treatment Section	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations Support Services	266,223	-	266,223	-	-	-	266,223
Water Systems Operations	Operations Support Services	189,308	-	189,308	-	-	-	189,308
Water Systems Operations	Desert Region / C&D CRA	27,371,189	-	27,371,189	-	-	-	27,371,189
Water Systems Operations	System Operations Unit	-	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	-	-	-	-	-	-	-
Water Systems Operations	C&D, Eastern Unit	758,807	-	758,807	-	-	-	758,807
Water Systems Operations	C&D, Western Unit	254	-	254	-	-	-	254
Water Systems Operations	OSS, Manufacturing Services Unit	379,636	-	379,636	-	-	-	379,636
Water Systems Operations	Environmental Health & Safety Section	1,950,200	-	1,950,200	-	-	-	1,950,200
Water Systems Operations	OSS, Fleet Services Unit	1,144,726	-	1,144,726	-	-	-	1,144,726
Water Systems Operations	OSS, Power Support Unit	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations & Planning Section	118,366	-	118,366	-	-	-	118,366
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-	-
Sustainability, Resilience & Inr		-	-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-	-
Engineering Services		1,182,996	-	1,182,996	-	-	-	1,182,996
Business Technology	Administrative Services	-	-	-	-	-	-	-
Business Technology	Information Technology	3,111,503	-	3,111,503	-	-	-	3,111,503
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	-	-	-	-	-	-	-
Water Resources Managemen	Office of the Group Manager	-	-	-	-	-	-	-
Ethics Office		-	-	-	-	-	-	-
Real Property		1,750,852	-	1,750,852	-	-	-	1,750,852
General Counsel		-	-	-	-	-	-	-
General Auditor		-	-	-	-	-	-	-
Total Departmental O&M	-	41,757,736	-	41,757,736	-	-	-	41,757,736

		Functionalization	Allocation Percentages					% Total
			Demand	Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Office of General Manager	Board of Directors	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Bay Delta Initiatives	Bay Delta Initiatives	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Legislative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Media Communications Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Manager, External Affairs/Special Projects	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Conservation & Community Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Human Resources		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Treatment Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations Support Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Support Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Desert Region / C&D CRA	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	System Operations Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Power Operations and Planning	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Planning & Programs Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Jensen	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Diemer	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Mills	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Skinner	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Weymouth	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Water Quality Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Eastern Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Western Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Manufacturing Services Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Environmental Health & Safety Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Fleet Services Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Power Support Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations & Planning Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Security Team & Security Management	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Sustainability, Resilience & Innovation		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Diversity, Equity & Inclusion		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Equal Employment Opportunity		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Office of the Chief Financial Officer		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Office of Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Engineering Services		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Administrative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Information Technology	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Planning & Development	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Implementation	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Office of the Group Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Ethics Office		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Real Property		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
General Counsel		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
General Auditor		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Departmental O&M		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
GENERAL DISTRICT REQUIREMENTS								
State Water Contract*								
Supply - O&M		-	0.0%	0.0%	0.0%	100.0%	0.0%	100.0%
Supply - Capital		-	0.0%	0.0%	0.0%	100.0%	0.0%	100.0%
Power - O&M & Off-Aq Capital	258,551,933	-	0.0%	0.0%	0.0%	100.0%	0.0%	100.0%
Power - Capital (less Off-Aq)	(3,654,765)	-	0.0%	0.0%	0.0%	100.0%	0.0%	100.0%
Transmission - Capital - Commodity, Demand, & Standby		-	0.0%	0.0%	0.0%	100.0%	0.0%	100.0%
Transmission - O&M - Commodity only		-	0.0%	0.0%	0.0%	100.0%	0.0%	100.0%
Delta Conveyance - Supply		-	0.0%	0.0%	0.0%	100.0%	0.0%	100.0%
Delta Conveyance - Power		-	0.0%	0.0%	0.0%	100.0%	0.0%	100.0%
Delta Conveyance - Other		-	0.0%	0.0%	0.0%	100.0%	0.0%	100.0%
Total State Water Contract	254,897,168	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Colorado River Aqueduct Power Costs			-	0.0%	0.0%	0.0%	0.0%	0.0%
Supply Programs (cash funded portion)			-	0.0%	0.0%	0.0%	0.0%	0.0%
Demand Management (cash funded portion)			-	0.0%	0.0%	0.0%	0.0%	0.0%
Local Resources Program		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Future Supply Actions & Stormwater Pilot		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Conservation Program (cash funded portion)		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Demand Management Costs		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Capital Financing			-	0.0%	0.0%	0.0%	0.0%	0.0%
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
G.O. Bond Debt Service		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Debt Administration		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Bond Defeasance		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
PAYGO		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total Capital Financing Costs		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Other Operating Costs								
Operating Equipment		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Succession Planning Labor Pool		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
OPEB/PERS Pre-Funding		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Other Operating Costs		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Increase/(Decrease) in Required Reserves			-	0.0%	0.0%	100.0%	0.0%	100.0%
Total General District Requirements			254,897,168	0.0%	0.0%	0.0%	0.0%	0.0%
REQUIREMENTS BEFORE OFFSETS:			254,897,168	0.0%	0.0%	0.0%	0.0%	0.0%
Revenue Offsets								
Property Taxes - MWD Portion of SWC GO Debt Service		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Property Taxes - MWD GO Debt Service		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Interest on Investments	1,208,677	-	0.0%	0.0%	0.0%	100.0%	0.0%	100.0%
Hydro-Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
CRA Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Wadsworth Pumping Plant (DVL) Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to supply (PVID Lease)		-	0.0%	0.0%	0.0%	100.0%	0.0%	100.0%
Property Taxes - SWC	58,332,797	-	0.0%	0.0%	0.0%	100.0%	0.0%	100.0%
Revenue Reserve used for Revenue Bonds - I&P		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Annexation		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total Revenue Offsets	59,541,474	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
NET REVENUE REQUIREMENTS:			-	195,355,694	0.0%	0.0%	0.0%	0.0%

	Functionalization	Allocation Percentages					Total
		Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M							
Group	Item						
Office of General Manager		-	-	-	-	-	-
Office of General Manager	Board of Directors	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-
Human Resources		-	-	-	-	-	-
Water Systems Operations	Office of the Manager	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Conveyance & Distribution S	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations Support Services	-	-	-	-	-	-
Water Systems Operations	Operations Support Services	-	-	-	-	-	-
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	-	-	-	-	-	-
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	-	-	-	-	-	-
Water Systems Operations	Environmental Health & Safety Section	-	-	-	-	-	-
Water Systems Operations	OSS, Fleet Services Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Power Support Unit	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations & Planning Secti	-	-	-	-	-	-
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-
Sustainability, Resilience & Inn		-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-
Engineering Services		-	-	-	-	-	-
Business Technology	Administrative Services	-	-	-	-	-	-
Business Technology	Information Technology	-	-	-	-	-	-
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	-	-	-	-	-	-
Water Resources Managemen	Office of the Group Manager	-	-	-	-	-	-
Ethics Office		-	-	-	-	-	-
Real Property		-	-	-	-	-	-
General Counsel		-	-	-	-	-	-
General Auditor		-	-	-	-	-	-
Total Departmental O&M	-	-	-	-	-	-	-
GENERAL DISTRICT REQUIREMENTS		-	-	-	-	-	-
State Water Contract*		-	-	-	-	-	-
Supply - O&M		-	-	-	-	-	-
Supply - Capital		-	-	-	-	-	-
Power - O&M & Off-Aq Capital	258,551,933	-	-	-	258,551,933	-	258,551,933
Power - Capital (less Off-Aq)	(3,654,765)	-	-	-	(3,654,765)	-	(3,654,765)
Transmission - Capital - Commodity, Demand, & Standby	-	-	-	-	-	-	-
Transmission - O&M - Commodity only	-	-	-	-	-	-	-
Delta Conveyance - Supply	-	-	-	-	-	-	-
Delta Conveyance - Power	-	-	-	-	-	-	-
Delta Conveyance - Other	-	-	-	-	-	-	-
Total State Water Contract	254,897,168	-	-	-	254,897,168	-	254,897,168
Colorado River Aqueduct Power Costs		-	-	-	-	-	-
Supply Programs (cash funded portion)		-	-	-	-	-	-
Demand Management (cash funded portion)		-	-	-	-	-	-
Local Resources Program		-	-	-	-	-	-
Future Supply Actions & Stormwater Pilot		-	-	-	-	-	-
Conservation Program (cash funded portion)		-	-	-	-	-	-
Total Demand Management Costs	-	-	-	-	-	-	-
Capital Financing		-	-	-	-	-	-
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		-	-	-	-	-	-
G.O. Bond Debt Service		-	-	-	-	-	-
Debt Administration		-	-	-	-	-	-
Bond Defeasance		-	-	-	-	-	-
PAYGO		-	-	-	-	-	-
Total Capital Financing Costs	-	-	-	-	-	-	-
Other Operating Costs		-	-	-	-	-	-
Operating Equipment		-	-	-	-	-	-
Succession Planning Labor Pool		-	-	-	-	-	-
OPEB/PERS Pre-Funding		-	-	-	-	-	-
Total Other Operating Costs	-	-	-	-	-	-	-
Increase/(Decrease) in Required Reserves		-	-	-	-	-	-
Total General District Requirements	254,897,168	-	-	-	254,897,168	-	254,897,168
REQUIREMENTS BEFORE OFFSETS:	254,897,168	-	-	-	254,897,168	-	254,897,168
Revenue Offsets		-	-	-	-	-	-
Property Taxes - MWD Portion of SWC GO Debt Service	-	-	-	-	-	-	-
Property Taxes - MWD GO Debt Service	-	-	-	-	-	-	-
Interest on Investments	1,208,677	-	-	-	1,208,677	-	1,208,677
Hydro-Power Revenue	-	-	-	-	-	-	-
CRA Power Revenue	-	-	-	-	-	-	-
Wadsworth Pumping Plant (DVL) Power Revenue	-	-	-	-	-	-	-
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)	-	-	-	-	-	-	-
Misc. allocated to supply (PVID Lease)	-	-	-	-	-	-	-
Property Taxes - SWC	58,332,797	-	-	-	58,332,797	-	58,332,797
Revenue Reserve used for Revenue Bonds - I&P	-	-	-	-	-	-	-
Annexation	-	-	-	-	-	-	-
Total Revenue Offsets	59,541,474	-	-	-	59,541,474	-	59,541,474
NET REVENUE REQUIREMENTS:	195,355,694	-	-	-	195,355,694	-	195,355,694

	Functionalization	Allocation Percentages					Total
		Fixed			Variable		
		Demand	Commodity	Standby	Commodity	Hydroelectric	
Departmental O&M							
Group	Item						
Office of General Manager		-	-	-	-	-	-
Office of General Manager	Board of Directors	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-
Human Resources		-	-	-	-	-	-
Water Systems Operations	Office of the Manager	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations Support Services	-	-	-	-	-	-
Water Systems Operations	Operations Support Services	-	-	-	-	-	-
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	-	-	-	-	-	-
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	-	-	-	-	-	-
Water Systems Operations	Environmental Health & Safety Section	-	-	-	-	-	-
Water Systems Operations	OSS, Fleet Services Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Power Support Unit	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations & Planning Section	-	-	-	-	-	-
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-
Sustainability, Resilience & Inr		-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-
Engineering Services		-	-	-	-	-	-
Business Technology	Administrative Services	-	-	-	-	-	-
Business Technology	Information Technology	-	-	-	-	-	-
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	-	-	-	-	-	-
Water Resources Managemen	Office of the Group Manager	-	-	-	-	-	-
Ethics Office		-	-	-	-	-	-
Real Property		-	-	-	-	-	-
General Counsel		-	-	-	-	-	-
General Auditor		-	-	-	-	-	-
Total Departmental O&M	-	-	-	-	-	-	-

		Functionalization	Allocation Percentages					% Total
			Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		327,438	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Office of General Manager	Board of Directors	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Bay Delta Initiatives	Bay Delta Initiatives	12,280,257	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Legislative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Media Communications Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Manager, External Affairs/Special Projects	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Conservation & Community Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Human Resources		644,557	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager	112,480	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	31,305	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Treatment Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations Support Services	21,829	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Support Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Desert Region / C&D CRA	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	System Operations Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Power Operations and Planning	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Planning & Programs Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Jensen	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Diemer	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Mills	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Skinner	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Weymouth	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Water Quality Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Eastern Unit	2,215,427	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Western Unit	562,147	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Manufacturing Services Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Environmental Health & Safety Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Fleet Services Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Power Support Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations & Planning Section	8,111	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Security Team & Security Management	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Sustainability, Resilience & Innovation		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Diversity, Equity & Inclusion		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Equal Employment Opportunity		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Office of the Chief Financial Officer		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Office of Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Engineering Services		698,536	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Administrative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Information Technology	2,089,892	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Planning & Development	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Implementation	51,076	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Office of the Group Manager	5,874	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Ethics Office		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Real Property		5,329,667	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
General Counsel		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
General Auditor		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Departmental O&M		24,378,597	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
GENERAL DISTRICT REQUIREMENTS								
State Water Contract*								
Supply - O&M		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Supply - Capital		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Power - O&M & Off-Aq Capital		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Power - Capital (less Off-Aq)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Transmission - Capital - Commodity, Demand, & Standby		80,660,127	8.1%	47.5%	44.5%	0.0%	0.0%	100.0%
Transmission - O&M - Commodity only		198,687,447	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Delta Conveyance - Supply		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Delta Conveyance - Power		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Delta Conveyance - Other		34,500,000	8.1%	47.5%	44.5%	0.0%	0.0%	100.0%
Total State Water Contract		313,847,574	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Colorado River Aqueduct Power Costs								
		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Supply Programs (cash funded portion)								
		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Demand Management (cash funded portion)								
Local Resources Program		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Future Supply Actions & Stormwater Pilot		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Conservation Program (cash funded portion)		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Demand Management Costs		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Capital Financing								
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		4,474,978	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
G.O. Bond Debt Service		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Debt Administration		40,820	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Bond Defeasance		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
PAYGO		2,038,500	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Capital Financing Costs		6,554,298	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Other Operating Costs								
Operating Equipment		364,704	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Succession Planning Labor Pool		206,356	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
OPEB/PERS Pre-Funding		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Other Operating Costs		571,061	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Increase/(Decrease) in Required Reserves								
		-	2.9%	81.1%	16.0%	0.0%	0.0%	100.0%
Total General District Requirements								
		320,972,933	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
REQUIREMENTS BEFORE OFFSETS:								
		345,351,530	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Revenue Offsets								
Property Taxes - MWD Portion of SWC GO Debt Service		36,010	8.1%	47.5%	44.5%	0.0%	0.0%	100.0%
Property Taxes - MWD GO Debt Service		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Interest on Investments		1,637,596	8.1%	47.5%	44.5%	0.0%	0.0%	100.0%
Hydro-Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
CRA Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Wadsworth Pumping Plant (DVL) Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to supply (PVID Lease)		-	2.7%	82.5%	14.8%	0.0%	0.0%	100.0%
Property Taxes - SWC		63,928,232	2.3%	84.8%	12.8%	0.0%	0.0%	100.0%
Revenue Reserve used for Revenue Bonds - I&P		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Annexation		-	8.1%	47.5%	44.5%	0.0%	0.0%	100.0%
Total Revenue Offsets		65,601,838	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
NET REVENUE REQUIREMENTS:								
-		279,749,692	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

	Functionalization	Allocation Percentages					Total
		Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M							
Group	Item						
Office of General Manager		327,438	-	327,438	-	-	327,438
Office of General Manager	Board of Directors	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	12,280,257	-	12,280,257	-	-	12,280,257
External Affairs	Legislative Services	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-
Human Resources		644,557	-	644,557	-	-	644,557
Water Systems Operations	Office of the Manager	112,480	-	112,480	-	-	112,480
Water Systems Operations	Office of the Manager, Conveyance & Distribution S	31,305	-	31,305	-	-	31,305
Water Systems Operations	Office of the Manager, Treatment Section	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations Support Services	21,829	-	21,829	-	-	21,829
Water Systems Operations	Operations Support Services	-	-	-	-	-	-
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	-	-	-	-	-	-
Water Systems Operations	C&D, Eastern Unit	2,215,427	-	2,215,427	-	-	2,215,427
Water Systems Operations	C&D, Western Unit	562,147	-	562,147	-	-	562,147
Water Systems Operations	OSS, Manufacturing Services Unit	-	-	-	-	-	-
Water Systems Operations	Environmental Health & Safety Section	-	-	-	-	-	-
Water Systems Operations	OSS, Fleet Services Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Power Support Unit	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations & Planning Secti	8,111	-	8,111	-	-	8,111
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-
Sustainability, Resilience & Inn		-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-
Engineering Services		698,536	-	698,536	-	-	698,536
Business Technology	Administrative Services	-	-	-	-	-	-
Business Technology	Information Technology	2,089,892	-	2,089,892	-	-	2,089,892
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	51,076	-	51,076	-	-	51,076
Water Resources Managemen	Office of the Group Manager	5,874	-	5,874	-	-	5,874
Ethics Office		-	-	-	-	-	-
Real Property		5,329,667	-	5,329,667	-	-	5,329,667
General Counsel		-	-	-	-	-	-
General Auditor		-	-	-	-	-	-
Total Departmental O&M	-	24,378,597	-	24,378,597	-	-	24,378,597
GENERAL DISTRICT REQUIREMENTS							
		-	-	-	-	-	-
State Water Contract*		-	-	-	-	-	-
Supply - O&M		-	-	-	-	-	-
Supply - Capital		-	-	-	-	-	-
Power - O&M & Off-Aq Capital		-	-	-	-	-	-
Power - Capital (less Off-Aq)		-	-	-	-	-	-
Transmission - Capital - Commodity, Demand, & Standby		80,660,127	6,507,938	38,281,988	35,870,201	-	80,660,127
Transmission - O&M - Commodity only		198,687,447	-	198,687,447	-	-	198,687,447
Delta Conveyance - Supply		-	-	-	-	-	-
Delta Conveyance - Power		-	-	-	-	-	-
Delta Conveyance - Other		34,500,000	2,783,579	16,373,996	15,342,425	-	34,500,000
Total State Water Contract		313,847,574	9,291,517	253,343,431	51,212,626	-	313,847,574
Colorado River Aqueduct Power Costs							
		-	-	-	-	-	-
Supply Programs (cash funded portion)		-	-	-	-	-	-
Demand Management (cash funded portion)							
Local Resources Program		-	-	-	-	-	-
Future Supply Actions & Stormwater Pilot		-	-	-	-	-	-
Conservation Program (cash funded portion)		-	-	-	-	-	-
Total Demand Management Costs		-	-	-	-	-	-
Capital Financing							
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		4,474,978	-	4,474,978	-	-	4,474,978
G.O. Bond Debt Service		-	-	-	-	-	-
Debt Administration		40,820	-	40,820	-	-	40,820
Bond Defeasance		-	-	-	-	-	-
PAYGO		2,038,500	-	2,038,500	-	-	2,038,500
Total Capital Financing Costs		6,554,298	-	6,554,298	-	-	6,554,298
Other Operating Costs							
Operating Equipment		364,704	-	364,704	-	-	364,704
Succession Planning Labor Pool		206,356	-	206,356	-	-	206,356
OPEB/PERS Pre-Funding		-	-	-	-	-	-
Total Other Operating Costs		571,061	-	571,061	-	-	571,061
Increase/(Decrease) in Required Reserves							
		-	-	-	-	-	-
Total General District Requirements		320,972,933	9,291,517	260,468,790	51,212,626	-	320,972,933
REQUIREMENTS BEFORE OFFSETS:		345,351,530	9,291,517	284,847,387	51,212,626	-	345,351,530
Revenue Offsets							
Property Taxes - MWD Portion of SWC GO Debt Service		36,010	2,905	17,091	16,014	-	36,010
Property Taxes - MWD GO Debt Service		-	-	-	-	-	-
Interest on Investments		1,637,596	132,127	777,217	728,252	-	1,637,596
Hydro-Power Revenue		-	-	-	-	-	-
CRA Power Revenue		-	-	-	-	-	-
Wadsworth Pumping Plant (DVL) Power Revenue		-	-	-	-	-	-
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)		-	-	-	-	-	-
Misc. allocated to supply (PVID Lease)		-	-	-	-	-	-
Property Taxes - SWC		63,928,232	1,489,331	54,230,065	8,208,836	-	63,928,232
Revenue Reserve used for Revenue Bonds - I&P		-	-	-	-	-	-
Annexation		-	-	-	-	-	-
Total Revenue Offsets		65,601,838	1,624,363	55,024,372	8,953,102	-	65,601,838
NET REVENUE REQUIREMENTS:		279,749,692	7,667,154	229,823,014	42,259,524	-	279,749,692

	Functionalization	Allocation Percentages					Total
		Fixed			Variable		
		Demand	Commodity	Standby	Commodity	Hydroelectric	
Departmental O&M							
Group	Item						
Office of General Manager		288,970	-	288,970	-	-	288,970
Office of General Manager	Board of Directors	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	5,598,517	-	5,598,517	-	-	5,598,517
External Affairs	Legislative Services	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-
Human Resources		505,543	-	505,543	-	-	505,543
Water Systems Operations	Office of the Manager	82,053	-	82,053	-	-	82,053
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	30,622	-	30,622	-	-	30,622
Water Systems Operations	Office of the Manager, Treatment Section	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations Support Services	16,590	-	16,590	-	-	16,590
Water Systems Operations	Operations Support Services	-	-	-	-	-	-
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	-	-	-	-	-	-
Water Systems Operations	C&D, Eastern Unit	1,558,346	-	1,558,346	-	-	1,558,346
Water Systems Operations	C&D, Western Unit	419,515	-	419,515	-	-	419,515
Water Systems Operations	OSS, Manufacturing Services Unit	-	-	-	-	-	-
Water Systems Operations	Environmental Health & Safety Section	-	-	-	-	-	-
Water Systems Operations	OSS, Fleet Services Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Power Support Unit	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations & Planning Section	7,376	-	7,376	-	-	7,376
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-
Sustainability, Resilience & Inr		-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-
Engineering Services		587,607	-	587,607	-	-	587,607
Business Technology	Administrative Services	-	-	-	-	-	-
Business Technology	Information Technology	1,387,690	-	1,387,690	-	-	1,387,690
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	32,903	-	32,903	-	-	32,903
Water Resources Managemen	Office of the Group Manager	5,749	-	5,749	-	-	5,749
Ethics Office		-	-	-	-	-	-
Real Property		2,268,710	-	2,268,710	-	-	2,268,710
General Counsel		-	-	-	-	-	-
General Auditor		-	-	-	-	-	-
Total Departmental O&M	-	12,790,191	-	12,790,191	-	-	12,790,191

		Functionalization	Allocation Percentages			Variable Commodity	Hydroelectric	% Total
			Demand	Commodity	Standby			
Departmental O&M								
Group	Item							
	Office of General Manager	104,386	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Office of General Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Bay Delta Initiatives	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	External Affairs	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	External Affairs	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	External Affairs	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	External Affairs	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Human Resources	205,483	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0

	Functionalization	Allocation Percentages					Total
		Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M							
Group	Item						
Office of General Manager		104,386	-	104,386	-	-	104,386
Office of General Manager	Board of Directors	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-
Human Resources		205,483	-	205,483	-	-	205,483
Water Systems Operations	Office of the Manager	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Conveyance & Distribution S	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations Support Services	-	-	-	-	-	-
Water Systems Operations	Operations Support Services	-	-	-	-	-	-
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	-	-	-	-	-	-
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	-	-	-	-	-	-
Water Systems Operations	Environmental Health & Safety Section	-	-	-	-	-	-
Water Systems Operations	OSS, Fleet Services Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Power Support Unit	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations & Planning Secti	-	-	-	-	-	-
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-
Sustainability, Resilience & Inn		-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-
Engineering Services		6,795,695	-	6,795,695	-	-	6,795,695
Business Technology	Administrative Services	-	-	-	-	-	-
Business Technology	Information Technology	666,251	-	666,251	-	-	666,251
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	-	-	-	-	-	-
Water Resources Managemen	Office of the Group Manager	-	-	-	-	-	-
Ethics Office		-	-	-	-	-	-
Real Property		-	-	-	-	-	-
General Counsel		-	-	-	-	-	-
General Auditor		-	-	-	-	-	-
Total Departmental O&M		7,771,815	-	7,771,815	-	-	7,771,815
GENERAL DISTRICT REQUIREMENTS		-	-	-	-	-	-
State Water Contract*		-	-	-	-	-	-
Supply - O&M		-	-	-	-	-	-
Supply - Capital		-	-	-	-	-	-
Power - O&M & Off-Aq Capital		-	-	-	-	-	-
Power - Capital (less Off-Aq)		-	-	-	-	-	-
Transmission - Capital - Commodity, Demand, & Standby		-	-	-	-	-	-
Transmission - O&M - Commodity only		-	-	-	-	-	-
Delta Conveyance - Supply		-	-	-	-	-	-
Delta Conveyance - Power		-	-	-	-	-	-
Delta Conveyance - Other		-	-	-	-	-	-
Total State Water Contract		-	-	-	-	-	-
Colorado River Aqueduct Power Costs		-	-	-	-	-	-
Supply Programs (cash funded portion)		-	-	-	-	-	-
Demand Management (cash funded portion)		-	-	-	-	-	-
Local Resources Program		-	-	-	-	-	-
Future Supply Actions & Stormwater Pilot		-	-	-	-	-	-
Conservation Program (cash funded portion)		-	-	-	-	-	-
Total Demand Management Costs		-	-	-	-	-	-
Capital Financing		-	-	-	-	-	-
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		43,534,722	3,512,532	20,661,952	19,360,238	-	43,534,722
G.O. Bond Debt Service		-	-	-	-	-	-
Debt Administration		397,118	32,041	188,475	176,601	-	397,118
Bond Defeasance		-	-	-	-	-	-
PAYGO		19,831,500	1,600,074	9,412,200	8,819,226	-	19,831,500
Total Capital Financing Costs		63,763,339	5,144,647	30,262,628	28,356,065	-	63,763,339
Other Operating Costs		-	-	-	-	-	-
Operating Equipment		116,267	-	116,267	-	-	116,267
Succession Planning Labor Pool		65,786	-	65,786	-	-	65,786
OPEB/PERS Pre-Funding		-	-	-	-	-	-
Total Other Operating Costs		182,052	-	182,052	-	-	182,052
Increase/(Decrease) in Required Reserves		-	-	-	-	-	-
Total General District Requirements		63,945,392	5,144,647	30,444,680	28,356,065	-	63,945,392
REQUIREMENTS BEFORE OFFSETS:		71,717,206	5,144,647	38,216,495	28,356,065	-	71,717,206
Revenue Offsets		-	-	-	-	-	-
Property Taxes - MWD Portion of SWC GO Debt Service		-	-	-	-	-	-
Property Taxes - MWD GO Debt Service		-	-	-	-	-	-
Interest on Investments		340,070	340,070	-	-	-	340,070
Hydro-Power Revenue		-	-	-	-	-	-
CRA Power Revenue		-	-	-	-	-	-
Wadsworth Pumping Plant (DVL) Power Revenue		-	-	-	-	-	-
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)		-	-	-	-	-	-
Misc. allocated to supply (PVID Lease)		-	-	-	-	-	-
Property Taxes - SWC		-	-	-	-	-	-
Revenue Reserve used for Revenue Bonds - I&P		-	-	-	-	-	-
Annexation		-	-	-	-	-	-
Total Revenue Offsets		340,070	340,070	-	-	-	340,070
NET REVENUE REQUIREMENTS:		71,377,136	4,804,576	38,216,495	28,356,065	-	71,377,136

	Functionalization	Allocation Percentages					Total
		Fixed			Variable		
		Demand	Commodity	Standby	Commodity	Hydroelectric	
Departmental O&M							
Group	Item						
Office of General Manager		92,123	-	92,123	-	-	92,123
Office of General Manager	Board of Directors	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-
Human Resources		161,165	-	161,165	-	-	161,165
Water Systems Operations	Office of the Manager	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations Support Services	-	-	-	-	-	-
Water Systems Operations	Operations Support Services	-	-	-	-	-	-
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	-	-	-	-	-	-
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	-	-	-	-	-	-
Water Systems Operations	Environmental Health & Safety Section	-	-	-	-	-	-
Water Systems Operations	OSS, Fleet Services Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Power Support Unit	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations & Planning Section	-	-	-	-	-	-
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-
Sustainability, Resilience & Inr		-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-
Engineering Services		5,716,516	-	5,716,516	-	-	5,716,516
Business Technology	Administrative Services	-	-	-	-	-	-
Business Technology	Information Technology	442,391	-	442,391	-	-	442,391
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	-	-	-	-	-	-
Water Resources Managemen	Office of the Group Manager	-	-	-	-	-	-
Ethics Office		-	-	-	-	-	-
Real Property		-	-	-	-	-	-
General Counsel		-	-	-	-	-	-
General Auditor		-	-	-	-	-	-
Total Departmental O&M	-	6,412,195	-	6,412,195	-	-	6,412,195

		Functionalization	Allocation Percentages					% Total
			Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		102,411	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Office of General Manager	Board of Directors	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Bay Delta Initiatives	Bay Delta Initiatives	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Legislative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Media Communications Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Manager, External Affairs/Special Projects	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Conservation & Community Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Human Resources		201,593	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager	32,925	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Treatment Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations Support Services	6,390	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Support Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Desert Region / C&D CRA	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	System Operations Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Power Operations and Planning	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Planning & Programs Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Jensen	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Diemer	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Mills	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Skinner	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Weymouth	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Water Quality Section	714,215	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Eastern Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Western Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Manufacturing Services Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Environmental Health & Safety Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Fleet Services Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Power Support Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations & Planning Section	2,374	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Security Team & Security Management	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Sustainability, Resilience & Innovation		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Diversity, Equity & Inclusion		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Equal Employment Opportunity		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Office of the Chief Financial Officer		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Office of Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Engineering Services		5,158,067	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Administrative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Information Technology	653,641	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Planning & Development	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Implementation	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Office of the Group Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Ethics Office		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Real Property		753,105	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
General Counsel		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
General Auditor		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Departmental O&M		7,624,721	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
GENERAL DISTRICT REQUIREMENTS								
State Water Contract*								
Supply - O&M		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Supply - Capital		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Power - O&M & Off-Aq Capital		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Power - Capital (less Off-Aq)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Transmission - Capital - Commodity, Demand, & Standby		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Transmission - O&M - Commodity only		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Supply		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Power		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Other		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total State Water Contract		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Colorado River Aqueduct Power Costs								
		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Supply Programs (cash funded portion)								
		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Demand Management (cash funded portion)								
Local Resources Program		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Future Supply Actions & Stormwater Pilot		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Conservation Program (cash funded portion)		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Demand Management Costs		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Capital Financing								
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
G.O. Bond Debt Service	33,043,713	-	0.0%	0.0%	100.0%	0.0%	0.0%	100.0%
Debt Administration		-	0.0%	0.0%	100.0%	0.0%	0.0%	100.0%
Bond Defeasance	301,420	-	0.0%	0.0%	100.0%	0.0%	0.0%	100.0%
PAYGO		-	0.0%	0.0%	100.0%	0.0%	0.0%	100.0%
Total Capital Financing Costs	15,052,500	48,397,633	0.0%	0.0%	100.0%	0.0%	0.0%	100.0%
Other Operating Costs								
Operating Equipment		114,066	0.0%	0.0%	100.0%	0.0%	0.0%	100.0%
Succession Planning Labor Pool		64,541	0.0%	0.0%	100.0%	0.0%	0.0%	100.0%
OPEB/PERS Pre-Funding		-	0.0%	0.0%	100.0%	0.0%	0.0%	100.0%
Total Other Operating Costs		178,607	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Increase/(Decrease) in Required Reserves								
		-	0.0%	0.0%	100.0%	0.0%	0.0%	100.0%
Total General District Requirements								
		48,576,240	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
REQUIREMENTS BEFORE OFFSETS:								
		56,200,961	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Revenue Offsets								
Property Taxes - MWD Portion of SWC GO Debt Service		-	0.0%	0.0%	100.0%	0.0%	0.0%	100.0%
Property Taxes - MWD GO Debt Service		-	0.0%	0.0%	100.0%	0.0%	0.0%	100.0%
Interest on Investments	266,495	-	0.0%	0.0%	100.0%	0.0%	0.0%	100.0%
Hydro-Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
CRA Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Wadsworth Pumping Plant (DVL) Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to supply (PVID Lease)		-	0.0%	0.0%	100.0%	0.0%	0.0%	100.0%
Property Taxes - SWC		-	0.0%	0.0%	100.0%	0.0%	0.0%	100.0%
Revenue Reserve used for Revenue Bonds - I&P		-	0.0%	0.0%	100.0%	0.0%	0.0%	100.0%
Annexation		-	0.0%	0.0%	100.0%	0.0%	0.0%	100.0%
Total Revenue Offsets	266,495		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
NET REVENUE REQUIREMENTS:								
	-	55,934,466	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

	Functionalization	Allocation Percentages					Total
		Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M							
Group	Item						
Office of General Manager		102,411	-	102,411	-	-	102,411
Office of General Manager	Board of Directors	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-
Human Resources		201,593	-	201,593	-	-	201,593
Water Systems Operations	Office of the Manager	32,925	-	32,925	-	-	32,925
Water Systems Operations	Office of the Manager, Conveyance & Distribution S	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations Support Services	6,390	-	6,390	-	-	6,390
Water Systems Operations	Operations Support Services	-	-	-	-	-	-
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	714,215	-	714,215	-	-	714,215
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	-	-	-	-	-	-
Water Systems Operations	Environmental Health & Safety Section	-	-	-	-	-	-
Water Systems Operations	OSS, Fleet Services Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Power Support Unit	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations & Planning Secti	2,374	-	2,374	-	-	2,374
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-
Sustainability, Resilience & Inn		-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-
Engineering Services		5,158,067	-	5,158,067	-	-	5,158,067
Business Technology	Administrative Services	-	-	-	-	-	-
Business Technology	Information Technology	653,641	-	653,641	-	-	653,641
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	-	-	-	-	-	-
Water Resources Managemen	Office of the Group Manager	-	-	-	-	-	-
Ethics Office		-	-	-	-	-	-
Real Property		753,105	-	753,105	-	-	753,105
General Counsel		-	-	-	-	-	-
General Auditor		-	-	-	-	-	-
Total Departmental O&M		7,624,721	-	7,624,721	-	-	7,624,721
GENERAL DISTRICT REQUIREMENTS		-	-	-	-	-	-
State Water Contract*		-	-	-	-	-	-
Supply - O&M		-	-	-	-	-	-
Supply - Capital		-	-	-	-	-	-
Power - O&M & Off-Aq Capital		-	-	-	-	-	-
Power - Capital (less Off-Aq)		-	-	-	-	-	-
Transmission - Capital - Commodity, Demand, & Standby		-	-	-	-	-	-
Transmission - O&M - Commodity only		-	-	-	-	-	-
Delta Conveyance - Supply		-	-	-	-	-	-
Delta Conveyance - Power		-	-	-	-	-	-
Delta Conveyance - Other		-	-	-	-	-	-
Total State Water Contract		-	-	-	-	-	-
Colorado River Aqueduct Power Costs		-	-	-	-	-	-
Supply Programs (cash funded portion)		-	-	-	-	-	-
Demand Management (cash funded portion)		-	-	-	-	-	-
Local Resources Program		-	-	-	-	-	-
Future Supply Actions & Stormwater Pilot		-	-	-	-	-	-
Conservation Program (cash funded portion)		-	-	-	-	-	-
Total Demand Management Costs		-	-	-	-	-	-
Capital Financing		-	-	-	-	-	-
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		33,043,713	-	33,043,713	-	-	33,043,713
G.O. Bond Debt Service		-	-	-	-	-	-
Debt Administration		301,420	-	301,420	-	-	301,420
Bond Defeasance		-	-	-	-	-	-
PAYGO		15,052,500	-	15,052,500	-	-	15,052,500
Total Capital Financing Costs		48,397,633	-	48,397,633	-	-	48,397,633
Other Operating Costs		-	-	-	-	-	-
Operating Equipment		114,066	-	114,066	-	-	114,066
Succession Planning Labor Pool		64,541	-	64,541	-	-	64,541
OPEB/PERS Pre-Funding		-	-	-	-	-	-
Total Other Operating Costs		178,607	-	178,607	-	-	178,607
Increase/(Decrease) in Required Reserves		-	-	-	-	-	-
Total General District Requirements		48,576,240	-	48,576,240	-	-	48,576,240
REQUIREMENTS BEFORE OFFSETS:		56,200,961	-	7,624,721	48,576,240	-	56,200,961
Revenue Offsets		-	-	-	-	-	-
Property Taxes - MWD Portion of SWC GO Debt Service		-	-	-	-	-	-
Property Taxes - MWD GO Debt Service		-	-	-	-	-	-
Interest on Investments		266,495	-	266,495	-	-	266,495
Hydro-Power Revenue		-	-	-	-	-	-
CRA Power Revenue		-	-	-	-	-	-
Wadsworth Pumping Plant (DVL) Power Revenue		-	-	-	-	-	-
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)		-	-	-	-	-	-
Misc. allocated to supply (PVID Lease)		-	-	-	-	-	-
Property Taxes - SWC		-	-	-	-	-	-
Revenue Reserve used for Revenue Bonds - I&P		-	-	-	-	-	-
Annexation		-	-	-	-	-	-
Total Revenue Offsets		266,495	-	266,495	-	-	266,495
NET REVENUE REQUIREMENTS:		55,934,466	-	7,624,721	48,309,745	-	55,934,466

		Functionalization	Allocation Percentages					Total
			Fixed			Variable		
			Demand	Commodity	Standby	Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		90,379	-	90,379	-	-	-	90,379
Office of General Manager	Board of Directors	-	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-	-
Human Resources		158,115	-	158,115	-	-	-	158,115
Water Systems Operations	Office of the Manager	24,018	-	24,018	-	-	-	24,018
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations Support Services	4,856	-	4,856	-	-	-	4,856
Water Systems Operations	Operations Support Services	-	-	-	-	-	-	-
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	587,922	-	587,922	-	-	-	587,922
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	-	-	-	-	-	-	-
Water Systems Operations	Environmental Health & Safety Section	-	-	-	-	-	-	-
Water Systems Operations	OSS, Fleet Services Unit	-	-	-	-	-	-	-
Water Systems Operations	OSS, Power Support Unit	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations & Planning Section	2,159	-	2,159	-	-	-	2,159
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-	-
Sustainability, Resilience & Inr		-	-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-	-
Engineering Services		4,338,949	-	4,338,949	-	-	-	4,338,949
Business Technology	Administrative Services	-	-	-	-	-	-	-
Business Technology	Information Technology	434,018	-	434,018	-	-	-	434,018
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	-	-	-	-	-	-	-
Water Resources Managemen	Office of the Group Manager	-	-	-	-	-	-	-
Ethics Office		-	-	-	-	-	-	-
Real Property		320,579	-	320,579	-	-	-	320,579
General Counsel		-	-	-	-	-	-	-
General Auditor		-	-	-	-	-	-	-
Total Departmental O&M	-	5,960,995	-	5,960,995	-	-	-	5,960,995

		Functionalization	Allocation Percentages					% Total
			Demand	Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		82,573	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Office of General Manager	Board of Directors	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Bay Delta Initiatives	Bay Delta Initiatives	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Legislative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Media Communications Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Manager, External Affairs/Special Projects	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Conservation & Community Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Human Resources		162,544	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager	32,925	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Treatment Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations Support Services	6,390	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Support Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Desert Region / C&D CRA	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	System Operations Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Power Operations and Planning	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Planning & Programs Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Jensen	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Diemer	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Mills	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Skinner	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Weymouth	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Water Quality Section	714,215	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Eastern Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Western Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Manufacturing Services Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Environmental Health & Safety Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Fleet Services Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Power Support Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations & Planning Section	2,374	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Security Team & Security Management	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Sustainability, Resilience & Innovation		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Diversity, Equity & Inclusion		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Equal Employment Opportunity		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Office of the Chief Financial Officer		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Office of Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Engineering Services		3,330,770	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Administrative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Information Technology	527,028	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Planning & Development	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Implementation	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Office of the Group Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Ethics Office		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Real Property		1,288,968	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
General Counsel		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
General Auditor		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Departmental O&M		6,147,788	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
GENERAL DISTRICT REQUIREMENTS								
State Water Contract*								
Supply - O&M		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Supply - Capital		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Power - O&M & Off-Aq Capital		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Power - Capital (less Off-Aq)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Transmission - Capital - Commodity, Demand, & Standby		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Transmission - O&M - Commodity only		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Supply		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Power		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Other		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total State Water Contract		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Colorado River Aqueduct Power Costs								
		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Supply Programs (cash funded portion)								
		11,720,987	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Demand Management (cash funded portion)								
Local Resources Program		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Future Supply Actions & Stormwater Pilot		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Conservation Program (cash funded portion)		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Demand Management Costs		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Capital Financing								
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
G.O. Bond Debt Service	21,337,644	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Debt Administration	194,639	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Bond Defeasance	-	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
PAYGO	9,720,000	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Capital Financing Costs	31,252,283	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Other Operating Costs								
Operating Equipment	91,971	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Succession Planning Labor Pool	52,039	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
OPEB/PERS Pre-Funding	-	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Other Operating Costs	144,010	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Increase/(Decrease) in Required Reserves								
		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total General District Requirements								
		43,117,281	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
REQUIREMENTS BEFORE OFFSETS:								
		49,265,069	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Revenue Offsets								
Property Taxes - MWD Portion of SWC GO Debt Service	-	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Property Taxes - MWD GO Debt Service	-	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Interest on Investments	233,606	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Hydro-Power Revenue	-	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
CRA Power Revenue	-	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Wadsworth Pumping Plant (DVL) Power Revenue	-	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)	-	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to supply (PVID Lease)	-	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Property Taxes - SWC	-	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Revenue Reserve used for Revenue Bonds - I&P	-	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Annexation	-	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Revenue Offsets	233,606	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
NET REVENUE REQUIREMENTS:								
-		49,031,463	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

	Functionalization	Allocation Percentages					Total
		Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M							
Group	Item						
Office of General Manager	Office of General Manager	82,573	-	82,573	-	-	82,573
Office of General Manager	Board of Directors	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-
Human Resources	Human Resources	162,544	-	162,544	-	-	162,544
Water Systems Operations	Office of the Manager	32,925	-	32,925	-	-	32,925
Water Systems Operations	Office of the Manager, Conveyance & Distribution S	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations Support Services	6,390	-	6,390	-	-	6,390
Water Systems Operations	Operations Support Services	-	-	-	-	-	-
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	714,215	-	714,215	-	-	714,215
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	-	-	-	-	-	-
Water Systems Operations	Environmental Health & Safety Section	-	-	-	-	-	-
Water Systems Operations	OSS, Fleet Services Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Power Support Unit	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations & Planning Secti	2,374	-	2,374	-	-	2,374
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-
Sustainability, Resilience & Inn	Sustainability, Resilience & Inn	-	-	-	-	-	-
Diversity, Equity & Inclusion	Diversity, Equity & Inclusion	-	-	-	-	-	-
Equal Employment Opportunity	Equal Employment Opportunity	-	-	-	-	-	-
Office of the Chief Financial O	Office of the Chief Financial O	-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-
Engineering Services	Engineering Services	3,330,770	-	3,330,770	-	-	3,330,770
Business Technology	Administrative Services	-	-	-	-	-	-
Business Technology	Information Technology	527,028	-	527,028	-	-	527,028
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	-	-	-	-	-	-
Water Resources Managemen	Office of the Group Manager	-	-	-	-	-	-
Ethics Office	Ethics Office	-	-	-	-	-	-
Real Property	Real Property	1,288,968	-	1,288,968	-	-	1,288,968
General Counsel	General Counsel	-	-	-	-	-	-
General Auditor	General Auditor	-	-	-	-	-	-
Total Departmental O&M	-	6,147,788	-	6,147,788	-	-	6,147,788
GENERAL DISTRICT REQUIREMENTS							
State Water Contract*							
Supply - O&M	Supply - O&M	-	-	-	-	-	-
Supply - Capital	Supply - Capital	-	-	-	-	-	-
Power - O&M & Off-Aq Capital	Power - O&M & Off-Aq Capital	-	-	-	-	-	-
Power - Capital (less Off-Aq)	Power - Capital (less Off-Aq)	-	-	-	-	-	-
Transmission - Capital - Commodity, Demand, & Standby	Transmission - Capital - Commodity, Demand, & Standby	-	-	-	-	-	-
Transmission - O&M - Commodity only	Transmission - O&M - Commodity only	-	-	-	-	-	-
Delta Conveyance - Supply	Delta Conveyance - Supply	-	-	-	-	-	-
Delta Conveyance - Power	Delta Conveyance - Power	-	-	-	-	-	-
Delta Conveyance - Other	Delta Conveyance - Other	-	-	-	-	-	-
Total State Water Contract		-	-	-	-	-	-
Colorado River Aqueduct Power Costs							
Supply Programs (cash funded portion)		11,720,987	-	11,720,987	-	-	11,720,987
Demand Management (cash funded portion)							
Local Resources Program	Local Resources Program	-	-	-	-	-	-
Future Supply Actions & Stormwater Pilot	Future Supply Actions & Stormwater Pilot	-	-	-	-	-	-
Conservation Program (cash funded portion)	Conservation Program (cash funded portion)	-	-	-	-	-	-
Total Demand Management Costs		-	-	-	-	-	-
Capital Financing							
Revenue Bond Debt Service net of BABs Interest Subsidy Payment	Revenue Bond Debt Service net of BABs Interest Subsidy Payment	21,337,644	-	21,337,644	-	-	21,337,644
G.O. Bond Debt Service	G.O. Bond Debt Service	-	-	-	-	-	-
Debt Administration	Debt Administration	194,639	-	194,639	-	-	194,639
Bond Defeasance	Bond Defeasance	-	-	-	-	-	-
PAYGO	PAYGO	9,720,000	-	9,720,000	-	-	9,720,000
Total Capital Financing Costs		31,252,283	-	31,252,283	-	-	31,252,283
Other Operating Costs							
Operating Equipment	Operating Equipment	91,971	-	91,971	-	-	91,971
Succession Planning Labor Pool	Succession Planning Labor Pool	52,039	-	52,039	-	-	52,039
OPEB/PERS Pre-Funding	OPEB/PERS Pre-Funding	-	-	-	-	-	-
Total Other Operating Costs		144,010	-	144,010	-	-	144,010
Increase/(Decrease) in Required Reserves							
Total General District Requirements		43,117,281	-	43,117,281	-	-	43,117,281
REQUIREMENTS BEFORE OFFSETS:		49,265,069	-	49,265,069	-	-	49,265,069
Revenue Offsets							
Property Taxes - MWD Portion of SWC GO Debt Service	Property Taxes - MWD Portion of SWC GO Debt Service	-	-	-	-	-	-
Property Taxes - MWD GO Debt Service	Property Taxes - MWD GO Debt Service	-	-	-	-	-	-
Interest on Investments	Interest on Investments	233,606	-	233,606	-	-	233,606
Hydro-Power Revenue	Hydro-Power Revenue	-	-	-	-	-	-
CRA Power Revenue	CRA Power Revenue	-	-	-	-	-	-
Wadsworth Pumping Plant (DVL) Power Revenue	Wadsworth Pumping Plant (DVL) Power Revenue	-	-	-	-	-	-
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)	Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)	-	-	-	-	-	-
Misc. allocated to supply (PVID Lease)	Misc. allocated to supply (PVID Lease)	-	-	-	-	-	-
Property Taxes - SWC	Property Taxes - SWC	-	-	-	-	-	-
Revenue Reserve used for Revenue Bonds - I&P	Revenue Reserve used for Revenue Bonds - I&P	-	-	-	-	-	-
Annexation	Annexation	-	-	-	-	-	-
Total Revenue Offsets		233,606	-	233,606	-	-	233,606
NET REVENUE REQUIREMENTS:		49,031,463	-	49,031,463	-	-	49,031,463

		Functionalization	Allocation Percentages					Total
			Fixed			Variable		
			Demand	Commodity	Standby	Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		72,872	-	72,872	-	-	-	72,872
Office of General Manager	Board of Directors	-	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-	-
Human Resources		127,488	-	127,488	-	-	-	127,488
Water Systems Operations	Office of the Manager	24,018	-	24,018	-	-	-	24,018
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations Support Services	4,856	-	4,856	-	-	-	4,856
Water Systems Operations	Operations Support Services	-	-	-	-	-	-	-
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	587,922	-	587,922	-	-	-	587,922
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	-	-	-	-	-	-	-
Water Systems Operations	Environmental Health & Safety Section	-	-	-	-	-	-	-
Water Systems Operations	OSS, Fleet Services Unit	-	-	-	-	-	-	-
Water Systems Operations	OSS, Power Support Unit	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations & Planning Section	2,159	-	2,159	-	-	-	2,159
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-	-
Sustainability, Resilience & Inr		-	-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-	-
Engineering Services		2,801,832	-	2,801,832	-	-	-	2,801,832
Business Technology	Administrative Services	-	-	-	-	-	-	-
Business Technology	Information Technology	349,947	-	349,947	-	-	-	349,947
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	-	-	-	-	-	-	-
Water Resources Managemen	Office of the Group Manager	-	-	-	-	-	-	-
Ethics Office		-	-	-	-	-	-	-
Real Property		548,683	-	548,683	-	-	-	548,683
General Counsel		-	-	-	-	-	-	-
General Auditor		-	-	-	-	-	-	-
Total Departmental O&M	-	4,519,778	-	4,519,778	-	-	-	4,519,778

		Functionalization	Allocation Percentages					% Total
			Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		54,868	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Office of General Manager	Board of Directors	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Bay Delta Initiatives	Bay Delta Initiatives	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Legislative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Media Communications Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Manager, External Affairs/Special Projects	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Conservation & Community Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Human Resources		108,007	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager	32,925	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Treatment Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations Support Services	6,390	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Support Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Desert Region / C&D CRA	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	System Operations Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Power Operations and Planning	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Planning & Programs Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Jensen	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Diemer	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Mills	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Skinner	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Weymouth	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Water Quality Section	714,215	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Eastern Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Western Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Manufacturing Services Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Environmental Health & Safety Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Fleet Services Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Power Support Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations & Planning Section	2,374	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Security Team & Security Management	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Sustainability, Resilience & Innovation		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Diversity, Equity & Inclusion		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Equal Employment Opportunity		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Office of the Chief Financial Officer		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Office of Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Engineering Services		2,511,955	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Administrative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Information Technology	350,199	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Planning & Development	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Implementation	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Office of the Group Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Ethics Office		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Real Property		304,139	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
General Counsel		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
General Auditor		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Departmental O&M		4,085,073	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
GENERAL DISTRICT REQUIREMENTS								
State Water Contract*								
Supply - O&M		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Supply - Capital		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Power - O&M & Off-Aq Capital		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Power - Capital (less Off-Aq)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Transmission - Capital - Commodity, Demand, & Standby		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Transmission - O&M - Commodity only		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Supply		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Power		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Other		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total State Water Contract		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Colorado River Aqueduct Power Costs								
		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Supply Programs (cash funded portion)								
		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Demand Management (cash funded portion)								
Local Resources Program		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Future Supply Actions & Stormwater Pilot		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Conservation Program (cash funded portion)		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Demand Management Costs		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Capital Financing								
		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		16,092,140	34.7%	38.6%	26.7%	0.0%	0.0%	100.0%
G.O. Bond Debt Service		-	34.7%	38.6%	26.7%	0.0%	0.0%	100.0%
Debt Administration		146,790	34.7%	38.6%	26.7%	0.0%	0.0%	100.0%
Bond Defeasance		-	34.7%	38.6%	26.7%	0.0%	0.0%	100.0%
PAYGO		7,330,500	34.7%	38.6%	26.7%	0.0%	0.0%	100.0%
Total Capital Financing Costs		23,569,430	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Other Operating Costs								
Operating Equipment		61,113	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Succession Planning Labor Pool		34,579	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
OPEB/PERS Pre-Funding		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Other Operating Costs		95,692	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Increase/(Decrease) in Required Reserves								
		-	34.6%	38.8%	26.5%	0.0%	0.0%	100.0%
Total General District Requirements								
		23,665,122	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
REQUIREMENTS BEFORE OFFSETS:								
		27,750,195	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Revenue Offsets								
Property Taxes - MWD Portion of SWC GO Debt Service		-	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Property Taxes - MWD GO Debt Service		-	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Interest on Investments		131,586	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Hydro-Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
CRA Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Wadsworth Pumping Plant (DVL) Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to supply (PVID Lease)		-	29.5%	47.8%	22.6%	0.0%	0.0%	100.0%
Property Taxes - SWC		-	34.7%	38.6%	26.7%	0.0%	0.0%	100.0%
Revenue Reserve used for Revenue Bonds - I&P		-	34.7%	38.6%	26.7%	0.0%	0.0%	100.0%
Annexation		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total Revenue Offsets		131,586	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
NET REVENUE REQUIREMENTS:								
-		27,618,608	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

	Functionalization	Allocation Percentages					Total
		Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M							
Group	Item						
Office of General Manager		54,868	-	54,868	-	-	54,868
Office of General Manager	Board of Directors	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-
Human Resources		108,007	-	108,007	-	-	108,007
Water Systems Operations	Office of the Manager	32,925	-	32,925	-	-	32,925
Water Systems Operations	Office of the Manager, Conveyance & Distribution S	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations Support Services	6,390	-	6,390	-	-	6,390
Water Systems Operations	Operations Support Services	-	-	-	-	-	-
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	714,215	-	714,215	-	-	714,215
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	-	-	-	-	-	-
Water Systems Operations	Environmental Health & Safety Section	-	-	-	-	-	-
Water Systems Operations	OSS, Fleet Services Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Power Support Unit	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations & Planning Secti	2,374	-	2,374	-	-	2,374
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-
Sustainability, Resilience & Inn		-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-
Engineering Services		2,511,955	-	2,511,955	-	-	2,511,955
Business Technology	Administrative Services	-	-	-	-	-	-
Business Technology	Information Technology	350,199	-	350,199	-	-	350,199
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	-	-	-	-	-	-
Water Resources Managemen	Office of the Group Manager	-	-	-	-	-	-
Ethics Office		-	-	-	-	-	-
Real Property		304,139	-	304,139	-	-	304,139
General Counsel		-	-	-	-	-	-
General Auditor		-	-	-	-	-	-
Total Departmental O&M		4,085,073	-	4,085,073	-	-	4,085,073
GENERAL DISTRICT REQUIREMENTS		-	-	-	-	-	-
State Water Contract*		-	-	-	-	-	-
Supply - O&M		-	-	-	-	-	-
Supply - Capital		-	-	-	-	-	-
Power - O&M & Off-Aq Capital		-	-	-	-	-	-
Power - Capital (less Off-Aq)		-	-	-	-	-	-
Transmission - Capital - Commodity, Demand, & Standby		-	-	-	-	-	-
Transmission - O&M - Commodity only		-	-	-	-	-	-
Delta Conveyance - Supply		-	-	-	-	-	-
Delta Conveyance - Power		-	-	-	-	-	-
Delta Conveyance - Other		-	-	-	-	-	-
Total State Water Contract		-	-	-	-	-	-
Colorado River Aqueduct Power Costs		-	-	-	-	-	-
Supply Programs (cash funded portion)		-	-	-	-	-	-
Demand Management (cash funded portion)		-	-	-	-	-	-
Local Resources Program		-	-	-	-	-	-
Future Supply Actions & Stormwater Pilot		-	-	-	-	-	-
Conservation Program (cash funded portion)		-	-	-	-	-	-
Total Demand Management Costs		-	-	-	-	-	-
Capital Financing		-	-	-	-	-	-
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		16,092,140	5,591,988	6,211,160	4,288,992	-	16,092,140
G.O. Bond Debt Service		-	-	-	-	-	-
Debt Administration		146,790	51,009	56,657	39,124	-	146,790
Bond Defeasance		-	-	-	-	-	-
PAYGO		7,330,500	2,547,335	2,829,388	1,953,777	-	7,330,500
Total Capital Financing Costs		23,569,430	8,190,332	9,097,206	6,281,893	-	23,569,430
Other Operating Costs		-	-	-	-	-	-
Operating Equipment		61,113	-	61,113	-	-	61,113
Succession Planning Labor Pool		34,579	-	34,579	-	-	34,579
OPEB/PERS Pre-Funding		-	-	-	-	-	-
Total Other Operating Costs		95,692	-	95,692	-	-	95,692
Increase/(Decrease) in Required Reserves		-	-	-	-	-	-
Total General District Requirements		23,665,122	8,190,332	9,192,897	6,281,893	-	23,665,122
REQUIREMENTS BEFORE OFFSETS:		27,750,195	8,190,332	13,277,970	6,281,893	-	27,750,195
Revenue Offsets		-	-	-	-	-	-
Property Taxes - MWD Portion of SWC GO Debt Service		-	-	-	-	-	-
Property Taxes - MWD GO Debt Service		-	-	-	-	-	-
Interest on Investments		131,586	-	131,586	-	-	131,586
Hydro-Power Revenue		-	-	-	-	-	-
CRA Power Revenue		-	-	-	-	-	-
Wadsworth Pumping Plant (DVL) Power Revenue		-	-	-	-	-	-
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)		-	-	-	-	-	-
Misc. allocated to supply (PVID Lease)		-	-	-	-	-	-
Property Taxes - SWC		-	-	-	-	-	-
Revenue Reserve used for Revenue Bonds - I&P		-	-	-	-	-	-
Annexation		-	-	-	-	-	-
Total Revenue Offsets		131,586	-	131,586	-	-	131,586
NET REVENUE REQUIREMENTS:		27,618,608	8,190,332	13,146,383	6,281,893	-	27,618,608

		Functionalization	Allocation Percentages					Total
			Fixed			Variable		
			Demand	Commodity	Standby	Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		48,422	-	48,422	-	-	-	48,422
Office of General Manager	Board of Directors	-	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-	-
Human Resources		84,713	-	84,713	-	-	-	84,713
Water Systems Operations	Office of the Manager	24,018	-	24,018	-	-	-	24,018
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations Support Services	4,856	-	4,856	-	-	-	4,856
Water Systems Operations	Operations Support Services	-	-	-	-	-	-	-
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	587,922	-	587,922	-	-	-	587,922
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	-	-	-	-	-	-	-
Water Systems Operations	Environmental Health & Safety Section	-	-	-	-	-	-	-
Water Systems Operations	OSS, Fleet Services Unit	-	-	-	-	-	-	-
Water Systems Operations	OSS, Power Support Unit	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations & Planning Section	2,159	-	2,159	-	-	-	2,159
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-	-
Sustainability, Resilience & Inr		-	-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-	-
Engineering Services		2,113,049	-	2,113,049	-	-	-	2,113,049
Business Technology	Administrative Services	-	-	-	-	-	-	-
Business Technology	Information Technology	232,532	-	232,532	-	-	-	232,532
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	-	-	-	-	-	-	-
Water Resources Managemen	Office of the Group Manager	-	-	-	-	-	-	-
Ethics Office		-	-	-	-	-	-	-
Real Property		129,464	-	129,464	-	-	-	129,464
General Counsel		-	-	-	-	-	-	-
General Auditor		-	-	-	-	-	-	-
Total Departmental O&M	-	3,227,136	-	3,227,136	-	-	-	3,227,136

		Functionalization	Allocation Percentages					% Total
			Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Office of General Manager	Board of Directors	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Bay Delta Initiatives	Bay Delta Initiatives	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Legislative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Media Communications Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Manager, External Affairs/Special Projects	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Conservation & Community Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Human Resources		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Treatment Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations Support Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Support Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Desert Region / C&D CRA	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	System Operations Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Power Operations and Planning	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Planning & Programs Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Jensen	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Diemer	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Mills	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Skinner	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Weymouth	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Water Quality Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Eastern Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Western Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Manufacturing Services Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Environmental Health & Safety Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Fleet Services Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Power Support Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations & Planning Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Security Team & Security Management	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Sustainability, Resilience & Innovation		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Diversity, Equity & Inclusion		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Equal Employment Opportunity		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Office of the Chief Financial Officer		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Office of Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Engineering Services		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Administrative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Information Technology	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Planning & Development	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Implementation	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Office of the Group Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Ethics Office		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Real Property		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
General Counsel		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
General Auditor		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Departmental O&M		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
GENERAL DISTRICT REQUIREMENTS								
State Water Contract*								
Supply - O&M		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Supply - Capital		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Power - O&M & Off-Aq Capital		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Power - Capital (less Off-Aq)		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Transmission - Capital - Commodity, Demand, & Standby		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Transmission - O&M - Commodity only		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Supply		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Power		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Other		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total State Water Contract		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Colorado River Aqueduct Power Costs		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Supply Programs (cash funded portion)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Demand Management (cash funded portion)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Local Resources Program		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Future Supply Actions & Stormwater Pilot		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Conservation Program (cash funded portion)		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Demand Management Costs		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Capital Financing		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
G.O. Bond Debt Service		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Debt Administration		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Bond Defeasance		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
PAYGO		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total Capital Financing Costs		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Other Operating Costs								
Operating Equipment		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Succession Planning Labor Pool		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
OPEB/PERS Pre-Funding		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Other Operating Costs		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Increase/(Decrease) in Required Reserves		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total General District Requirements		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
REQUIREMENTS BEFORE OFFSETS:		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Revenue Offsets								
Property Taxes - MWD Portion of SWC GO Debt Service		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Property Taxes - MWD GO Debt Service		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Interest on Investments		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Hydro-Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
CRA Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Wadsworth Pumping Plant (DVL) Power Revenue	545,067	-	0.0%	0.0%	0.0%	100.0%	0.0%	100.0%
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to supply (PVID Lease)		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Property Taxes - SWC		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Revenue Reserve used for Revenue Bonds - I&P		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Annexation		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total Revenue Offsets	545,067	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
NET REVENUE REQUIREMENTS:		-	(545,067)	0.0%	0.0%	0.0%	0.0%	0.0%

	Functionalization	Allocation Percentages					Total
		Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M							
Group	Item						
Office of General Manager	Office of General Manager	-	-	-	-	-	-
Office of General Manager	Board of Directors	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-
Human Resources		-	-	-	-	-	-
Water Systems Operations	Office of the Manager	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Conveyance & Distribution S	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations Support Services	-	-	-	-	-	-
Water Systems Operations	Operations Support Services	-	-	-	-	-	-
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	-	-	-	-	-	-
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	-	-	-	-	-	-
Water Systems Operations	Environmental Health & Safety Section	-	-	-	-	-	-
Water Systems Operations	OSS, Fleet Services Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Power Support Unit	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations & Planning Secti	-	-	-	-	-	-
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-
Sustainability, Resilience & Inn		-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-
Engineering Services		-	-	-	-	-	-
Business Technology	Administrative Services	-	-	-	-	-	-
Business Technology	Information Technology	-	-	-	-	-	-
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	-	-	-	-	-	-
Water Resources Managemen	Office of the Group Manager	-	-	-	-	-	-
Ethics Office		-	-	-	-	-	-
Real Property		-	-	-	-	-	-
General Counsel		-	-	-	-	-	-
General Auditor		-	-	-	-	-	-
Total Departmental O&M	-	-	-	-	-	-	-
GENERAL DISTRICT REQUIREMENTS		-	-	-	-	-	-
State Water Contract*		-	-	-	-	-	-
Supply - O&M		-	-	-	-	-	-
Supply - Capital		-	-	-	-	-	-
Power - O&M & Off-Aq Capital		-	-	-	-	-	-
Power - Capital (less Off-Aq)		-	-	-	-	-	-
Transmission - Capital - Commodity, Demand, & Standby		-	-	-	-	-	-
Transmission - O&M - Commodity only		-	-	-	-	-	-
Delta Conveyance - Supply		-	-	-	-	-	-
Delta Conveyance - Power		-	-	-	-	-	-
Delta Conveyance - Other		-	-	-	-	-	-
Total State Water Contract		-	-	-	-	-	-
Colorado River Aqueduct Power Costs		-	-	-	-	-	-
Supply Programs (cash funded portion)		-	-	-	-	-	-
Demand Management (cash funded portion)		-	-	-	-	-	-
Local Resources Program		-	-	-	-	-	-
Future Supply Actions & Stormwater Pilot		-	-	-	-	-	-
Conservation Program (cash funded portion)		-	-	-	-	-	-
Total Demand Management Costs		-	-	-	-	-	-
Capital Financing		-	-	-	-	-	-
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		-	-	-	-	-	-
G.O. Bond Debt Service		-	-	-	-	-	-
Debt Administration		-	-	-	-	-	-
Bond Defeasance		-	-	-	-	-	-
PAYGO		-	-	-	-	-	-
Total Capital Financing Costs		-	-	-	-	-	-
Other Operating Costs		-	-	-	-	-	-
Operating Equipment		-	-	-	-	-	-
Succession Planning Labor Pool		-	-	-	-	-	-
OPEB/PERS Pre-Funding		-	-	-	-	-	-
Total Other Operating Costs		-	-	-	-	-	-
Increase/(Decrease) in Required Reserves		-	-	-	-	-	-
Total General District Requirements		-	-	-	-	-	-
REQUIREMENTS BEFORE OFFSETS:		-	-	-	-	-	-
Revenue Offsets		-	-	-	-	-	-
Property Taxes - MWD Portion of SWC GO Debt Service		-	-	-	-	-	-
Property Taxes - MWD GO Debt Service		-	-	-	-	-	-
Interest on Investments		-	-	-	-	-	-
Hydro-Power Revenue		-	-	-	-	-	-
CRA Power Revenue		-	-	-	-	-	-
Wadsworth Pumping Plant (DVL) Power Revenue	545,067	-	-	-	545,067	-	545,067
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)		-	-	-	-	-	-
Misc. allocated to supply (PVID Lease)		-	-	-	-	-	-
Property Taxes - SWC		-	-	-	-	-	-
Revenue Reserve used for Revenue Bonds - I&P		-	-	-	-	-	-
Annexation		-	-	-	-	-	-
Total Revenue Offsets	545,067	-	-	-	545,067	-	545,067
NET REVENUE REQUIREMENTS:	(545,067)	-	-	-	(545,067)	-	(545,067)

	Functionalization	Allocation Percentages					Total
		Fixed			Variable		
		Demand	Commodity	Standby	Commodity	Hydroelectric	
Departmental O&M							
Group	Item						
Office of General Manager		-	-	-	-	-	-
Office of General Manager	Board of Directors	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-
Human Resources		-	-	-	-	-	-
Water Systems Operations	Office of the Manager	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations Support Services	-	-	-	-	-	-
Water Systems Operations	Operations Support Services	-	-	-	-	-	-
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	-	-	-	-	-	-
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	-	-	-	-	-	-
Water Systems Operations	Environmental Health & Safety Section	-	-	-	-	-	-
Water Systems Operations	OSS, Fleet Services Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Power Support Unit	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations & Planning Section	-	-	-	-	-	-
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-
Sustainability, Resilience & Inr		-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-
Engineering Services		-	-	-	-	-	-
Business Technology	Administrative Services	-	-	-	-	-	-
Business Technology	Information Technology	-	-	-	-	-	-
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	-	-	-	-	-	-
Water Resources Managemen	Office of the Group Manager	-	-	-	-	-	-
Ethics Office		-	-	-	-	-	-
Real Property		-	-	-	-	-	-
General Counsel		-	-	-	-	-	-
General Auditor		-	-	-	-	-	-
Total Departmental O&M	-	-	-	-	-	-	-

		Functionalization	Allocation Percentages					% Total
			Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		406,048	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Office of General Manager	Board of Directors	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Bay Delta Initiatives	Bay Delta Initiatives	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Legislative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Media Communications Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Manager, External Affairs/Special Projects	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Conservation & Community Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Human Resources		799,299	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager	819,797	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Treatment Section	214,802	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations Support Services	159,098	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Support Services	98,943	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Desert Region / C&D CRA	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	System Operations Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Power Operations and Planning	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Planning & Programs Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Jensen	17,461,395	0.0%	63.2%	0.0%	36.8%	0.0%	100.0%
Water Systems Operations	Treatment Diemer	-	0.0%	55.3%	0.0%	44.7%	0.0%	100.0%
Water Systems Operations	Treatment Mills	-	0.0%	77.8%	0.0%	22.2%	0.0%	100.0%
Water Systems Operations	Treatment Skinner	-	0.0%	64.2%	0.0%	35.8%	0.0%	100.0%
Water Systems Operations	Treatment Weymouth	-	0.0%	61.0%	0.0%	39.0%	0.0%	100.0%
Water Systems Operations	Water Quality Section	2,893,961	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Eastern Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Western Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Manufacturing Services Unit	145,820	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Environmental Health & Safety Section	1,317,542	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Fleet Services Unit	566,065	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Power Support Unit	282,970	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations & Planning Section	59,119	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Security Team & Security Management	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Sustainability, Resilience & Innovation		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Diversity, Equity & Inclusion		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Equal Employment Opportunity		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Office of the Chief Financial Officer		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Office of Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Engineering Services		2,414,808	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Administrative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Information Technology	2,591,623	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Planning & Development	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Implementation	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Office of the Group Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Ethics Office		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Real Property		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
General Counsel		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
General Auditor		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Departmental O&M		30,231,288	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
GENERAL DISTRICT REQUIREMENTS								
State Water Contract*								
Supply - O&M		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Supply - Capital		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Power - O&M & Off-Aq Capital		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Power - Capital (less Off-Aq)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Transmission - Capital - Commodity, Demand, & Standby		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Transmission - O&M - Commodity only		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Supply		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Power		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Other		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total State Water Contract		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Colorado River Aqueduct Power Costs								
		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Supply Programs (cash funded portion)								
		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Demand Management (cash funded portion)								
Local Resources Program		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Future Supply Actions & Stormwater Pilot		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Conservation Program (cash funded portion)		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Demand Management Costs		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Capital Financing								
		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		15,469,792	31.8%	29.5%	38.7%	0.0%	0.0%	100.0%
G.O. Bond Debt Service		102,612	31.8%	29.5%	38.7%	0.0%	0.0%	100.0%
Debt Administration		141,113	31.8%	29.5%	38.7%	0.0%	0.0%	100.0%
Bond Defeasance		-	31.8%	29.5%	38.7%	0.0%	0.0%	100.0%
PAYGO		7,047,000	31.8%	29.5%	38.7%	0.0%	0.0%	100.0%
Total Capital Financing Costs		22,760,518	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Other Operating Costs								
Operating Equipment		452,261	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Succession Planning Labor Pool		255,897	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
OPEB/PERS Pre-Funding		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Other Operating Costs		708,158	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Increase/(Decrease) in Required Reserves								
		-	30.9%	31.6%	37.5%	0.0%	0.0%	100.0%
Total General District Requirements								
		23,468,676	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
REQUIREMENTS BEFORE OFFSETS:								
		53,699,964	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Revenue Offsets								
Property Taxes - MWD Portion of SWC GO Debt Service		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Property Taxes - MWD GO Debt Service		102,612	0.0%	0.0%	100.0%	0.0%	0.0%	100.0%
Interest on Investments		254,636	31.8%	29.5%	38.7%	0.0%	0.0%	100.0%
Hydro-Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
CRA Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Wadsworth Pumping Plant (DVL) Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to supply (PVID Lease)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Property Taxes - SWC		-	31.8%	29.5%	38.7%	0.0%	0.0%	100.0%
Revenue Reserve used for Revenue Bonds - I&P		-	31.8%	29.5%	38.7%	0.0%	0.0%	100.0%
Annexation		-	31.8%	29.5%	38.7%	0.0%	0.0%	100.0%
Total Revenue Offsets		357,248	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
NET REVENUE REQUIREMENTS:								
-		53,342,717	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

	Functionalization	Allocation Percentages					Total
		Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M							
Group	Item						
Office of General Manager		406,048	-	406,048	-	-	406,048
Office of General Manager	Board of Directors	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-
Human Resources		799,299	-	799,299	-	-	799,299
Water Systems Operations	Office of the Manager	819,797	-	819,797	-	-	819,797
Water Systems Operations	Office of the Manager, Conveyance & Distribution S	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	214,802	-	214,802	-	-	214,802
Water Systems Operations	Office of the Manager, Operations Support Services	159,098	-	159,098	-	-	159,098
Water Systems Operations	Operations Support Services	98,943	-	98,943	-	-	98,943
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	17,461,395	-	11,032,071	-	6,429,323	17,461,395
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	2,893,961	-	2,893,961	-	-	2,893,961
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	145,820	-	145,820	-	-	145,820
Water Systems Operations	Environmental Health & Safety Section	1,317,542	-	1,317,542	-	-	1,317,542
Water Systems Operations	OSS, Fleet Services Unit	566,065	-	566,065	-	-	566,065
Water Systems Operations	OSS, Power Support Unit	282,970	-	282,970	-	-	282,970
Water Systems Operations	Office of the Manager, Operations & Planning Secti	59,119	-	59,119	-	-	59,119
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-
Sustainability, Resilience & Inn		-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-
Engineering Services		2,414,808	-	2,414,808	-	-	2,414,808
Business Technology	Administrative Services	-	-	-	-	-	-
Business Technology	Information Technology	2,591,623	-	2,591,623	-	-	2,591,623
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	-	-	-	-	-	-
Water Resources Managemen	Office of the Group Manager	-	-	-	-	-	-
Ethics Office		-	-	-	-	-	-
Real Property		-	-	-	-	-	-
General Counsel		-	-	-	-	-	-
General Auditor		-	-	-	-	-	-
Total Departmental O&M	-	30,231,288	-	23,801,965	-	6,429,323	30,231,288
GENERAL DISTRICT REQUIREMENTS							
		-	-	-	-	-	-
State Water Contract*							
Supply - O&M		-	-	-	-	-	-
Supply - Capital		-	-	-	-	-	-
Power - O&M & Off-Aq Capital		-	-	-	-	-	-
Power - Capital (less Off-Aq)		-	-	-	-	-	-
Transmission - Capital - Commodity, Demand, & Standby		-	-	-	-	-	-
Transmission - O&M - Commodity only		-	-	-	-	-	-
Delta Conveyance - Supply		-	-	-	-	-	-
Delta Conveyance - Power		-	-	-	-	-	-
Delta Conveyance - Other		-	-	-	-	-	-
Total State Water Contract		-	-	-	-	-	-
Colorado River Aqueduct Power Costs							
		-	-	-	-	-	-
Supply Programs (cash funded portion)							
		-	-	-	-	-	-
Demand Management (cash funded portion)							
Local Resources Program		-	-	-	-	-	-
Future Supply Actions & Stormwater Pilot		-	-	-	-	-	-
Conservation Program (cash funded portion)		-	-	-	-	-	-
Total Demand Management Costs		-	-	-	-	-	-
Capital Financing							
Revenue Bond Debt Service net of BABs Interest Subsidy Payment	15,469,792	4,926,323	4,561,411	5,982,058	-	-	15,469,792
G.O. Bond Debt Service	102,612	32,677	30,256	39,679	-	-	102,612
Debt Administration	141,113	44,937	41,609	54,568	-	-	141,113
Bond Defeasance	-	-	-	-	-	-	-
PAYGO	7,047,000	2,244,103	2,077,873	2,725,025	-	-	7,047,000
Total Capital Financing Costs	22,760,518	7,248,040	6,711,148	8,801,330	-	-	22,760,518
Other Operating Costs							
Operating Equipment	452,261	-	452,261	-	-	-	452,261
Succession Planning Labor Pool	255,897	-	255,897	-	-	-	255,897
OPEB/PERS Pre-Funding	-	-	-	-	-	-	-
Total Other Operating Costs	708,158	-	708,158	-	-	-	708,158
Increase/(Decrease) in Required Reserves							
	-	-	-	-	-	-	-
Total General District Requirements	23,468,676	7,248,040	7,419,306	8,801,330	-	-	23,468,676
REQUIREMENTS BEFORE OFFSETS:	53,699,964	7,248,040	31,221,271	8,801,330	6,429,323	-	53,699,964
Revenue Offsets							
Property Taxes - MWD Portion of SWC GO Debt Service	-	-	-	-	-	-	-
Property Taxes - MWD GO Debt Service	102,612	-	-	102,612	-	-	102,612
Interest on Investments	254,636	81,088	75,082	98,466	-	-	254,636
Hydro-Power Revenue	-	-	-	-	-	-	-
CRA Power Revenue	-	-	-	-	-	-	-
Wadsworth Pumping Plant (DVL) Power Revenue	-	-	-	-	-	-	-
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)	-	-	-	-	-	-	-
Misc. allocated to supply (PVID Lease)	-	-	-	-	-	-	-
Property Taxes - SWC	-	-	-	-	-	-	-
Revenue Reserve used for Revenue Bonds - I&P	-	-	-	-	-	-	-
Annexation	-	-	-	-	-	-	-
Total Revenue Offsets	357,248	81,088	75,082	201,078	-	-	357,248
NET REVENUE REQUIREMENTS:	53,342,717	7,166,952	31,146,190	8,600,252	6,429,323	-	53,342,717

		Functionalization	Allocation Percentages					Total
			Fixed			Variable Commodity	Hydroelectric	
			Demand	Commodity	Standby			
Departmental O&M								
Group	Item							
Office of General Manager		358,344	-	358,344	-	-	-	358,344
Office of General Manager	Board of Directors	-	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-	-
Human Resources		626,911	-	626,911	-	-	-	626,911
Water Systems Operations	Office of the Manager	598,029	-	598,029	-	-	-	598,029
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	77,241	-	77,241	-	-	-	77,241
Water Systems Operations	Office of the Manager, Operations Support Services	120,917	-	120,917	-	-	-	120,917
Water Systems Operations	Operations Support Services	89,491	-	89,491	-	-	-	89,491
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	10,334,821	-	10,334,821	-	-	-	10,334,821
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	2,382,228	-	2,382,228	-	-	-	2,382,228
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	133,853	-	133,853	-	-	-	133,853
Water Systems Operations	Environmental Health & Safety Section	1,022,103	-	1,022,103	-	-	-	1,022,103
Water Systems Operations	OSS, Fleet Services Unit	343,180	-	343,180	-	-	-	343,180
Water Systems Operations	OSS, Power Support Unit	255,604	-	255,604	-	-	-	255,604
Water Systems Operations	Office of the Manager, Operations & Planning Section	53,761	-	53,761	-	-	-	53,761
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-	-
Sustainability, Resilience & Inr		-	-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-	-
Equal Employment Opportunit		-	-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-	-
Engineering Services		2,031,328	-	2,031,328	-	-	-	2,031,328
Business Technology	Administrative Services	-	-	-	-	-	-	-
Business Technology	Information Technology	1,720,840	-	1,720,840	-	-	-	1,720,840
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	-	-	-	-	-	-	-
Water Resources Managemen	Office of the Group Manager	-	-	-	-	-	-	-
Ethics Office		-	-	-	-	-	-	-
Real Property		-	-	-	-	-	-	-
General Counsel		-	-	-	-	-	-	-
General Auditor		-	-	-	-	-	-	-
Total Departmental O&M	-	20,148,651	-	20,148,651	-	-	-	20,148,651

		Functionalization	Allocation Percentages					% Total
			Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		406,571	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Office of General Manager	Board of Directors	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Bay Delta Initiatives	Bay Delta Initiatives	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Legislative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Media Communications Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Manager, External Affairs/Special Projects	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Conservation & Community Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Human Resources		800,328	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager	842,945	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Treatment Section	223,329	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations Support Services	163,590	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Support Services	98,943	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Desert Region / C&D CRA	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	System Operations Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Power Operations and Planning	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Planning & Programs Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Jensen	-	0.0%	63.2%	0.0%	36.8%	0.0%	100.0%
Water Systems Operations	Treatment Diemer	-	0.0%	55.3%	0.0%	44.7%	0.0%	100.0%
Water Systems Operations	Treatment Mills	-	0.0%	77.8%	0.0%	22.2%	0.0%	100.0%
Water Systems Operations	Treatment Skinner	-	0.0%	64.2%	0.0%	35.8%	0.0%	100.0%
Water Systems Operations	Treatment Weymouth	17,332,688	0.0%	61.0%	0.0%	39.0%	0.0%	100.0%
Water Systems Operations	Water Quality Section	2,893,961	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Eastern Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Western Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Manufacturing Services Unit	145,820	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Environmental Health & Safety Section	1,317,542	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Fleet Services Unit	566,065	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Power Support Unit	282,970	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations & Planning Section	60,789	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Security Team & Security Management	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Sustainability, Resilience & Innovation		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Diversity, Equity & Inclusion		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Equal Employment Opportunity		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Office of the Chief Financial Officer		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Office of Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Engineering Services		2,539,712	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Administrative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Information Technology	2,594,960	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Planning & Development	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Implementation	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Office of the Group Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Ethics Office		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Real Property		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
General Counsel		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
General Auditor		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Departmental O&M		30,270,213	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
GENERAL DISTRICT REQUIREMENTS								
State Water Contract*								
Supply - O&M		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Supply - Capital		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Power - O&M & Off-Aq Capital		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Power - Capital (less Off-Aq)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Transmission - Capital - Commodity, Demand, & Standby		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Transmission - O&M - Commodity only		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Supply		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Power		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Other		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total State Water Contract		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Colorado River Aqueduct Power Costs								
		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Supply Programs (cash funded portion)								
		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Demand Management (cash funded portion)								
Local Resources Program		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Future Supply Actions & Stormwater Pilot		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Conservation Program (cash funded portion)		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Demand Management Costs		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Capital Financing								
		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		16,269,954	31.8%	29.5%	38.7%	0.0%	0.0%	100.0%
G.O. Bond Debt Service		107,920	31.8%	29.5%	38.7%	0.0%	0.0%	100.0%
Debt Administration		148,412	31.8%	29.5%	38.7%	0.0%	0.0%	100.0%
Bond Defeasance		-	31.8%	29.5%	38.7%	0.0%	0.0%	100.0%
PAYGO		7,411,500	31.8%	29.5%	38.7%	0.0%	0.0%	100.0%
Total Capital Financing Costs		23,937,786	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Other Operating Costs								
Operating Equipment		452,843	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Succession Planning Labor Pool		256,227	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
OPEB/PERS Pre-Funding		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Other Operating Costs		709,070	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Increase/(Decrease) in Required Reserves								
		-	30.9%	31.5%	37.6%	0.0%	0.0%	100.0%
Total General District Requirements								
		24,646,856	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
REQUIREMENTS BEFORE OFFSETS:								
		54,917,069	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Revenue Offsets								
Property Taxes - MWD Portion of SWC GO Debt Service		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Property Taxes - MWD GO Debt Service		107,920	0.0%	0.0%	100.0%	0.0%	0.0%	100.0%
Interest on Investments		260,407	31.8%	29.5%	38.7%	0.0%	0.0%	100.0%
Hydro-Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
CRA Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Wadsworth Pumping Plant (DVL) Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to supply (PVID Lease)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Property Taxes - SWC		-	31.8%	29.5%	38.7%	0.0%	0.0%	100.0%
Revenue Reserve used for Revenue Bonds - I&P		-	31.8%	29.5%	38.7%	0.0%	0.0%	100.0%
Annexation		-	31.8%	29.5%	38.7%	0.0%	0.0%	100.0%
Total Revenue Offsets		368,327	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
NET REVENUE REQUIREMENTS:								
-		54,548,742	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

	Functionalization	Allocation Percentages				Total	
		Demand	Fixed Commodity	Standby	Variable Commodity		Hydroelectric
Departmental O&M							
Group	Item						
Office of General Manager		406,571	-	406,571	-	-	406,571
Office of General Manager	Board of Directors	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-
Human Resources		800,328	-	800,328	-	-	800,328
Water Systems Operations	Office of the Manager	842,945	-	842,945	-	-	842,945
Water Systems Operations	Office of the Manager, Conveyance & Distribution S	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	223,329	-	223,329	-	-	223,329
Water Systems Operations	Office of the Manager, Operations Support Services	163,590	-	163,590	-	-	163,590
Water Systems Operations	Operations Support Services	98,943	-	98,943	-	-	98,943
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	17,332,688	-	10,935,981	-	6,396,707	17,332,688
Water Systems Operations	Water Quality Section	2,893,961	-	2,893,961	-	-	2,893,961
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	145,820	-	145,820	-	-	145,820
Water Systems Operations	Environmental Health & Safety Section	1,317,542	-	1,317,542	-	-	1,317,542
Water Systems Operations	OSS, Fleet Services Unit	566,065	-	566,065	-	-	566,065
Water Systems Operations	OSS, Power Support Unit	282,970	-	282,970	-	-	282,970
Water Systems Operations	Office of the Manager, Operations & Planning Secti	60,789	-	60,789	-	-	60,789
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-
Sustainability, Resilience & Inn		-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-
Engineering Services		2,539,712	-	2,539,712	-	-	2,539,712
Business Technology	Administrative Services	-	-	-	-	-	-
Business Technology	Information Technology	2,594,960	-	2,594,960	-	-	2,594,960
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	-	-	-	-	-	-
Water Resources Managemen	Office of the Group Manager	-	-	-	-	-	-
Ethics Office		-	-	-	-	-	-
Real Property		-	-	-	-	-	-
General Counsel		-	-	-	-	-	-
General Auditor		-	-	-	-	-	-
Total Departmental O&M	-	30,270,213	-	23,873,506	-	6,396,707	30,270,213
GENERAL DISTRICT REQUIREMENTS							
		-	-	-	-	-	-
State Water Contract*							
Supply - O&M		-	-	-	-	-	-
Supply - Capital		-	-	-	-	-	-
Power - O&M & Off-Aq Capital		-	-	-	-	-	-
Power - Capital (less Off-Aq)		-	-	-	-	-	-
Transmission - Capital - Commodity, Demand, & Standby		-	-	-	-	-	-
Transmission - O&M - Commodity only		-	-	-	-	-	-
Delta Conveyance - Supply		-	-	-	-	-	-
Delta Conveyance - Power		-	-	-	-	-	-
Delta Conveyance - Other		-	-	-	-	-	-
Total State Water Contract		-	-	-	-	-	-
Colorado River Aqueduct Power Costs							
		-	-	-	-	-	-
Supply Programs (cash funded portion)							
		-	-	-	-	-	-
Demand Management (cash funded portion)							
Local Resources Program		-	-	-	-	-	-
Future Supply Actions & Stormwater Pilot		-	-	-	-	-	-
Conservation Program (cash funded portion)		-	-	-	-	-	-
Total Demand Management Costs		-	-	-	-	-	-
Capital Financing							
		-	-	-	-	-	-
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		16,269,954	5,181,133	4,797,346	6,291,475	-	16,269,954
G.O. Bond Debt Service		107,920	34,367	31,821	41,732	-	107,920
Debt Administration		148,412	47,262	43,761	57,390	-	148,412
Bond Defeasance		-	-	-	-	-	-
PAYGO		7,411,500	2,360,177	2,185,349	2,865,974	-	7,411,500
Total Capital Financing Costs		23,937,786	7,622,938	7,058,276	9,256,571	-	23,937,786
Other Operating Costs							
		-	-	-	-	-	-
Operating Equipment		452,843	-	452,843	-	-	452,843
Succession Planning Labor Pool		256,227	-	256,227	-	-	256,227
OPEB/PERS Pre-Funding		-	-	-	-	-	-
Total Other Operating Costs		709,070	-	709,070	-	-	709,070
Increase/(Decrease) in Required Reserves							
		-	-	-	-	-	-
Total General District Requirements		24,646,856	7,622,938	7,767,346	9,256,571	-	24,646,856
REQUIREMENTS BEFORE OFFSETS:							
		54,917,069	7,622,938	31,640,852	9,256,571	6,396,707	54,917,069
Revenue Offsets							
		-	-	-	-	-	-
Property Taxes - MWD Portion of SWC GO Debt Service		-	-	-	-	-	-
Property Taxes - MWD GO Debt Service		107,920	-	-	107,920	-	107,920
Interest on Investments		260,407	82,926	76,783	100,698	-	260,407
Hydro-Power Revenue		-	-	-	-	-	-
CRA Power Revenue		-	-	-	-	-	-
Wadsworth Pumping Plant (DVL) Power Revenue		-	-	-	-	-	-
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)		-	-	-	-	-	-
Misc. allocated to supply (PVID Lease)		-	-	-	-	-	-
Property Taxes - SWC		-	-	-	-	-	-
Revenue Reserve used for Revenue Bonds - I&P		-	-	-	-	-	-
Annexation		-	-	-	-	-	-
Total Revenue Offsets		368,327	82,926	76,783	208,617	-	368,327
NET REVENUE REQUIREMENTS:							
		54,548,742	7,540,012	31,564,069	9,047,954	6,396,707	54,548,742

		Functionalization	Allocation Percentages					Total
			Fixed			Variable		
			Demand	Commodity	Standby	Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		358,805	-	358,805	-	-	-	358,805
Office of General Manager	Board of Directors	-	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-	-
Human Resources		627,718	-	627,718	-	-	-	627,718
Water Systems Operations	Office of the Manager	614,916	-	614,916	-	-	-	614,916
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	80,307	-	80,307	-	-	-	80,307
Water Systems Operations	Office of the Manager, Operations Support Services	124,331	-	124,331	-	-	-	124,331
Water Systems Operations	Operations Support Services	89,491	-	89,491	-	-	-	89,491
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	10,745,104	-	10,745,104	-	-	-	10,745,104
Water Systems Operations	Water Quality Section	2,382,228	-	2,382,228	-	-	-	2,382,228
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	133,853	-	133,853	-	-	-	133,853
Water Systems Operations	Environmental Health & Safety Section	1,022,103	-	1,022,103	-	-	-	1,022,103
Water Systems Operations	OSS, Fleet Services Unit	343,180	-	343,180	-	-	-	343,180
Water Systems Operations	OSS, Power Support Unit	255,604	-	255,604	-	-	-	255,604
Water Systems Operations	Office of the Manager, Operations & Planning Section	55,279	-	55,279	-	-	-	55,279
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-	-
Sustainability, Resilience & Inr		-	-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-	-
Engineering Services		2,136,397	-	2,136,397	-	-	-	2,136,397
Business Technology	Administrative Services	-	-	-	-	-	-	-
Business Technology	Information Technology	1,723,055	-	1,723,055	-	-	-	1,723,055
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	-	-	-	-	-	-	-
Water Resources Managemen	Office of the Group Manager	-	-	-	-	-	-	-
Ethics Office		-	-	-	-	-	-	-
Real Property		-	-	-	-	-	-	-
General Counsel		-	-	-	-	-	-	-
General Auditor		-	-	-	-	-	-	-
Total Departmental O&M	-	20,692,373	-	20,692,373	-	-	-	20,692,373

		Functionalization	Allocation Percentages					Total
			Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		432,254	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Office of General Manager	Board of Directors	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Bay Delta Initiatives	Bay Delta Initiatives	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Legislative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Media Communications Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Manager, External Affairs/Special Projects	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Conservation & Community Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Human Resources		850,884	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager	796,821	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Treatment Section	206,338	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations Support Services	154,639	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Support Services	98,943	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Desert Region / C&D CRA	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	System Operations Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Power Operations and Planning	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Planning & Programs Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Jensen	-	0.0%	63.2%	0.0%	36.8%	0.0%	100.0%
Water Systems Operations	Treatment Diemer	18,557,321	0.0%	55.3%	0.0%	44.7%	0.0%	100.0%
Water Systems Operations	Treatment Mills	-	0.0%	77.8%	0.0%	22.2%	0.0%	100.0%
Water Systems Operations	Treatment Skinner	-	0.0%	64.2%	0.0%	35.8%	0.0%	100.0%
Water Systems Operations	Treatment Weymouth	-	0.0%	61.0%	0.0%	39.0%	0.0%	100.0%
Water Systems Operations	Water Quality Section	2,893,961	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Eastern Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Western Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Manufacturing Services Unit	145,820	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Environmental Health & Safety Section	1,317,542	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Fleet Services Unit	566,065	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Power Support Unit	282,970	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations & Planning Section	57,463	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Security Team & Security Management	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Sustainability, Resilience & Innovation		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Diversity, Equity & Inclusion		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Equal Employment Opportunity		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Office of the Chief Financial Officer		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Office of Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Engineering Services		3,062,458	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Administrative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Information Technology	2,758,881	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Planning & Development	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Implementation	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Office of the Group Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Ethics Office		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Real Property		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
General Counsel		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
General Auditor		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Departmental O&M		32,182,359	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
GENERAL DISTRICT REQUIREMENTS								
State Water Contract*								
Supply - O&M		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Supply - Capital		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Power - O&M & Off-Aq Capital		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Power - Capital (less Off-Aq)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Transmission - Capital - Commodity, Demand, & Standby		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Transmission - O&M - Commodity only		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Supply		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Power		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Other		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total State Water Contract		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Colorado River Aqueduct Power Costs								
		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Supply Programs (cash funded portion)								
		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Demand Management (cash funded portion)								
Local Resources Program		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Future Supply Actions & Stormwater Pilot		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Conservation Program (cash funded portion)		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Demand Management Costs		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Capital Financing								
		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		19,618,779	31.8%	29.5%	38.7%	0.0%	0.0%	100.0%
G.O. Bond Debt Service		130,133	31.8%	29.5%	38.7%	0.0%	0.0%	100.0%
Debt Administration		178,960	31.8%	29.5%	38.7%	0.0%	0.0%	100.0%
Bond Defeasance		-	31.8%	29.5%	38.7%	0.0%	0.0%	100.0%
PAYGO		8,937,000	31.8%	29.5%	38.7%	0.0%	0.0%	100.0%
Total Capital Financing Costs		28,864,871	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Other Operating Costs								
Operating Equipment		481,449	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Succession Planning Labor Pool		272,413	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
OPEB/PERS Pre-Funding		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Other Operating Costs		753,862	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Increase/(Decrease) in Required Reserves								
		-	31.0%	31.3%	37.7%	0.0%	0.0%	100.0%
Total General District Requirements								
		29,618,733	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
REQUIREMENTS BEFORE OFFSETS:								
		61,801,092	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Revenue Offsets								
Property Taxes - MWD Portion of SWC GO Debt Service		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Property Taxes - MWD GO Debt Service		130,133	0.0%	0.0%	100.0%	0.0%	0.0%	100.0%
Interest on Investments		293,050	31.8%	29.5%	38.7%	0.0%	0.0%	100.0%
Hydro-Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
CRA Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Wadsworth Pumping Plant (DVL) Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to supply (PVID Lease)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Property Taxes - SWC		-	31.8%	29.5%	38.7%	0.0%	0.0%	100.0%
Revenue Reserve used for Revenue Bonds - I&P		-	31.8%	29.5%	38.7%	0.0%	0.0%	100.0%
Annexation		-	31.8%	29.5%	38.7%	0.0%	0.0%	100.0%
Total Revenue Offsets		423,182	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
NET REVENUE REQUIREMENTS:								
-		61,377,909	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

	Functionalization	Allocation Percentages					Total
		Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M							
Group	Item						
Office of General Manager		432,254	-	432,254	-	-	432,254
Office of General Manager	Board of Directors	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-
Human Resources		850,884	-	850,884	-	-	850,884
Water Systems Operations	Office of the Manager	796,821	-	796,821	-	-	796,821
Water Systems Operations	Office of the Manager, Conveyance & Distribution S	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	206,338	-	206,338	-	-	206,338
Water Systems Operations	Office of the Manager, Operations Support Services	154,639	-	154,639	-	-	154,639
Water Systems Operations	Operations Support Services	98,943	-	98,943	-	-	98,943
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	18,557,321	-	10,256,939	8,300,382	-	18,557,321
Water Systems Operations	Treatment Mills	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	2,893,961	-	2,893,961	-	-	2,893,961
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	145,820	-	145,820	-	-	145,820
Water Systems Operations	Environmental Health & Safety Section	1,317,542	-	1,317,542	-	-	1,317,542
Water Systems Operations	OSS, Fleet Services Unit	566,065	-	566,065	-	-	566,065
Water Systems Operations	OSS, Power Support Unit	282,970	-	282,970	-	-	282,970
Water Systems Operations	Office of the Manager, Operations & Planning Secti	57,463	-	57,463	-	-	57,463
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-
Sustainability, Resilience & Inn		-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-
Engineering Services		3,062,458	-	3,062,458	-	-	3,062,458
Business Technology	Administrative Services	-	-	-	-	-	-
Business Technology	Information Technology	2,758,881	-	2,758,881	-	-	2,758,881
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	-	-	-	-	-	-
Water Resources Managemen	Office of the Group Manager	-	-	-	-	-	-
Ethics Office		-	-	-	-	-	-
Real Property		-	-	-	-	-	-
General Counsel		-	-	-	-	-	-
General Auditor		-	-	-	-	-	-
Total Departmental O&M		32,182,359	-	23,881,977	8,300,382	-	32,182,359
GENERAL DISTRICT REQUIREMENTS		-	-	-	-	-	-
State Water Contract*		-	-	-	-	-	-
Supply - O&M		-	-	-	-	-	-
Supply - Capital		-	-	-	-	-	-
Power - O&M & Off-Aq Capital		-	-	-	-	-	-
Power - Capital (less Off-Aq)		-	-	-	-	-	-
Transmission - Capital - Commodity, Demand, & Standby		-	-	-	-	-	-
Transmission - O&M - Commodity only		-	-	-	-	-	-
Delta Conveyance - Supply		-	-	-	-	-	-
Delta Conveyance - Power		-	-	-	-	-	-
Delta Conveyance - Other		-	-	-	-	-	-
Total State Water Contract		-	-	-	-	-	-
Colorado River Aqueduct Power Costs		-	-	-	-	-	-
Supply Programs (cash funded portion)		-	-	-	-	-	-
Demand Management (cash funded portion)		-	-	-	-	-	-
Local Resources Program		-	-	-	-	-	-
Future Supply Actions & Stormwater Pilot		-	-	-	-	-	-
Conservation Program (cash funded portion)		-	-	-	-	-	-
Total Demand Management Costs		-	-	-	-	-	-
Capital Financing		-	-	-	-	-	-
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		19,618,779	6,247,560	5,784,777	7,586,442	-	19,618,779
G.O. Bond Debt Service		130,133	41,440	38,371	50,321	-	130,133
Debt Administration		178,960	56,989	52,768	69,202	-	178,960
Bond Defeasance		-	-	-	-	-	-
PAYGO		8,937,000	2,845,969	2,635,157	3,455,874	-	8,937,000
Total Capital Financing Costs		28,864,871	9,191,959	8,511,073	11,161,840	-	28,864,871
Other Operating Costs		-	-	-	-	-	-
Operating Equipment		481,449	-	481,449	-	-	481,449
Succession Planning Labor Pool		272,413	-	272,413	-	-	272,413
OPEB/PERS Pre-Funding		-	-	-	-	-	-
Total Other Operating Costs		753,862	-	753,862	-	-	753,862
Increase/(Decrease) in Required Reserves		-	-	-	-	-	-
Total General District Requirements		29,618,733	9,191,959	9,264,934	11,161,840	-	29,618,733
REQUIREMENTS BEFORE OFFSETS:		61,801,092	9,191,959	33,146,912	11,161,840	8,300,382	61,801,092
Revenue Offsets		-	-	-	-	-	-
Property Taxes - MWD Portion of SWC GO Debt Service		-	-	-	-	-	-
Property Taxes - MWD GO Debt Service		130,133	-	-	130,133	-	130,133
Interest on Investments		293,050	93,321	86,408	113,320	-	293,050
Hydro-Power Revenue		-	-	-	-	-	-
CRA Power Revenue		-	-	-	-	-	-
Wadsworth Pumping Plant (DVL) Power Revenue		-	-	-	-	-	-
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)		-	-	-	-	-	-
Misc. allocated to supply (PVID Lease)		-	-	-	-	-	-
Property Taxes - SWC		-	-	-	-	-	-
Revenue Reserve used for Revenue Bonds - I&P		-	-	-	-	-	-
Annexation		-	-	-	-	-	-
Total Revenue Offsets		423,182	93,321	86,408	243,453	-	423,182
NET REVENUE REQUIREMENTS:		61,377,909	9,098,637	33,060,503	10,918,387	8,300,382	61,377,909

		Functionalization	Allocation Percentages					Total
			Fixed			Variable		
			Demand	Commodity	Standby	Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		381,471	-	381,471	-	-	-	381,471
Office of General Manager	Board of Directors	-	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-	-
Human Resources		667,371	-	667,371	-	-	-	667,371
Water Systems Operations	Office of the Manager	581,269	-	581,269	-	-	-	581,269
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	74,197	-	74,197	-	-	-	74,197
Water Systems Operations	Office of the Manager, Operations Support Services	-	-	117,528	-	-	-	117,528
Water Systems Operations	Operations Support Services	89,491	-	89,491	-	-	-	89,491
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	9,927,606	-	9,927,606	-	-	-	9,927,606
Water Systems Operations	Treatment Mills	-	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	2,382,228	-	2,382,228	-	-	-	2,382,228
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	133,853	-	133,853	-	-	-	133,853
Water Systems Operations	Environmental Health & Safety Section	1,022,103	-	1,022,103	-	-	-	1,022,103
Water Systems Operations	OSS, Fleet Services Unit	343,180	-	343,180	-	-	-	343,180
Water Systems Operations	OSS, Power Support Unit	255,604	-	255,604	-	-	-	255,604
Water Systems Operations	Office of the Manager, Operations & Planning Section	52,254	-	52,254	-	-	-	52,254
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-	-
Sustainability, Resilience & Inr		-	-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-	-
Engineering Services		2,576,129	-	2,576,129	-	-	-	2,576,129
Business Technology	Administrative Services	-	-	-	-	-	-	-
Business Technology	Information Technology	1,831,899	-	1,831,899	-	-	-	1,831,899
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	-	-	-	-	-	-	-
Water Resources Managemen	Office of the Group Manager	-	-	-	-	-	-	-
Ethics Office		-	-	-	-	-	-	-
Real Property		-	-	-	-	-	-	-
General Counsel		-	-	-	-	-	-	-
General Auditor		-	-	-	-	-	-	-
Total Departmental O&M	-	20,436,185	-	20,436,185	-	-	-	20,436,185

		Functionalization	Allocation Percentages					% Total
			Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		305,989	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Office of General Manager	Board of Directors	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Bay Delta Initiatives	Bay Delta Initiatives	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Legislative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Media Communications Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Manager, External Affairs/Special Projects	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Conservation & Community Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Human Resources		602,333	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager	769,114	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Treatment Section	196,131	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations Support Services	149,262	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Support Services	98,943	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Desert Region / C&D CRA	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	System Operations Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Power Operations and Planning	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Planning & Programs Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Jensen	-	0.0%	63.2%	0.0%	36.8%	0.0%	100.0%
Water Systems Operations	Treatment Diemer	-	0.0%	55.3%	0.0%	44.7%	0.0%	100.0%
Water Systems Operations	Treatment Mills	12,653,970	0.0%	77.8%	0.0%	22.2%	0.0%	100.0%
Water Systems Operations	Treatment Skinner	-	0.0%	64.2%	0.0%	35.8%	0.0%	100.0%
Water Systems Operations	Treatment Weymouth	-	0.0%	61.0%	0.0%	39.0%	0.0%	100.0%
Water Systems Operations	Water Quality Section	2,893,961	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Eastern Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Western Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Manufacturing Services Unit	145,820	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Environmental Health & Safety Section	1,317,542	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Fleet Services Unit	566,065	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Power Support Unit	282,970	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations & Planning Section	55,464	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Security Team & Security Management	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Sustainability, Resilience & Innovation		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Diversity, Equity & Inclusion		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Equal Employment Opportunity		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Office of the Chief Financial Officer		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Office of Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Engineering Services		791,058	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Administrative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Information Technology	1,952,988	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Planning & Development	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Implementation	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Office of the Group Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Ethics Office		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Real Property		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
General Counsel		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
General Auditor		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Departmental O&M		22,781,610	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
GENERAL DISTRICT REQUIREMENTS								
State Water Contract*								
Supply - O&M		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Supply - Capital		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Power - O&M & Off-Aq Capital		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Power - Capital (less Off-Aq)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Transmission - Capital - Commodity, Demand, & Standby		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Transmission - O&M - Commodity only		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Supply		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Power		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Other		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total State Water Contract		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Colorado River Aqueduct Power Costs								
		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Supply Programs (cash funded portion)								
		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Demand Management (cash funded portion)								
Local Resources Program		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Future Supply Actions & Stormwater Pilot		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Conservation Program (cash funded portion)		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Demand Management Costs		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Capital Financing								
		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		5,067,691	31.8%	29.5%	38.7%	0.0%	0.0%	100.0%
G.O. Bond Debt Service		33,614	31.8%	29.5%	38.7%	0.0%	0.0%	100.0%
Debt Administration		46,227	31.8%	29.5%	38.7%	0.0%	0.0%	100.0%
Bond Defeasance		-	31.8%	29.5%	38.7%	0.0%	0.0%	100.0%
PAYGO		2,308,500	31.8%	29.5%	38.7%	0.0%	0.0%	100.0%
Total Capital Financing Costs		7,456,032	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Other Operating Costs								
Operating Equipment		340,814	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Succession Planning Labor Pool		192,838	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
OPEB/PERS Pre-Funding		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Other Operating Costs		533,652	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Increase/(Decrease) in Required Reserves								
		-	29.7%	34.2%	36.1%	0.0%	0.0%	100.0%
Total General District Requirements								
		7,989,684	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
REQUIREMENTS BEFORE OFFSETS:								
		30,771,294	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Revenue Offsets								
Property Taxes - MWD Portion of SWC GO Debt Service		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Property Taxes - MWD GO Debt Service		33,614	0.0%	0.0%	100.0%	0.0%	0.0%	100.0%
Interest on Investments		145,912	31.8%	29.5%	38.7%	0.0%	0.0%	100.0%
Hydro-Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
CRA Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Wadsworth Pumping Plant (DVL) Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to supply (PVID Lease)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Property Taxes - SWC		-	31.8%	29.5%	38.7%	0.0%	0.0%	100.0%
Revenue Reserve used for Revenue Bonds - I&P		-	31.8%	29.5%	38.7%	0.0%	0.0%	100.0%
Annexation		-	31.8%	29.5%	38.7%	0.0%	0.0%	100.0%
Total Revenue Offsets		179,526	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
NET REVENUE REQUIREMENTS:								
-		30,591,767	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

	Functionalization	Allocation Percentages				Total	
		Demand	Fixed Commodity	Standby	Variable Commodity		Hydroelectric
Departmental O&M							
Group	Item						
Office of General Manager		305,989	-	305,989	-	-	305,989
Office of General Manager	Board of Directors	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-
Human Resources		602,333	-	602,333	-	-	602,333
Water Systems Operations	Office of the Manager	769,114	-	769,114	-	-	769,114
Water Systems Operations	Office of the Manager, Conveyance & Distribution S	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	196,131	-	196,131	-	-	196,131
Water Systems Operations	Office of the Manager, Operations Support Services	149,262	-	149,262	-	-	149,262
Water Systems Operations	Operations Support Services	98,943	-	98,943	-	-	98,943
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	12,653,970	-	9,849,722	2,804,248	-	12,653,970
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	2,893,961	-	2,893,961	-	-	2,893,961
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	145,820	-	145,820	-	-	145,820
Water Systems Operations	Environmental Health & Safety Section	1,317,542	-	1,317,542	-	-	1,317,542
Water Systems Operations	OSS, Fleet Services Unit	566,065	-	566,065	-	-	566,065
Water Systems Operations	OSS, Power Support Unit	282,970	-	282,970	-	-	282,970
Water Systems Operations	Office of the Manager, Operations & Planning Secti	55,464	-	55,464	-	-	55,464
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-
Sustainability, Resilience & Inn		-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-
Engineering Services		791,058	-	791,058	-	-	791,058
Business Technology	Administrative Services	-	-	-	-	-	-
Business Technology	Information Technology	1,952,988	-	1,952,988	-	-	1,952,988
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	-	-	-	-	-	-
Water Resources Managemen	Office of the Group Manager	-	-	-	-	-	-
Ethics Office		-	-	-	-	-	-
Real Property		-	-	-	-	-	-
General Counsel		-	-	-	-	-	-
General Auditor		-	-	-	-	-	-
Total Departmental O&M	-	22,781,610	-	19,977,362	2,804,248	-	22,781,610
GENERAL DISTRICT REQUIREMENTS							
		-	-	-	-	-	-
State Water Contract*							
Supply - O&M		-	-	-	-	-	-
Supply - Capital		-	-	-	-	-	-
Power - O&M & Off-Aq Capital		-	-	-	-	-	-
Power - Capital (less Off-Aq)		-	-	-	-	-	-
Transmission - Capital - Commodity, Demand, & Standby		-	-	-	-	-	-
Transmission - O&M - Commodity only		-	-	-	-	-	-
Delta Conveyance - Supply		-	-	-	-	-	-
Delta Conveyance - Power		-	-	-	-	-	-
Delta Conveyance - Other		-	-	-	-	-	-
Total State Water Contract		-	-	-	-	-	-
Colorado River Aqueduct Power Costs							
		-	-	-	-	-	-
Supply Programs (cash funded portion)							
		-	-	-	-	-	-
Demand Management (cash funded portion)							
Local Resources Program		-	-	-	-	-	-
Future Supply Actions & Stormwater Pilot		-	-	-	-	-	-
Conservation Program (cash funded portion)		-	-	-	-	-	-
Total Demand Management Costs		-	-	-	-	-	-
Capital Financing							
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		5,067,691	1,613,796	1,494,255	1,959,640	-	5,067,691
G.O. Bond Debt Service		33,614	10,704	9,911	12,998	-	33,614
Debt Administration		46,227	14,721	13,630	17,876	-	46,227
Bond Defeasance		-	-	-	-	-	-
PAYGO		2,308,500	735,137	680,682	892,680	-	2,308,500
Total Capital Financing Costs		7,456,032	2,374,358	2,198,480	2,883,194	-	7,456,032
Other Operating Costs							
Operating Equipment		340,814	-	340,814	-	-	340,814
Succession Planning Labor Pool		192,838	-	192,838	-	-	192,838
OPEB/PERS Pre-Funding		-	-	-	-	-	-
Total Other Operating Costs		533,652	-	533,652	-	-	533,652
Increase/(Decrease) in Required Reserves							
		-	-	-	-	-	-
Total General District Requirements		7,989,684	2,374,358	2,732,132	2,883,194	-	7,989,684
REQUIREMENTS BEFORE OFFSETS:		30,771,294	2,374,358	22,709,494	2,883,194	2,804,248	30,771,294
Revenue Offsets							
Property Taxes - MWD Portion of SWC GO Debt Service		-	-	-	-	-	-
Property Taxes - MWD GO Debt Service		33,614	-	-	33,614	-	33,614
Interest on Investments		145,912	46,465	43,023	56,423	-	145,912
Hydro-Power Revenue		-	-	-	-	-	-
CRA Power Revenue		-	-	-	-	-	-
Wadsworth Pumping Plant (DVL) Power Revenue		-	-	-	-	-	-
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)		-	-	-	-	-	-
Misc. allocated to supply (PVID Lease)		-	-	-	-	-	-
Property Taxes - SWC		-	-	-	-	-	-
Revenue Reserve used for Revenue Bonds - I&P		-	-	-	-	-	-
Annexation		-	-	-	-	-	-
Total Revenue Offsets		179,526	46,465	43,023	90,037	-	179,526
NET REVENUE REQUIREMENTS:		30,591,767	2,327,893	22,666,470	2,793,157	2,804,248	30,591,767

		Functionalization	Allocation Percentages					Total
			Fixed			Variable		
			Demand	Commodity	Standby	Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		270,040	-	270,040	-	-	-	270,040
Office of General Manager	Board of Directors	-	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-	-
Human Resources		472,426	-	472,426	-	-	-	472,426
Water Systems Operations	Office of the Manager	561,057	-	561,057	-	-	-	561,057
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	70,527	-	70,527	-	-	-	70,527
Water Systems Operations	Office of the Manager, Operations Support Services	113,441	-	113,441	-	-	-	113,441
Water Systems Operations	Operations Support Services	-	-	89,491	-	-	-	89,491
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	9,436,532	-	9,436,532	-	-	-	9,436,532
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	2,382,228	-	2,382,228	-	-	-	2,382,228
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	133,853	-	133,853	-	-	-	133,853
Water Systems Operations	Environmental Health & Safety Section	1,022,103	-	1,022,103	-	-	-	1,022,103
Water Systems Operations	OSS, Fleet Services Unit	343,180	-	343,180	-	-	-	343,180
Water Systems Operations	OSS, Power Support Unit	255,604	-	255,604	-	-	-	255,604
Water Systems Operations	Office of the Manager, Operations & Planning Section	50,437	-	50,437	-	-	-	50,437
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-	-
Sustainability, Resilience & Inr		-	-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-	-
Engineering Services		665,435	-	665,435	-	-	-	665,435
Business Technology	Administrative Services	-	-	-	-	-	-	-
Business Technology	Information Technology	1,296,786	-	1,296,786	-	-	-	1,296,786
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	-	-	-	-	-	-	-
Water Resources Managemen	Office of the Group Manager	-	-	-	-	-	-	-
Ethics Office		-	-	-	-	-	-	-
Real Property		-	-	-	-	-	-	-
General Counsel		-	-	-	-	-	-	-
General Auditor		-	-	-	-	-	-	-
Total Departmental O&M	-	17,163,141	-	17,163,141	-	-	-	17,163,141

		Functionalization	Allocation Percentages					Total
			Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		365,917	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Office of General Manager	Board of Directors	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Bay Delta Initiatives	Bay Delta Initiatives	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Legislative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Media Communications Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Manager, External Affairs/Special Projects	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Conservation & Community Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Human Resources		720,301	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager	756,513	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Treatment Section	191,489	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations Support Services	146,816	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Support Services	98,943	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Desert Region / C&D CRA	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	System Operations Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Power Operations and Planning	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Planning & Programs Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Jensen	-	0.0%	63.2%	0.0%	36.8%	0.0%	100.0%
Water Systems Operations	Treatment Diemer	-	0.0%	55.3%	0.0%	44.7%	0.0%	100.0%
Water Systems Operations	Treatment Mills	-	0.0%	77.8%	0.0%	22.2%	0.0%	100.0%
Water Systems Operations	Treatment Skinner	14,818,093	0.0%	64.2%	0.0%	35.8%	0.0%	100.0%
Water Systems Operations	Treatment Weymouth	-	0.0%	61.0%	0.0%	39.0%	0.0%	100.0%
Water Systems Operations	Water Quality Section	2,893,961	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Eastern Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Western Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Manufacturing Services Unit	145,820	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Environmental Health & Safety Section	1,317,542	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Fleet Services Unit	566,065	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Power Support Unit	282,970	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations & Planning Section	54,556	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Security Team & Security Management	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Sustainability, Resilience & Innovation		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Diversity, Equity & Inclusion		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Equal Employment Opportunity		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Office of the Chief Financial Officer		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Office of Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Engineering Services		2,548,964	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Administrative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Information Technology	2,335,484	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Planning & Development	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Implementation	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Office of the Group Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Ethics Office		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Real Property		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
General Counsel		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
General Auditor		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Departmental O&M		27,243,435	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
GENERAL DISTRICT REQUIREMENTS								
State Water Contract*								
Supply - O&M		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Supply - Capital		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Power - O&M & Off-Aq Capital		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Power - Capital (less Off-Aq)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Transmission - Capital - Commodity, Demand, & Standby		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Transmission - O&M - Commodity only		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Supply		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Power		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Other		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total State Water Contract		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Colorado River Aqueduct Power Costs								
		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Supply Programs (cash funded portion)								
		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Demand Management (cash funded portion)								
Local Resources Program		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Future Supply Actions & Stormwater Pilot		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Conservation Program (cash funded portion)		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Demand Management Costs		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Capital Financing								
		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		16,329,225	31.8%	29.5%	38.7%	0.0%	0.0%	100.0%
G.O. Bond Debt Service		108,313	31.8%	29.5%	38.7%	0.0%	0.0%	100.0%
Debt Administration		148,953	31.8%	29.5%	38.7%	0.0%	0.0%	100.0%
Bond Defeasance		-	31.8%	29.5%	38.7%	0.0%	0.0%	100.0%
PAYGO		7,438,500	31.8%	29.5%	38.7%	0.0%	0.0%	100.0%
Total Capital Financing Costs		24,024,991	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Other Operating Costs								
Operating Equipment		407,563	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Succession Planning Labor Pool		230,606	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
OPEB/PERS Pre-Funding		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Other Operating Costs		638,169	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Increase/(Decrease) in Required Reserves								
		-	31.0%	31.3%	37.7%	0.0%	0.0%	100.0%
Total General District Requirements								
		24,663,160	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
REQUIREMENTS BEFORE OFFSETS:								
		51,906,594	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Revenue Offsets								
Property Taxes - MWD Portion of SWC GO Debt Service		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Property Taxes - MWD GO Debt Service		108,313	0.0%	0.0%	100.0%	0.0%	0.0%	100.0%
Interest on Investments		246,132	31.8%	29.5%	38.7%	0.0%	0.0%	100.0%
Hydro-Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
CRA Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Wadsworth Pumping Plant (DVL) Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to supply (PVID Lease)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Property Taxes - SWC		-	31.8%	29.5%	38.7%	0.0%	0.0%	100.0%
Revenue Reserve used for Revenue Bonds - I&P		-	31.8%	29.5%	38.7%	0.0%	0.0%	100.0%
Annexation		-	31.8%	29.5%	38.7%	0.0%	0.0%	100.0%
Total Revenue Offsets		354,445	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
NET REVENUE REQUIREMENTS:								
-		51,552,150	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

	Functionalization	Allocation Percentages					Total
		Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M							
Group	Item						
Office of General Manager		365,917	-	365,917	-	-	365,917
Office of General Manager	Board of Directors	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-
Human Resources		720,301	-	720,301	-	-	720,301
Water Systems Operations	Office of the Manager	756,513	-	756,513	-	-	756,513
Water Systems Operations	Office of the Manager, Conveyance & Distribution S	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	191,489	-	191,489	-	-	191,489
Water Systems Operations	Office of the Manager, Operations Support Services	146,816	-	146,816	-	-	146,816
Water Systems Operations	Operations Support Services	98,943	-	98,943	-	-	98,943
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	14,818,093	-	9,515,508	5,302,585	-	14,818,093
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	2,893,961	-	2,893,961	-	-	2,893,961
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	145,820	-	145,820	-	-	145,820
Water Systems Operations	Environmental Health & Safety Section	1,317,542	-	1,317,542	-	-	1,317,542
Water Systems Operations	OSS, Fleet Services Unit	566,065	-	566,065	-	-	566,065
Water Systems Operations	OSS, Power Support Unit	282,970	-	282,970	-	-	282,970
Water Systems Operations	Office of the Manager, Operations & Planning Secti	54,556	-	54,556	-	-	54,556
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-
Sustainability, Resilience & Inn		-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-
Engineering Services		2,548,964	-	2,548,964	-	-	2,548,964
Business Technology	Administrative Services	-	-	-	-	-	-
Business Technology	Information Technology	2,335,484	-	2,335,484	-	-	2,335,484
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	-	-	-	-	-	-
Water Resources Managemen	Office of the Group Manager	-	-	-	-	-	-
Ethics Office		-	-	-	-	-	-
Real Property		-	-	-	-	-	-
General Counsel		-	-	-	-	-	-
General Auditor		-	-	-	-	-	-
Total Departmental O&M		27,243,435	-	21,940,850	5,302,585	-	27,243,435
GENERAL DISTRICT REQUIREMENTS		-	-	-	-	-	-
State Water Contract*		-	-	-	-	-	-
Supply - O&M		-	-	-	-	-	-
Supply - Capital		-	-	-	-	-	-
Power - O&M & Off-Aq Capital		-	-	-	-	-	-
Power - Capital (less Off-Aq)		-	-	-	-	-	-
Transmission - Capital - Commodity, Demand, & Standby		-	-	-	-	-	-
Transmission - O&M - Commodity only		-	-	-	-	-	-
Delta Conveyance - Supply		-	-	-	-	-	-
Delta Conveyance - Power		-	-	-	-	-	-
Delta Conveyance - Other		-	-	-	-	-	-
Total State Water Contract		-	-	-	-	-	-
Colorado River Aqueduct Power Costs		-	-	-	-	-	-
Supply Programs (cash funded portion)		-	-	-	-	-	-
Demand Management (cash funded portion)		-	-	-	-	-	-
Local Resources Program		-	-	-	-	-	-
Future Supply Actions & Stormwater Pilot		-	-	-	-	-	-
Conservation Program (cash funded portion)		-	-	-	-	-	-
Total Demand Management Costs		-	-	-	-	-	-
Capital Financing		-	-	-	-	-	-
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		16,329,225	5,200,008	4,814,822	6,314,395	-	16,329,225
G.O. Bond Debt Service		108,313	34,492	31,937	41,884	-	108,313
Debt Administration		148,953	47,434	43,920	57,599	-	148,953
Bond Defeasance		-	-	-	-	-	-
PAYGO		7,438,500	2,368,775	2,193,310	2,876,415	-	7,438,500
Total Capital Financing Costs		24,024,991	7,650,709	7,083,990	9,290,293	-	24,024,991
Other Operating Costs		-	-	-	-	-	-
Operating Equipment		407,563	-	407,563	-	-	407,563
Succession Planning Labor Pool		230,606	-	230,606	-	-	230,606
OPEB/PERS Pre-Funding		-	-	-	-	-	-
Total Other Operating Costs		638,169	-	638,169	-	-	638,169
Increase/(Decrease) in Required Reserves		-	-	-	-	-	-
Total General District Requirements		24,663,160	7,650,709	7,722,158	9,290,293	-	24,663,160
REQUIREMENTS BEFORE OFFSETS:		51,906,594	7,650,709	29,663,008	9,290,293	5,302,585	51,906,594
Revenue Offsets		-	-	-	-	-	-
Property Taxes - MWD Portion of SWC GO Debt Service		-	-	-	-	-	-
Property Taxes - MWD GO Debt Service		108,313	-	-	108,313	-	108,313
Interest on Investments		246,132	78,380	72,574	95,177	-	246,132
Hydro-Power Revenue		-	-	-	-	-	-
CRA Power Revenue		-	-	-	-	-	-
Wadsworth Pumping Plant (DVL) Power Revenue		-	-	-	-	-	-
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)		-	-	-	-	-	-
Misc. allocated to supply (PVID Lease)		-	-	-	-	-	-
Property Taxes - SWC		-	-	-	-	-	-
Revenue Reserve used for Revenue Bonds - I&P		-	-	-	-	-	-
Annexation		-	-	-	-	-	-
Total Revenue Offsets		354,445	78,380	72,574	203,490	-	354,445
NET REVENUE REQUIREMENTS:		51,552,150	7,572,329	29,590,434	9,086,802	5,302,585	51,552,150

		Functionalization	Allocation Percentages					Total
			Fixed			Variable		
			Demand	Commodity	Standby	Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		322,928	-	322,928	-	-	-	322,928
Office of General Manager	Board of Directors	-	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-	-
Human Resources		564,951	-	564,951	-	-	-	564,951
Water Systems Operations	Office of the Manager	551,864	-	551,864	-	-	-	551,864
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	68,858	-	68,858	-	-	-	68,858
Water Systems Operations	Office of the Manager, Operations Support Services	111,583	-	111,583	-	-	-	111,583
Water Systems Operations	Operations Support Services	89,491	-	89,491	-	-	-	89,491
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	9,213,189	-	9,213,189	-	-	-	9,213,189
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	2,382,228	-	2,382,228	-	-	-	2,382,228
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	133,853	-	133,853	-	-	-	133,853
Water Systems Operations	Environmental Health & Safety Section	1,022,103	-	1,022,103	-	-	-	1,022,103
Water Systems Operations	OSS, Fleet Services Unit	343,180	-	343,180	-	-	-	343,180
Water Systems Operations	OSS, Power Support Unit	255,604	-	255,604	-	-	-	255,604
Water Systems Operations	Office of the Manager, Operations & Planning Section	49,611	-	49,611	-	-	-	49,611
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-	-
Sustainability, Resilience & Inr		-	-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-	-
Engineering Services		2,144,180	-	2,144,180	-	-	-	2,144,180
Business Technology	Administrative Services	-	-	-	-	-	-	-
Business Technology	Information Technology	1,550,764	-	1,550,764	-	-	-	1,550,764
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	-	-	-	-	-	-	-
Water Resources Managemen	Office of the Group Manager	-	-	-	-	-	-	-
Ethics Office		-	-	-	-	-	-	-
Real Property		-	-	-	-	-	-	-
General Counsel		-	-	-	-	-	-	-
General Auditor		-	-	-	-	-	-	-
Total Departmental O&M	-	18,804,387	-	18,804,387	-	-	-	18,804,387

		Functionalization	Allocation Percentages						% Total
			Demand	Commodity	Standby	Variable Commodity	Other	Hydroelectric	
Departmental O&M									
Group	Item								
Office of General Manager		1,592,153	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Office of General Manager	Board of Directors	-	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Bay Delta Initiatives	Bay Delta Initiatives	-	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Legislative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Media Communications Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Manager, External Affairs/Special Projects	-	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Conservation & Community Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Human Resources		3,134,125	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager	3,651,194	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	363,701	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Treatment Section	155,585	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations Support Services	708,586	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Support Services	6,818,209	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Desert Region / C&D CRA	-	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	System Operations Unit	9,419,591	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Power Operations and Planning	1,276,297	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Planning & Programs Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Jensen	2,632,270	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Diemer	2,797,479	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Mills	1,907,561	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Skinner	2,233,798	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Weymouth	2,612,868	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Water Quality Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Eastern Unit	16,691,835	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Western Unit	15,058,721	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Manufacturing Services Unit	6,807,621	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Environmental Health & Safety Section	6,502,324	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Fleet Services Unit	6,927,294	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Power Support Unit	4,272,290	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations & Planning Section	263,305	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Security Team & Security Management	-	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Sustainability, Resilience & Innovation		-	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Diversity, Equity & Inclusion		-	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Equal Employment Opportunity		-	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Office of the Chief Financial Officer		-	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Office of Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Engineering Services		8,539,723	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Administrative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Information Technology	10,161,994	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Planning & Development	412,544	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Implementation	-	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Office of the Group Manager	47,448	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Ethics Office		-	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Real Property		3,551,180	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%
General Counsel		-	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%
General Auditor		-	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Total Departmental O&M		118,539,694	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
GENERAL DISTRICT REQUIREMENTS									
State Water Contract*									
Supply - O&M		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Supply - Capital		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Power - O&M & Off-Aq Capital		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Power - Capital (less Off-Aq)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Transmission - Capital - Commodity, Demand, & Standby		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Transmission - O&M - Commodity only		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Supply		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Power		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Other		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total State Water Contract		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Colorado River Aqueduct Power Costs									
		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Supply Programs (cash funded portion)									
		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Demand Management (cash funded portion)									
Local Resources Program		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Future Supply Actions & Stormwater Pilot		-	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Conservation Program (cash funded portion)		-	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Total Demand Management Costs		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Capital Financing									
		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		54,707,349	34.6%	38.9%	26.5%	0.0%	0.0%	0.0%	100.0%
G.O. Bond Debt Service		1,483,158	34.6%	38.9%	26.5%	0.0%	0.0%	0.0%	100.0%
Debt Administration		499,033	34.6%	38.9%	26.5%	0.0%	0.0%	0.0%	100.0%
Bond Defeasance		-	34.6%	38.9%	26.5%	0.0%	0.0%	0.0%	100.0%
PAYGO		24,921,000	34.6%	38.9%	26.5%	0.0%	0.0%	0.0%	100.0%
Total Capital Financing Costs		81,610,541	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Other Operating Costs									
Operating Equipment		1,773,357	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Succession Planning Labor Pool		1,003,398	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%
OPEB/PERS Pre-Funding		-	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Total Other Operating Costs		2,776,755	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Increase/(Decrease) in Required Reserves									
		-	33.4%	41.0%	25.6%	0.0%	0.0%	0.0%	100.0%
Total General District Requirements									
		84,387,295	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
REQUIREMENTS BEFORE OFFSETS:									
		202,926,990	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Revenue Offsets									
Property Taxes - MWD Portion of SWC GO Debt Service		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Property Taxes - MWD GO Debt Service		1,483,158	34.7%	38.6%	26.7%	0.0%	0.0%	0.0%	100.0%
Interest on Investments		962,244	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Hydro-Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
CRA Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Wadsworth Pumping Plant (DVL) Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to supply (PVID Lease)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Property Taxes - SWC		-	34.7%	38.6%	26.7%	0.0%	0.0%	0.0%	100.0%
Revenue Reserve used for Revenue Bonds - I&P		-	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Annexation		-	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Total Revenue Offsets		2,445,402	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
NET REVENUE REQUIREMENTS:									
		200,481,588	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

	Functionalization	Allocation Percentages					Total
		Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M							
Group	Item						
Office of General Manager		1,592,153	-	1,592,153	-	-	1,592,153
Office of General Manager	Board of Directors	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-
Human Resources		3,134,125	-	3,134,125	-	-	3,134,125
Water Systems Operations	Office of the Manager	3,651,194	-	3,651,194	-	-	3,651,194
Water Systems Operations	Office of the Manager, Conveyance & Distribution S	363,701	-	363,701	-	-	363,701
Water Systems Operations	Office of the Manager, Treatment Section	155,585	-	155,585	-	-	155,585
Water Systems Operations	Office of the Manager, Operations Support Services	708,586	-	708,586	-	-	708,586
Water Systems Operations	Operations Support Services	6,818,209	-	6,818,209	-	-	6,818,209
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	9,419,591	-	9,419,591	-	-	9,419,591
Water Systems Operations	Power Operations and Planning	1,276,297	-	1,276,297	-	-	1,276,297
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	2,632,270	-	2,632,270	-	-	2,632,270
Water Systems Operations	Treatment Diemer	2,797,479	-	2,797,479	-	-	2,797,479
Water Systems Operations	Treatment Mills	1,907,561	-	1,907,561	-	-	1,907,561
Water Systems Operations	Treatment Skinner	2,233,798	-	2,233,798	-	-	2,233,798
Water Systems Operations	Treatment Weymouth	2,612,868	-	2,612,868	-	-	2,612,868
Water Systems Operations	Water Quality Section	-	-	-	-	-	-
Water Systems Operations	C&D, Eastern Unit	16,691,835	-	16,691,835	-	-	16,691,835
Water Systems Operations	C&D, Western Unit	15,058,721	-	15,058,721	-	-	15,058,721
Water Systems Operations	OSS, Manufacturing Services Unit	6,807,621	-	6,807,621	-	-	6,807,621
Water Systems Operations	Environmental Health & Safety Section	6,502,324	-	6,502,324	-	-	6,502,324
Water Systems Operations	OSS, Fleet Services Unit	6,927,294	-	6,927,294	-	-	6,927,294
Water Systems Operations	OSS, Power Support Unit	4,272,290	-	4,272,290	-	-	4,272,290
Water Systems Operations	Office of the Manager, Operations & Planning Secti	263,305	-	263,305	-	-	263,305
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-
Sustainability, Resilience & Inn		-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-
Engineering Services		8,539,723	-	8,539,723	-	-	8,539,723
Business Technology	Administrative Services	-	-	-	-	-	-
Business Technology	Information Technology	10,161,994	-	10,161,994	-	-	10,161,994
Water Resources Managemen	Resource Planning & Development	412,544	-	412,544	-	-	412,544
Water Resources Managemen	Resource Implementation	-	-	-	-	-	-
Water Resources Managemen	Office of the Group Manager	47,448	-	47,448	-	-	47,448
Ethics Office		-	-	-	-	-	-
Real Property		3,551,180	-	3,551,180	-	-	3,551,180
General Counsel		-	-	-	-	-	-
General Auditor		-	-	-	-	-	-
Total Departmental O&M	-	118,539,694	-	118,539,694	-	-	118,539,694
GENERAL DISTRICT REQUIREMENTS							
		-	-	-	-	-	-
State Water Contract*							
Supply - O&M		-	-	-	-	-	-
Supply - Capital		-	-	-	-	-	-
Power - O&M & Off-Aq Capital		-	-	-	-	-	-
Power - Capital (less Off-Aq)		-	-	-	-	-	-
Transmission - Capital - Commodity, Demand, & Standby		-	-	-	-	-	-
Transmission - O&M - Commodity only		-	-	-	-	-	-
Delta Conveyance - Supply		-	-	-	-	-	-
Delta Conveyance - Power		-	-	-	-	-	-
Delta Conveyance - Other		-	-	-	-	-	-
Total State Water Contract		-	-	-	-	-	-
Colorado River Aqueduct Power Costs							
		-	-	-	-	-	-
Supply Programs (cash funded portion)							
		-	-	-	-	-	-
Demand Management (cash funded portion)							
Local Resources Program		-	-	-	-	-	-
Future Supply Actions & Stormwater Pilot		-	-	-	-	-	-
Conservation Program (cash funded portion)		-	-	-	-	-	-
Total Demand Management Costs		-	-	-	-	-	-
Capital Financing							
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		-	-	-	-	-	-
G.O. Bond Debt Service	54,707,349	18,904,255	21,303,743	14,499,351	-	-	54,707,349
Debt Administration	1,483,158	512,509	577,561	393,089	-	-	1,483,158
Bond Defeasance	499,033	172,442	194,330	132,261	-	-	499,033
PAYGO	-	-	-	-	-	-	-
Total Capital Financing Costs	24,921,000	8,611,511	9,704,557	6,604,932	-	-	24,921,000
	81,610,541	28,200,717	31,780,191	21,629,633	-	-	81,610,541
Other Operating Costs							
Operating Equipment	-	-	-	-	-	-	-
Succession Planning Labor Pool	1,773,357	-	1,773,357	-	-	-	1,773,357
OPEB/PERS Pre-Funding	1,003,398	-	1,003,398	-	-	-	1,003,398
Total Other Operating Costs	-	-	-	-	-	-	-
	2,776,755	-	2,776,755	-	-	-	2,776,755
Increase/(Decrease) in Required Reserves							
	-	-	-	-	-	-	-
Total General District Requirements	84,387,295	28,200,717	34,556,945	21,629,633	-	-	84,387,295
REQUIREMENTS BEFORE OFFSETS:	202,926,990	28,200,717	153,096,640	21,629,633	-	-	202,926,990
Revenue Offsets							
Property Taxes - MWD Portion of SWC GO Debt Service	-	-	-	-	-	-	-
Property Taxes - MWD GO Debt Service	1,483,158	515,395	572,462	395,302	-	-	1,483,158
Interest on Investments	962,244	-	962,244	-	-	-	962,244
Hydro-Power Revenue	-	-	-	-	-	-	-
CRA Power Revenue	-	-	-	-	-	-	-
Wadsworth Pumping Plant (DVL) Power Revenue	-	-	-	-	-	-	-
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)	-	-	-	-	-	-	-
Misc. allocated to supply (PVID Lease)	-	-	-	-	-	-	-
Property Taxes - SWC	-	-	-	-	-	-	-
Revenue Reserve used for Revenue Bonds - I&P	-	-	-	-	-	-	-
Annexation	-	-	-	-	-	-	-
Total Revenue Offsets	2,445,402	515,395	1,534,705	395,302	-	-	2,445,402
NET REVENUE REQUIREMENTS:	200,481,588	27,685,323	151,561,934	21,234,331	-	-	200,481,588

		Functionalization	Allocation Percentages					Total
			Fixed			Variable		
			Demand	Commodity	Standby	Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		1,405,100	-	1,405,100	-	-	-	1,405,100
Office of General Manager	Board of Directors	-	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-	-
Human Resources		2,458,177	-	2,458,177	-	-	-	2,458,177
Water Systems Operations	Office of the Manager	2,663,490	-	2,663,490	-	-	-	2,663,490
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	355,772	-	355,772	-	-	-	355,772
Water Systems Operations	Office of the Manager, Treatment Section	55,947	-	55,947	-	-	-	55,947
Water Systems Operations	Office of the Manager, Operations Support Services	538,538	-	538,538	-	-	-	538,538
Water Systems Operations	Operations Support Services	6,166,856	-	6,166,856	-	-	-	6,166,856
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	7,700,524	-	7,700,524	-	-	-	7,700,524
Water Systems Operations	Power Operations and Planning	1,100,780	-	1,100,780	-	-	-	1,100,780
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	1,557,953	-	1,557,953	-	-	-	1,557,953
Water Systems Operations	Treatment Diemer	1,496,567	-	1,496,567	-	-	-	1,496,567
Water Systems Operations	Treatment Mills	1,422,538	-	1,422,538	-	-	-	1,422,538
Water Systems Operations	Treatment Skinner	1,388,870	-	1,388,870	-	-	-	1,388,870
Water Systems Operations	Treatment Weymouth	1,619,803	-	1,619,803	-	-	-	1,619,803
Water Systems Operations	Water Quality Section	-	-	-	-	-	-	-
Water Systems Operations	C&D, Eastern Unit	11,741,148	-	11,741,148	-	-	-	11,741,148
Water Systems Operations	C&D, Western Unit	11,237,923	-	11,237,923	-	-	-	11,237,923
Water Systems Operations	OSS, Manufacturing Services Unit	6,248,962	-	6,248,962	-	-	-	6,248,962
Water Systems Operations	Environmental Health & Safety Section	5,044,279	-	5,044,279	-	-	-	5,044,279
Water Systems Operations	OSS, Fleet Services Unit	4,199,710	-	4,199,710	-	-	-	4,199,710
Water Systems Operations	OSS, Power Support Unit	3,859,115	-	3,859,115	-	-	-	3,859,115
Water Systems Operations	Office of the Manager, Operations & Planning Section	239,440	-	239,440	-	-	-	239,440
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-	-
Sustainability, Resilience & Inr		-	-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-	-
Engineering Services		7,183,587	-	7,183,587	-	-	-	7,183,587
Business Technology	Administrative Services	-	-	-	-	-	-	-
Business Technology	Information Technology	6,747,572	-	6,747,572	-	-	-	6,747,572
Water Resources Managemen	Resource Planning & Development	326,423	-	326,423	-	-	-	326,423
Water Resources Managemen	Resource Implementation	-	-	-	-	-	-	-
Water Resources Managemen	Office of the Group Manager	46,435	-	46,435	-	-	-	46,435
Ethics Office		-	-	-	-	-	-	-
Real Property		1,511,652	-	1,511,652	-	-	-	1,511,652
General Counsel		-	-	-	-	-	-	-
General Auditor		-	-	-	-	-	-	-
Total Departmental O&M	-	88,317,159	-	88,317,159	-	-	-	88,317,159

		Functionalization	Allocation Percentages					% Total
			Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		89,429	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Office of General Manager	Board of Directors	-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Bay Delta Initiatives	Bay Delta Initiatives	-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
External Affairs	Legislative Services	-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
External Affairs	Media Communications Services	-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
External Affairs	Manager, External Affairs/Special Projects	-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
External Affairs	Conservation & Community Services	-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Human Resources		176,039	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Water Systems Operations	Office of the Manager	233,328	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	12,445	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Water Systems Operations	Office of the Manager, Treatment Section	-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Water Systems Operations	Office of the Manager, Operations Support Services	45,282	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Water Systems Operations	Operations Support Services	120,508	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Water Systems Operations	Desert Region / C&D CRA	-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Water Systems Operations	System Operations Unit	-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Water Systems Operations	Power Operations and Planning	929,601	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Water Systems Operations	Operations Planning & Programs Unit	-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Water Systems Operations	Treatment Jensen	-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Water Systems Operations	Treatment Diemer	-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Water Systems Operations	Treatment Mills	-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Water Systems Operations	Treatment Skinner	-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Water Systems Operations	Treatment Weymouth	-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Water Systems Operations	Water Quality Section	-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Water Systems Operations	C&D, Eastern Unit	557,610	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Water Systems Operations	C&D, Western Unit	528,077	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Water Systems Operations	OSS, Manufacturing Services Unit	85,817	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Water Systems Operations	Environmental Health & Safety Section	50,902	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Water Systems Operations	OSS, Fleet Services Unit	-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Water Systems Operations	OSS, Power Support Unit	2,589,267	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Water Systems Operations	Office of the Manager, Operations & Planning Section	16,826	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Water Systems Operations	Security Team & Security Management	-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Sustainability, Resilience & Innovation		-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Diversity, Equity & Inclusion		-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Equal Employment Opportunity		-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Office of the Chief Financial Officer		-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Business Technology	Office of Manager	-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Engineering Services		652,276	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Business Technology	Administrative Services	-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Business Technology	Information Technology	570,783	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Water Resources Management	Resource Planning & Development	-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Water Resources Management	Resource Implementation	-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Water Resources Management	Office of the Group Manager	-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Ethics Office		-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Real Property		-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
General Counsel		-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
General Auditor		-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Total Departmental O&M		6,658,190	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
GENERAL DISTRICT REQUIREMENTS								
State Water Contract*								
Supply - O&M		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Supply - Capital		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Power - O&M & Off-Aq Capital		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Power - Capital (less Off-Aq)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Transmission - Capital - Commodity, Demand, & Standby		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Transmission - O&M - Commodity only		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Supply		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Power		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Other		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total State Water Contract		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Colorado River Aqueduct Power Costs								
		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Supply Programs (cash funded portion)								
		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Demand Management (cash funded portion)								
Local Resources Program		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Future Supply Actions & Stormwater Pilot		-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Conservation Program (cash funded portion)		-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Total Demand Management Costs		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Capital Financing								
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
G.O. Bond Debt Service		4,178,622	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Debt Administration		-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Bond Defeasance		38,117	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
PAYGO		-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Total Capital Financing Costs		1,903,500	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
		6,120,239	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Other Operating Costs								
Operating Equipment		99,607	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Succession Planning Labor Pool		56,359	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
OPEB/PERS Pre-Funding		-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Total Other Operating Costs		155,966	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Increase/(Decrease) in Required Reserves								
		-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Total General District Requirements								
		6,276,205	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
REQUIREMENTS BEFORE OFFSETS:								
		12,934,395	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Revenue Offsets								
Property Taxes - MWD Portion of SWC GO Debt Service		-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Property Taxes - MWD GO Debt Service		-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Interest on Investments		61,333	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Hydro-Power Revenue		10,710,879	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
CRA Power Revenue		-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Wadsworth Pumping Plant (DVL) Power Revenue		-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)		-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Misc. allocated to supply (PVID Lease)		-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Property Taxes - SWC		-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Revenue Reserve used for Revenue Bonds - I&P		-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Annexation		-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Total Revenue Offsets		10,772,211	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
NET REVENUE REQUIREMENTS:								
-		2,162,184	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

	Functionalization	Allocation Percentages					Total
		Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M							
Group	Item						
Office of General Manager		89,429	-	-	-	89,429	89,429
Office of General Manager	Board of Directors	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-
Human Resources		176,039	-	-	-	176,039	176,039
Water Systems Operations	Office of the Manager	233,328	-	-	-	233,328	233,328
Water Systems Operations	Office of the Manager, Conveyance & Distribution S	12,445	-	-	-	12,445	12,445
Water Systems Operations	Office of the Manager, Treatment Section	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations Support Services	45,282	-	-	-	45,282	45,282
Water Systems Operations	Operations Support Services	120,508	-	-	-	120,508	120,508
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	929,601	-	-	-	929,601	929,601
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	-	-	-	-	-	-
Water Systems Operations	C&D, Eastern Unit	557,610	-	-	-	557,610	557,610
Water Systems Operations	C&D, Western Unit	528,077	-	-	-	528,077	528,077
Water Systems Operations	OSS, Manufacturing Services Unit	85,817	-	-	-	85,817	85,817
Water Systems Operations	Environmental Health & Safety Section	50,902	-	-	-	50,902	50,902
Water Systems Operations	OSS, Fleet Services Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Power Support Unit	2,589,267	-	-	-	2,589,267	2,589,267
Water Systems Operations	Office of the Manager, Operations & Planning Sect	16,826	-	-	-	16,826	16,826
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-
Sustainability, Resilience & Inr		-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-
Equal Employment Opportunit		-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-
Engineering Services		652,276	-	-	-	652,276	652,276
Business Technology	Administrative Services	-	-	-	-	-	-
Business Technology	Information Technology	570,783	-	-	-	570,783	570,783
Water Resources Management	Resource Planning & Development	-	-	-	-	-	-
Water Resources Management	Resource Implementation	-	-	-	-	-	-
Water Resources Management	Office of the Group Manager	-	-	-	-	-	-
Ethics Office		-	-	-	-	-	-
Real Property		-	-	-	-	-	-
General Counsel		-	-	-	-	-	-
General Auditor		-	-	-	-	-	-
Total Departmental O&M	-	6,658,190	-	-	-	6,658,190	6,658,190
GENERAL DISTRICT REQUIREMENTS		-	-	-	-	-	-
State Water Contract*		-	-	-	-	-	-
Supply - O&M		-	-	-	-	-	-
Supply - Capital		-	-	-	-	-	-
Power - O&M & Off-Aq Capital		-	-	-	-	-	-
Power - Capital (less Off-Aq)		-	-	-	-	-	-
Transmission - Capital - Commodity, Demand, & Standby		-	-	-	-	-	-
Transmission - O&M - Commodity only		-	-	-	-	-	-
Delta Conveyance - Supply		-	-	-	-	-	-
Delta Conveyance - Power		-	-	-	-	-	-
Delta Conveyance - Other		-	-	-	-	-	-
Total State Water Contract		-	-	-	-	-	-
Colorado River Aqueduct Power Costs		-	-	-	-	-	-
Supply Programs (cash funded portion)		-	-	-	-	-	-
Demand Management (cash funded portion)		-	-	-	-	-	-
Local Resources Program		-	-	-	-	-	-
Future Supply Actions & Stormwater Pilot		-	-	-	-	-	-
Conservation Program (cash funded portion)		-	-	-	-	-	-
Total Demand Management Costs		-	-	-	-	-	-
Capital Financing		-	-	-	-	-	-
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		4,178,622	-	-	-	4,178,622	4,178,622
G.O. Bond Debt Service		-	-	-	-	-	-
Debt Administration		38,117	-	-	-	38,117	38,117
Bond Defeasance		-	-	-	-	-	-
PAYGO		1,903,500	-	-	-	1,903,500	1,903,500
Total Capital Financing Costs		6,120,239	-	-	-	6,120,239	6,120,239
Other Operating Costs		-	-	-	-	-	-
Operating Equipment		99,607	-	-	-	99,607	99,607
Succession Planning Labor Pool		56,359	-	-	-	56,359	56,359
OPEB/PERS Pre-Funding		-	-	-	-	-	-
Total Other Operating Costs		155,966	-	-	-	155,966	155,966
Increase/(Decrease) in Required Reserves		-	-	-	-	-	-
Total General District Requirements		6,276,205	-	-	-	6,276,205	6,276,205
REQUIREMENTS BEFORE OFFSETS:		12,934,395	-	-	-	12,934,395	12,934,395
Revenue Offsets		-	-	-	-	-	-
Property Taxes - MWD Portion of SWC GO Debt Service		-	-	-	-	-	-
Property Taxes - MWD GO Debt Service		-	-	-	-	-	-
Interest on Investments		61,333	-	-	-	61,333	61,333
Hydro-Power Revenue		10,710,879	-	-	-	10,710,879	10,710,879
CRA Power Revenue		-	-	-	-	-	-
Wadsworth Pumping Plant (DVL) Power Revenue		-	-	-	-	-	-
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)		-	-	-	-	-	-
Misc. allocated to supply (PVID Lease)		-	-	-	-	-	-
Property Taxes - SWC		-	-	-	-	-	-
Revenue Reserve used for Revenue Bonds - I&P		-	-	-	-	-	-
Annexation		-	-	-	-	-	-
Total Revenue Offsets		10,772,211	-	-	-	10,772,211	10,772,211
NET REVENUE REQUIREMENTS:		2,162,184	-	-	-	2,162,184	2,162,184

		Functionalization	Allocation Percentages					Total	
			Demand	Fixed		Variable Commodity	Other		Hydroelectric
				Commodity	Standby				
Departmental O&M									
Group	Item								
	Office of General Manager	78,922	-	-	-	-	78,922	78,922	
	Office of General Manager	-	-	-	-	-	-	-	
	Bay Delta Initiatives	-	-	-	-	-	-	-	
	External Affairs	-	-	-	-	-	-	-	
	External Affairs	-	-	-	-	-	-	-	
	External Affairs	-	-	-	-	-	-	-	
	External Affairs	-	-	-	-	-	-	-	
	Human Resources	138,072	-	-	-	-	138,072	138,072	
	Water Systems Operations	170,209	-	-	-	-	170,209	170,209	
	Water Systems Operations	12,174	-	-	-	-	12,174	12,174	
	Water Systems Operations	-	-	-	-	-	-	-	
	Water Systems Operations	34,415	-	-	-	-	34,415	34,415	
	Water Systems Operations	108,996	-	-	-	-	108,996	108,996	
	Water Systems Operations	-	-	-	-	-	-	-	
	Water Systems Operations	-	-	-	-	-	-	-	
	Water Systems Operations	801,762	-	-	-	-	801,762	801,762	
	Water Systems Operations	-	-	-	-	-	-	-	
	Water Systems Operations	-	-	-	-	-	-	-	
	Water Systems Operations	-	-	-	-	-	-	-	
	Water Systems Operations	-	-	-	-	-	-	-	
	Water Systems Operations	-	-	-	-	-	-	-	
	Water Systems Operations	-	-	-	-	-	-	-	
	Water Systems Operations	-	-	-	-	-	-	-	
	Water Systems Operations	-	-	-	-	-	-	-	
	Water Systems Operations	-	-	-	-	-	-	-	
	Water Systems Operations	-	-	-	-	-	-	-	
	Water Systems Operations	-	-	-	-	-	-	-	
	Water Systems Operations	-	-	-	-	-	-	-	
	Water Systems Operations	-	-	-	-	-	-	-	
	Water Systems Operations	-	-	-	-	-	-	-	
	Water Systems Operations	-	-	-	-	-	-	-	
	Water Systems Operations	-	-	-	-	-	-	-	
	Water Systems Operations	-	-	-	-	-	-	-	
	Water Systems Operations	-	-	-	-	-	-	-	
	Water Systems Operations	-	-	-	-	-	-	-	
	Water Systems Operations	-	-	-	-	-	-	-	
	Water Systems Operations	-	-	-	-	-	-	-	
	Water Systems Operations	-	-	-	-	-	-	-	
	Water Systems Operations	-	-	-	-	-	-	-	
	Water Systems Operations	-	-	-	-	-	-	-	
	Water Systems Operations	-	-	-	-	-	-	-	
	Water Systems Operations	-	-	-	-	-	-	-	
	Water Systems Operations	-	-	-	-	-	-	-	
	Water Systems Operations	-	-	-	-	-	-	-	
	Water Systems Operations	-	-	-	-	-	-	-	
	Water Systems Operations	-	-	-	-	-	-	-	
	Water Systems Operations	-	-	-	-	-	-	-	
	Water Systems Operations	-	-	-	-	-	-	-	
	Water Systems Operations	-	-	-	-	-	-	-	
	Water Systems Operations	-	-	-	-	-	-	-	
	Water Systems Operations	-	-	-	-	-	-	-	
	Water Systems Operations	-	-	-	-	-	-	-	
	Water Systems Operations	-	-	-	-	-	-	-	
	Water Systems Operations	-	-	-	-	-	-	-	
	Water Systems Operations	-	-	-	-	-	-	-	
	Water Systems Operations	-	-	-	-	-	-	-	
	Water Systems Operations	-	-	-	-	-	-	-	
	Water Systems Operations	-	-	-	-	-	-	-	
	Water Systems Operations	-	-	-	-	-	-	-	
	Water Systems Operations	-	-	-	-	-	-	-	
	Water Systems Operations	-	-	-	-	-	-	-	
	Water Systems Operations	-	-	-	-	-	-	-	
	Water Systems Operations	-	-	-	-	-	-	-	
	Water Systems Operations	-	-	-	-	-	-	-	
	Water Systems Operations	-	-	-	-	-	-	-	
	Water Systems Operations	-	-	-	-	-	-	-	
	Water Systems Operations	-	-	-	-	-	-	-	
	Water Systems Operations	-	-	-	-	-	-	-	
	Water Systems Operations	-	-	-	-	-	-	-	
	Water Systems Operations	-	-	-	-	-	-	-	
	Water Systems Operations	-	-	-	-	-	-	-	
	Water Systems Operations	-	-	-	-	-	-	-	
	Water Systems Operations	-	-	-	-	-	-	-	
	Water Systems Operations	-	-	-	-	-	-	-	
	Water Systems Operations	-	-	-	-	-	-	-	
	Water Systems Operations	-	-	-	-	-	-	-	
	Water Systems Operations	-	-	-	-	-	-	-	
	Water Systems Operations	-	-	-	-	-	-	-	
	Water Systems Operations	-	-	-	-	-	-	-	
	Water Systems Operations	-	-	-	-	-	-	-	
	Water Systems Operations	-	-	-	-	-	-	-	
	Water Systems Operations	-	-	-	-	-	-	-	
	Water Systems Operations	-	-	-	-	-	-	-	
	Water Systems Operations	-	-	-	-	-	-	-	
	Water Systems Operations	-	-	-	-	-	-	-	
	Water Systems Operations	-	-	-	-	-	-	-	
	Water Systems Operations	-	-	-	-	-	-	-	
	Water Systems Operations	-	-	-	-	-	-	-	
	Water Systems Operations	-	-	-	-	-	-	-	
	Water Systems Operations	-	-	-	-	-	-	-	
	Water Systems Operations	-	-	-	-	-	-	-	
	Water Systems Operations	-	-	-	-	-	-	-	
	Water Systems Operations	-	-	-	-	-	-	-	
	Water Systems Operations	-	-	-	-	-	-	-	
	Water Systems Operations	-	-	-	-	-	-	-	
	Water Systems Operations	-	-	-	-	-	-	-	
	Water Systems Operations								

		Functionalization	Allocation Percentages					% Total
			Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		154,245	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Office of General Manager	Board of Directors	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Bay Delta Initiatives	Bay Delta Initiatives	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Legislative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Media Communications Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Manager, External Affairs/Special Projects	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Conservation & Community Services	2,954,426	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Human Resources		303,629	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Treatment Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations Support Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Support Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Desert Region / C&D CRA	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	System Operations Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Power Operations and Planning	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Planning & Programs Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Jensen	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Diemer	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Mills	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Skinner	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Weymouth	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Water Quality Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Eastern Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Western Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Manufacturing Services Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Environmental Health & Safety Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Fleet Services Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Power Support Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations & Planning Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Security Team & Security Management	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Sustainability, Resilience & Innovation		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Diversity, Equity & Inclusion		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Equal Employment Opportunity		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Office of the Chief Financial Officer		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Office of Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Engineering Services		175,791	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Administrative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Information Technology	984,477	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Planning & Development	309,408	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Implementation	5,889,049	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Office of the Group Manager	712,903	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Ethics Office		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Real Property		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
General Counsel		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
General Auditor		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Departmental O&M		11,483,927	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
GENERAL DISTRICT REQUIREMENTS								
State Water Contract*								
Supply - O&M		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Supply - Capital		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Power - O&M & Off-Aq Capital		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Power - Capital (less Off-Aq)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Transmission - Capital - Commodity, Demand, & Standby		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Transmission - O&M - Commodity only		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Supply		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Power		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Other		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total State Water Contract		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Colorado River Aqueduct Power Costs								
		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Supply Programs (cash funded portion)								
		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Demand Management (cash funded portion)								
Local Resources Program		21,685,717	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Future Supply Actions & Stormwater Pilot		2,422,500	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Conservation Program (cash funded portion)		25,000,000	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Demand Management Costs		49,108,217	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Capital Financing								
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		1,126,153	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
G.O. Bond Debt Service		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Debt Administration		10,273	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Bond Defeasance		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
PAYGO		513,000	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Capital Financing Costs		1,649,426	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%
Other Operating Costs								
Operating Equipment		171,800	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Succession Planning Labor Pool		97,207	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
OPEB/PERS Pre-Funding		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Other Operating Costs		269,007	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Increase/(Decrease) in Required Reserves								
		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total General District Requirements								
		51,026,650	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
REQUIREMENTS BEFORE OFFSETS:								
		62,510,577	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Revenue Offsets								
Property Taxes - MWD Portion of SWC GO Debt Service		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Property Taxes - MWD GO Debt Service		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Interest on Investments		296,414	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Hydro-Power Revenue		-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
CRA Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Wadsworth Pumping Plant (DVL) Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to supply (PVID Lease)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Property Taxes - SWC		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Revenue Reserve used for Revenue Bonds - I&P		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Annexation		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total Revenue Offsets		296,414	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
NET REVENUE REQUIREMENTS:								
-		62,214,163	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

	Functionalization	Allocation Percentages					Total
		Demand	Fixed Commodity	Standby	Variable Commodity	Other Hydroelectric	
Departmental O&M							
Group	Item						
Office of General Manager		154,245	-	154,245	-	-	154,245
Office of General Manager	Board of Directors	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-
External Affairs	Conservation & Community Services	2,954,426	-	2,954,426	-	-	2,954,426
Human Resources		303,629	-	303,629	-	-	303,629
Water Systems Operations	Office of the Manager	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Conveyance & Distribution S	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations Support Services	-	-	-	-	-	-
Water Systems Operations	Operations Support Services	-	-	-	-	-	-
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	-	-	-	-	-	-
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	-	-	-	-	-	-
Water Systems Operations	Environmental Health & Safety Section	-	-	-	-	-	-
Water Systems Operations	OSS, Fleet Services Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Power Support Unit	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations & Planning Sect	-	-	-	-	-	-
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-
Sustainability, Resilience & Inr		-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-
Engineering Services		175,791	-	175,791	-	-	175,791
Business Technology	Administrative Services	-	-	-	-	-	-
Business Technology	Information Technology	984,477	-	984,477	-	-	984,477
Water Resources Managemen	Resource Planning & Development	309,408	-	309,408	-	-	309,408
Water Resources Managemen	Resource Implementation	5,889,049	-	5,889,049	-	-	5,889,049
Water Resources Managemen	Office of the Group Manager	712,903	-	712,903	-	-	712,903
Ethics Office		-	-	-	-	-	-
Real Property		-	-	-	-	-	-
General Counsel		-	-	-	-	-	-
General Auditor		-	-	-	-	-	-
Total Departmental O&M	-	11,483,927	-	11,483,927	-	-	11,483,927
GENERAL DISTRICT REQUIREMENTS		-	-	-	-	-	-
State Water Contract*		-	-	-	-	-	-
Supply - O&M		-	-	-	-	-	-
Supply - Capital		-	-	-	-	-	-
Power - O&M & Off-Aq Capital		-	-	-	-	-	-
Power - Capital (less Off-Aq)		-	-	-	-	-	-
Transmission - Capital - Commodity, Demand, & Standby		-	-	-	-	-	-
Transmission - O&M - Commodity only		-	-	-	-	-	-
Delta Conveyance - Supply		-	-	-	-	-	-
Delta Conveyance - Power		-	-	-	-	-	-
Delta Conveyance - Other		-	-	-	-	-	-
Total State Water Contract		-	-	-	-	-	-
Colorado River Aqueduct Power Costs		-	-	-	-	-	-
Supply Programs (cash funded portion)		-	-	-	-	-	-
Demand Management (cash funded portion)		-	-	-	-	-	-
Local Resources Program		21,685,717	-	21,685,717	-	-	21,685,717
Future Supply Actions & Stormwater Pilot		2,422,500	-	2,422,500	-	-	2,422,500
Conservation Program (cash funded portion)		25,000,000	-	25,000,000	-	-	25,000,000
Total Demand Management Costs		49,108,217	-	49,108,217	-	-	49,108,217
Capital Financing		-	-	-	-	-	-
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		1,126,153	-	1,126,153	-	-	1,126,153
G.O. Bond Debt Service		-	-	-	-	-	-
Debt Administration		10,273	-	10,273	-	-	10,273
Bond Defeasance		-	-	-	-	-	-
PAYGO		513,000	-	513,000	-	-	513,000
Total Capital Financing Costs		1,649,426	-	1,649,426	-	-	1,649,426
Other Operating Costs		-	-	-	-	-	-
Operating Equipment		171,800	-	171,800	-	-	171,800
Succession Planning Labor Pool		97,207	-	97,207	-	-	97,207
OPEB/PERS Pre-Funding		-	-	-	-	-	-
Total Other Operating Costs		269,007	-	269,007	-	-	269,007
Increase/(Decrease) in Required Reserves		-	-	-	-	-	-
Total General District Requirements		51,026,650	-	51,026,650	-	-	51,026,650
REQUIREMENTS BEFORE OFFSETS:		62,510,577	-	62,510,577	-	-	62,510,577
Revenue Offsets		-	-	-	-	-	-
Property Taxes - MWD Portion of SWC GO Debt Service		-	-	-	-	-	-
Property Taxes - MWD GO Debt Service		-	-	-	-	-	-
Interest on Investments		296,414	-	296,414	-	-	296,414
Hydro-Power Revenue		-	-	-	-	-	-
CRA Power Revenue		-	-	-	-	-	-
Wadsworth Pumping Plant (DVL) Power Revenue		-	-	-	-	-	-
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)		-	-	-	-	-	-
Misc. allocated to supply (PVID Lease)		-	-	-	-	-	-
Property Taxes - SWC		-	-	-	-	-	-
Revenue Reserve used for Revenue Bonds - I&P		-	-	-	-	-	-
Annexation		-	-	-	-	-	-
Total Revenue Offsets		296,414	-	296,414	-	-	296,414
NET REVENUE REQUIREMENTS:		62,214,163	-	62,214,163	-	-	62,214,163

		Functionalization	Allocation Percentages					Total
			Fixed			Variable		
			Demand	Commodity	Standby	Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		136,124	-	136,124	-	-	-	136,124
Office of General Manager	Board of Directors	-	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-	-
External Affairs	Conservation & Community Services	1,940,431	-	1,940,431	-	-	-	1,940,431
Human Resources		238,144	-	238,144	-	-	-	238,144
Water Systems Operations	Office of the Manager	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations Support Services	-	-	-	-	-	-	-
Water Systems Operations	Operations Support Services	-	-	-	-	-	-	-
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	-	-	-	-	-	-	-
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	-	-	-	-	-	-	-
Water Systems Operations	Environmental Health & Safety Section	-	-	-	-	-	-	-
Water Systems Operations	OSS, Fleet Services Unit	-	-	-	-	-	-	-
Water Systems Operations	OSS, Power Support Unit	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations & Planning Section	-	-	-	-	-	-	-
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-	-
Sustainability, Resilience & Inr		-	-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-	-
Equal Employment Opportunit		-	-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-	-
Engineering Services		147,874	-	147,874	-	-	-	147,874
Business Technology	Administrative Services	-	-	-	-	-	-	-
Business Technology	Information Technology	653,693	-	653,693	-	-	-	653,693
Water Resources Managemen	Resource Planning & Development	244,817	-	244,817	-	-	-	244,817
Water Resources Managemen	Resource Implementation	3,793,678	-	3,793,678	-	-	-	3,793,678
Water Resources Managemen	Office of the Group Manager	697,687	-	697,687	-	-	-	697,687
Ethics Office		-	-	-	-	-	-	-
Real Property		-	-	-	-	-	-	-
General Counsel		-	-	-	-	-	-	-
General Auditor		-	-	-	-	-	-	-
Total Departmental O&M		7,852,449	-	7,852,449	-	-	-	7,852,449

		Functionalization	Allocation Percentages					% Total
			Demand	Commodity	Standby	Variable Commodity	Other	
Departmental O&M								
Group	Item							
Office of General Manager		2,183,988	0.0%	1.6%	0.0%	0.0%	0.0%	1.7%
Office of General Manager	Board of Directors	2,138,953	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Bay Delta Initiatives	Bay Delta Initiatives	-	0.0%	1.8%	0.0%	0.0%	0.0%	1.8%
External Affairs	Legislative Services	6,287,765	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
External Affairs	Media Communications Services	5,811,169	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
External Affairs	Manager, External Affairs/Special Projects	9,685,087	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
External Affairs	Conservation & Community Services	2,954,426	0.0%	0.6%	0.0%	0.0%	0.0%	0.6%
Human Resources		4,299,141	0.0%	2.8%	0.0%	0.0%	0.0%	2.9%
Water Systems Operations	Office of the Manager	736,701	0.0%	2.5%	0.0%	0.0%	0.1%	2.5%
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	20,511	0.0%	0.3%	0.0%	0.0%	0.0%	0.3%
Water Systems Operations	Office of the Manager, Treatment Section	-	0.0%	0.1%	0.0%	0.0%	0.0%	0.1%
Water Systems Operations	Office of the Manager, Operations Support Services	142,971	0.0%	0.5%	0.0%	0.0%	0.0%	0.5%
Water Systems Operations	Operations Support Services	285,413	0.0%	2.2%	0.0%	0.0%	0.0%	2.3%
Water Systems Operations	Desert Region / C&D CRA	-	0.0%	8.9%	0.0%	0.0%	0.0%	8.9%
Water Systems Operations	System Operations Unit	-	0.0%	2.5%	0.0%	0.0%	0.0%	2.5%
Water Systems Operations	Power Operations and Planning	361,935	0.0%	0.7%	0.0%	0.0%	0.3%	1.0%
Water Systems Operations	Operations Planning & Programs Unit	-	0.0%	0.7%	0.0%	0.0%	0.0%	0.7%
Water Systems Operations	Treatment Jensen	-	0.0%	3.9%	0.0%	0.0%	0.0%	3.9%
Water Systems Operations	Treatment Diemer	-	0.0%	3.7%	0.0%	0.0%	0.0%	3.7%
Water Systems Operations	Treatment Mills	-	0.0%	3.5%	0.0%	0.0%	0.0%	3.5%
Water Systems Operations	Treatment Skinner	-	0.0%	3.5%	0.0%	0.0%	0.0%	3.5%
Water Systems Operations	Treatment Weymouth	-	0.0%	4.0%	0.0%	0.0%	0.0%	4.0%
Water Systems Operations	Water Quality Section	-	0.0%	7.5%	0.0%	0.0%	0.0%	7.5%
Water Systems Operations	C&D, Eastern Unit	902,899	0.0%	4.6%	0.0%	0.0%	0.1%	4.7%
Water Systems Operations	C&D, Western Unit	885,466	0.0%	3.8%	0.0%	0.0%	0.0%	3.9%
Water Systems Operations	OSS, Manufacturing Services Unit	580,039	0.0%	2.4%	0.0%	0.0%	0.0%	2.4%
Water Systems Operations	Environmental Health & Safety Section	765,172	0.0%	3.9%	0.0%	0.0%	0.0%	4.0%
Water Systems Operations	OSS, Fleet Services Unit	1,439,370	0.0%	2.3%	0.0%	0.0%	0.0%	2.3%
Water Systems Operations	OSS, Power Support Unit	134,087	0.0%	1.9%	0.0%	0.0%	0.8%	2.7%
Water Systems Operations	Office of the Manager, Operations & Planning Section	53,127	0.0%	0.2%	0.0%	0.0%	0.0%	0.2%
Water Systems Operations	Security Team & Security Management	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Sustainability, Resilience & Innovation		9,216,241	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Diversity, Equity & Inclusion		1,426,072	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Equal Employment Opportunity		2,036,286	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Office of the Chief Financial Officer		25,369,838	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Business Technology	Office of Manager	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Engineering Services		2,845,032	0.0%	11.7%	0.0%	0.0%	0.2%	11.9%
Business Technology	Administrative Services	33,621,784	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Business Technology	Information Technology	13,939,409	0.0%	7.8%	0.0%	0.0%	0.1%	7.9%
Water Resources Management	Resource Planning & Development	-	0.0%	1.4%	0.0%	0.0%	0.0%	1.4%
Water Resources Management	Resource Implementation	35,753	0.0%	3.6%	0.0%	0.0%	0.0%	3.6%
Water Resources Management	Office of the Group Manager	4,112	0.0%	0.8%	0.0%	0.0%	0.0%	0.8%
Ethics Office		2,156,213	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Real Property		11,829,544	0.0%	2.4%	0.0%	0.0%	0.0%	2.4%
General Counsel		15,716,806	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
General Auditor		4,737,939	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total Departmental O&M		162,603,248	0.0%	98.2%	0.0%	0.0%	1.8%	100.0%
GENERAL DISTRICT REQUIREMENTS								
State Water Contract*								
Supply - O&M	-	0.0%	7.7%	0.0%	0.0%	0.0%	0.0%	7.7%
Supply - Capital	-	0.0%	6.2%	0.0%	0.0%	0.0%	0.0%	6.2%
Power - O&M & Off-Aq Capital	-	0.0%	0.0%	0.0%	18.7%	0.0%	0.0%	18.7%
Power - Capital (less Off-Aq)	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Transmission - Capital - Commodity, Demand, & Standby	-	0.5%	2.8%	2.6%	0.0%	0.0%	0.0%	5.8%
Transmission - O&M - Commodity only	-	0.0%	14.4%	0.0%	0.0%	0.0%	0.0%	14.4%
Delta Conveyance - Supply	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Power	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Other	-	0.2%	1.2%	1.1%	0.0%	0.0%	0.0%	2.5%
Total State Water Contract	-	0.7%	32.2%	3.7%	18.7%	0.0%	0.0%	55.3%
Colorado River Aqueduct Power Costs								
-	-	0.0%	0.0%	0.0%	6.2%	0.0%	0.0%	6.2%
Supply Programs (cash funded portion)								
-	-	0.0%	4.6%	0.0%	0.0%	0.0%	0.0%	4.6%
Demand Management (cash funded portion)								
-	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Local Resources Program	-	0.0%	1.6%	0.0%	0.0%	0.0%	0.0%	1.6%
Future Supply Actions & Stormwater Pilot	-	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.2%
Conservation Program (cash funded portion)	-	0.0%	1.8%	0.0%	0.0%	0.0%	0.0%	1.8%
Total Demand Management Costs	-	0.0%	3.6%	0.0%	0.0%	0.0%	0.0%	3.6%
Capital Financing								
-	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Revenue Bond Debt Service net of BABs Interest Subsidy Payment	18,225,905	3.8%	8.6%	7.5%	0.0%	0.0%	0.3%	20.1%
G.O. Bond Debt Service	-	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.1%
Debt Administration	166,254	0.0%	0.1%	0.1%	0.0%	0.0%	0.0%	0.2%
Bond Defeasance	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
PAYGO	8,302,500	1.7%	3.9%	3.4%	0.0%	0.0%	0.1%	9.2%
Total Capital Financing Costs	26,694,659	5.5%	12.6%	11.0%	0.0%	0.0%	0.4%	29.6%
Other Operating Costs								
Operating Equipment	2,432,549	0.0%	0.4%	0.0%	0.0%	0.0%	0.0%	0.5%
Succession Planning Labor Pool	1,376,380	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.3%
OPEB/PERS Pre-Funding	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total Other Operating Costs	3,808,930	0.0%	0.7%	0.0%	0.0%	0.0%	0.0%	0.7%
Increase/(Decrease) in Required Reserves								
	6,900,000	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total General District Requirements								
	37,403,588	6.2%	53.7%	14.7%	24.9%	0.0%	0.5%	100.0%
REQUIREMENTS BEFORE OFFSETS:								
	200,006,836	5.1%	61.8%	12.0%	20.4%	0.0%	0.7%	100.0%
Revenue Offsets								
Property Taxes - MWD Portion of SWC GO Debt Service	-	5.1%	61.8%	12.0%	20.4%	0.0%	0.7%	100.0%
Property Taxes - MWD GO Debt Service	-	5.1%	61.8%	12.0%	20.4%	0.0%	0.7%	100.0%
Interest on Investments	948,397	5.1%	61.8%	12.0%	20.4%	0.0%	0.7%	100.0%
Hydro-Power Revenue	-	5.1%	61.8%	12.0%	20.4%	0.0%	0.7%	100.0%
CRA Power Revenue	-	5.1%	61.8%	12.0%	20.4%	0.0%	0.7%	100.0%
Wadsworth Pumping Plant (DVL) Power Revenue	-	5.1%	61.8%	12.0%	20.4%	0.0%	0.7%	100.0%
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)	27,575,443	5.1%	61.8%	12.0%	20.4%	0.0%	0.7%	100.0%
Misc. allocated to supply (PVID Lease)	-	5.1%	61.8%	12.0%	20.4%	0.0%	0.7%	100.0%
Property Taxes - SWC	-	5.1%	61.8%	12.0%	20.4%	0.0%	0.7%	100.0%
Revenue Reserve used for Revenue Bonds - I&P	-	5.1%	61.8%	12.0%	20.4%	0.0%	0.7%	100.0%
Annexation	-	5.1%	61.8%	12.0%	20.4%	0.0%	0.7%	100.0%
Total Revenue Offsets	28,523,840	5.1%	61.8%	12.0%	20.4%	0.0%	0.7%	100.0%
NET REVENUE REQUIREMENTS:								
-	171,482,996	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

	Functionalization	Allocation Percentages						Total
		Demand	Fixed Commodity	Standby	Variable Commodity	Other	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		-	-	2,645,081	-	-	41,790	2,686,871
Office of General Manager	Board of Directors	-	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	2,964,443	-	-	-	2,964,443
External Affairs	Legislative Services	-	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	1,027,468	-	-	-	1,027,468
Human Resources		-	-	4,627,483	-	-	73,110	4,700,593
Water Systems Operations	Office of the Manager	-	-	4,012,116	-	-	90,127	4,102,243
Water Systems Operations	Office of the Manager, Conveyance & Distribution S	-	-	435,210	-	-	6,446	441,656
Water Systems Operations	Office of the Manager, Treatment Section	-	-	226,140	-	-	-	226,140
Water Systems Operations	Office of the Manager, Operations Support Services	-	-	811,220	-	-	18,223	829,443
Water Systems Operations	Operations Support Services	-	-	3,602,551	-	-	57,714	3,660,265
Water Systems Operations	Desert Region / C&D CRA	-	-	14,493,181	-	-	-	14,493,181
Water Systems Operations	System Operations Unit	-	-	4,077,466	-	-	-	4,077,466
Water Systems Operations	Power Operations and Planning	-	-	1,150,077	-	-	424,537	1,574,614
Water Systems Operations	Operations Planning & Programs Unit	-	-	1,087,806	-	-	-	1,087,806
Water Systems Operations	Treatment Jensen	-	-	6,297,283	-	-	-	6,297,283
Water Systems Operations	Treatment Diemer	-	-	6,049,157	-	-	-	6,049,157
Water Systems Operations	Treatment Mills	-	-	5,749,932	-	-	-	5,749,932
Water Systems Operations	Treatment Skinner	-	-	5,613,843	-	-	-	5,613,843
Water Systems Operations	Treatment Weymouth	-	-	6,547,280	-	-	-	6,547,280
Water Systems Operations	Water Quality Section	-	-	12,128,861	-	-	-	12,128,861
Water Systems Operations	C&D, Eastern Unit	-	-	7,443,940	-	-	207,686	7,651,626
Water Systems Operations	C&D, Western Unit	-	-	6,172,806	-	-	208,673	6,381,479
Water Systems Operations	OSS, Manufacturing Services Unit	-	-	3,864,255	-	-	41,711	3,905,967
Water Systems Operations	Environmental Health & Safety Section	-	-	6,409,656	-	-	20,909	6,430,565
Water Systems Operations	OSS, Fleet Services Unit	-	-	3,738,483	-	-	-	3,738,483
Water Systems Operations	OSS, Power Support Unit	-	-	3,120,418	-	-	1,238,437	4,358,855
Water Systems Operations	Office of the Manager, Operations & Planning Secti	-	-	360,678	-	-	8,102	368,780
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-	-
Sustainability, Resilience & Inn		-	-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-	-
Engineering Services		-	-	19,047,573	-	-	290,535	19,338,108
Business Technology	Administrative Services	-	-	-	-	-	-	-
Business Technology	Information Technology	-	-	12,702,211	-	-	200,683	12,902,894
Water Resources Managemen	Resource Planning & Development	-	-	2,274,247	-	-	-	2,274,247
Water Resources Managemen	Resource Implementation	-	-	5,795,181	-	-	-	5,795,181
Water Resources Managemen	Office of the Group Manager	-	-	1,336,100	-	-	-	1,336,100
Ethics Office		-	-	-	-	-	-	-
Real Property		-	-	3,862,420	-	-	-	3,862,420
General Counsel		-	-	-	-	-	-	-
General Auditor		-	-	-	-	-	-	-
Total Departmental O&M	-	-	-	159,674,566	-	-	2,928,682	162,603,248
GENERAL DISTRICT REQUIREMENTS								
		-	-	-	-	-	-	-
State Water Contract*		-	-	-	-	-	-	-
Supply - O&M		-	-	2,893,665	-	-	-	2,893,665
Supply - Capital		-	-	2,312,085	-	-	-	2,312,085
Power - O&M & Off-Aq Capital		-	-	-	-	6,992,156	-	6,992,156
Power - Capital (less Off-Aq)		-	-	-	-	-	-	-
Transmission - Capital - Commodity, Demand, & Standby		175,998	-	1,035,280	970,057	-	-	2,181,334
Transmission - O&M - Commodity only		-	-	5,373,209	-	-	-	5,373,209
Delta Conveyance - Supply		-	-	-	-	-	-	-
Delta Conveyance - Power		-	-	-	-	-	-	-
Delta Conveyance - Other		75,278	-	442,811	414,913	-	-	933,002
Total State Water Contract		251,275	-	12,057,049	1,384,970	6,992,156	-	20,685,450
Colorado River Aqueduct Power Costs		-	-	-	-	2,315,633	-	2,315,633
Supply Programs (cash funded portion)		-	-	1,733,517	-	-	-	1,733,517
Demand Management (cash funded portion)		-	-	-	-	-	-	-
Local Resources Program		-	-	586,458	-	-	-	586,458
Future Supply Actions & Stormwater Pilot		-	-	65,513	-	-	-	65,513
Conservation Program (cash funded portion)		-	-	676,088	-	-	-	676,088
Total Demand Management Costs		-	-	1,328,059	-	-	-	1,328,059
Capital Financing		-	-	-	-	-	-	-
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		1,403,680	-	3,210,455	2,794,483	-	113,005	7,521,623
G.O. Bond Debt Service		18,016	-	19,467	15,677	-	-	53,161
Debt Administration		12,804	-	29,285	25,491	-	1,031	68,611
Bond Defeasance		-	-	-	-	-	-	-
PAYGO		639,423	-	1,462,468	1,272,979	-	51,477	3,426,347
Total Capital Financing Costs		2,073,923	-	4,721,676	4,108,630	-	165,513	11,069,742
Other Operating Costs		-	-	-	-	-	-	-
Operating Equipment		-	-	167,414	3,085	-	2,694	173,192
Succession Planning Labor Pool		-	-	94,726	1,745	-	1,524	97,995
OPEB/PERS Pre-Funding		-	-	-	-	-	-	-
Total Other Operating Costs		-	-	262,140	4,830	-	4,218	271,188
Increase/(Decrease) in Required Reserves		-	-	-	-	-	-	-
Total General District Requirements		-	2,325,199	20,102,441	5,498,430	9,307,788	169,731	37,403,588
REQUIREMENTS BEFORE OFFSETS:	200,006,836	2,325,199	179,777,007	5,498,430	9,307,788	-	3,098,412	200,006,836
Revenue Offsets								
Property Taxes - MWD Portion of SWC GO Debt Service		-	-	-	-	-	-	-
Property Taxes - MWD GO Debt Service		-	-	-	-	-	-	-
Interest on Investments	948,397	48,245	586,313	114,086	193,127	-	6,625	948,397
Hydro-Power Revenue		-	-	-	-	-	-	-
CRA Power Revenue		-	-	-	-	-	-	-
Wadsworth Pumping Plant (DVL) Power Revenue		-	-	-	-	-	-	-
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)	27,575,443	1,402,775	17,047,555	3,317,160	5,615,318	-	192,636	27,575,443
Misc. allocated to supply (PVID Lease)		-	-	-	-	-	-	-
Property Taxes - SWC		-	-	-	-	-	-	-
Revenue Reserve used for Revenue Bonds - I&P		-	-	-	-	-	-	-
Annexation		-	-	-	-	-	-	-
Total Revenue Offsets	28,523,840	1,451,020	17,633,868	3,431,247	5,808,444	-	199,261	28,523,840
NET REVENUE REQUIREMENTS:	171,482,996	874,179	162,143,140	2,067,183	3,499,344	-	2,899,151	171,482,996

		Total Costs to Be Allocated	A&G Cost Redistribution	Adjusted Costs	Allocation Categories					Total
					Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M										
Group	Item									
Office of General Manager		2,183,988	6,252,703	8,436,691	-	8,305,472	-	-	131,218	8,436,691
Office of General Manager	Board of Directors	2,138,953	(2,138,953)	-	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	15,244,699	15,244,699	-	15,244,699	-	-	-	15,244,699
External Affairs	Legislative Services	6,287,765	(6,287,765)	-	-	-	-	-	-	-
External Affairs	Media Communications Services	5,811,169	(5,811,169)	-	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	9,685,087	(9,685,087)	-	-	-	-	-	-	-
External Affairs	Conservation & Community Services	2,954,426	1,027,468	3,981,894	-	3,981,894	-	-	-	3,981,894
Human Resources		4,299,141	11,719,871	16,019,011	-	15,769,863	-	-	249,149	16,019,011
Water Systems Operations	Office of the Manager, Conveyance & Distribution Se	736,701	13,985,802	14,722,503	-	14,399,049	-	-	323,454	14,722,503
Water Systems Operations	Office of the Manager, Treatment Section	20,511	1,273,827	1,294,338	-	1,275,447	-	-	18,892	1,294,338
Water Systems Operations	Office of the Manager, Operations Support Services	142,971	2,747,543	2,890,514	-	2,827,010	-	-	63,505	2,890,514
Water Systems Operations	Operations Support Services	285,413	11,017,588	11,303,001	-	11,124,779	-	-	178,222	11,303,001
Water Systems Operations	Desert Region / C&D CRA	-	47,935,742	47,935,742	-	47,935,742	-	-	-	47,935,742
Water Systems Operations	System Operations Unit	-	13,497,057	13,497,057	-	13,497,057	-	-	-	13,497,057
Water Systems Operations	Power Operations and Planning	361,935	4,660,586	5,022,521	-	3,668,382	-	-	1,354,138	5,022,521
Water Systems Operations	Operations Planning & Programs Unit	-	3,209,522	3,209,522	-	3,209,522	-	-	-	3,209,522
Water Systems Operations	Treatment Jensen	-	26,390,948	26,390,948	-	19,961,625	-	6,429,323	-	26,390,948
Water Systems Operations	Treatment Diemer	-	27,403,957	27,403,957	-	19,103,575	-	8,300,382	-	27,403,957
Water Systems Operations	Treatment Mills	-	20,311,463	20,311,463	-	17,507,215	-	2,804,248	-	20,311,463
Water Systems Operations	Treatment Skinner	-	22,665,733	22,665,733	-	17,363,148	-	5,302,585	-	22,665,733
Water Systems Operations	Treatment Weymouth	-	26,492,836	26,492,836	-	20,096,129	-	6,396,707	-	26,492,836
Water Systems Operations	Water Quality Section	-	39,955,412	39,955,412	-	39,955,412	-	-	-	39,955,412
Water Systems Operations	C&D, Eastern Unit	902,899	27,292,359	28,195,258	-	27,429,963	-	-	765,296	28,195,258
Water Systems Operations	C&D, Western Unit	885,466	21,645,298	22,530,765	-	21,794,015	-	-	736,750	22,530,765
Water Systems Operations	OSS, Manufacturing Services Unit	580,039	11,362,039	11,942,078	-	11,814,550	-	-	127,528	11,942,078
Water Systems Operations	Environmental Health & Safety Section	765,172	21,320,231	22,085,403	-	22,013,592	-	-	71,811	22,085,403
Water Systems Operations	OSS, Fleet Services Unit	1,439,370	13,944,923	15,384,292	-	15,384,292	-	-	-	15,384,292
Water Systems Operations	OSS, Power Support Unit	134,087	13,338,062	13,472,149	-	9,644,445	-	-	3,827,703	13,472,149
Water Systems Operations	Office of the Manager, Operations & Planning Sectio	53,127	1,081,530	1,134,657	-	1,109,729	-	-	24,929	1,134,657
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-	-	-	-
Sustainability, Resilience & Innovation		9,216,241	(9,216,241)	-	-	-	-	-	-	-
Diversity, Equity & Inclusion		1,426,072	(1,426,072)	-	-	-	-	-	-	-
Equal Employment Opportunity		2,036,286	(2,036,286)	-	-	-	-	-	-	-
Office of the Chief Financial Officer		25,369,838	(25,369,838)	-	-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-	-	-	-
Engineering Services		2,845,032	59,908,734	62,753,766	-	61,810,955	-	-	942,811	62,753,766
Business Technology	Administrative Services	33,621,784	(33,621,784)	-	-	-	-	-	-	-
Business Technology	Information Technology	13,939,409	35,661,995	49,601,404	-	48,829,938	-	-	771,466	49,601,404
Water Resources Management	Resource Planning & Development	-	7,702,457	7,702,457	-	7,702,457	-	-	-	7,702,457
Water Resources Management	Resource Implementation	35,753	22,748,967	22,784,720	-	22,784,720	-	-	-	22,784,720
Water Resources Management	Office of the Group Manager	4,112	3,910,320	3,914,432	-	3,914,432	-	-	-	3,914,432
Ethics Office		2,156,213	(2,156,213)	-	-	-	-	-	-	-
Real Property		11,829,544	9,168,914	20,998,458	-	20,998,458	-	-	-	20,998,458
General Counsel		15,716,806	(15,716,806)	-	-	-	-	-	-	-
General Auditor		4,737,939	(4,737,939)	-	-	-	-	-	-	-
Total Departmental O&M		162,603,248	428,088,249	590,691,497	-	551,871,380	-	29,233,245	9,586,872	590,691,497
GENERAL DISTRICT REQUIREMENTS										
State Water Contract*										
Supply - O&M		107,000,290	2,893,665	109,893,955	-	109,893,955	-	-	-	109,893,955
Supply - Capital		85,494,959	2,312,085	87,807,044	-	87,807,044	-	-	-	87,807,044
Power - O&M & Off-Aq Capital		258,551,933	6,992,156	265,544,088	-	-	-	265,544,088	-	265,544,088
Power - Capital (less Off-Aq)		(3,654,765)	-	(3,654,765)	-	-	-	(3,654,765)	-	(3,654,765)
Transmission - Capital - Commodity, Demand, & Standby		80,660,127	2,181,334	82,841,461	6,683,935	39,317,268	36,840,258	-	-	82,841,461
Transmission - O&M - Commodity only		198,687,447	5,373,209	204,060,656	-	204,060,656	-	-	-	204,060,656
Delta Conveyance - Supply		-	-	-	-	-	-	-	-	-
Delta Conveyance - Power		-	-	-	-	-	-	-	-	-
Delta Conveyance - Other		-	-	-	-	-	-	-	-	-
Total State Water Contract		34,500,000	933,002	35,433,002	2,858,857	16,816,806	15,757,338	-	-	35,433,002
		761,239,991	20,685,450	781,925,441	9,542,793	457,895,729	52,597,596	261,889,323	-	781,925,441
Colorado River Aqueduct Power Costs										
		85,626,149	2,315,633	87,941,781	-	-	-	87,941,781	-	87,941,781
Supply Programs (cash funded portion)										
		64,100,985	1,733,517	65,834,502	-	65,834,502	-	-	-	65,834,502
Demand Management (cash funded portion)										
Local Resources Program		21,685,717	586,458	22,272,175	-	22,272,175	-	-	-	22,272,175
Future Supply Actions & Stormwater Pilot		2,422,500	65,513	2,488,013	-	2,488,013	-	-	-	2,488,013
Conservation Program (cash funded portion)		25,000,000	676,088	25,676,088	-	25,676,088	-	-	-	25,676,088
Total Demand Management Costs		49,108,217	1,328,059	50,436,276	-	50,436,276	-	-	-	50,436,276
Capital Financing										
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		296,356,173	(10,704,282)	285,651,891	53,308,171	121,924,831	106,127,262	-	4,291,627	285,651,891
G.O. Bond Debt Service		1,965,750	53,161	2,018,911	684,205	739,325	595,381	-	-	2,018,911
Debt Administration		2,703,320	(97,643)	2,605,677	486,270	1,112,181	968,078	-	39,148	2,605,677
Bond Defeasance		-	-	-	-	-	-	-	-	-
PAYGO		135,000,000	(4,876,153)	130,123,847	24,283,628	55,540,778	48,344,464	-	1,954,977	130,123,847
Total Capital Financing Costs		436,025,242	(15,624,917)	420,400,325	78,762,274	179,317,115	156,035,184	-	6,285,752	420,400,325
Other Operating Costs										
Operating Equipment		8,836,761	(2,259,357)	6,577,404	-	6,357,953	117,151	-	102,300	6,577,404
Succession Planning Labor Pool		5,000,000	(1,278,385)	3,721,615	-	3,597,445	66,286	-	57,883	3,721,615
OPEB/PERS Pre-Funding		-	-	-	-	-	-	-	-	-
Total Other Operating Costs		13,836,761	(3,537,742)	10,299,019	-	9,955,399	183,437	-	160,184	10,299,019
Increase/(Decrease) in Required Reserves										
		6,900,000	(6,900,000)	-	-	-	-	-	-	-
Total General District Requirements		1,416,837,345	(0)	1,416,837,345	88,305,067	763,439,021	208,816,217	349,831,105	6,445,936	1,416,837,345
REQUIREMENTS BEFORE OFFSETS:										
		1,579,440,593	428,088,249	2,007,528,842	88,305,067	1,315,310,401	208,816,217	379,064,350	16,032,807	2,007,528,842
Revenue Offsets										
Property Taxes - MWD Portion of SWC GO Debt Service		36,010	-	36,010	2,905	17,091	16,014	-	-	36,010
Property Taxes - MWD GO Debt Service		1,965,750	(0)	1,965,750	515,395	572,462	877,894	-	-	1,965,750
Interest on Investments		9,519,345	(0)	9,519,345	929,075	4,936,060	1,718,710	1,867,541	-	9,519,345
Hydro-Power Revenue		10,710,879	-	10,710,879	-	-	-	-	67,958	10,710,879
CRA Power Revenue		2,989,504	-	2,989,504	-	-	-	2,989,504	-	2,989,504
Wadsworth Pumping Plant (DVL) Power Revenue		545,067	-	545,067	-	-	-	545,067	-	545,067
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)		27,575,443	-	27,575,443	1,402,775	17,047,555	3,317,160	5,615,318	192,636	27,575,443
Misc. allocated to supply (PVID Lease)		6,048,886	-	6,048,886	-	6,048,886	-	-	-	6,048,886
Property Taxes - SWC		166,313,250	-	166,313,250	1,489,331	98,282,285	8,208,836	58,332,797	-	166,313,250
Revenue Reserve used for Revenue Bonds - I&P		-	-	-	-	-	-	-	-	-
Annexation		-	-	-	-	-	-	-	-	-
Total Revenue Offsets		225,704,132	(0)	225,704,132	4,339,480	126,904,338	14,138,615	69,350,227	10,971,472	225,704,132
NET REVENUE REQUIREMENTS:										
		\$ 1,781,824,709	\$ 428,088,249	\$ 1,781,824,709	\$ 83,965,586	\$ 1,188,406,062	\$ 194,677,602	\$ 309,714,123	\$ 5,061,335	\$ 1,781,824,709

		Total to Be Allocated Excluding A&G and Negative Values	Line Item Costs by Allocation Category (w/o A&G)					Total Allocations
			Fixed			Variable Commodity	Hydro- Electric	
			Demand	Commodity	Standby			
Departmental O&M								
Group	Item							
Office of General Manager		5,074,306	-	4,995,384	-	-	78,922	5,074,306
Office of General Manager	Board of Directors	-	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	5,598,517	-	5,598,517	-	-	-	5,598,517
External Affairs	Legislative Services	-	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-	-
Human Resources		1,940,431	-	1,940,431	-	-	-	1,940,431
Water Systems Operations	Office of the Manager	8,877,334	-	8,739,262	-	-	138,072	8,877,334
Water Systems Operations	Office of the Manager, Conveyance & Treatment	7,747,317	-	7,577,107	-	-	170,209	7,747,317
Water Systems Operations	Office of the Manager, Operations Support Services	834,092	-	821,918	-	-	12,174	834,092
Water Systems Operations	Office of the Manager, Treatment Services	427,078	-	427,078	-	-	-	427,078
Water Systems Operations	Office of the Manager, Operations Support Services	1,566,449	-	1,532,034	-	-	34,415	1,566,449
Water Systems Operations	Operations Support Services	6,912,616	-	6,803,620	-	-	108,996	6,912,616
Water Systems Operations	Desert Region / C&D CRA	27,371,189	-	27,371,189	-	-	-	27,371,189
Water Systems Operations	System Operations Unit	7,700,524	-	7,700,524	-	-	-	7,700,524
Water Systems Operations	Power Operations and Planning	2,973,748	-	2,171,986	-	-	801,762	2,973,748
Water Systems Operations	Operations Planning & Programs Unit	2,054,383	-	2,054,383	-	-	-	2,054,383
Water Systems Operations	Treatment Jensen	11,892,774	-	11,892,774	-	-	-	11,892,774
Water Systems Operations	Treatment Diemer	11,424,173	-	11,424,173	-	-	-	11,424,173
Water Systems Operations	Treatment Mills	10,859,070	-	10,859,070	-	-	-	10,859,070
Water Systems Operations	Treatment Skinner	10,602,059	-	10,602,059	-	-	-	10,602,059
Water Systems Operations	Treatment Weymouth	12,364,907	-	12,364,907	-	-	-	12,364,907
Water Systems Operations	Water Quality Section	22,906,038	-	22,906,038	-	-	-	22,906,038
Water Systems Operations	C&D, Eastern Unit	14,450,527	-	14,058,301	-	-	392,226	14,450,527
Water Systems Operations	C&D, Western Unit	12,051,782	-	11,657,692	-	-	394,090	12,051,782
Water Systems Operations	OSS, Manufacturing Services Unit	7,376,638	-	7,297,864	-	-	78,774	7,376,638
Water Systems Operations	Environmental Health & Safety Section	12,144,484	-	12,104,996	-	-	39,488	12,144,484
Water Systems Operations	OSS, Fleet Services Unit	7,060,336	-	7,060,336	-	-	-	7,060,336
Water Systems Operations	OSS, Power Support Unit	8,231,943	-	5,893,086	-	-	2,338,857	8,231,943
Water Systems Operations	Office of the Manager, Operations & Security Team & Security Management	696,462	-	681,161	-	-	15,301	696,462
Water Systems Operations		-	-	-	-	-	-	-
Sustainability, Resilience & Inclusion		-	-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-	-
Office of the Chief Financial Officer		-	-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-	-
Engineering Services		36,521,106	-	35,972,414	-	-	548,692	36,521,106
Business Technology	Administrative Services	-	-	-	-	-	-	-
Business Technology	Information Technology	-	-	-	-	-	-	-
Business Technology	Resource Planning & Development	24,367,841	-	23,988,840	-	-	379,001	24,367,841
Water Resources Management	Resource Planning & Development	4,295,043	-	4,295,043	-	-	-	4,295,043
Water Resources Management	Resource Implementation	10,944,526	-	10,944,526	-	-	-	10,944,526
Water Resources Management	Office of the Group Manager	2,523,300	-	2,523,300	-	-	-	2,523,300
Ethics Office		-	-	-	-	-	-	-
Real Property		7,294,397	-	7,294,397	-	-	-	7,294,397
General Counsel		-	-	-	-	-	-	-
General Auditor		-	-	-	-	-	-	-
Total Departmental O&M	-	307,085,390	-	301,554,410	-	-	5,530,980	307,085,390
GENERAL DISTRICT REQUIREMENTS								
State Water Contract*								
Supply - O&M		107,000,290	-	107,000,290	-	-	-	107,000,290
Supply - Capital		85,494,959	-	85,494,959	-	-	-	85,494,959
Power - O&M & Off-Aq Capital		258,551,933	-	-	-	258,551,933	-	258,551,933
Power - Capital (less Off-Aq)		-	-	-	-	-	-	-
Transmission - Capital - Commodity, Demand, & Standby		80,660,127	6,507,938	38,281,988	35,870,201	-	-	80,660,127
Transmission - O&M - Commodity only		198,687,447	-	198,687,447	-	-	-	198,687,447
Delta Conveyance - Supply		-	-	-	-	-	-	-
Delta Conveyance - Power		-	-	-	-	-	-	-
Delta Conveyance - Other		34,500,000	2,783,579	16,373,996	15,342,425	-	-	34,500,000
Total State Water Contract		764,894,756	9,291,517	445,838,680	51,212,626	258,551,933	-	764,894,756
Colorado River Aqueduct Power Costs		85,626,149	-	-	-	85,626,149	-	85,626,149
Supply Programs (cash funded portion)		64,100,985	-	64,100,985	-	-	-	64,100,985
Demand Management (cash funded portion)								
Local Resources Program		21,685,717	-	21,685,717	-	-	-	21,685,717
Future Supply Actions & Stormwater Pilot		2,422,500	-	2,422,500	-	-	-	2,422,500
Conservation Program (cash funded portion)		25,000,000	-	25,000,000	-	-	-	25,000,000
Total Demand Management Costs		49,108,217	-	49,108,217	-	-	-	49,108,217
Capital Financing								
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		278,130,268	51,904,491	118,714,376	103,332,779	-	4,178,622	278,130,268
G.O. Bond Debt Service		1,965,750	666,189	719,857	579,703	-	-	1,965,750
Debt Administration		2,537,065	473,466	1,082,896	942,587	-	38,117	2,537,065
Bond Defeasance		-	-	-	-	-	-	-
PAYGO		126,697,500	23,644,205	54,078,309	47,071,485	-	1,903,500	126,697,500
Total Capital Financing Costs		409,330,584	76,688,351	174,595,439	151,926,555	-	6,120,239	409,330,584
Other Operating Costs								
Operating Equipment		6,404,212	-	6,190,539	114,066	-	99,607	6,404,212
Succession Planning Labor Pool		3,623,620	-	3,502,720	64,541	-	56,359	3,623,620
OPEB/PERS Pre-Funding		-	-	-	-	-	-	-
Total Other Operating Costs		10,027,832	-	9,693,259	178,607	-	155,966	10,027,832
Increase/(Decrease) in Required Reserves		-	-	-	-	-	-	-
Total General District Requirements		1,383,088,521	85,979,868	743,336,580	203,317,787	344,178,081	6,276,205	1,383,088,521
REQUIREMENTS BEFORE OFFSETS:		1,690,173,912	85,979,868	1,044,890,990	203,317,787	344,178,081	11,807,185	1,690,173,912
Revenue Offsets								
Property Taxes - MWD Portion of SWC GO Debt Service		36,010	2,905	17,091	16,014	-	-	36,010
Property Taxes - MWD GO Debt Service		1,965,750	515,395	572,462	877,894	-	-	1,965,750
Interest on Investments		8,570,948	880,829	4,349,747	1,604,624	1,674,415	61,333	8,570,948
Hydro-Power Revenue		10,710,879	-	-	-	-	10,710,879	10,710,879
CRA Power Revenue		2,989,504	-	-	-	2,989,504	-	2,989,504
Wadsworth Pumping Plant (DVL) Power Revenue		545,067	-	-	-	545,067	-	545,067
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)		-	-	-	-	-	-	-
Misc. allocated to supply (PVID Lease)		6,048,886	-	6,048,886	-	-	-	6,048,886
Property Taxes - SWC		166,313,250	1,489,331	98,282,285	8,208,836	58,332,797	-	166,313,250
Revenue Reserve used for Revenue Bonds - I&P		-	-	-	-	-	-	-
Annexation		-	-	-	-	-	-	-
Total Revenue Offsets		197,180,292	2,888,460	109,270,470	10,707,368	63,541,783	10,772,211	197,180,292
NET REVENUE REQUIREMENTS:		\$ 1,492,993,620	\$ 83,091,408	\$ 935,620,520	\$ 192,610,420	\$ 280,636,299	\$ 1,034,974	\$ 1,492,993,620

		A&G Line Item Allocators by Allocation Category						Total
		Demand	Fixed Commodity	Standby	Variable Commodity	Demand Management	Hydro-Electric	
Departmental O&M								
Group	Item							
Office of General Manager		0.00%	1.63%	0.00%	0.00%	0.00%	0.03%	1.65%
Office of General Manager	Board of Directors	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Bay Delta Initiatives	Bay Delta Initiatives	0.00%	1.82%	0.00%	0.00%	0.00%	0.00%	1.82%
External Affairs	Legislative Services	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
External Affairs	Media Communications Services	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
External Affairs	Manager, External Affairs/Special Projects	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
External Affairs	Conservation & Community Services	0.00%	0.63%	0.00%	0.00%	0.00%	0.00%	0.63%
Human Resources		0.00%	2.85%	0.00%	0.00%	0.00%	0.04%	2.89%
Water Systems Operations	Office of the Manager	0.00%	2.47%	0.00%	0.00%	0.00%	0.06%	2.52%
Water Systems Operations	Office of the Manager, Conveyance & Dis	0.00%	0.27%	0.00%	0.00%	0.00%	0.00%	0.27%
Water Systems Operations	Office of the Manager, Treatment Section	0.00%	0.14%	0.00%	0.00%	0.00%	0.00%	0.14%
Water Systems Operations	Office of the Manager, Operations Support	0.00%	0.50%	0.00%	0.00%	0.00%	0.01%	0.51%
Water Systems Operations	Operations Support Services	0.00%	2.22%	0.00%	0.00%	0.00%	0.04%	2.25%
Water Systems Operations	Desert Region / C&D CRA	0.00%	8.91%	0.00%	0.00%	0.00%	0.00%	8.91%
Water Systems Operations	System Operations Unit	0.00%	2.51%	0.00%	0.00%	0.00%	0.00%	2.51%
Water Systems Operations	Power Operations and Planning	0.00%	0.71%	0.00%	0.00%	0.00%	0.26%	0.97%
Water Systems Operations	Operations Planning & Programs Unit	0.00%	0.67%	0.00%	0.00%	0.00%	0.00%	0.67%
Water Systems Operations	Treatment Jensen	0.00%	3.87%	0.00%	0.00%	0.00%	0.00%	3.87%
Water Systems Operations	Treatment Diemer	0.00%	3.72%	0.00%	0.00%	0.00%	0.00%	3.72%
Water Systems Operations	Treatment Mills	0.00%	3.54%	0.00%	0.00%	0.00%	0.00%	3.54%
Water Systems Operations	Treatment Skinner	0.00%	3.45%	0.00%	0.00%	0.00%	0.00%	3.45%
Water Systems Operations	Treatment Weymouth	0.00%	4.03%	0.00%	0.00%	0.00%	0.00%	4.03%
Water Systems Operations	Water Quality Section	0.00%	7.46%	0.00%	0.00%	0.00%	0.00%	7.46%
Water Systems Operations	C&D, Eastern Unit	0.00%	4.58%	0.00%	0.00%	0.00%	0.13%	4.71%
Water Systems Operations	C&D, Western Unit	0.00%	3.80%	0.00%	0.00%	0.00%	0.13%	3.92%
Water Systems Operations	OSS, Manufacturing Services Unit	0.00%	2.38%	0.00%	0.00%	0.00%	0.03%	2.40%
Water Systems Operations	Environmental Health & Safety Section	0.00%	3.94%	0.00%	0.00%	0.00%	0.01%	3.95%
Water Systems Operations	OSS, Fleet Services Unit	0.00%	2.30%	0.00%	0.00%	0.00%	0.00%	2.30%
Water Systems Operations	OSS, Power Support Unit	0.00%	1.92%	0.00%	0.00%	0.00%	0.76%	2.68%
Water Systems Operations	Office of the Manager, Operations & Planr	0.00%	0.22%	0.00%	0.00%	0.00%	0.00%	0.23%
Water Systems Operations	Security Team & Security Management	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Sustainability, Resilience & Innovati	-	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Diversity, Equity & Inclusion	-	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Equal Employment Opportunity	-	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Office of the Chief Financial Officer		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Business Technology	Office of Manager	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Engineering Services		0.00%	11.71%	0.00%	0.00%	0.00%	0.18%	11.89%
Business Technology	Administrative Services	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Business Technology	Information Technology	0.00%	7.81%	0.00%	0.00%	0.00%	0.12%	7.94%
Water Resources Management	Resource Planning & Development	0.00%	1.40%	0.00%	0.00%	0.00%	0.00%	1.40%
Water Resources Management	Resource Implementation	0.00%	3.56%	0.00%	0.00%	0.00%	0.00%	3.56%
Water Resources Management	Office of the Group Manager	0.00%	0.82%	0.00%	0.00%	0.00%	0.00%	0.82%
Ethics Office		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Real Property		0.00%	2.38%	0.00%	0.00%	0.00%	0.00%	2.38%
General Counsel		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
General Auditor		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Total Departmental O&M	-	0.00%	98.20%	0.00%	0.00%	0.00%	1.80%	100.00%
GENERAL DISTRICT REQUIREMENTS								
State Water Contract*								
Supply - O&M		0.00%	7.74%	0.00%	0.00%	0.00%	0.00%	7.74%
Supply - Capital		0.00%	6.18%	0.00%	0.00%	0.00%	0.00%	6.18%
Power - O&M & Off-Aq Capital		0.00%	0.00%	0.00%	18.69%	0.00%	0.00%	18.69%
Power - Capital (less Off-Aq)		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Transmission - Capital - Commodity, Demand, & Standby		0.47%	2.77%	2.59%	0.00%	0.00%	0.00%	5.83%
Transmission - O&M - Commodity only		0.00%	14.37%	0.00%	0.00%	0.00%	0.00%	14.37%
Delta Conveyance - Supply		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Delta Conveyance - Power		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Delta Conveyance - Other		0.20%	1.18%	1.11%	0.00%	0.00%	0.00%	2.49%
Total State Water Contract		0.67%	32.24%	3.70%	18.69%	0.00%	0.00%	55.30%
Colorado River Aqueduct Power Costs		0.00%	0.00%	0.00%	6.19%	0.00%	0.00%	6.19%
Supply Programs (cash funded portion)		0.00%	4.63%	0.00%	0.00%	0.00%	0.00%	4.63%
Demand Management (cash funded portion)								
Local Resources Program		0.00%	1.57%	0.00%	0.00%	0.00%	0.00%	1.57%
Future Supply Actions & Stormwater Pilot		0.00%	0.18%	0.00%	0.00%	0.00%	0.00%	0.18%
Conservation Program (cash funded portion)		0.00%	1.81%	0.00%	0.00%	0.00%	0.00%	1.81%
Total Demand Management Costs		0.00%	3.55%	0.00%	0.00%	0.00%	0.00%	3.55%
Capital Financing								
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		3.75%	8.58%	7.47%	0.00%	0.00%	0.30%	20.11%
G.O. Bond Debt Service		0.05%	0.05%	0.04%	0.00%	0.00%	0.00%	0.14%
Debt Administration		0.03%	0.08%	0.07%	0.00%	0.00%	0.00%	0.18%
Bond Defeasance		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
PAYGO		1.71%	3.91%	3.40%	0.00%	0.00%	0.14%	9.16%
Total Capital Financing Costs		5.54%	12.62%	10.98%	0.00%	0.00%	0.44%	29.60%
Other Operating Costs		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Operating Equipment		0.00%	0.45%	0.01%	0.00%	0.00%	0.01%	0.46%
Succession Planning Labor Pool		0.00%	0.25%	0.00%	0.00%	0.00%	0.00%	0.25%
OPEB/PERS Pre-Funding		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Total Other Operating Costs		0.00%	0.70%	0.01%	0.00%	0.00%	0.01%	0.73%
Increase/(Decrease) in Required Reserves		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Total General District Requirements		6.22%	53.74%	14.70%	24.88%	0.00%	0.45%	100.00%
REQUIREMENTS BEFORE OFFSETS:		5.09%	61.82%	12.03%	20.36%	0.00%	0.70%	100.00%

Functionalization of A&G Costs
 Summary of Allocation Results before Inclusion of Administrative and General Costs
 Fiscal Year Ending 2024

Functional Categories	Functional Costs Allocated for FY 2024	Allocation Categories (Costs Exclude Administrative and General)					Total Allocated Excluding A&G
		Demand	Fixed Commodity	Standby	Variable Commodity	Hydro-Electric	
Source of Supply							
CRA	\$ 60,489,433.37	\$ -	\$ 60,489,433	\$ -	\$ -	\$ -	\$ 60,489,433
SWP	158,321,247	-	158,321,247	-	-	-	158,321,247
Other Supply	33,163,756	-	33,163,756	-	-	-	33,163,756
Subtotal: Source of Supply	251,974,436	-	251,974,436	-	-	-	251,974,436
Conveyance & Aqueduct							
CRA							
CRA Power	94,763,935	-	12,593,029	-	82,170,907	-	94,763,935
CRA All Other	68,810,129	1,038,200	62,049,619	5,722,310	-	-	68,810,129
SWP*	-	-	-	-	-	-	-
SWP Power	195,355,694	-	-	-	195,355,694	-	195,355,694
SWP All Other	279,749,692	7,667,154	229,823,014	42,259,524	-	-	279,749,692
Other Conveyance & Aqueduct	71,377,136	4,804,576	38,216,495	28,356,065	-	-	71,377,136
Subtotal: Conveyance & Aqueduct	710,056,587	13,509,930	342,682,157	76,337,899	277,526,601	-	710,056,587
Storage							
Storage Costs Other Than Power							
Emergency	55,934,466	-	7,624,721	48,309,745	-	-	55,934,466
Drought	49,031,463	-	49,031,463	-	-	-	49,031,463
Regulatory	27,618,608	8,190,332	13,146,383	6,281,893	-	-	27,618,608
Storage Power	(545,067)	-	-	-	(545,067)	-	(545,067)
Subtotal: Storage	132,039,470	8,190,332	69,802,567	54,591,638	(545,067)	-	132,039,470
Treatment							
Jensen	53,342,717	7,166,952	31,146,190	8,600,252	6,429,323	-	53,342,717
Weymouth	54,548,742	7,540,012	31,564,069	9,047,954	6,396,707	-	54,548,742
Diemer	61,377,909	9,098,637	33,060,503	10,918,387	8,300,382	-	61,377,909
Mills	30,591,767	2,327,893	22,666,470	2,793,157	2,804,248	-	30,591,767
Skinner	51,552,150	7,572,329	29,590,434	9,086,802	5,302,585	-	51,552,150
Subtotal: Treatment	251,413,285	33,705,823	148,027,666	40,446,552	29,233,245	-	251,413,285
Distribution	200,481,588	27,685,323	151,561,934	21,234,331	-	-	200,481,588
Demand Management	62,214,163	-	62,214,163	-	-	-	62,214,163
Hydro-Electric	2,162,184	-	-	-	-	2,162,184	2,162,184
Total Costs Allocated	\$ 1,610,341,713	\$ 83,091,408	\$ 1,026,262,923	\$ 192,610,420	\$ 306,214,779	\$ 2,162,184	\$ 1,610,341,713
A&G Costs to be Functionalized		\$ 874,179	\$ 162,143,140	\$ 2,067,182,634	\$ 3,499,344	\$ 2,899,151	\$ 171,482,996

Percentages Used for Functionalization of A&G Costs

Allocation Categories				
Fixed			Variable Commodity	Hydro-Electric
Demand	Commodity	Standby		
0.0%	5.9%	0.0%	0.0%	0.0%
0.0%	15.4%	0.0%	0.0%	0.0%
0.0%	3.2%	0.0%	0.0%	0.0%
0.0%	24.6%	0.0%	0.0%	0.0%
0.0%	1.2%	0.0%	26.8%	0.0%
1.2%	6.0%	3.0%	0.0%	0.0%
0.0%	0.0%	0.0%	0.0%	0.0%
0.0%	0.0%	0.0%	63.8%	0.0%
9.2%	22.4%	21.9%	0.0%	0.0%
5.8%	3.7%	14.7%	0.0%	0.0%
16.3%	33.4%	39.6%	90.6%	0.0%
0.0%	0.7%	25.1%	0.0%	0.0%
0.0%	4.8%	0.0%	0.0%	0.0%
9.9%	1.3%	3.3%	0.0%	0.0%
0.0%	0.0%	0.0%	-0.2%	0.0%
9.9%	6.8%	28.3%	-0.2%	0.0%
8.6%	3.0%	4.5%	2.1%	0.0%
9.1%	3.1%	4.7%	2.1%	0.0%
11.0%	3.2%	5.7%	2.7%	0.0%
2.8%	2.2%	1.5%	0.9%	0.0%
9.1%	2.9%	4.7%	1.7%	0.0%
40.6%	14.4%	21.0%	9.5%	0.0%
33.3%	14.8%	11.0%	0.0%	0.0%
0.0%	6.1%	0.0%	0.0%	0.0%
0.0%	0.0%	0.0%	0.0%	100.0%
100.0%	100.0%	100.0%	100.0%	100.0%

Administrative and General Costs Redistributed Among Functional Categories

Administrative and General Costs by Allocation Categories						Total A&G Costs Allocated	Functional Categories
Fixed			Variable				
Demand	Commodity	Standby	Commodity	Hydro-Electric			
\$	-	\$ 9,556,953	\$ -	\$ -	\$ -	\$ 9,556,953	Source of Supply
		25,013,769	-	-	-	25,013,769	CRA
		5,239,667	-	-	-	5,239,667	SWP
		39,810,389	-	-	-	39,810,389	Other Supply
							Subtotal: Source of Supply
							Conveyance & Aqueduct
							CRA
		1,989,620	-	939,028	-	2,928,648	
10,923	9,803,453	61,414	-	-	-	9,875,790	
	-	-	-	-	-	-	SWP*
	-	-	-	2,232,475	-	2,232,475	
80,664	36,310,603	453,548	-	-	-	36,844,815	
50,547	6,037,968	304,330	-	-	-	6,392,845	Other Conveyance & Aqueduct
142,134	54,141,643	819,293	3,171,503	-	-	58,274,573	Subtotal: Conveyance & Aqueduct
							Storage
							Storage Costs Other Than Power
	1,204,658	518,482	-	-	-	1,723,141	
	7,746,665	-	-	-	-	7,746,665	
86,168	2,077,047	67,420	-	-	-	2,230,635	
	-	-	(6,229)	-	-	(6,229)	Storage Power
86,168	11,028,370	585,902	(6,229)	-	-	11,694,212	Subtotal: Storage
							Treatment
75,401	4,920,904	92,302	73,473	-	-	5,162,079	Jensen
79,326	4,986,926	97,107	73,100	-	-	5,236,459	Weymouth
95,724	5,223,353	117,181	94,855	-	-	5,531,113	Diemer
24,491	3,581,161	29,977	32,046	-	-	3,667,676	Mills
79,666	4,675,104	97,524	60,597	-	-	4,912,890	Skinner
354,608	23,387,448	434,091	334,070	-	-	24,510,217	Subtotal: Treatment
291,269	23,945,840	227,896	-	-	-	24,465,005	Distribution
	9,829,450	-	-	-	-	9,829,450	Demand Management
	-	-	-	2,899,151	-	2,899,151	Hydro-Electric
\$ 874,179	\$ 162,143,140	\$ 2,067,183	\$ 3,499,344	\$ 2,899,151	\$ -	\$ 171,482,996	Total Costs Allocated

Summary of Functionalization Percentages

Fiscal Year Ending 2024

	Source of Supply	Conveyance & Aqueduct	Storage	Water Quality	Treatment	Distribution	Demand Management	Hydro-Electric	Administrative & General	Total Allocated
Departmental Operations & Maintenance										
Office of General Manager	5%	12%	2%	0%	19%	16%	2%	1%	43%	100%
Water Systems Operations	5%	17%	1%	0%	41%	33%	0%	2%	2%	100%
Water Resources Management	70%	0%	0%	0%	0%	2%	28%	0%	0%	100%
Engineering Services	4%	21%	24%	0%	25%	18%	0%	1%	6%	100%
Bay Delta Initiatives	0%	100%	0%	0%	0%	0%	0%	0%	0%	100%
Business Technology	4%	9%	2%	0%	15%	12%	1%	1%	56%	100%
Real Property	6%	33%	8%	0%	0%	12%	0%	0%	41%	100%
Human Resources	7%	15%	3%	0%	24%	20%	2%	1%	28%	100%
Office of the Chief Financial Officer	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%
External Affairs	0%	0%	0%	0%	0%	0%	11%	0%	89%	100%
General Counsel	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%
General Auditor	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%
Ethics Office	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%
Sustainability, Resilience & Innovation	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%
Diversity, Equity & Inclusion	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%
Equal Employment Opportunity	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%
Total Departmental O&M	7%	15%	3%	0%	24%	20%	2%	1%	28%	100%
General District Requirements										
State Water Contract*	25%	75%	0%	0%	0%	0%	0%	0%	0%	100%
Colorado River Aqueduct Power Costs	0%	100%	0%	0%	0%	0%	0%	0%	0%	100%
Supply Programs (cash funded portion)	82%	0%	18%	0%	0%	0%	0%	0%	0%	100%
Demand Management (cash funded portion)	0%	0%	0%	0%	0%	0%	100%	0%	0%	100%
Capital Financing	4%	21%	24%	0%	25%	19%	0%	1%	6%	100%
Other Operating Costs	7%	15%	3%	0%	24%	20%	2%	1%	28%	100%
Increase/(Decrease) in Required Reserves	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%
Total General District Requirements	19%	53%	8%	0%	8%	6%	4%	0%	3%	100%
Revenue Offsets	23%	57%	1%	0%	1%	1%	0%	5%	13%	100%
Net Revenue Requirements	14%	40%	7%	0%	14%	11%	3%	0%	10%	100%

* Includes Delta Conveyance planning costs net of California WaterFix refund

Cost Allocation Summary (by budget line item)

Fiscal Year Ending 2024

	Allocation Categories						Total Allocated
	Fixed			Variable	Other	Hydro-Electric	
	Demand	Commodity	Standby	Commodity			
Departmental Operations & Maintenance							
Office of General Manager	\$ -	\$ 8,305,472	\$ -	\$ -	\$ -	\$ 131,218	\$ 8,436,691
Water Systems Operations	-	342,528,492	-	29,233,245	-	7,492,227	379,253,964
Water Resources Management	-	34,401,609	-	-	-	-	34,401,609
Engineering Services	-	61,810,955	-	-	-	942,811	62,753,766
Bay Delta Initiatives	-	15,244,699	-	-	-	-	15,244,699
Business Technology	-	48,829,938	-	-	-	771,466	49,601,404
Real Property	-	20,998,458	-	-	-	-	20,998,458
Human Resources	-	15,769,863	-	-	-	249,149	16,019,011
Office of the Chief Financial Officer	-	-	-	-	-	-	-
External Affairs	-	3,981,894	-	-	-	-	3,981,894
General Counsel	-	-	-	-	-	-	-
General Auditor	-	-	-	-	-	-	-
Ethics Office	-	-	-	-	-	-	-
Sustainability, Resilience & Innovation	-	-	-	-	-	-	-
Diversity, Equity & Inclusion	-	-	-	-	-	-	-
Equal Employment Opportunity	-	-	-	-	-	-	-
Total Departmental O&M (including Administrative and General)	-	551,871,380	-	29,233,245	-	9,586,872	590,691,497
General District Requirements							
State Water Contract*	9,542,793	457,895,729	52,597,596	261,889,323	-	-	781,925,441
Colorado River Aqueduct Power Costs	-	-	-	87,941,781	-	-	87,941,781
Supply Programs (cash funded portion)	-	65,834,502	-	-	-	-	65,834,502
Demand Management (cash funded portion)	-	50,436,276	-	-	-	-	50,436,276
Capital Financing	78,762,274	179,317,115	156,035,184	-	-	6,285,752	420,400,325
Other Operating Costs	-	9,955,399	183,437	-	-	160,184	10,299,019
Increase/(Decrease) in Required Reserves	-	-	-	-	Other	-	-
Total General District Requirements (including Administrative and General)	88,305,067	763,439,021	208,816,217	349,831,105	-	6,445,936	1,416,837,345
Revenue Offsets	(4,339,480)	(126,904,338)	(14,138,615)	(69,350,227)	-	(10,971,472)	(225,704,132)
Net Revenue Requirements	\$ 83,965,586	\$ 1,188,406,062	\$ 194,677,602	\$ 309,714,123	\$ -	\$ 5,061,335	\$ 1,781,824,709

* Includes Delta Conveyance planning costs net of California WaterFix refund

Fiscal Year Ending 2024	Supply			Conveyance & Aqueduct					Storage				Treatment	Distribution	Demand Mgt.	Hydro	Total
	CRA	SWC	Other	CRA power	CRA other	SWC power	SWC other	Other C&A	Emergency	Drought	Regulatory	Power					
Dept. Operations & Maintenance	9,426,812	16,532,838	14,457,531	3,610,240	54,662,118	-	24,378,597	7,771,815	7,624,721	6,147,788	4,085,073	-	142,708,905	118,539,694	11,483,927	6,658,190	428,088,249
General District Requirements																	
State Water Contract*	-	85,494,959	-	-	-	(3,654,765)	115,160,127	-	-	-	-	-	-	-	-	-	197,000,320
Capital	-	107,000,290	-	-	-	258,551,933	198,687,447	-	-	-	-	-	-	-	-	-	564,239,670
O&M	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	85,626,149
Colorado River Aqueduct Power	-	-	-	85,626,149	-	-	-	-	-	-	-	-	-	-	-	-	64,100,985
Supply Programs (cash funded portion)	51,129,998	-	1,250,000	-	-	-	-	-	-	11,720,987	-	-	-	-	-	-	49,108,217
Demand Management (cash funded portion)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Capital Financing Program	-	-	17,275,568	8,898,220	13,195,409	-	6,554,298	63,763,339	48,397,633	31,252,283	23,569,430	-	107,044,197	81,610,541	1,649,426	6,120,239	409,330,584
Other Operating Costs	220,820	387,276	338,663	84,569	1,280,443	-	571,061	182,052	178,607	144,010	95,692	-	3,342,911	2,776,755	269,007	155,966	10,027,832
Revenue Offsets	(288,197)	(51,094,117)	(158,006)	(3,455,242)	(327,840)	(59,541,474)	(65,601,838)	(340,070)	(266,495)	(233,606)	(131,586)	(545,067)	(1,682,728)	(2,445,402)	(296,414)	(10,772,211)	(197,180,292)
Admin. & General	9,556,953	25,013,769	5,239,667	2,928,648	9,875,790	2,232,475	36,844,815	6,392,845	1,723,141	7,746,665	2,230,635	(6,229)	24,510,217	24,465,005	9,829,450	2,899,151	171,482,996
Net Revenue Requirement	70,046,386	183,335,016	38,403,423	97,692,583	78,685,919	197,588,169	316,594,507	77,769,982	57,657,607	56,778,128	29,849,243	(551,296)	275,923,502	224,946,593	72,043,612	5,061,335	1,781,824,709
* Includes Delta Conveyance planning costs net of California WaterFix refund																	

Fiscal Year Ending 2024	Supply			Conveyance & Aqueduct					Storage				Treatment	Distribution	Demand Mgt.	Hydro	Total
	CRA	SWC	Other	CRA power	CRA other	SWC power	SWC other	Other C&A	Emergency	Drought	Regulatory	Power					
Fixed Demand																	
engineering factors	-	-	-	0.0%	8.1%	0.0%	8.1%	8.1%	0.0%	0.0%	34.7%	0.0%	31.8%	34.7%	-	-	-
SWC Capital	-	-	-	-	-	-	9,291,517	-	-	-	-	-	-	-	-	-	9,291,517
Capital Financing	-	-	-	-	1,064,651	-	528,823	5,144,647	-	-	8,190,332	-	34,088,003	28,359,507	-	-	77,375,964
A&G less Offsets	-	-	-	-	(15,529)	-	(2,072,523)	(289,523)	-	-	86,168	-	(27,572)	(382,916)	-	-	(2,701,895)
Total fixed demand	-	-	-	-	1,049,123	-	7,747,818	4,855,124	-	-	8,276,500	-	34,060,431	27,976,591	-	-	83,965,586
Fixed Commodity																	
engineering factors	100%	100%	100%	100%	47.5%	0%	47.5%	47.5%	0%	100%	38.6%	0%	29.5%	38.6%	1	-	-
Capital Financing	-	-	17,275,568	8,898,220	6,262,654	-	3,110,726	30,262,628	-	31,252,283	9,097,206	-	31,562,966	31,499,610	1,649,426	-	170,871,287
SWC Capital*	-	85,494,959	-	-	-	-	54,655,984	-	-	-	-	-	-	-	-	-	140,150,942
SWC O&M	-	107,000,290	-	-	-	-	198,687,447	-	-	-	-	-	-	-	-	-	305,687,738
Dept. O&M	9,426,812	16,532,838	14,457,531	3,610,240	54,662,118	-	24,378,597	7,771,815	7,624,721	6,147,788	4,085,073	-	107,825,632	118,539,694	11,483,927	-	386,546,786
Supply Programs (cash funded portion)	51,129,998	-	1,250,000	-	-	-	-	-	-	11,720,987	-	-	-	-	-	-	64,100,985
Demand Management (cash funded portion)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	49,108,217
Other Operating Costs	220,820	387,276	338,663	84,569	1,280,443	-	571,061	182,052	178,607	144,010	95,692	-	3,342,911	2,776,755	269,007	-	9,871,866
A&G less Offsets	9,268,756	(26,080,347)	5,081,661	1,989,620	9,647,857	-	(15,270,198)	6,037,968	1,026,052	7,513,059	1,945,460	-	28,683,604	22,691,715	9,533,036	-	62,068,243
Total fixed commodity	70,046,386	183,335,016	38,403,423	14,582,649	71,853,072	-	266,133,617	44,254,462	8,829,379	56,778,128	15,223,430	-	171,415,113	175,507,774	72,043,612	-	1,188,406,062
Fixed Standby																	
engineering factors	-	-	-	0%	44%	0%	44.5%	44.5%	100%	0%	26.7%	0%	38.7%	26.7%	-	-	-
SWC Capital*	-	-	-	-	-	-	51,212,626	-	-	-	-	-	-	-	-	-	51,212,626
Capital Financing	-	-	-	-	5,868,103	-	2,914,749	28,356,065	48,397,633	-	6,281,893	-	41,393,227	21,751,423	-	-	154,963,094
A&G less Offsets	-	-	-	-	(84,379)	-	(11,414,302)	304,330	430,594	-	67,420	-	(512,585)	(289,196)	-	-	(11,498,117)
Total fixed standby	-	-	-	-	5,783,725	-	42,713,072	28,660,395	48,828,227	-	6,349,313	-	40,880,642	21,462,227	-	-	194,677,602
Variable Commodity																	
SWC Power	-	-	-	-	-	254,897,168	-	-	-	-	-	-	-	-	-	-	254,897,168
CRA Power	-	-	-	85,626,149	-	-	-	-	-	-	-	-	-	-	-	-	85,626,149
Variable Treatment	-	-	-	-	-	-	-	-	-	-	-	-	34,883,273	-	-	-	34,883,273
A&G less Offsets	-	-	-	(2,516,214)	-	(57,308,999)	-	-	-	-	-	(551,296)	(5,315,958)	-	-	-	(65,692,466)
Total variable commodity	-	-	-	83,109,935	-	197,588,169	-	-	-	-	-	(551,296)	29,567,315	-	-	-	309,714,123
Hydroelectric																	
A&G less Offsets	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12,934,395	12,934,395
Total hydroelectric	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	(7,873,060)	(7,873,060)
Total Costs	70,046,386	183,335,016	38,403,423	97,692,583	78,685,919	197,588,169	316,594,507	77,769,982	57,657,607	56,778,128	29,849,243	(551,296)	275,923,502	224,946,593	72,043,612	5,061,335	1,781,824,709

*Option 3- 5.5% / 5.5%

Metropolitan Water District of Southern California

FISCAL YEARS 2022/23 and 2023/24 COST OF SERVICE REPORT FOR PROPOSED WATER RATES AND CHARGES



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EXECUTIVE SUMMARY

Metropolitan's current rate design was adopted by its Board of Directors on October 16, 2001 following a lengthy and open process. Metropolitan is required to adopt rates and charges that are reasonable, and cost of service is one reasonable method. In 2001, Metropolitan chose to adopt a cost of service rate structure that it found reasonable for recovering the costs of providing full-service water service (treated and untreated) and wheeling service to its 26 member agencies, as previously defined in Metropolitan's Administrative Code Section 4405. The rate structure is designed in accordance with the Rate Structure Action Plan of December 12, 2000; the Composite Rate Structure framework of April 11, 2000; the Strategic Plan Policy Principles of December 14, 1999; and the Strategic Plan Steering Committee Guidelines of January 6, 2000. The Board adopted the rate structure on October 16, 2001. On August 18, 2020, the Board of Directors repealed the Administrative Code sections that established the wheeling service it previously made available to its member agencies (short-term wheeling service under one year) and the pre-set wheeling rate for that wheeling service. As a result of the Board's action, short-term wheeling to member agencies is now determined on a case by case basis and is set by contract, as has been done for wheeling service for member agencies lasting more than one year and wheeling for third parties. Additionally, on November 23, 2021, the Board took an action to direct staff to incorporate all demand management costs in Metropolitan's supply rate elements for future rates and charges proposals, eliminating the Water Stewardship Rate element.

This report describes the updated rate structure in detail including the cost of service process that supports the proposed rates and charges for calendar years 2023 and 2024, which are based on the Proposed Biennial Budget for Fiscal Years 2022/23 and 2023/24 prepared for the Board and committee meetings scheduled in February 2022 (the "Biennial Budget") through April 2022.

The rate structure supports the strategic planning vision that Metropolitan is a regional provider of services, encourages the development of additional local supplies by member agencies through programs such as recycling, encourages conservation, and accommodates a water transfer market. Through its regional services, Metropolitan ensures a baseline of reliability and quality for imported water deliveries in its service area. Metropolitan's rate structure recognizes the foregoing and other unique aspects of Metropolitan's services, governance structure, and operational circumstances. Although there are general tenants that are important in cost of service industry guidelines, all guidelines recognize that customization of cost of service is necessary to reflect the service being provided. Accordingly, Metropolitan's cost of service and the rate structure developed therefrom is in line with industry guidelines and Metropolitan's unique operational circumstances.

Objectives

In accordance with the Strategic Plan Policy Principles adopted in 1999, the rate structure is designed to accomplish the following:

Accountability. Define the linkage among costs, charges, and benefits through a cost of service approach consistent with industry guidelines.

Regional Provider. Ensure that regional services are provided to meet the existing and growth needs of member agencies.

Equity. Ensure that users, including member agencies and other entities, pay the same rates and charges for like classes of services and provide fair and reasonable allocation of costs through rates and charges.

Environmental Responsibility. Encourage wise environmental stewardship and effective demand management by funding conservation and recycling projects and programs and using pricing¹ to encourage investments in conservation, recycling, and other economical local supplies.

Choice and Competition. Offer choices for services to member agencies and accommodate the development of a water transfer market.

Water Quality. Support source quality improvements and water treatment systems that are required to ensure safe drinking water and the feasibility of water recycling and groundwater management programs.

Financial Integrity. Establish a financial commitment from the member agencies that provides financial security for Metropolitan and does not transfer undue risk to member agencies, individually or as a whole.

¹ Metropolitan's rates reflect the cost of providing its services and the impact of those costs may have an impact on member agencies' conservation and local resource development. Metropolitan invests in demand management, by providing incentives to those conserving and developing local resource projects that reduce the price of those projects for the participants. Those demand management investments lower system costs and reduce the need for Metropolitan to import additional supplies into the service area.

DISTRICT OVERVIEW

This Report provides an overview of Metropolitan generally, its governance structure, operational characteristics, and the services it provides to its member agencies. The District Overview provides context for the cost of service process applied, which result in the proposed rates and charges.

District Profile

The Metropolitan Water District of Southern California (Metropolitan) is a metropolitan water district created in 1928 under authority of the Metropolitan Water District Act (California Statutes 1927, Chapter 429, as reenacted in 1969 as Chapter 209, as amended (the Act)). Metropolitan has 26 member public agencies and its primary purpose is to provide its members with a reliable wholesale water supply service for domestic and municipal uses. To do so, Metropolitan imports water from the Colorado River and Northern California. Metropolitan also helps its member agencies develop increased water conservation, recycling, storage, and other local resource programs.

Metropolitan is authorized to develop, store, and distribute water for domestic and municipal purposes and other beneficial uses if excess water is available, and may provide, generate, and deliver electric power within or outside the state for the purpose of developing, storing, and distributing water. All powers, privileges and duties vested in or imposed upon Metropolitan are exercised and performed by and through its Board of Directors. Metropolitan is governed by a 38-member Board of Directors representing the 26 member agencies. Metropolitan directors are selected by their respective member agencies and some of those directors also serve on the governing body of their member agency. Board and committee meetings are open to the public and are broadcast on the Internet through Metropolitan's website, www.mwdh2o.com. Although the Board and its committees have met virtually since the start of the COVID-19 pandemic, Metropolitan has made participation, observation, viewing, and listening options available to the public for all meetings. A schedule of Board and committee meetings, as well as current and archived Board materials, is available at the same website.

Metropolitan was established to obtain an allotment of Colorado River water and to construct and operate the 242-mile Colorado River Aqueduct (CRA), which runs from an intake at Lake Havasu on the California-Arizona border, to an endpoint at Metropolitan's Lake Mathews reservoir in Riverside County. Metropolitan owns and operates an extensive portfolio of capital facilities including the CRA, 16 hydroelectric facilities, nine reservoirs, 830 miles of large-scale pipes, and five water treatment plants.

In 1960, Metropolitan, followed by other public agencies, signed a long-term contract with the state Department of Water Resources (DWR) to participate in the State Water Project (SWP). The SWP is the largest state-built, user-financed water supply and transportation project in the country. Its facilities were constructed with several general types of financing, the repayment of which is made by the 29 agencies and districts that participate in the SWP through long-term contracts (the State Water Contractors). The State Water Contractors also pay for the operations, maintenance, power, and replacement (OMP&R) costs of the SWP, as the State Water Contracts are the basis for all SWP construction and ongoing operations. DWR manages and operates the SWP. As the largest of the now 29 contractors, Metropolitan is allocated slightly less than half of all SWP supplies. Water supplies from the SWP are conveyed to Metropolitan via the SWP's 444-mile California Aqueduct, which was made possible pursuant to Metropolitan's State Water Contract. The SWP serves urban and agricultural agencies from the San Francisco Bay area to Southern California.

To secure additional supplies, Metropolitan also has groundwater banking partnerships and water transfer arrangements within and outside of its service area. Metropolitan also provides financial incentives to its member agencies for local investments in demand management programs and projects. An increasing

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percentage of Southern California's water supply comes from these conservation programs and local resources projects, including water recycling and recovered groundwater.

To pay for its costs, the Act authorizes Metropolitan to: levy property taxes within its service area; establish water rates; collect charges for water standby and service availability; incur general obligation bonded indebtedness and issue revenue bonds, notes and short-term revenue certificates; execute contracts; and exercise the power of eminent domain for the purpose of acquiring property. In addition, Metropolitan's Board is authorized to establish terms and conditions under which additional areas may be annexed to Metropolitan's service area.

District Mission

The mission of Metropolitan is to provide its 5,200-square-mile service area with an adequate and reliable supply of high-quality water to meet present and future needs in an environmentally and economically responsible way.

Metropolitan Service Area

Metropolitan's service area comprises approximately 5,200 square miles and includes portions of the six counties of Los Angeles, Orange, Riverside, San Bernardino, San Diego and Ventura. When Metropolitan began delivering water in 1941, its service area consisted of approximately 625 square miles. Its service area has increased by 4,500 square miles since that time. The expansion was primarily the result of annexation of the service areas of additional member agencies. Metropolitan has historically provided between 40 and 60 percent of the water used annually within its service area.

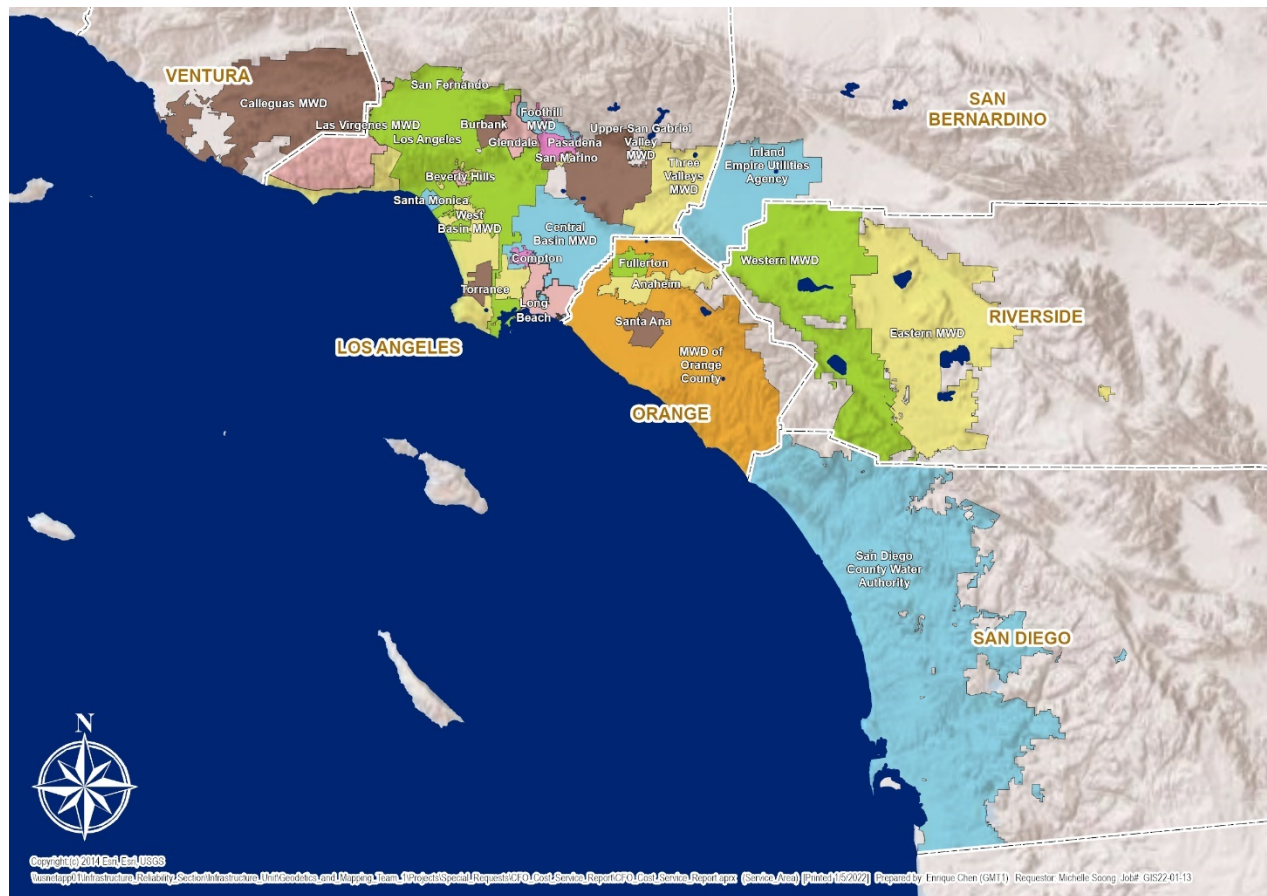
The area served by Metropolitan represents the most densely populated and heavily industrialized portions of Southern California. Metropolitan estimates that approximately 19 million people lived in Metropolitan's service area in 2020, based on official estimates from the California Department of Finance and on population distribution estimates from the Southern California Association of Governments (SCAG) and the San Diego Association of Governments (SANDAG). Recent population projections prepared by SCAG in 2020 and by SANDAG in 2019, which will be used as base data for Metropolitan's 2020 Integrated Water Resources Plan, show expected population growth of approximately 17 percent in Metropolitan's service area between 2010 and 2035, which is slightly lower than the approximately 18 percent population growth rate projected by SCAG in 2012 and SANDAG in 2013 (which projections were used as base data for Metropolitan's prior 2015 Integrated Water Resources Plan update).

The economy of Metropolitan's service area is exceptionally diverse. In 2019, the economy of the six counties which contain Metropolitan's service area had a gross domestic product larger than all but twelve nations of the world. The Six County Area economy ranked between South Korea (\$1.642 trillion) and Spain (\$1.394 trillion), with an estimated gross domestic product (GDP) of \$1.596 trillion. The Six County Area's gross domestic product in 2019 was larger than all states except California, Texas, and New York.

The climate in Metropolitan's service area ranges from moderate temperatures throughout the year in the coastal areas to hot and dry summers in the inland areas. Annual rainfall in an average year has historically been approximately 13 to 15 inches along the coastal area, up to 20 inches in foothill areas and less than 10 inches inland.

Service Area Map

Figure 1 below shows the area served by Metropolitan. It includes parts of the six counties that comprise Southern California (Six County Area) consisting of Los Angeles, Orange, Riverside, San Bernardino, San Diego, and Ventura counties. Although these counties comprise Metropolitan's service area, Metropolitan's territory does not encompass all the area within each of the six counties.

Figure 1: Map of Metropolitan's Service Area

Organization Structure

Board of Directors

Metropolitan is governed by the customers that use its system and service, its member public agencies, through a 38-member Board of Directors. Each member public agency is entitled to have at least one representative on the Board, plus an additional representative for each full five percent of the total assessed valuation of property in Metropolitan's service area that is within the member public agency. Accordingly, the Board may, from time to time, have more than 38 directors. There are also limits on reductions in the number of directors. Changes in relative assessed valuation do not terminate any director's term and as a result of California Assembly Bill 1220 (Garcia) enacted in 2019, "A member public agency shall not have fewer than the number of representatives the member public agency had as of January 1, 2019."

The Board includes business, professional and civic leaders. Directors serve on the Board without compensation from Metropolitan. Voting is based on assessed valuation, with each member agency being entitled to cast one vote for each \$10 million or major fractional part of \$10 million of assessed valuation of property within the member agency, as shown by the assessment records of the county in which the member agency is located. The Board administers its policies through the Metropolitan Water District Administrative Code (the Administrative Code), which the Board adopted in 1977. The Board periodically amends the Administrative Code to reflect new policies or changes in existing policies that occur from time to time.

Metropolitan's day-to-day management is under the direction of its General Manager, who serves at the pleasure of the Board, as do Metropolitan's General Counsel, General Auditor, and Ethics Officer. Metropolitan's organization chart is shown in Figure 2; Table 1 provides a listing of Metropolitan's Senior Management.

Figure 2: Metropolitan Organization Chart

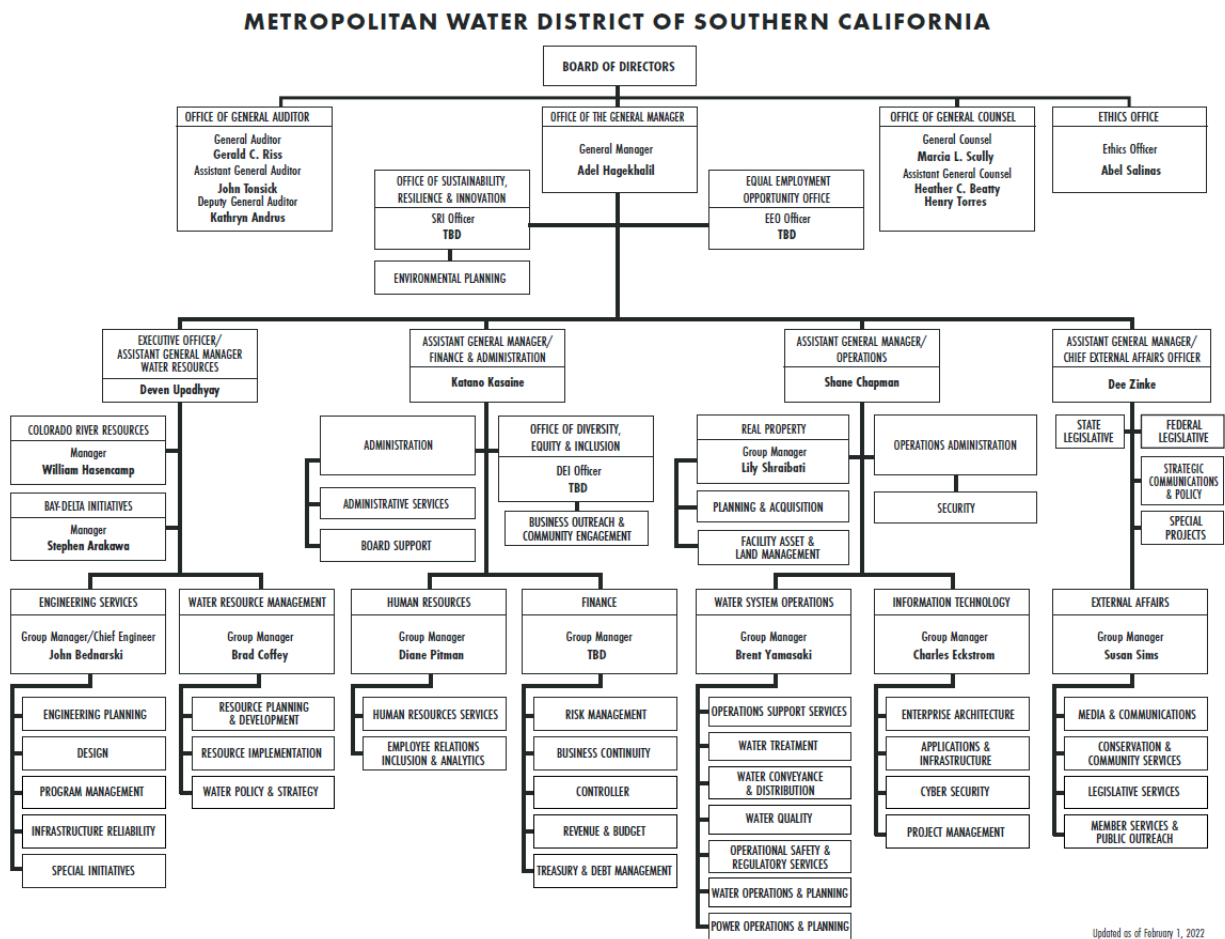


Table 1: Metropolitan Senior Management

Adel Hagekhalil	General Manager
Marcia Scully	General Counsel
Gerald Riss	General Auditor
Abel Salinas	Ethics Officer
Deven Upadhyay	Executive Officer and Assistant General Manager/Water Resources
Katano Kasaine	Assistant General Manager/Finance & Administration
Dee Zinke	Assistant General Manager/Chief External Affairs Officer
Shane Chapman	Assistant General Manager/Operations
Rosa Castro	Board Administrator

Member Agencies

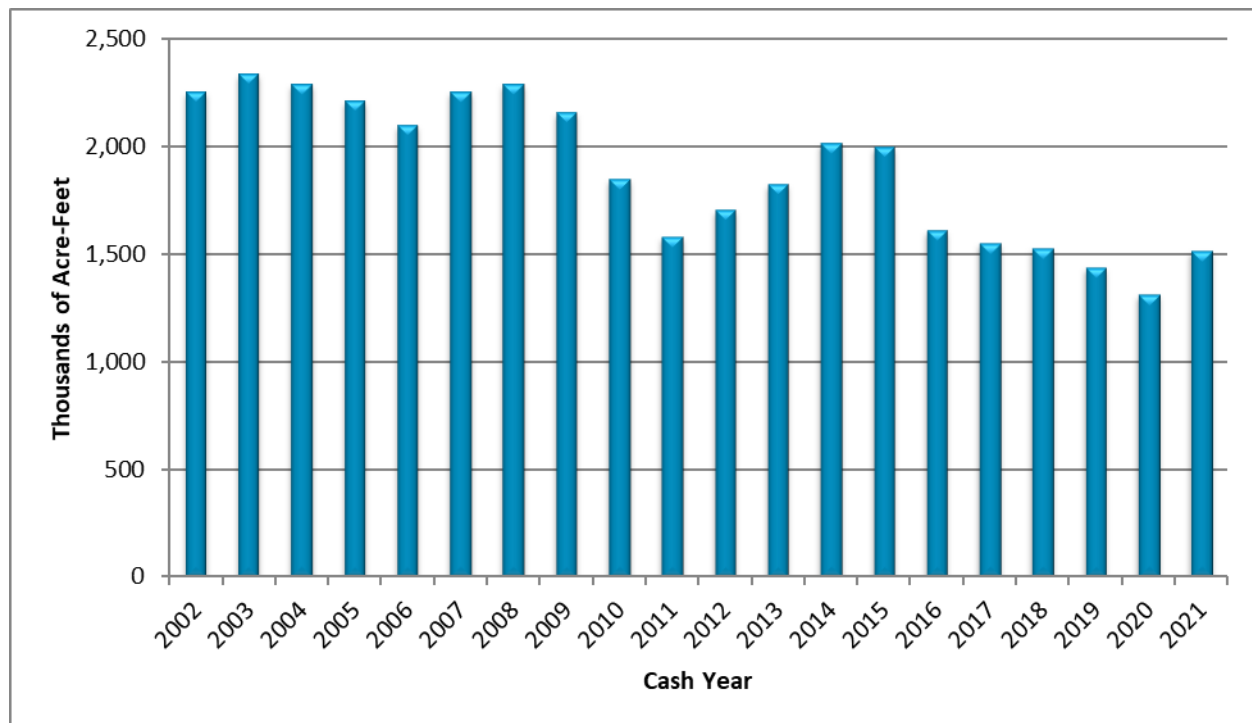
Table 2 lists the 26 member agencies of Metropolitan which include 11 municipal water districts, 14 cities and one county water authority.

Table 2: Metropolitan Member Agencies

Municipal Water Districts	Cities	County Water Authority
Calleguas	Anaheim	San Diego
Central Basin	Beverly Hills	
Eastern	Burbank	
Foothill	Compton	
Inland Empire Utilities Agency	Fullerton	
Upper San Gabriel Valley	Glendale	
Western of Riverside County	Long Beach	
Las Virgenes	Los Angeles	
Orange County	Pasadena	
Three Valleys	San Fernando	
West Basin	San Marino	
	Santa Ana	
	Santa Monica	
	Torrance	

Metropolitan's Water Transactions with Member Agencies

Due to Metropolitan's role as a voluntary cooperative of, and supplemental wholesale supplier to, member agencies with varying degrees of reliance on Metropolitan, and other factors described below, water transactions are highly variable and unpredictable from year to year. In the past 20 years, water transactions have been as high as 2.3 million acre-feet (MAF) in Cash Year 2003 and as low as 1.3 MAF in Cash Year 2020, as shown in Figure 3. Figure 3 includes total member agencies transactions by cash year, which includes water sales, exchanges, and wheeling. Variation occurs for many reasons. The demand for supplemental supplies is dependent on water use at the retail consumer level and the amount of local water supplies available to member agencies. Consumer demand and locally supplied water vary from year to year, resulting in variability in Metropolitan's water transactions. Both economic growth and recessions can also lead to increases and decreases in demand. Weather also affects demands. Wet cool weather not only increases the availability of local supplies, it also decreases retail demands. Conversely, hot and dry weather results in significant increases in retail demand. Member agencies also rely on Metropolitan during times of operational emergencies. Examples include: power outages, when member agencies need gravity-fed supplies to replace energy-dependent operations; water quality issues, such as when contaminants in groundwater force member agencies to shut down wells; and fires, when member agencies rely on Metropolitan for increased flows.

Figure 3: Historic Water Transactions Cash Year 2002 -2021¹

¹ Occur period Water Transactions. Includes transactions for services provided to member agencies.

Table 3 identifies the amounts paid by member agency, including fixed charges and volumetric rates, as well as the volume of water transactions by Metropolitan member agencies for FY 2021. Water transactions include sales, exchanges, and wheeling.

Table 3: Metropolitan Water Transactions with Member Agencies, Year Ended June 30, 2021(Accrual Basis, Dollars in Thousands) ^{1, 2}

Agency	Revenues				Water Transactions	
	Fixed Charges (\$ thousands)	Volumetric Charges (\$ thousands)	Total (\$ thousands)	Percent of Total	AF	Percent of Total
Anaheim	\$ 1,344	\$ 41,292	\$ 42,636	2.87%	41,964	2.67%
Beverly Hills	1,196	10,675	11,871	0.80%	9,784	0.62%
Burbank	853	8,760	9,613	0.65%	9,920	0.63%
Calleguas	8,046	103,711	111,757	7.51%	95,365	6.06%
Central Basin	836	27,263	28,099	1.89%	25,527	1.62%
Compton	61	2	63	0.00%	2	0.00%
Eastern	7,830	89,647	97,476	6.55%	91,462	5.81%
Foothill	645	10,598	11,243	0.76%	9,733	0.62%
Fullerton	486	7,552	8,038	0.54%	6,947	0.44%
Glendale	1,348	17,719	19,067	1.28%	16,183	1.03%
Inland Empire	4,521	44,465	48,986	3.29%	71,347	4.53%
Las Virgenes	1,842	23,056	24,897	1.67%	21,153	1.34%
Long Beach	2,379	24,043	26,422	1.78%	22,399	1.42%
Los Angeles	28,159	271,083	299,242	20.11%	316,537	20.11%
MWDOC	15,423	137,769	153,192	10.30%	140,558	8.93%
Pasadena	1,644	23,314	24,958	1.68%	21,297	1.35%
San Diego CWA	19,952	197,949	217,901	14.64%	335,760	21.33%
San Fernando	3	-3	0	0.00%	-	0.00%
San Marino	108	796	903	0.06%	738	0.05%
Santa Ana	734	8,423	9,157	0.62%	7,738	0.49%
Santa Monica	707	6,113	6,820	0.46%	5,603	0.36%
Three Valleys	5,078	62,301	67,379	4.53%	66,540	4.23%
Torrance	1,294	14,195	15,489	1.04%	14,341	0.91%
Upper San Gabriel	492	46,902	47,393	3.19%	60,036	3.81%
West Basin	12,177	118,108	130,285	8.76%	108,250	6.88%
Western MWD	4,404	70,673	75,077	5.05%	74,783	4.75%
Total	\$ 121,561	\$ 1,366,404	\$ 1,487,965	100.00%	1,573,965	100.00%

¹ Water Transactions include sales, exchanges, and wheeling.² Water Transactions as billed.

Due to differences in local supply resources and demand characteristics, usage profiles differ significantly among the member agencies. Table 4 summarizes the usage characteristics of the member agencies for the ten calendar years ended 2020. As can be seen from this table, individual agency purchases vary substantially from year to year, and the Metropolitan system accommodates usage behavior that varies widely among member agencies. The table shows that Metropolitan's transactions can vary as much as ± 30 percent from average. This range of variability is not typical for a retail water utility, but Metropolitan is a wholesale supplemental supplier with varying demands placed on it by its member agencies. Additionally, Metropolitan maintains its service available to all member agencies, regardless of each agencies' usage patterns.

Table 4: Member Agency Water Usage ProfilesCalendar Years 2011-2020 ^{1, 2, 3}

Agency	Average (AF)	Maximum (AF)	Minimum (AF)	Peak Day (CFS)
Anaheim	19,504	38,582	13,267	84.1
Beverly Hills	10,634	12,102	9,498	32.7
Burbank	15,690	19,815	7,747	22.6
Calleguas	100,699	133,688	87,759	240.8
Central Basin	42,659	73,685	17,546	79.2
Compton	420	1,597	-	6.9
Eastern	102,891	113,109	83,878	267.4
Foothill	8,270	9,532	7,218	19.9
Fullerton	7,515	10,339	5,057	27.4
Glendale	17,480	20,941	14,487	49.0
Inland Empire	81,713	103,526	63,287	153.9
Las Virgenes	20,807	24,639	17,815	46.1
Long Beach	33,225	45,221	25,953	80.4
Los Angeles	267,855	444,526	106,380	782.5
MWDOC	304,336	361,491	161,758	443.1
Pasadena	18,754	21,103	16,501	52.5
San Diego	443,762	600,211	323,909	1,138.2
San Fernando	31	108	-	4.9
San Marino	972	1,601	309	7.5
Santa Ana	10,452	16,675	4,747	21.7
Santa Monica	4,757	6,629	2,989	22.7
Three Valleys	67,162	73,500	55,988	178.6
Torrance	18,021	28,013	15,209	39.1
Upper San Gabriel	39,359	61,263	17,416	79.1
West Basin	144,806	156,213	119,443	230.2
Western	93,279	114,317	83,498	198.6
Total	1,875,053	2,492,428	1,261,658	4,309.3

¹ Water Transactions include sales, exchanges, and wheeling.² Occur period Water Transactions.³ Peak Day from May 1 through September 30, excluding replenishment.

Based on the variability of supplemental wholesale water transactions and unpredictability of future hydrologic conditions, transaction projections are based on long-term average forecasts consistent with Metropolitan's 2020 Integrated Resources Plan update analysis.

Metropolitan's Water Resources and Facilities

Metropolitan's total water system has been built over time to meet the widely differing needs of its member agencies and the sources of water available to Metropolitan. Some agencies have no local water resources and rely on Metropolitan for 100 percent of their annual water needs. Other agencies have adequate local surface supplies and storage and/or groundwater basins that provide them with the majority of their water supplies during wet and average years. However, during dry periods these agencies rely on Metropolitan to

make up any shortfalls in local water supplies. All members rely on the entirety of the system reliability during any emergency or shortage period. Therefore, Metropolitan operates its system to attempt to ensure the availability of its services to all its member agencies throughout the entire year. Challenges arise in managing water available from the SWP, the Colorado River, and water supply projects of Metropolitan.

Metropolitan's water delivery system is comprised of three integrated conveyance and delivery components:

- SWP;
- CRA; and
- Distribution System.

The California Aqueduct of the SWP and the CRA convey imported water into the Metropolitan service area. This water is then delivered to Metropolitan's member agencies via a regional network of canals, pipelines, and appurtenant facilities, which constitute the Distribution System. Supply, treatment, and storage facilities augment the Distribution System.

Water Conveyance System

For purposes of this report, components of the conveyance system are considered to include only those major trunk facilities that transport water from primary supply sources to either regional storage facilities or feeder lines linked to the primary conveyance facilities. All other water transport facilities, including pipelines, feeders, laterals, canals and aqueducts are considered part of the distribution facilities. Distribution facilities can be further identified in that they generally have at least one connection to a member agency's local distribution system. Existing regional conveyance facilities include both the SWP and CRA facilities. SWP facilities transport water from the Sacramento-San Joaquin Delta southward through a series of pumps, aqueducts, siphons, and tunnels that comprise the California Aqueduct. Conveyance facilities in or near Metropolitan's service area include the East Branch and West Branch of the California Aqueduct, the San Bernardino Tunnel, the Devil Canyon Power Plant, and the Santa Ana Valley Pipeline, which constitute the terminus of the reaches of the SWP facilities used and allocable to Metropolitan under its State Water Contract. The characteristics of the California Aqueduct are described more fully under the "State Water Project" heading below. Metropolitan operates the CRA. The CRA transports water from the Colorado River approximately 242 miles to its terminus at Lake Mathews in Riverside County. The characteristics of the CRA are more fully described under the "Colorado River Aqueduct" heading below. A summary of conveyance facilities is presented in Table 5.

Table 5: Components of Metropolitan's Water Conveyance System

Facility Name	Design Capacity (cfs)
East Branch SWP to Devil Canyon (a)	1,500
West Branch SWP (a)	1,490
Santa Ana Valley Pipeline SWP (a)	420
Colorado River Aqueduct	1,605
Inland Feeder	1,000

(a) The availability of additional capacity is dependent on coordination of Metropolitan's needs and the needs of other SWP Contractors

Metropolitan's conveyance facilities deliver available water to meet regional supplemental water demands either through direct deliveries or through deliveries to storage for later use. The two most important factors considered in evaluating water conveyance needs are:

- Availability of water supplies; and
- Supplemental water demands, including both:
 - Consumptive demands; and
 - Deliveries to storage during water surplus periods.

Additional factors that are considered in modeling operational needs and planning for additional water conveyance facilities include:

- Water quality blend requirements,
- System reliability in an emergency or unusual supply year; and
- System flexibility under other-than-normal operating conditions.

Conveyance system planning and operational needs are evaluated using both 1) computer simulation models, which indicate how much imported water is available during a given year, and 2) a distribution system mass balance model, which indicates system capacity constraints. These models use available imported supplies based on historical hydrology, and then map these supplies over projected supplemental water demands on a monthly basis. Modeling results are analyzed to determine if shortages occur because of conveyance constraints or water supply constraints under various wet, dry, and normal conditions. The need for additional conveyance facilities is governed by the most restrictive of the conveyance constraints.

State Water Project (SWP)²

One of Metropolitan's two major sources of water is the SWP, which is managed and operated by DWR, and is an integral part of Metropolitan's conveyance system. The SWP is the largest state-built, multipurpose, user-financed water project in the country. It was designed and built primarily to deliver water, but also provides flood control, generates power for pumping, is used for recreation, and enhances habitat for fish and wildlife. The SWP provides irrigation water for 750,000 acres of farmland, primarily in the San Joaquin Valley, and provides municipal and industrial water for approximately 27 million of California's estimated 39.5 million residents.

The SWP consists of a complex system of dams, reservoirs, power plants, pumping plants, canals and aqueducts to deliver water. SWP water consists of water from rainfall and snowmelt runoff that is captured and stored in SWP conservation facilities and then delivered through SWP transportation facilities to water agencies and districts located throughout the Upper Feather River, Bay Area, Central Valley, Central Coast, and Southern California. Metropolitan receives water from the SWP through the California Aqueduct, which is 444 miles long, and at four delivery points near the northern and eastern boundaries of Metropolitan's service area. The SWP facilities are shown in Figure 4.

The capacity of the SWP to deliver water decreases with distance from the Banks Pumping Plant, located in the Sacramento-San Joaquin Delta, as water is delivered to Contractors through the South Bay Aqueduct and the Coastal Branch Aqueduct, and to turnouts in the San Joaquin Valley and Southern California. The design pumping capacity at Banks Pumping Plant is 10,670 cubic feet-per-second (cfs) but only 4,480 cfs at the Edmonston Pumping Plant, located at the base of the Tehachapi Mountains.

In addition to the delivery of SWP water, the SWP is also used to convey transfers of SWP water and non-SWP water. SWP operations are closely coordinated and integrated with the federal Central Valley Project (CVP) and the San Luis Reservoir and San Luis Canal section of the California Aqueduct are shared SWP/CVP facilities. The SWP is also connected to other water sources upstream of the Sacramento-San Joaquin Delta, and along the California Aqueduct as it passes through Central Valley.

² For historical and current information regarding the SWP, refer to Bulletin 132, published periodically by DWR since 1963. The most recently published Bulletin is Bulletin 132-18 dated January 2021 and titled "Management of the California State Water Project". Appendices to the Bulletin are also updated separately. Both are available at: <https://water.ca.gov/Programs/State-Water-Project/Management/Bulletin-132>.

This map illustrates the extensive California Aqueduct system, which transports water from the Sacramento-San Joaquin Delta to the Central Valley. The system is divided into several main branches: the North Bay Aqueduct, South Bay Aqueduct, Coastal Branch Aqueduct, West Branch Aqueduct, and East Branch Aqueduct. Key components shown include major reservoirs like Lake Oroville, Lake Davis, Lake Perris, and Lake Mead; numerous pumping plants such as the Thermalito, Barker Slough, Cordelia, and Teerink plants; and various forebays and powerplants. The map also depicts the Sacramento-San Joaquin Delta and the Central Valley's topography, with the aqueduct route highlighted in green and labeled throughout its length.

State Water Contractors participate in the SWP through responsibility for costs of the SWP in exchange for delivery of water conserved and stored by the SWP, an allocated portion of that total supply, and other participation rights. Each year, DWR determines the percentage of the total contracted amount it estimates

will be available to the State Water Contractors (the DWR allocation). Under a 100 percent allocation, Metropolitan would receive 1,911,500 acre-feet of SWP water. Late each year, DWR announces an initial allocation estimate for the upcoming year but may revise the estimate throughout the year if warranted by developing precipitation and water supply conditions. State Water Contractors are obligated to pay all costs of the SWP, except for those attributable to recreation, flood control, and other costs not associated with water deliveries to the State Water Contractors, regardless of the annual allocation determined by DWR. In addition to SWP water, Metropolitan also obtains water from water transfers, groundwater banking and exchange programs delivered through the California Aqueduct. From calendar years 2004 through 2020 the amount of water received by Metropolitan from the SWP, including water from water transfer, groundwater banking and exchange programs delivered through the California Aqueduct (described under “Water Transfer, Storage and Exchange Programs” below), varied from a low of 593,000 acre-feet in calendar year 2015 to a high of 1,800,000 acre-feet in 2004. In calendar year 2020, DWR’s allocation to State Water Contractors was 20 percent of contracted amounts, or 382,200 acre-feet, for Metropolitan. In calendar year 2021, DWR’s allocation to State Water Contractors was 5 percent of contracted amounts, or 95,550 acre-feet, for Metropolitan.

On December 1, 2020, DWR announced an initial calendar year 2020 allocation of 10 percent. On March 23, 2021, DWR decreased the allocation to 5 percent. Decreased hydrologic conditions, including below-average precipitation in the month of January and February, led to the decrease to 5 percent. For calendar year 2021, DWR’s initial allocation was announced on December 1, 2021 and was 0 percent of contracted amounts. This is the first year in DWR’s history of setting an initial allocation of 0 percent. As a result of improved runoff conditions, on January 20, 2022 DWR increased the allocation to 15 percent. On March 18, DWR decreased the allocation to 5 percent due to a historically dry January and February.

In addition to the allocation percentage set by DWR, the availability of SWP water to its contractors depends on the ability of the system to convey the water to each contractor. Regulatory constraints have reduced the ability of the SWP to divert water from the Bay-Delta, and subsidence has reduced the capacity to convey water to the service area of contractors south of the Bay-Delta.

In addition to being a source of water for diversion into the SWP, the Bay-Delta is also the source of water for local agricultural, municipal and industrial needs, and, in addition, supports significant resident and anadromous fish and wildlife resources and important recreational uses of water. Both the SWP’s upstream reservoir operations and its Bay-Delta diversions can at times affect these other uses of Bay-Delta water directly, or indirectly, through impacts on Bay-Delta water quality.

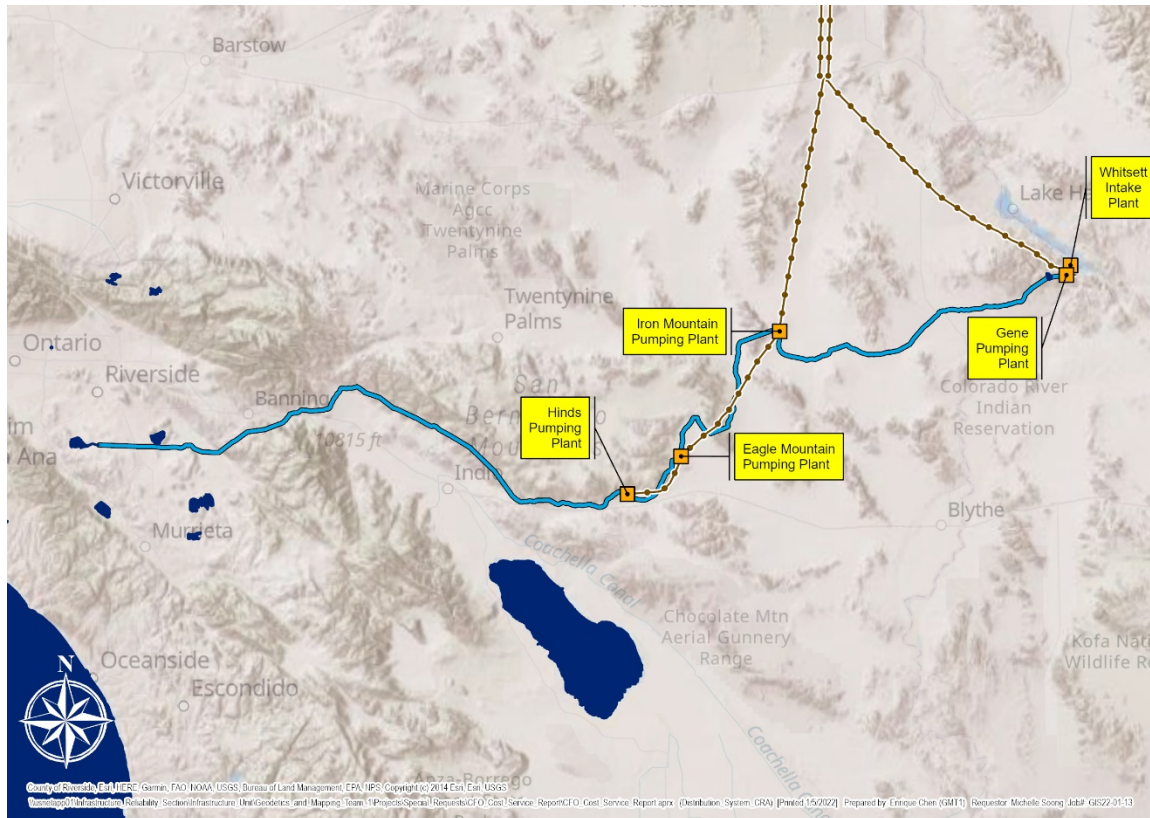
Colorado River Aqueduct (CRA)

The other major source of water for Metropolitan is the Colorado River through the CRA. Metropolitan was established to obtain an allotment of Colorado River water, and its first mission was to construct and operate the CRA. The CRA consists of 5 pumping plants, 450 miles of high voltage power lines, 1 electric switching station, 4 regulating reservoirs, and 242 miles of aqueducts, siphons, canals, conduits and pipelines terminating at Lake Mathews in Riverside County.

The Colorado River was Metropolitan’s original source of water after Metropolitan’s establishment in 1928. Metropolitan has a legal entitlement to receive water from the Colorado River under a permanent service contract with the Secretary of the Interior. Water from the Colorado River and its tributaries is also available to other users in California, as well as users in the states of Arizona, Colorado, Nevada, New Mexico, Utah, and Wyoming (the Colorado River Basin States), resulting in both competition and the need for cooperation among these holders of Colorado River entitlements. In addition, under a 1944 treaty, Mexico has an allotment of 1.5 MAF of Colorado River water annually except in the event of extraordinary drought or serious accident to the delivery system in the United States, in which event the water allotted to Mexico would be curtailed. Mexico also can schedule delivery of an additional 200,000 acre-feet of Colorado River water per year if water is available in excess of the requirements in the United States and the 1.5 MAF allotted to Mexico.

The CRA, which is directly owned and operated by Metropolitan, transports water from the Colorado River approximately 242 miles to its terminus at Lake Mathews in Riverside County. The CRA is shown in Figure 5. Up to 1.25 MAF of water per year may be conveyed through the CRA to Metropolitan's service area, subject to availability of Colorado River water for delivery to Metropolitan as described below.

Figure 5: Colorado River Aqueduct



California is apportioned the use of 4.4 MAF of water from the Colorado River each year plus one-half of any surplus that may be available for use collectively in Arizona, California and Nevada. Under the 1931 priority system that has formed the basis for the distribution of Colorado River water made available to California, Metropolitan holds the fourth priority right to 550,000 acre-feet per year. This is the last priority within California's basic apportionment. In addition, Metropolitan holds the fifth priority right to 662,000 acre-feet of water, which is in excess of California's basic apportionment. Until 2003, Metropolitan had been able to take full advantage of its fifth priority right as a result of the availability of surplus water and water apportioned to Arizona and Nevada that was not needed by those states. However, during the 1990s, Arizona and Nevada increased their use of water from the Colorado River and by 2002 no unused apportionment was available for California. In addition, a severe drought in the Colorado River Basin reduced storage in system reservoirs, ending the availability of surplus deliveries to Metropolitan. As a result, California has been limited to 4.4 MAF since 2003. Prior to 2003, Metropolitan could divert over 1.25 MAF in any year, but since that time, Metropolitan's net diversions of Colorado River water have ranged from a low of 537,607 acre-feet in 2019 to a high of approximately 1,179,000 acre-feet in 2015. Metropolitan has taken steps to augment its share of Colorado River water through agreements with other agencies that have rights to use such water.

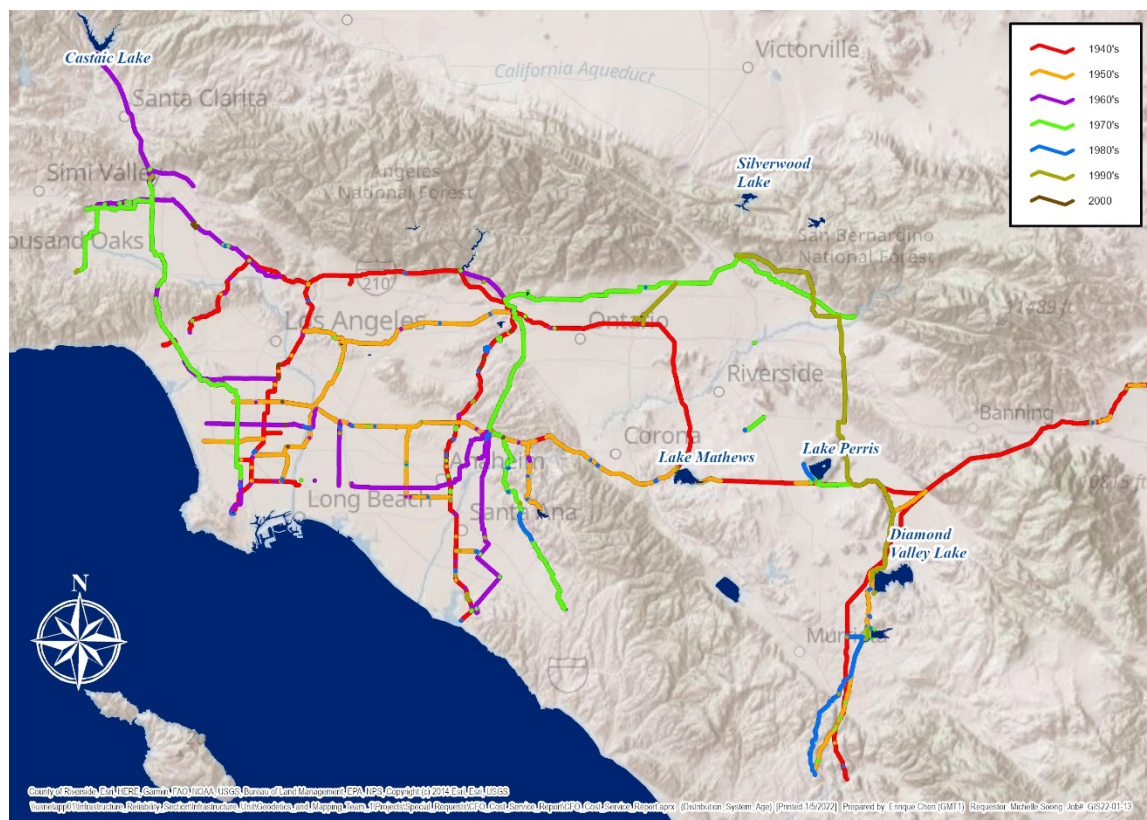
The Quantification Settlement Agreement (QSA) and related agreements, executed by Coachella Valley Water District (CVWD), Imperial Irrigation District (IID), Metropolitan, and other parties in October 2003, establishes Colorado River water use limits for IID and CVWD, and provides for specific acquisitions of conserved water and water supply and delivery arrangements for up to 110 years. The QSA and related

agreements provide a framework for Metropolitan to enter into other cooperative Colorado River supply programs and set aside several disputes among California's Colorado River water agencies.

Specific programs under the QSA and related agreements include lining portions of the All-American and Coachella Canals, which conserve approximately 96,000 acre-feet annually. Included under the QSA is an allocation agreement, in which Metropolitan assigned about 80,000 acre-feet of conserved canal lining water per year to the San Diego County Water Authority (SDCWA) for 110 years. Also included is an exchange agreement with SDCWA, under which SDCWA makes available to Metropolitan at Lake Havasu the conserved canal lining water and conserved transfer water from IID, and in exchange Metropolitan delivers a like quantity of water to SDCWA in its service area. Additionally, included under the QSA is the delivery and exchange agreement between Metropolitan and CVWD that provides for Metropolitan, when requested, to deliver annually up to 35,000 acre-feet of Metropolitan's SWP contractual water to CVWD by exchange with Metropolitan's available Colorado River supplies. Metropolitan and CVWD also share in 105,000 acre-feet annually of water conserved by IID, with Metropolitan receiving no less than 85,000 acre-feet. In 2021, the transfer of water conserved annually by IID to SDCWA was 205,000 acre-feet. With full implementation of the programs identified in the QSA, at times when California is limited to its basic apportionment of 4.4 MAF per year, Metropolitan expects to be able to annually divert to its service area approximately 900,000 acre-feet of Colorado River water plus water from other water augmentation programs it develops, including the Palo Verde Irrigation District (PVID) program, which provides up to approximately 133,000 acre-feet of water per year.

Distribution System

All water transport facilities not specifically identified as part of the regional conveyance system are considered part of the distribution facilities (Distribution System). While conveyance and aqueduct system components are regional in nature and do not link directly to local agency distribution systems, Distribution System facilities do ultimately connect to local agency systems. As a result, these facilities rely on conveyance and aqueduct facilities to import water from regional supply sources. The Distribution System is a complex network of facilities which routes water from the SWP and CRA to storage reservoirs and treatment plants within Metropolitan's member agencies and also to the member agencies. Beginning at the terminal delivery points of the CRA and SWP, Metropolitan's Distribution System includes approximately 775 miles of pipelines, feeders, and canals. The Distribution System includes components dating from the 1930's up to the present day, as shown in Figure 6. Distribution System operations are coordinated from the Operations Control Center in Eagle Rock. The control center plans, schedules, and balances daily water operations in response to member agency demands and the operational limits of the system as a whole. Metropolitan's storage and treatment facilities augment the Distribution System. Metropolitan operates and maintains separate untreated and treated distribution facilities.

Figure 6: Metropolitan's Distribution System

¹ Figure includes Colorado River Aqueduct and Inland Feeder which are part of the Conveyance and Aqueduct Facilities.

Storage Facilities

Existing imported water storage available to the region consists of Metropolitan's raw water reservoirs, a share of the SWP's raw water reservoirs in and near the service area, and the portion of the groundwater basins used for conjunctive-use storage. Figure 7 shows the geographical location of Metropolitan's major storage facilities. Table 6 lists surface water storage facilities owned and operated by Metropolitan. With some limitations, these reservoirs can be used to help meet the region's water storage requirements. Total storage capacity currently available to Metropolitan in these existing reservoirs is about 1,041,830 acre-feet.

Metropolitan's water storage is divided into three categories: emergency, regulatory, and drought carryover storage. Emergency storage capacity is intended to provide the Metropolitan service area with a supply of water in the event of a major regional catastrophe isolating Southern California from its imported water supplies. Regulatory storage requirements are based on historical reservoir cycling and known cycling targets intended to meet the delivery schedules of the member agencies. Drought carryover storage is intended to prevent water shortages during dry years and is evaluated using computer simulation models, incorporating historic hydrologic data, projections of future demand, and information on currently available storage levels.

Figure 7: Metropolitan's Major Distribution System Storage Facilities**Table 6: Capacity of Metropolitan's Distribution System Storage Facilities**

Storage Facilities	Capacity (Acre-feet)
Etiwanda Reservoir	447
Garvey Reservoir	1,610
Orange County Reservoir	Out of Service
Palos Verdes Reservoir	695
Live Oak Reservoir	2,500
Lake Mathews	182,000
Lake Skinner	44,000
Diamond Valley Lake	810,000
Total Storage Capacity	1,041,252

In addition to the storage facilities shown above, DWR owns and operates five major reservoirs in or near Metropolitan's service area as part of the SWP. Castaic Lake, Elderberry Forebay, and Pyramid Lake are located on the West Branch of the California Aqueduct. Silverwood Lake and Lake Perris are on the East Branch of the California Aqueduct. The total storage capacity of these five reservoirs is approximately 733,900 AF. When cost allocation factors from DWR Bulletin 132 Appendix B, Table B-2 are applied to the operational storage capacities, storage available to Metropolitan in these five DWR reservoirs is approximately 644,000 AF. Within these reservoirs, up to 220,000 acre-feet of additional storage is provided for by the State Water Contract. During an emergency or drought, Metropolitan may access more or less than

644,000 AF, based on the availability at the reservoirs and need of all State Water Contractors with access to the reservoirs.

Under a conjunctive-use groundwater program, groundwater basins are used to store imported supplies during years when water is abundant. The stored water is then used during shortages and emergencies, reducing demand on imported supplies. Consequently, groundwater conjunctive use enables member agencies to better capture surplus surface flows Metropolitan receives from the SWP and the CRA and reduces demand that would otherwise be placed on Metropolitan's system during dry periods.

Treatment Plants

In addition to raw water supply, Metropolitan provides treated water to supplement the potable water needs of its member agencies. Table 7 identifies Metropolitan's water treatment plants and related design capacities.

Metropolitan's Water Treatment Plants

Table 7: Water Treatment Plants

Water Treatment Plants	Design Capacity (cfs)
Diemer Filtration Plant	803
Jensen Filtration Plant	1,163
Mills Filtration Plant	341
Skinner Filtration Plant	543
Weymouth Filtration Plant	803
Total	3,652

Metropolitan's water treatment plants are listed in Table 7 and shown geographically in Figure 8. More than 60 percent of Metropolitan's demand for supplemental treated water is located in a region of the service area referred to as the "Central Pool". Agencies located partially or entirely within the Central Pool include Los Angeles, Orange, and Ventura Counties. Three existing Metropolitan treatment plants serve the Central Pool's treated water needs:

- The Jensen plant in Granada Hills;
- The Weymouth plant in La Verne; and
- The Diemer plant in Yorba Linda.

While some areas of the Central Pool receive treated water from one plant, the three plants together also jointly produce water for a common area of the Central Pool referred to as the "Common Pool". The Mills plant and the Skinner plant do not produce water for the Common Pool but serve areas in the eastern part of Metropolitan's service area.

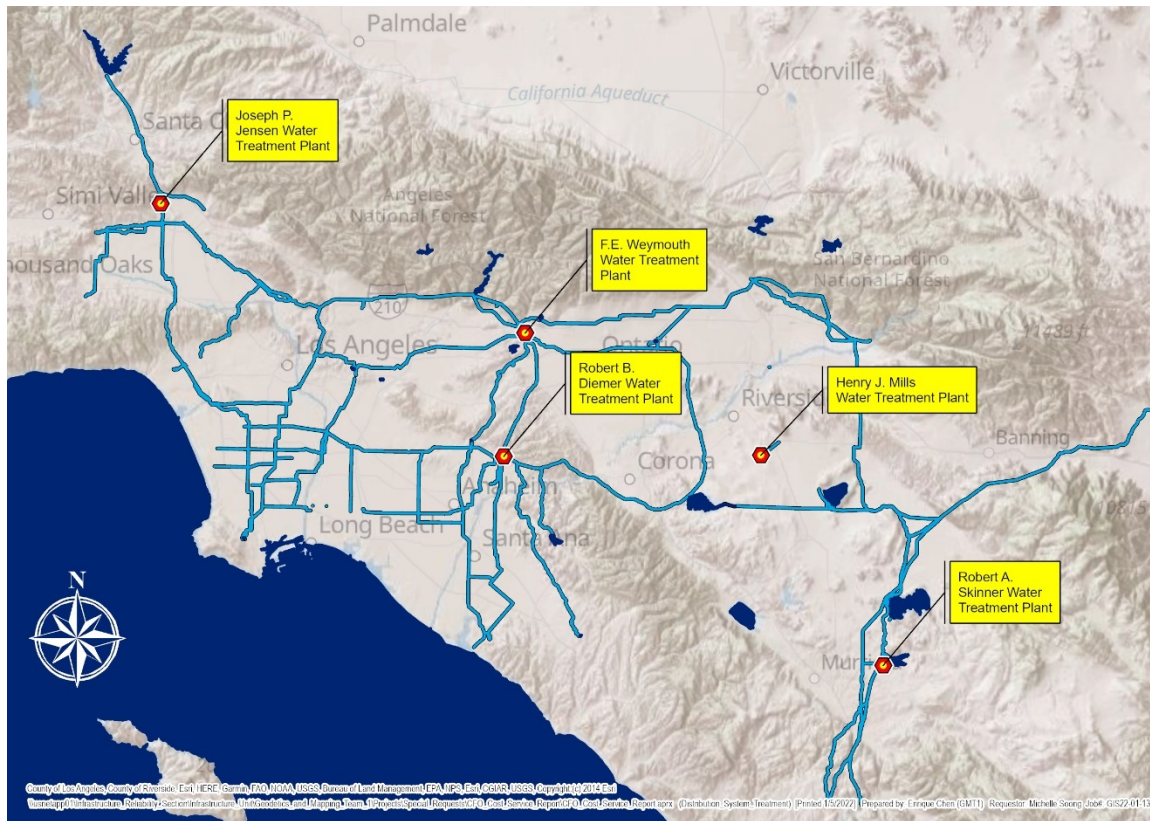
Figure 8: Metropolitan's Treatment Plants' Geographical Location

Table 8 shows Metropolitan's treated and untreated water transactions by member agency for Cash Year 2021. Approximately 50 percent of Metropolitan's water transactions in Cash Year 2021 were treated.

Table 8: Treated and Untreated Water Transactions by Member Agency, Cash Year 2021

Acre-Feet^{1, 2}

Agency	Treated (AF)	Untreated (AF)	Total (AF)
Anaheim	28,847	14,177	43,024
Beverly Hills	9,709	-	9,709
Burbank	4,796	5,472	10,268
Calleguas	93,372	-	93,372
Central Basin	24,449	-	24,449
Compton	2	-	2
Eastern	64,690	26,344	91,034
Foothill	9,289	-	9,289
Fullerton	6,652	-	6,652
Glendale	16,136	-	16,136
Inland Empire	-	68,651	68,651
Las Virgenes	21,097	-	21,097
Long Beach	22,906	-	22,906
Los Angeles	75,715	211,520	287,235
MWDOC	107,910	29,374	137,284
Pasadena	19,654	-	19,654
San Diego	29,810	294,288	324,097
San Fernando	-	-	-
San Marino	1,365	-	1,365
Santa Ana	8,254	-	8,254
Santa Monica	5,571	-	5,571
Three Valleys	35,140	28,814	63,954
Torrance	14,489	-	14,489
Upper San Gabriel	4,378	54,895	59,273
West Basin	109,127	-	109,127
Western	43,744	28,895	72,639
Total	757,103	762,429	1,519,531

¹ Water Transactions include sales, exchanges, and wheeling.

² Water Transactions are based on occur period.

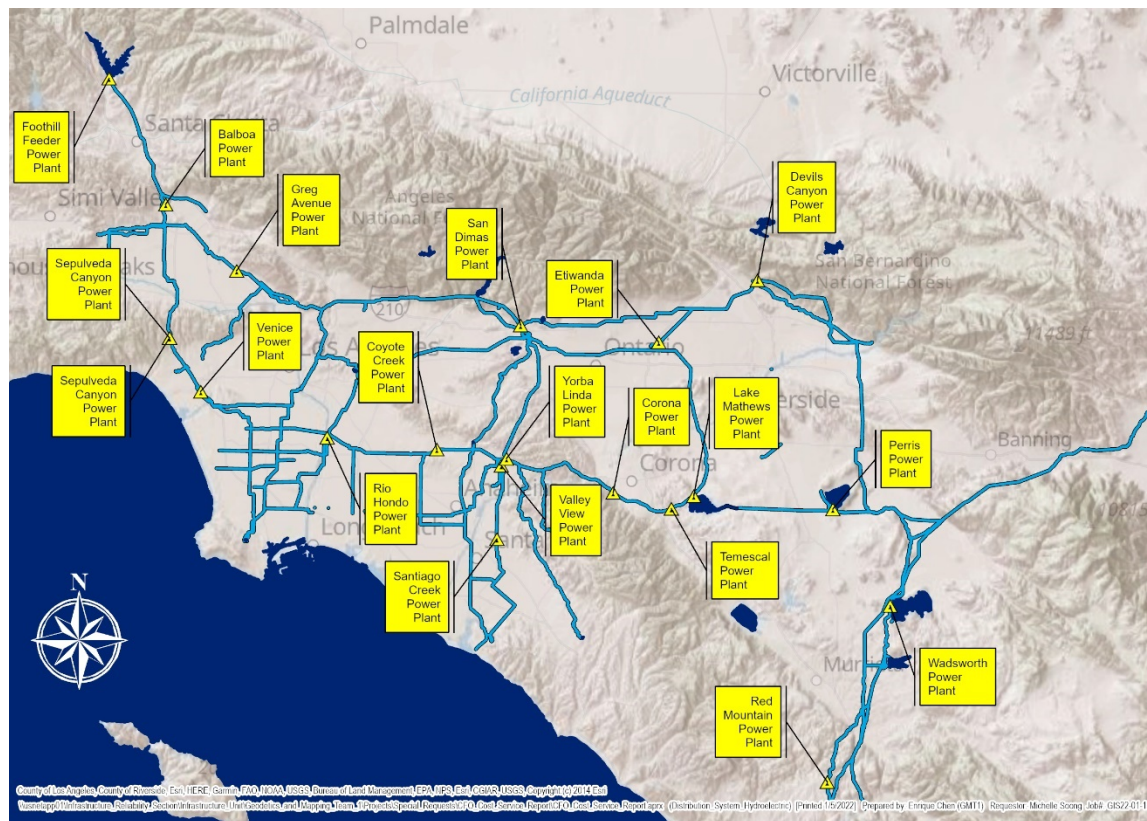
Hydroelectric Facilities

Metropolitan's Distribution System has 16 small hydroelectric plants located throughout the service area. The plants are located in Los Angeles, Orange, Riverside, and San Diego Counties as shown in Figure 9. The combined generating capacity of these plants and the generating capacity at Diamond Valley Lake (DVL) are approximately 130 megawatts. Depending upon annual water deliveries, projected annual income for the next several years is expected to range between \$11 million and \$13 million.

Power from four of the plants is sold to DWR at a contract rate. Power from four plants is sold to the Southern California Public Power Authority based on a contract rate. Power generation from the Sepulveda Canyon Plant is sold to the Los Angeles Department of Water and Power based on a contract rate. Power from the Etiwanda Power Plant has been sold to the Pacific Gas and Electric Company based on contract rates. Power generated by DVL and the remaining four plants are sold into the wholesale market, while the resource adequacy attributes are retained by Metropolitan to serve the CRA Bulk Electric System resource adequacy requirements.

Electricity generated by Metropolitan hydroelectric facilities is sold rather than used internally because of the costs and inefficiencies that would be associated with building an internal electric distribution network for transmitting the electricity throughout the Metropolitan system. The costs associated with contracting for such transmission services from others would be similarly prohibitive.

Figure 9: Metropolitan's Hydroelectric Facilities



DEVELOPMENTS

Today, Metropolitan finds that its challenges and goals are evolving. The Board of Directors in the 1990s was deeply concerned with member agencies relying too much on importing supplies from Northern California and the Colorado River. Programs to regionalize conservation efforts and to incentivize new local supplies such as the LRP were developed. This approach was developed through regional long-term planning via Metropolitan's Integrated Water Resources Plan (IRP) initiated in 1996.

Today, there is a shifting water landscape. Population growth and water demands, in large part due to tremendous strides in water use efficiency, are far less than once predicted. Metropolitan's water transactions, which include sales, exchanges, and wheeling, in fiscal year 2019 were the lowest in nearly 40 years. A new generation of larger local supply projects are in the planning stages.

Delivery of imported supplies will always be a foundation to meet ongoing regional demands, even with climate change, and importantly so will storage of imported water for droughts and emergencies. Given fluctuations in the availability of water resources, maintaining and enhancing system flexibility is a priority for Metropolitan. The evolving mix of Southern California's future water portfolio is still to be determined and will be impacted by future policies and decisions made by Metropolitan's Board.

Delta Conveyance

Within the region's water portfolio, supplies from the SWP remain an essential baseline water source for Southern California. Water from Northern California delivered through the SWP has provided key supplies in wet years to manage against dry years, and it is the only imported supply that can physically reach significant portions of Metropolitan's service area. This water source faces uncertainties due to climate change and the Delta's badly outdated delivery system; these problems are compounded by a declining ecosystem and 1,100-mile levee systems that are increasingly vulnerable.

California WaterFix was a comprehensive science-based solution proposed by the state to modernize critical water delivery infrastructure of the SWP. The California WaterFix proposed construction of new water intakes in the north Delta and two 40-foot diameter tunnels under the Delta terminating at a forebay in the south Delta. This would have fulfilled the requirement of the 2009 Delta Reform Act to contribute toward meeting the coequal goals of more reliably delivering water for California and protecting, restoring and enhancing the Delta ecosystem.

On April 29, 2019, Governor Newsom issued an executive order directing State agencies to develop a comprehensive statewide strategy to build a climate-resilient water system that included consideration of a single-tunnel Delta conveyance facility instead of the approved two-tunnel WaterFix project. In light of this order, DWR and the State Water Contractors deleted the WaterFix cost provisions from the current amendment process leaving only the water management provisions and embarked on a new public process to further negotiate proposed amendments related to cost allocation for a potential new Bay-Delta conveyance project. **As a result, the costs of any such new project are yet unknown and Metropolitan's projected up to \$10.8 billion costs for California WaterFix are no longer included in its current or future budgeting or projections.**

Consistent with the Governor's direction, the formal environmental review process for a proposed single tunnel Delta Conveyance Project commenced with the issuance by DWR of a Notice of Preparation under CEQA on January 15, 2020. Planning, environmental review and conceptual design work by DWR is expected to be completed in the 2023-2024 timeframe. The Proposed Biennial Budget includes Metropolitan's planned contribution of \$99.0 million for Delta conveyance project planning activities. This contribution follows Board policy that staff work with the State to find solutions to improve Delta conveyance. The focus over the

next two years will be supporting the DWR as it seeks permits for a Delta conveyance project; participating in the Delta Conveyance Design and Construction Authority; and continuing to put forward sound scientific research to help inform and improve Delta management decisions. If staff determines that Metropolitan's appropriate contribution toward planning activities should exceed the budgeted amount, the General Manager will request authorization from the Board for additional funding. Additionally, the Board will separately consider Metropolitan's participation in a new Delta conveyance project once that proposed project is finalized by DWR. Information regarding the Delta conveyance project is located on Metropolitan's website at <https://www.mwdh2o.com/planning-for-tomorrow/securing-our-imported-supplies/delta-conveyance/>.

Regional Recycled Water Program

The Regional Recycled Water Program (RRWP), is a partnership between Metropolitan and the Sanitation Districts of Los Angeles County. In November 2020, Metropolitan's Board voted to proceed with the Environmental Planning Phase of the Program. This work will prepare the documentation needed for future Board approval of the Program Environmental Impact Report. As it has since its completion in 2019, the RRWP's demonstration facility will produce approximately 500,000 gallons per day and will continue to be operated to generate information needed for regulatory approval and to increase the efficiency of the treatment processes that may be used in a potential full-scale recycled water facility. The potential full-scale project, viewed as a potential third source of water for Metropolitan, would provide a reliable, drought-proof, climate-resilient, local supply for indirect potable reuse (IPR) through groundwater basin recharge, direct potable reuse (DPR) through raw water augmentation at Metropolitan's treatment plants, and direct industrial use. If approved, the full-scale project will produce 150 million gallons per day (mgd), or approximately 168,000 acre-feet (AF) per year (AFY), of purified water.

Construction of the 0.5 mgd advanced water treatment demonstration plant was approved in 2017 and was completed in August 2019. Testing and operation of the plant began in October 2019 to confirm treatment costs and provide the basis for regulatory approval of the proposed treatment process and technical recommendations concerning design, operation, and optimization of the full-scale RRWP. The initial phase of testing is scheduled for completion in 2021 with future testing phases planned that will form the basis for the design, operation and optimization of, and will inform Metropolitan's Board decision whether to move forward with, a full-scaled advanced water treatment facility. **The Board has not yet committed to a full-scale project; however, the planning costs for the backbone system of the RRWP is included in the Biennial Budget in the order of approximately \$20 million over the biennial period.** Metropolitan has secured partners in the Southern Nevada Water Authority and Central Arizona Project who have each committed to pay a portion of the planning costs of the project and executed Memorandum of Understandings with Metropolitan to document their commitment to the program's success. Information regarding the RRWP is located on Metropolitan's website at <https://www.mwdh2o.com/planning-for-tomorrow/building-local-supplies/regional-recycled-water-program/>.

2020 IRP Update

The IRP is a plan for providing reliable and affordable water to Southern California for the next 25 years, from its inception in 1996 and then from regular updates, most recently in 2015. It broadly identifies and aligns regional and local needs, priorities, resources and opportunities, both in the scale of actions and in their timing. The emphasis is on its broad collaborative approach to planning.

Each IRP sets important targets for actions such as developing local supply, water use efficiency, or average-year expectations from the Colorado River and the SWP. It does not signal that Metropolitan will build or pay for any specific initiative or project to meet those targets, nor does it assume any particular local supply project will be funded or constructed. The IRP is a method for setting targets and reassessing them approximately every five years along with the Urban Water Management Plan.

Metropolitan is preparing to finalize the 2020 IRP Update in early 2022 and initiate the IRP Implementation Plan shortly thereafter. During this update Metropolitan's Board will be faced with deciding the vision for Metropolitan's second century – to provide service at reduced levels of demand and provide resilient operations through variable hydrology. This vision will help drive the direction of the 2020 IRP Update as well as many other decisions.

Rate Structure Review

Since its creation Metropolitan has shifted from receiving the bulk of its revenues from a single source, ad valorem property taxes, to a mix of fixed charges and volumetric rates. This shift took place over decades for numerous reasons, including the availability of water to deliver to Metropolitan's member agencies. Currently about 80 percent of Metropolitan's revenues come from the volumetric rates and the remaining 20 percent comes from fixed sources such as the fixed charges, ad valorem property taxes, and miscellaneous revenue sources including interest income, hydroelectric power sales, leases and grant funding.

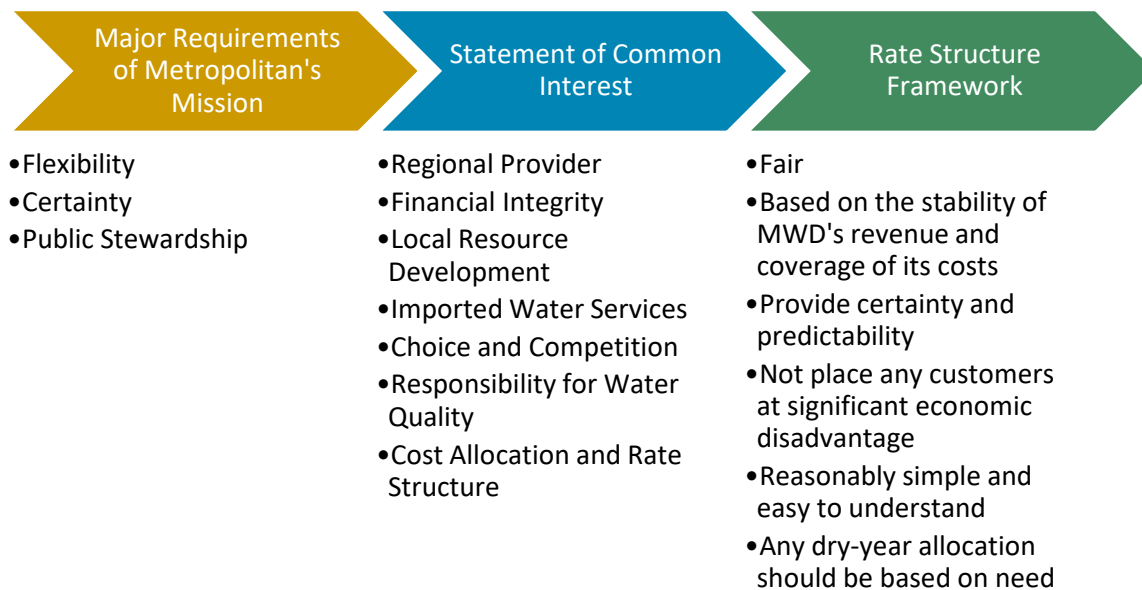
Member agencies' purchases and use of Metropolitan's system have always varied for many reasons, with member agencies able to call on Metropolitan's services at various levels from year to year. Because Metropolitan's deliveries to its member agencies have generally remained consistent on a long-term basis (as opposed to year-to-year), the volumetric revenue base has provided consistent necessary revenue for Metropolitan. **However, if through the IRP process and strategic planning, the Board determines that reliance on Metropolitan will be less consistent, then the current rate structure may not be consistent with that role.** Any changes to the rate structure should seek to maintain a structure that is sustainable for the long-term and remains equitable to Metropolitan's member agencies throughout the service area.

RATE STRUCTURE

Framework

The Rate Structure Framework evolved through a comprehensive strategic planning process initiated in 1998. As depicted in the following figure, the first step of the process was to identify the “Major Requirements of Metropolitan’s Mission,” which was reflected in the Strategic Plan Policy Principles. The Statement of Common Interests formed the basis of Metropolitan’s strategic plan to address these mission requirements. One of the most important common interests was “Cost Allocation and Rate Structure.” In determining the most appropriate Cost of Service (COS) and rate structure, a set of pricing objectives, or guiding rate principles, was developed. These guiding rate principles defined Metropolitan’s Rate Structure Framework by which various COS and rate-setting methodologies could be evaluated.

Development of the Rate Structure Framework



The strategic planning process which established the foundation of the Rate Structure Framework is discussed below.

Major Requirements of Metropolitan’s Mission

As one of the first steps in the strategic planning process in 1998, the Board developed a list of three mission requirements in its Metropolitan vision statement – flexibility, certainty, and public stewardship, which it described as:

- **Flexibility.** Metropolitan is aware of the legislative and economic pressures which make flexibility in providing water services for a changing demand and in a competitive water market paramount. Fair compensation for wheeling through Metropolitan’s conveyance systems is an essential element of Southern California’s developing market.

- **Certainty.** The certainty that Metropolitan's water supply is reliable, and that the COS is appropriate is of utmost importance to member agencies and their retailers who are endeavoring to provide not only water, but value to the residents in their service area.
- **Public Stewardship.** As public stewards of much of Southern California's water supply, Metropolitan and its member agencies are responsible for making certain that the water is provided in a cost-effective and environmentally sound manner.

Statement of Common Interests

From the strategic planning mission requirements, the Board developed a list of seven areas of common interest that formed the major focus elements of the Metropolitan strategic plan, described as:

- **Regional provider.** This area includes the concerns of protecting regional infrastructure and providing service during drought periods. Regional water must be provided to meet the needs of the member agencies, and water supplies must be equitably allocated during drought periods based on the Water Surplus and Drought Management Plan principles.
- **Financial integrity.** It is a common interest of the members for Metropolitan to assure the financial integrity of the agency in all aspects of its operations.
- **Local resource development.** Metropolitan supports local resources development by working in partnership with its member agencies and by providing member agencies with financial incentives for water conservation and for local projects.
- **Imported water service.** Metropolitan is responsible for providing imported water to meet the committed needs of its member agencies.
- **Choice and competition.** After Metropolitan provides imported water for the member agencies' committed demands, a member agency can choose the most cost-effective additional water supplies for its customers. These choices include either Metropolitan, local resource development, market transfers, or some combination of these secondary options. Metropolitan and its member agencies can decide how to provide these additional supplies collaboratively while balancing local, imported, and market opportunities with affordability.
- **Responsibility for water quality.** Metropolitan must advocate for source water quality and implement in-basin water quality for the imported water it supplies. This is necessary to guarantee compliance with primary drinking water standards and to meet the water quality requirements for water recycling and ground water replenishment.
- **Cost allocation and rate structure.** The framework for a revised rate structure will be established to address allocation of costs, financial commitment, unbundling of services, and fair compensation for services including wheeling, peaking, growth, and others.

Rate Structure Framework

A major element of common interest was "*Cost Allocation and Rate Structure.*" In addressing this element, a set of pricing objectives, or guiding rate principles, had to be developed to evaluate alternative COS and rate setting approaches, or methodologies. As a result, the Board adopted a set of rate principles which was defined as the *Rate Structure Framework*. The Rate Structure Framework provided the principles for the Strategic Planning Steering Committee to develop a preferred rate structure. The Rate Structure Framework includes the following principles:

- The rate structure should be *fair*;
- It should be based on the *stability* of Metropolitan's revenue and coverage of its costs;
- It should provide certainty and predictability;

- It should not place any customers at *significant economic disadvantage*;
- It should be reasonably *simple and easy to understand*; and
- Any dry-year allocation should be *based on need*.

The 2001 COS and rate structure was adopted by the Board to address the Rate Structure Framework. That COS process and rate structure remain today, with the exception of recent modifications by the Board. First, in August 2020, the Board repealed the pre-set wheeling rate for short-term wheeling service to member agencies. As a result, charges for short-term wheeling to member agencies is now subject to contractual negotiations on a case-by-case basis, as has been the case with long-term wheeling arrangements for member agencies, all wheeling for third parties, and all exchange transactions. In December 2019, the Board directed staff (1) to incorporate the 2019/20 fiscal-year-end balance of the Water Stewardship Fund to fund all demand management costs in the proposed FYs 2020/21 and 2021/22 Biennial Budget; and (2) to not incorporate the Water Stewardship Rate, or any other rate or charge to recover demand management costs, with the proposed rate and charges for CYs 2021 and 2022. In November 2021, the Board directed staff to allocate all demand management costs to Metropolitan's supply rate elements, and no Water Stewardship Rate or other demand management recovery charge is included in the rate structure after 2022.

Rate Structure Design

The elements of the rate structure are summarized in Table 9 below, along with the current amounts for rates and charges effective in the current calendar year 2022:

Table 9: Rate Elements, Calendar Year 2022

Rate Design Elements	Functional Costs Recovered	Type of Charge	Rate or charge effective January 1, 2022
Tier 1 Supply Rate	Supply, Drought Storage	Volumetric (\$/af)	\$243
Tier 2 Supply Rate	Tier 1 Supply costs, plus cost of transfers from north of the Delta	Volumetric (\$/af)	\$285
System Access Rate	Conveyance/Distribution (Average Capacity), portion of Regulatory/Emergency Storage	Volumetric (\$/af)	\$389
Water Stewardship Rate (incorporated in Supply Rates after 2022)	Demand Management	Volumetric (\$/af)	\$-
System Power Rate	Power on CRA and SWP	Volumetric (\$/af)	\$167
Treatment Surcharge	Treatment	Volumetric (\$/af)	\$344
Capacity Charge	Peak Distribution Capacity, portion of Regulatory Storage	Fixed (\$/cfs)	\$12,200
Readiness-to-Serve Charge	Available Conv. & Dist. Capacity, Emergency Storage	Fixed (\$M)	\$140

Supply Rates

Purpose

The rate structure recovers supply costs through a two-tiered price structure. The amount of water a member agency may purchase at a lower Tier 1 Supply Rate (water sales within a member agency's Tier 1 maximum) is established by either a purchase order agreement or calculated as 60 percent of its Revised Base Firm Demand.

Tier 1 Supply Rate

The Tier 1 Supply Rate is a volumetric rate charged on Metropolitan's water sales that are within a member agency's Tier 1 maximum. The Tier 1 Supply Rate supports a regional integrated approach through the uniform, postage stamp rate. The Tier 1 Supply Rate is calculated as the amount of the total revenue requirement functionalized as supply divided by the estimated amount of Tier 1 water sales. Per Board direction in December 2021, all demand management costs are now functionalized as supply and collected on the Tier 1 and Tier 2 supply rates. All projected water sales for CY 2023 and 2024 are project to be Tier 1 sales.

The Supply Rate includes the costs of supply programs and demand management.

Tier 2 Supply Rate

The Tier 2 Supply Rate is a volumetric rate that reflects the costs of Tier 1 and Metropolitan's cost of purchasing water transfers north of the Delta. The Tier 2 Supply Rate is charged on Metropolitan water sales that exceed a member agency's Tier 1 maximum. The higher costs reflected in the Tier 2 Supply Rate encourages the member agencies and their customers to maintain existing local supplies and develop cost-effective local supply resources and conservation. Per Board direction in December 2021, all demand management costs are now functionalized as supply and collected on the Tier 1 and Tier 2 supply rates. No Tier 2 water sales are projected for CY 2023 and 2024.

Implementation

Because the Tier 1 maximum is set at a total member agency level and not at a meter level, all system water delivered will be billed at the Tier 1 Supply Rate. Any water delivered that exceeds the Tier 1 maximum will be billed an additional amount equivalent to the difference between the Tier 2 and Tier 1 Supply Rates.

For member agencies without purchase orders and member agencies with purchase orders that accrue a cumulative Tier 2 obligation at the end of year five of the purchase order, the Tier 2 Supply Rate will be applied in the month where the Tier 1 maximum is surpassed on all applicable deliveries. Otherwise, any obligation to pay the Tier 2 Supply Rate will be calculated over the ten-year period, consistent with the calculation of any purchase order commitment obligation.

System Access Rate (SAR)

Purpose

The SAR recovers the costs of Conveyance, Distribution, and Storage that is used on an average annual basis through a uniform, volumetric rate. All member agencies pay the SAR for the conveyance and distribution capacity associated with deliveries of full-service water.

Implementation

The SAR is charged for each acre-foot of water transported by Metropolitan to its member agencies and delivered as a full-service water transaction.

System Power Rate (SPR)

Purpose

The SPR recovers the costs of energy required to pump water to Southern California through the SWP and CRA. The cost of power is recovered through a uniform, volumetric rate.

Implementation

The SPR is applied to all deliveries of Metropolitan water to member agencies.

Treatment Surcharge

Purpose

The Treatment Surcharge recovers all costs of providing treatment capacity and operations through a uniform, volumetric rate per acre-foot of treated water transactions.

Implementation

The Treatment Surcharge is charged on all treated water transactions.

Capacity Charge

Purpose

The Capacity Charge recovers the costs incurred to provide peak capacity within the Distribution System. The Capacity Charge also provides a price signal to encourage agencies to reduce peak demands on the Distribution System and to shift demands that occur during the May 1 through September 30 period into the October 1 through April 30 period, resulting in more efficient utilization of Metropolitan's existing infrastructure and deferring capacity expansion costs.

Implementation

Each member agency will pay the Capacity Charge per cubic feet per second (cfs) based on a three-year trailing peak (maximum) day demand, measured in cfs. Each member agency's peak day is likely to occur on different days; therefore, this measure approximates peak week demands on Metropolitan.

Readiness-To-Serve Charge (RTS)

Purpose

The RTS recovers the cost of the portion of system that is available to provide emergency service and available capacity during outages and hydrologic variability.

Implementation

The RTS is a fixed charge that is allocated among the member agencies based on a ten-fiscal-year rolling average of firm demands. Water transfers and exchanges are included for purposes of calculating the ten-year rolling average³. The Standby Charge is collected at the request of some member agencies that have elected to use the charge as a direct offset to the member agency's RTS obligation.

³ The SDCWA exchange water transactions are excluded from the calculation of the ten-year rolling average per the terms of the parties' exchange agreement.

Purchase Order Option

Purpose

The current rate structure allows member agencies to choose to purchase water from Metropolitan by means of a Purchase Order. Purchase Orders are voluntary agreements that determine the amount of water that a member agency can purchase at the Tier 1 Supply Rate. They allow member agencies to purchase a greater amount of water at the lower Tier 1 Supply Rate than would otherwise be authorized by the Administrative Code. In exchange for the higher Tier 1 Maximum, the member agency commits to purchase a specific amount of water (based on past purchase levels) over the term of the agreement. Such agreements allow member agencies to manage costs and provide Metropolitan with a measure of secure revenue.

In November 2014, the Metropolitan Board approved new Purchase Orders effective January 1, 2015 through December 31, 2024 (the "Purchase Order Term"). Twenty-one of the twenty-six-member agencies have Purchase Orders, which commit the member agencies to purchase a minimum amount of supply from Metropolitan (the "Purchase Order Commitment").

The key terms of the Purchase Orders include:

- A ten-year term, effective January 1, 2015 through December 31, 2024;
- A higher Tier 1 limit based on the Base Period Demand, determined by the member agency's choice between (1) the Revised Base Firm Demand, which is the highest fiscal year purchases during the 13-year period of fiscal year 1989/90 through fiscal year 2001/02, or (2) the highest year purchases in the most recent 12-year period of fiscal year 2002/03 through 2013/14. The demand base is unique for each member agency, reflecting the use of Metropolitan's system water over time;
- An overall purchase commitment by the member agency equal to the Demand Base period chosen, multiplied by ten to reflect the ten-year Purchase Order term. Those agencies choosing the more recent 12-year period may have a higher Tier 1 Maximum and commitment. The commitment is also unique for each member agency.
- The opportunity to reset the Base Period Demand using a five-year rolling average;
- Any obligation to pay the Tier 2 Supply Rate will be calculated over the ten-year period, consistent with the calculation of any Purchase Order commitment obligation; and
- An appeals process for agencies with unmet purchase commitments that will allow each acre-foot of unmet commitment to be reduced by the amount of production from a local resource project that commences operation on or after January 1, 2014.

Member agencies that do not have Purchase Orders in effect are subject to Tier 2 Supply Rates for amounts exceeding 60 percent of their base amount (equal to the member agency's highest fiscal year demand between 1989/90 and 2001/02) annually.

Implementation

Purchase Order Commitments are unique for each member agency. The commitment is calculated based on the demand base chosen (the "Base Period Demand") and multiplied by ten to reflect the ten-year Purchase Order Term. If a member agency opted to use the Revised Base Firm Demand, which is the highest fiscal year purchases during the original 13-year period of fiscal year 1989/90 through fiscal year 2001/02 for their Purchase Order, their Commitment is 60 percent of the 2003 Initial Base Firm Demand, the same as the previous Amended and Restated Purchase Order agreement, multiplied by ten. If a member agency opted to use the more recent 12-year period of fiscal year 2002/03 through fiscal year 2013/14 for their Purchase Order, their Commitment is 60 percent of the highest year in the period of fiscal year 2002/03 through fiscal year 2013/14, multiplied by ten. The Purchase Order Commitment is fixed for the Purchase Order Term.

At the end of the Purchase Order Term, if the member agency has not purchased enough firm supply to meet its Purchase Order Commitment, it will be billed for the remaining balance of the Purchase Order Commitment at the average of the Tier 1 Supply Rate in effect during the Term. This payment may be prorated with interest evenly over the next 12 invoices.

If a member agency fulfills its Purchase Order Commitment prior to the end of the Purchase Order Term, then the member agency has met its obligation under the Purchase Order. The member agency may continue to purchase up to 90 percent of its cumulative Base Period Demand over the Term at the Tier 1 Supply Rate for the duration of the Purchase Order Term.

Firm water purchases made under the terms of the Purchase Order agreements are subject to reduction in accordance with the shortage allocation provisions of the Water Surplus and Drought Management Plan (WSDM Plan) implemented through the Water Supply Allocation Plan (WSAP). In the event that Metropolitan's Board or General Manager determines to reduce, interrupt or suspend deliveries of water, any outstanding balance of the Purchase Order Commitment at the end of the Term will be reduced by the "Purchase Order Commitment—Annual Average" for each and every fiscal or calendar year that a reduction, interruption or suspension occurred. The original Purchase Order Commitment was reduced by 10 percent due to the WSAP implantation in FY 2015/16.

The following water transactions will be counted toward the Purchase Order Commitment:

- Full-service sales (Tier 1 or Tier 2 Supply Rates) of treated or untreated water
- Conjunctive Use sales
- Cyclic sales.

The current bundled full-service costs are shown in Table 10.

Table 10: Bundled Full-Service Costs⁴

Rate Type	Type of Charge	Rate or charge effective January 1, 2022
Tier 1 Full-Service Untreated Cost	Volumetric (\$/af)	\$799
Tier 2 Full-Service Untreated Cost	Volumetric (\$/af)	\$841
Tier 1 Full-Service Treated Cost	Volumetric (\$/af)	\$1,143
Tier 2 Full-Service Treated Cost	Volumetric (\$/af)	\$1,185

The Tier 1 Full-Service Untreated Cost consists of the following rate elements: The Tier 1 Supply Rate, the System Access Rate, the System Power Rate, and the Water Stewardship Rate (currently set at \$0).

The Tier 2 Full-Service Untreated Cost consists of the following rate elements: The Tier 2 Supply Rate, the System Access Rate, the System Power Rate, and the Water Stewardship Rate (currently set at \$0).

The Tier 1 Full-Service Treated Cost consists of the following rate elements: The Tier 1 Supply Rate, the System Access Rate, the System Power Rate, the Water Stewardship Rate (currently set at \$0), and the Treatment Surcharge.

The Tier 2 Full-Service Treated Cost consists of the following rate elements: The Tier 2 Supply Rate, the System Access Rate, the System Power Rate, the Water Stewardship Rate (currently set at \$0), and the Treatment Surcharge.

⁴ Nineteen of Metropolitan's member agencies have invoices prepared using bundled rates; seven of Metropolitan's member agencies have invoices prepared using the unbundled rate elements.

COST OF SERVICE

A cost of service (COS) report contains analysis of costs using a methodology to equitably allocate the revenue requirements of a utility between the various users of service. Costs of operating a utility are not accounted for on a specific user or service basis. Many costs are incurred for the joint benefit of all users, while other costs may benefit only the users of certain services. Metropolitan uses the COS methodology to functionalize, allocate and distribute costs to services provided. The unbundled rate structure is used to collect revenue based on the services provided to different member agencies and contractual arrangements. Metropolitan provides full-service water (treated and untreated) to its member agencies. Exchanges, wheeling, and other arrangements are provided on a contractual basis.

AWWA Guidelines

The American Water Works Association (AWWA) is the professional association which, among other functions, identifies water industry standards for financial management and rate-setting practices. AWWA publishes a document on these topics in its Manual of Water Supply Practices series, which is the AWWA's M1, Principles of Water Rates, Fees, and Charges, Seventh Edition.

AWWA manual M1 Seventh Edition delineates a number of guidelines and principles that are intended to be observed in the broad development of cost of service and rate setting steps⁵. The COS process reflects the M1 Seventh Edition guidelines and principles, which were carefully considered in the conceptual design of the Metropolitan COS. Major AWWA guidelines and principles considered in the proposed COS approach are outlined below.

- One of the most effective methods used to accommodate the impact of rapidly increasing costs on rate design is the use of a "forward looking" or prospective rate period. This procedure is frequently used by government-owned utilities in determining cost of service. Metropolitan's COS follows this approach by incorporating budget data for upcoming fiscal years, using projected debt service and State Water Contract payment obligation data, and applying annual escalation factors to operations and maintenance costs.
- The purpose of performing functional assignment of costs is to express the utility's cost of service in terms that make it possible to allocate and then distribute costs to services in accordance with the costs of serving each class of customer, or in Metropolitan's case, each function type. In keeping with AWWA recommendations, the functional assignment and commodity/demand allocation modules of the COS allow identification of functional cost components at a level that allows the unbundling of Metropolitan's rates.
- The cash-needs approach, which develops the revenue requirements for a utility based on total estimated cash expenditures for a time period, is one of two methodologies endorsed by AWWA principles and is frequently used by government-owned utilities. The COS's revenue requirements module is consistent with this approach.
- In areas where seasonal usage patterns impose significant demands and ultimately costs on the utility, consideration may be given to separate charges for such use. System costs associated with accommodating seasonal use may be recovered either through rates applied to separate metering for

⁵ The majority of the M1 Seventh Edition is written for utilities providing retail service or combined retail and wholesale service. The distinction in practices for wholesale-only utilities is indirect; care must be taken to be attuned to these distinctions such that the guidelines are not incorrectly applied or misrepresented.

such services or through charges applied based on seasonal use. This principle is consistent with the conceptual design of the COS's allocation module.

General principles for establishing charges state that:

- Beneficiaries of a service should pay for that service.
- The level of service charges should be related to the cost of providing the service.
- The price of services may be used to change user behavior and demand for the good or service.⁶

The proposed COS process is consistent with these principles.

AWWA's M1 Seventh Edition provides rate-setting objectives as a basis for evaluating water utility rate designs. These objectives have all been considered in the development of the proposed COS process and resulting rates, fees and charges for service⁷.

- Effectiveness in yielding total revenue requirements (full cost recovery).
- Revenue stability and predictability.
- Stability and predictability of the rates themselves from unexpected or adverse changes.
- Promotion of efficient resource use (conservation and efficient use).
- Fairness in the apportionment of total costs of service among the different ratepayers.
- Avoidance of undue discrimination (subsidies) within the rates.
- Dynamic efficiency in responding to changing supply and demand patterns.
- Freedom from controversies as to proper interpretation of the rates.
- Simple and easy to understand.
- Simple to administer.
- Legal and defensible.

It should be noted that there are circumstances in which some of these objectives can be in conflict with each other. For example, competing objectives could be conservation and revenue stability. To incentivize conservation, a utility might develop a rate structure that was 100 percent volumetric. To provide revenue stability, the same utility might develop a rate structure that was 100 percent fixed. Because of such conflict potential, all AWWA pricing objectives must be carefully balanced when selecting a preferred COS and rate setting approach.

Cost of Service

Prior to discussing the specific rates and charges that make up the rate structure, it is important to understand the cost of service process that supports the rates and charges. The AWWA M1 Seventh Edition sets out the steps in the COS process as: (1) identify which costs should be recovered through rates and charges (the revenue requirement); (2) organize costs into operational functions (functionalize); (3) allocate operational function costs on the basis for which the cost was incurred (allocate); and (4) distribute costs to rate elements (distribute). The process acronym is FAD: functionalize, allocate, distribute. The balance of

⁶ Metropolitan's rates reflect the cost of providing its services and the impact of those costs may have an impact on member agencies' conservation and local resource development. Metropolitan invests in demand management, by providing incentives to those conserving and developing local resource projects that reduce the price of those projects for the participants. Those demand management investments lower system costs and reduce the need for Metropolitan to import additional supplies into the service area.

⁷ Manual of Water Supply Practices, M1, Principles of Water Rates, Fees and Charges, American Water Works Association, Seventh Edition, pg.4

this report uses this nomenclature, while tailoring the process to Metropolitan's unique service obligations and member agency needs.

The purpose of sorting Metropolitan's costs in a manner that reflects the type of function (e.g., supply vs. conveyance), the characteristics of the cost (e.g., fixed or variable) and the reason why the cost was incurred (e.g., to meet peak or average demand) is to create logical cost of service "building blocks". The building blocks can then be arranged to design rates and charges with a reasonable nexus between costs and benefits.

Cost of Service Process

The general cost of service process involves the basic steps outlined below.

Step 1 - Development of Revenue Requirements

In the revenue requirement step, the costs that Metropolitan must recover through rates and charges, after consideration of revenue offsets (such as property tax revenue, interest income, and miscellaneous income), are identified. The cash-needs approach, an accepted industry practice for government-owned utilities, has historically been used in identifying Metropolitan's revenue requirements⁸. Although the utility approach would be acceptable under AWWA guidelines, the cash-needs approach was applied for the purposes of this study. All of Metropolitan's costs fall under the broad categories of either Departmental Costs or General District Requirements. Departmental Costs include budgeted items identified with specific departments within Metropolitan. General District Requirements primarily consist of requirements associated with the CRA, SWP, Supply Programs, Demand Management Programs, and capital financing costs. General District Requirements also include reserve fund transfers required by bond covenants and Metropolitan's Administrative Code. Under the cash needs approach, revenue requirements include operating costs and annual requirements for meeting financed capital items (debt service and funding of the CIP from operating revenues).

Step 2 - Functionalization of Costs

To allow for the development of rates that properly reflect the costs of providing different service types (full-service (treated and untreated), revenue requirements should be categorized based on the operational functions associated with each cost. In the functional assignment step, revenue requirements are assigned to different categories based on the operational functions associated with each cost. The functional categories are identified in such a way as to allow the development of logical assignment bases. The functional categories used in this cost of service process include:

- Supply
- Conveyance and Aqueduct
- Storage
- Treatment
- Distribution
- Demand Management
- Administrative and General
- Hydroelectric

These functional assignments reflect the unique functions that Metropolitan undertakes and is consistent with the Strategic Plan Policy Principles. In order to provide more finite functional assignment, many of these functional categories are subdivided into more detailed sub-functions in the COS process. For example, costs

⁸ The primary difference between the two methods is how capital-related costs are approached. The cash-needs approach uses debt service on bonds and capital funded from rates; the utility approach uses depreciation and a return on Rate Base or Investment.

for the Supply and Conveyance and Aqueduct (C&A) functions are further subdivided into the sub-functions SWP, CRA, and Other. Similarly, costs in the Storage function are broken down into the sub-functions Emergency Storage, Drought Carryover Storage, and Regulatory Storage.

Step 3 - Allocation of Costs

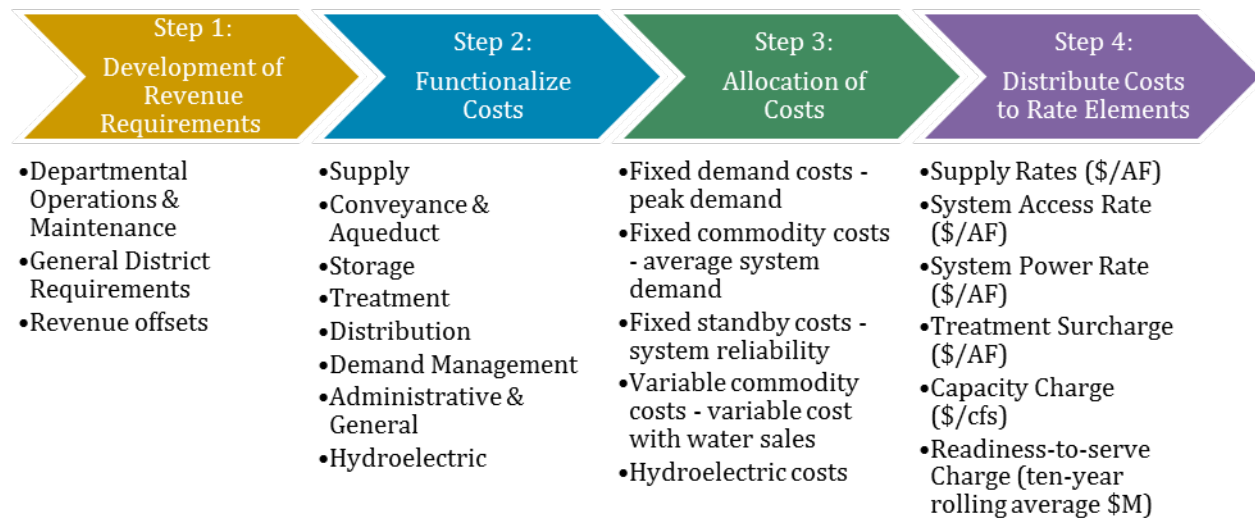
In the cost allocation step, functionalized costs are separated into categories according to their causes and behavioral characteristics. Proper cost allocation is critical in developing a rate structure that recovers costs in a manner consistent with the causes and behaviors of those costs. Under AWWA guidelines, cost allocation may be done using either the Base/Extra-Capacity approach or the Commodity/Demand approach. In the simplest sense, these approaches offer alternative means of distinguishing between utility costs incurred to meet average or base demands and costs incurred to meet peak demands. The Commodity/Demand approach was selected because it: (1) is best suited for systems where design criteria are focused on peaking patterns within a long-term time frame, such as peak month and peak week, (2) it works well in situations where complex cost relationships exist in the service area and attempting to allocate costs to peak day and peak hour functions would be complicated and often impractical, and (3) it allows for the development of the most appropriate COS classification bases because of the way Metropolitan's financial and operational data is organized. The Commodity/Demand approach was modified for its application to Metropolitan's rate structure by adding a separate cost allocation for costs related to Metropolitan's standby function. Analysis of system operating data indicated that a modified Commodity/Demand approach was most appropriate for developing Metropolitan's cost of service allocation bases.

Step 4 - Distribution to Rate Elements

The distribution of costs to the rate design elements depends on the purpose for which the cost was incurred and the manner in which the member agencies use the Metropolitan system. For example, costs incurred to meet average system demands are typically recovered by dollar per acre-foot rates and are distributed based on the volume of water purchased by each agency. Rates that are levied on the amount or volume of water delivered are commonly referred to as volumetric rates as the customer's costs vary with the volume of water purchased. Costs incurred to meet peak distribution demands (referred to in this report as demand costs) are recovered through a peaking charge (the Capacity Charge) and are distributed to agencies based on their peak summer demand behavior. Costs incurred to provide system reliability in the event of an emergency, major outage or hydrologic variability (referred to in this report as standby costs) are recovered through a Readiness-To-Serve Charge. Differentiating between costs for average, peak, and standby is just one example of how the COS process allows for the design of rates and charges to achieve overall customer equity and efficiency.

With regards to treatment-related costs, all costs, whether for average, peak, or standby, are recovered by dollar per acre-foot rates and are distributed based on the volume of treated water purchased. The following figure summarizes the Metropolitan COS process.

Cost of Service Process



Revenue Requirements

The estimated revenue requirements presented in this report are for FY 2022/23 and 2023/24. Throughout the report, the fiscal years are used as the “test years” to demonstrate the application of the COS process. Schedule 1 and Schedule 2 summarize the FY 2022/23 and FY 2023/24 revenue requirements, respectively, by the major budget line items used in Metropolitan’s budgeting process.

Current estimates indicate Metropolitan’s annual expenditures (including capital financing costs, but not construction outlays financed with bond proceeds) will total approximately \$1.92 billion in FY 2022/23 and \$2.00 billion in FY 2023/24. These expenditures support sales of 1.59 MAF in FY 2022/23 and 1.54 MAF in FY 2023/24 and assume a 15 percent SWP allocation in CY 2022, 40 percent SWP allocation in CY 2023, and 50 percent SWP allocation in CY 2024 with CRA diversions of 1.01 MAF in FY 2022/23 and 0.92 MAF in FY 2023/24.

The rates and charges do not have to cover the entire amount of estimated expenditures. Metropolitan generates a significant amount of revenue from interest income, hydroelectric power sales and miscellaneous income. These internally generated revenues are referred to as revenue offsets and are expected to generate about \$82 million in FY 2022/23 and \$68 million in FY 2023/24. It is expected that Metropolitan will also generate about \$163 million in ad valorem property tax revenues (assuming that ad valorem tax rates are maintained at 0.0035 percent of assessed valuation) in FY 2022/23 and \$168 million in FY 2023/24. Property tax revenues are used to pay for a portion of Metropolitan’s general obligation bond debt service, a portion of Metropolitan’s obligation to pay for debt service on bonds issued to fund the SWP, and other SWP costs. The total revenue offsets are estimated to be about \$245 million in FY 2022/23 and \$236 million in FY 2023/24. Therefore, the revenue required from rates and charges is the difference between the total estimated expenditures (costs) and the revenue offsets, or \$1.68 billion in FY 2022/23 and \$1.77 billion in FY 2023/24. Given an effective date of January 1, 2023 and January 1, 2024, respectively, the rates and charges recommended in this report, combined with rates and charges effective through December 31, 2022 will generate a total of \$1.67 billion in FY 2022/23 and \$1.73 billion in FY 2023/24.

All of Metropolitan's costs fall under the broad categories of Departmental Costs or General District Requirements. Departmental Costs include budgeted items identified with specific organizational groups. General District Requirements consist of requirements associated with the CRA, SWP, Supply Programs, Demand Management Programs, and capital financing costs associated with the Capital Investment Plan (CIP). General District Requirements also include reserve fund transfers required by bond covenants and Metropolitan's Administrative Code.

Schedule 1: Revenue Requirements (by budget line item), FY 2022/23

	Fiscal Year Ending 2023	% of Revenue Requirements (1)
Departmental Operations & Maintenance		
Office of General Manager	\$ 9,575,522	0.4%
Water Systems Operations	270,071,127	12.5%
Water Resources Management	23,561,574	1.1%
Engineering Services	46,845,108	2.2%
Bay Delta Initiatives	11,461,862	0.5%
Business Technology	79,444,215	3.7%
Real Property	28,035,463	1.3%
Human Resources	15,098,290	0.7%
Office of the Chief Financial Officer	28,405,697	1.3%
External Affairs	26,007,645	1.2%
General Counsel	15,833,730	0.7%
General Auditor	4,599,034	0.2%
Ethics Office	2,662,039	0.1%
Sustainability, Resilience & Innovation	9,831,427	0.5%
Diversity, Equity & Inclusion	1,371,646	0.1%
Equal Employment Opportunity	1,943,227	0.1%
Total	574,747,607	26.5%
General District Requirements		
State Water Contract*	681,709,121	31.4%
Colorado River Aqueduct Power Costs	105,857,041	4.9%
Supply Programs (cash funded portion)	66,659,522	3.1%
Demand Management (cash funded portion)	50,815,317	2.3%
Capital Financing	423,023,470	19.5%
Other Operating Costs	14,394,884	0.7%
Increase/(Decrease) in Required Reserves	5,500,000	0.3%
Total	1,347,959,356	62.2%
Revenue Offsets	(245,142,974)	11.3%
Net Revenue Requirements	1,677,563,989	100.0%
(1) Given as a percentage of the absolute values of total dollars apportioned * Includes Delta Conveyance planning costs net of California WaterFix refund Totals may not foot due to rounding		

Schedule 2: Revenue Requirements (by budget line item), FY 2023/24

	Fiscal Year Ending 2024	% of Revenue Requirements (1)
Departmental Operations & Maintenance		
Office of General Manager	\$ 9,982,060	0.4%
Water Systems Operations	279,185,730	12.5%
Water Resources Management	24,935,947	1.1%
Engineering Services	46,125,509	2.1%
Bay Delta Initiatives	12,080,310	0.5%
Business Technology	83,881,957	3.7%
Real Property	28,832,731	1.3%
Human Resources	15,544,838	0.7%
Office of the Chief Financial Officer	25,316,770	1.1%
External Affairs	26,680,060	1.2%
General Counsel	15,716,806	0.7%
General Auditor	4,737,939	0.2%
Ethics Office	2,759,274	0.1%
Sustainability, Resilience & Innovation	9,216,241	0.4%
Diversity, Equity & Inclusion	1,426,072	0.1%
Equal Employment Opportunity	2,036,286	0.1%
Total	588,458,528	26.3%
General District Requirements		
State Water Contract*	761,239,991	34.0%
Colorado River Aqueduct Power Costs	85,626,149	3.8%
Supply Programs (cash funded portion)	64,100,985	2.9%
Demand Management (cash funded portion)	49,108,217	2.2%
Capital Financing	436,025,242	19.5%
Other Operating Costs	13,836,761	0.6%
Increase/(Decrease) in Required Reserves	7,100,000	0.3%
Total	1,417,037,345	63.2%
Revenue Offsets	(235,772,044)	10.5%
Net Revenue Requirements	1,769,723,828	100.0%
(1) Given as a percentage of the absolute values of total dollars apportioned		
* Includes Delta Conveyance planning costs net of California WaterFix refund		
Totals may not foot due to rounding		

Departmental Costs

Departmental costs consist of salary and benefits, chemicals, power, outside services, materials and supplies, association dues, insurance expenses, leases, and property taxes budgeted by the General Manager's Department, as well as the General Counsel, General Auditor, and Ethics Officer.

The proposed FY 2022/23 O&M budget includes \$589.1 million for labor and benefits, water treatment chemicals, power, and solids handling, materials and supplies, professional services, and operating equipment purchases. This is \$9.2 million, or 1.6 percent, higher than the FY 2021/22 budget of \$579.9 million due primarily to negotiated labor, benefits, and outside services cost increases. Variable treatment costs are also higher due to higher chemical prices. The total authorized personnel complement for the FY 2022/23 budget is 1,974 authorized positions, including 47 district temporary full-time equivalents (FTEs), and reflects an increase of 30 full-time positions from the FY 2021/22 budget. Total funded positions are 1,974 FTEs.

The proposed FY 2023/24 O&M budget is \$602.3 million, an increase of \$13.2 million, or 2.2 percent, compared to the FY 2022/23 budget. This increase is primarily due to negotiated labor, benefits, and outside services cost increases, and slight increase in chemical prices. The total authorized personnel complement for FY 2023/24 is increased by 2 positions to 1,976 authorized positions, including 49 district temporary full-time equivalents (FTEs). Total funded positions are 1,976 FTEs.

The Departmental Budget is described in detail in the Biennial Budget document.

General District Revenue Requirements

General District Requirements include costs for the SWP, CRA power, Supply Programs, Demand Management Programs, and the Capital Financing costs. Each of these areas is described in the following.

State Water Project

Metropolitan participates in the State Water Project (SWP), which is managed and operated by the California Department of Water Resources (DWR) and is an integral part of Metropolitan's conveyance system, through its State Water Contract. All costs of the SWP capital expenditures and costs of the operations, maintenance, power and replacement (OMPR) associated with water conservation (supply) and transportation (delivery) are paid by the 29 State Water Contractors. Metropolitan recovers the costs associated with the SWP through ad valorem property taxes, the Tier 1 Supply Rate, System Access Rate, the System Power Rate, and the Readiness-to-Serve Charge.

All State Water Contractors are obligated to pay all costs incurred by DWR to operate the SWP for water supply delivery, as part of their contractual participation in the project. Articles 22 through 26 of the State Water Contract provide that all costs DWR might incur to conserve and transport water to Metropolitan will be recovered from Metropolitan. Metropolitan is responsible for paying the costs of the system necessary to conserve and transport SWP water regardless of whether Metropolitan receives any water at all. Only the Transportation Variable, which recovers power costs for pumping through SWP transportation facilities to Metropolitan, varies depending on the amount of water delivered to Metropolitan. In the event Metropolitan does not pay DWR, DWR can require Metropolitan to recover its SWP costs through property taxes. DWR has no recourse to go to the State General Fund to pay SWP costs. DWR has no exposure whatsoever for any revenue shortfall, cost changes, or the cost impacts of operational limitations; these risks are solely the Contractors' risks.

Annually, the DWR reviews and redetermines the water supply and financial aspects of the SWP as required by the State Water Contract. The annual review and redetermination results in the annual Statement of Charges to the Contractors for each calendar year. The information that supports the Statement of Charges is published by the DWR as Appendix B to the appropriate Bulletin 132 (i.e., the Statement of Charges for Calendar Year 2022 is supported by Appendix B to Bulletin 132-21). DWR does not charge rates for water service. It does not develop a revenue requirement and then develop rates based on projected billing determinants for a calendar year. Rather, DWR apportions its costs to the Contractors based on their proportionate share of conservation (supply) costs (the Delta Water Charge) and transportation (delivery) costs (the Transportation Charge). DWR reconciles actual costs for each year and either collects more funds from the Contractors if actual costs exceeded estimated costs or provides a credit/refund if actual costs were lower than estimated costs.

The Biennial Budget includes Metropolitan's planned contribution for Delta conveyance project planning activities of \$99.0 million. The expenditures for the SWP are described in detail in the Biennial Budget document.

Colorado River Aqueduct

Metropolitan owns, operates, and manages the CRA. Metropolitan is responsible for operating, maintaining, rehabilitating, and repairing the CRA, and is responsible for obtaining and scheduling energy resources adequate to power pumps at the CRA's five pumping stations.

The CRA costs for delivery and supply are reflected in the Departmental costs and in the costs of the appropriate operational functions. The expenditures for CRA power are described in detail in the Biennial Budget document.

In fiscal years 2022/23 and 2023/24, it is projected Metropolitan will receive annual CRA water diversions of approximately 1.01 MAF and 0.92 MAF respectively. The budgeted power costs for the CRA are \$105.9 million in FY 2022/23 and \$85.6 million in FY 2023/24.

Supply Programs: SWP

Since inception, the SWC provided Contractors the ability to use the SWP to convey non-SWP water under certain circumstances. Specifically, Article 18(c)(2) of the original SWC addresses situations where there is a shortage in the supply of water made available under the SWC and states, "[T]he District, at its option, shall have the right to use any of the project transportation facilities which by reason of such permanent shortage in the supply of project water to be made available to the District are not required for delivery of project water to the District, to transport water procured by it from any other source: [p]rovided, [t]hat such use shall be within the limits of the capacities provided in the project transportation facilities for service to the District under this contract". However, Article 18(c)(2) only applied in the event a permanent shortage was declared by DWR and it was unclear on how costs would be charged for using SWP facilities to transport nonproject water. In 1994, the Contractors and DWR negotiated the Monterey Amendment to the SWC, including Article 55, which made explicit that the Contractors' rights to use the portion of the SWP conveyance system necessary to deliver water to them (their "Reaches") also includes the right to convey non-SWP water at no additional cost as long as capacity exists. Power for the conveyance of non-SWP water is charged at the SWP melded power rate. The Monterey Amendment also expanded the ability to carry over SWP water in SWP storage facilities, allowed participating Contractors to borrow water from terminal reservoirs, and allowed Contractors to store water in groundwater storage facilities outside a Contractor's service area for later use. These amendments, approved by Metropolitan's Board in 1995, secured the means for individual Contractors to increase supply reliability through water transfers, and storage outside their service areas.

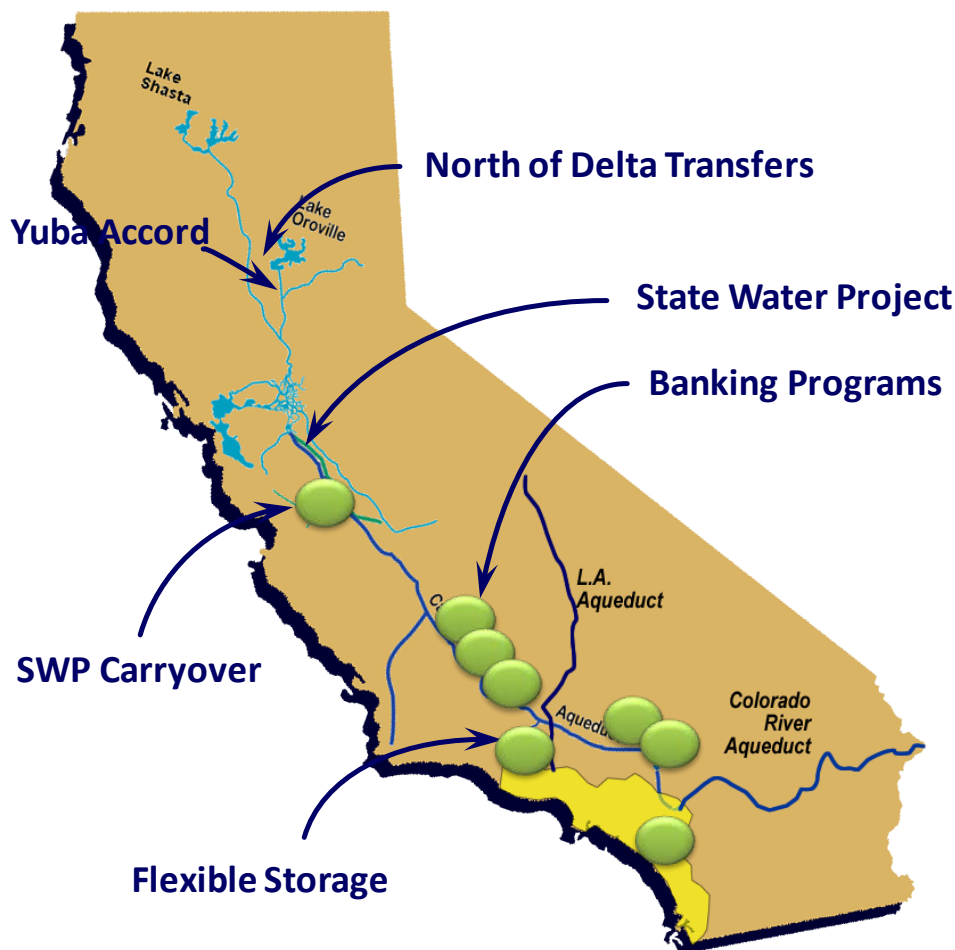
Since adoption of the 1996 Integrated Resources Plan (1996 IRP) and subsequent updates, Metropolitan has developed and actively managed a portfolio of supplies to convey through the California Aqueduct, as shown in Figure 10. The geographical locations of the projects are indicated by the green dots; Metropolitan's service area is designated by the yellow highlighted area. Metropolitan submits delivery schedules to DWR for these supplies and alters these schedules throughout the year based on changes in the availability of SWP and Colorado River water. The portfolio of supplies that Metropolitan has developed to be conveyed through the SWP since adoption of the Monterey Amendments and the 1996 IRP extend from north of the Delta to Southern California.

Since the Monterey Amendments, Metropolitan has secured one-year water transfer supplies through Metropolitan-only purchases, buyer coalition-purchases, and Governor Drought Water Banks. The most recent years that Metropolitan secured these one-year transactions were 2015, and 2021. Metropolitan opted not to pursue these transactions in 2018 or 2020. Most of the sellers were Sacramento Valley water users who are not Contractors. Other Contractors obtained one-year water transfers during this timeframe as well. There were no single-year transfer programs in, 2016-2017, or 2019 because of favorable water supply conditions and lack of capacity to move transfer supplies through the Delta.

In addition to the above one-year water transfers, Metropolitan purchases long-term water transfer supplies through the Yuba Accord. The Yuba Accord has provided water to enhance SWP and CVP water supply reliability by offsetting Delta export reductions and providing dry year water supplies for participating SWP

and CVP contractors. This water is Yuba River water developed by Yuba County Water Agency (YCWA) making reservoir releases or by YCWA's member units substituting groundwater for their surface water supplies; it is not SWP water.

Figure 10: California Aqueduct Portfolio of Supplies

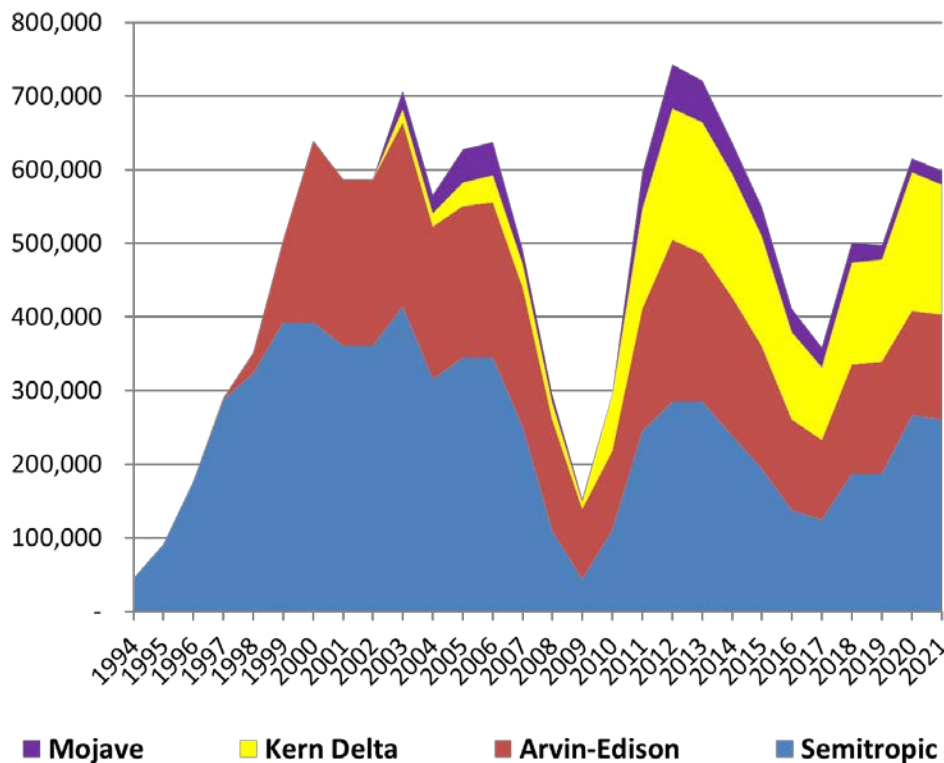


In addition to one-year transfers, and the Yuba Accord water, Metropolitan has developed groundwater storage agreements that allow Metropolitan to store available supplies in the Central Valley for return later. Metropolitan enters into point of delivery agreements with DWR to deliver water supplies from the SWP facilities to these storage programs. Metropolitan enters into agreements for introduction of local supplies to return these water supplies to the SWP system for delivery to Metropolitan's service area. Metropolitan's storage activities are shown in Figure 11. The figure shows how the programs function to store supplies during surplus conditions and return supplies during a drought. The storage programs have demonstrated that they can provide a significant amount of water when needed.

- **Arvin-Edison Storage Program:** under the agreement, Arvin-Edison Water Storage District stores water on behalf of Metropolitan. Up to 350,000 acre-feet can be stored; Arvin-Edison is obligated to return up to 75,000 acre-feet of stored water in any year to Metropolitan, upon request. The water is returned by direct groundwater pump-in and exchange of SWP supplies. A 2017 State Water Resources Control Board (SWRCB) regulation setting a Maximum Contaminant Level (MCL) for TCP has temporarily suspended use of this program due to the levels detected in the program groundwater wells. In November 2021, a change in the point-of-delivery was initiated to allow Metropolitan access to its stored water through an operational exchange of Friant Division CVP water supplies with SWP supplies in San Luis Reservoir.
- **Semitropic Storage Program:** under the agreement, Metropolitan stores water in the groundwater basin underlying land within the Semitropic Water Storage District. The maximum storage capacity

is 350,000 acre-feet. Currently, the minimum annual yield to Metropolitan is 38,200 acre-feet, and the maximum annual yield is 229,700 acre-feet depending on the available unused capacity and the SWP allocation. The water is returned by direct groundwater pump-in and exchange of SWP supplies.

- Kern Delta Storage Program: under the agreement, Kern Delta Water District provides groundwater banking and exchange transfer to allow Metropolitan to store up to 250,000 acre-feet of SWP water in wet years and take up to 50,000 acre-feet annually during droughts. The water is returned by direct groundwater pump-in or by exchange of surface water supplies.
- Mojave Storage Program: under the agreement, Mojave Water Agency provides groundwater banking and exchange transfers to allow Metropolitan to store up to 390,000 acre-feet for later return. The agreement allows Metropolitan to annually withdraw Mojave Water Agency's SWP contractual amounts, after accounting for local needs. The Mojave storage program returns water only by exchange of surface water supplies.
- Antelope Valley East Kern (AVEK) Storage Program: under the Storage Program, Metropolitan, at its discretion, could store up to 30,000 acre-feet of its SWP Table A amount or other supplies in the Antelope Valley Groundwater Basin in an account designated for Metropolitan. The water is returned by exchange of SWP supplies or direct groundwater pump-in.
- Antelope Valley-East Kern (AVEK) High Desert Water Bank Program: under this agreement, AVEK provides storage for up to 70,000 acre-feet per year of its unused SWP Table A amount to Metropolitan or other supplies for later return. The maximum storage capacity for Metropolitan supplies would be 280,000 acre-feet. The program is designed to return up to 70,000 acre-feet per year by direct pump-in to the East Branch of the California Aqueduct. Water can also be returned by exchange of SWP supplies when available.
- Sites Reservoir: under a participation agreement, Metropolitan is contributing to planning activities for a proposed reservoir project of approximately 1.3 to 1.5 million acre-feet being analyzed by the Sites Reservoir Authority, to be located in Colusa County. Water stored for the proposed project would be diverted from the Sacramento River. The maximum storage capacity for Metropolitan supplies would be 31,700 acre-feet. As proposed, the program would be designed to return up to 50,000 acre-feet per year on average to Metropolitan by direct pump-in to the Sacramento River. Metropolitan's agreement to participate in funding of this phase of project development activities does not commit Metropolitan to participate in any actual reservoir project that may be undertaken in the future.

Figure 11: SWP Groundwater Storage Programs, acre-feet

Metropolitan has developed exchanges and transfers with other Contractors to enhance supply flexibility. Some of these agencies have extensive groundwater supplies and are willing to exchange their SWP supplies.

- San Gabriel Valley Water District:** under this agreement, Metropolitan delivers treated water to a San Gabriel Valley Water District (SGVMWD) subagency in exchange for twice as much untreated SWP supplies delivered into the Main San Gabriel groundwater basin. The groundwater basin supplies water to both Metropolitan and SGVMWD subagencies. Each year Metropolitan purchases 5,000 acre-feet minus the unbalanced exchange amount. By mutual agreement Metropolitan may purchase more than the 5,000 acre-feet per year should SGVMWD have additional supplies available. This program has the potential to increase Metropolitan's reliability by providing 115,000 acre-feet through 2035.
- Desert Water Agency/Coachella Valley Water District Advance Delivery Program:** under this program, Metropolitan delivers Colorado River water to the Desert Water Agency (DWA) and Coachella Valley Water District (CVWD) in advance of the exchange for their SWP Contract Table A allocations. In addition to their Table A supplies, the agencies can take delivery of SWP supplies available under Article 21 and the Turn-back Pool Program, and non-SWP supplies separately acquired by each agency. These non-SWP supplies have included Yuba Accord water, drought water bank water, and San Joaquin Valley water. By delivering enough water in advance to cover Metropolitan's exchange obligations, Metropolitan is able to receive DWA and CVWD's available SWP supplies in years in which Metropolitan's supplies are insufficient without having to deliver an equivalent amount of Colorado River water. In December 2019, the exchange agreements were amended to provide more flexibility and operational certainty for the parties involved. Additionally, under the amended agreement, Coachella and Desert in wet years pay a portion of Metropolitan's water storage management costs, up to a combined total of \$4 million per year.

Supply Programs: CRA

Since adoption of the 1996 IRP and subsequent updates, Metropolitan has developed and actively manages a portfolio of supplies to convey through the CRA. Metropolitan determines the delivery schedule of those resources throughout the year based on changes in the availability of SWP and of Colorado River water. Figure 12 shows the geographic location of the portfolio of additional CRA supplies, designated by the red dots, which Metropolitan has developed for diversion into the CRA since adoption of the 1996 IRP. These resources extend from Lake Mead to Southern California and provide supply to Metropolitan's service area, which is shown in the yellow highlighted area.

Figure 12: Colorado River Aqueduct Portfolio of Supplies



- **Bard Fallowing:** Approved by the MWD Board in December 2019, the Bard Water District (Bard) Seasonal Fallowing Program (Program) incentivizes farmers to fallow land irrigated with Colorado River water for the spring and summer months in order to reduce water consumption Bard and augment Metropolitan's Colorado River supplies. Metropolitan estimates a water savings of 2.2 acre-feet per irrigable acre. Metropolitan benefits from the reduced water consumption as the saved water will remain in the Colorado River and be made available for diversion.
- **Imperial Irrigation District/Metropolitan Conservation Program:** Under a 1988 Conservation Agreement, Metropolitan has funded water efficiency improvements within the Imperial Irrigation District's (IID) service area in return for the right to divert the water conserved by those investments. Metropolitan provided funding for IID to construct and operate a number of conservation projects that have conserved up to 109,460 acre-feet of water per year that is then

available to Metropolitan. Execution of the Quantification Settlement Agreement (QSA) and related agreements resulted in changes in the availability of water under the program. As a result of a 2014 IID-Metropolitan letter agreement, the amount of water conserved by IID has been quantified at 105,000 acre-feet per year beginning in 2016. Metropolitan is guaranteed at least 85,000 acre-feet per year, with the remainder of the conserved water being made available to the Coachella Valley Water District (CVWD), if needed under the 1989 Approval Agreement as amended. However, in a recent clarifying agreement, CVWD has agreed to limit its call to 15,000 acre-feet per year through 2026, yielding 90,000 acre-feet annually from the program for Metropolitan, with Metropolitan delivering the remaining 15,000 AF to CVWD at Whitewater.

- N-Drip Irrigation: Metropolitan has agreed to jointly fund a pilot project in Arizona to test the efficacy of a novel drip irrigation technology produced by an Israeli company called N-Drip. The key component of the technology is a drip emitter that resists clogging under relatively low water pressure, which allows for drip irrigation systems without pumps or electricity, significantly reducing the cost of installation and operation. Other funding partners include the Central Arizona Water Conservation District (the project lead), the Southern Nevada Water Authority, the Central Utah Water Conservancy District, and Denver Water. The pilot is primarily a research project expected to yield minimal water savings for Metropolitan (at most, 400 AF in 2022). However, if the technology is widely adopted in the future, it could yield significant additional conservation savings that could increase Metropolitan's Colorado River supplies.
- Palo Verde Land Management, Crop Rotation, and Water Supply Program: Under this program, participating landowners in the PVID's valley service area are paid to reduce water use by not irrigating a portion of their land. A maximum of 35 percent of the participating lands within the Palo Verde Valley can be fallowed in any given year. This program saves up to 133,000 acre-feet of water in certain years, and a minimum of 33,000 acre-feet per year. The term of the program is 35 years. Fallowing began in 2005. In March 2009, Metropolitan and PVID entered into a supplemental emergency fallowing program within PVID that provided for the fallowing of additional acreage in 2009 and 2010. Since 2005, over 1.3 million acre-feet total of Colorado River water has been conserved. The volume of water that becomes available to Metropolitan is governed by the QSA and the Colorado River Water Delivery Agreement. Under these agreements:
 - Metropolitan must reduce its consumptive use of Colorado River water by that volume of consumptive use by PVID and holders of Priority 2 that is greater than 420,000 acre-feet in a calendar year, or
 - Metropolitan may increase its consumptive use of Colorado River water by that volume of consumptive use by PVID and holders of Priority 2 that is less than 420,000 acre-feet in a calendar year.

In both cases, each acre-foot of reduced consumptive use by PVID is an additional acre-foot that becomes available to Metropolitan.

- Quechan Forbearance: In 2005, Metropolitan entered into a settlement agreement in Arizona v. California with the Quechan Indian Tribe and other parties. The Tribe uses Colorado River water on the Fort Yuma Indian Reservation. Under the settlement agreement, the Tribe, in addition to the amounts of water decreed for the benefit of the Reservation in the 1964 decree in Arizona v. California, is entitled to (a) 20,000 acre-feet of diversions from the Colorado River, or (b) the amount necessary to supply the consumptive use required for irrigation of a specified number of acres, and for the satisfaction of related uses, whichever is less. Of the additional diversions, 13,000 acre-feet became available to the Tribe in 2006. Metropolitan agreed to provide annual incentive payments to the Tribe if the Tribe forbore diversion of the additional water, thereby allowing Metropolitan to divert it.
- Quechan Fallowing: Approved by the MWD Board in December 2021, the Metropolitan/Quechan Tribe Seasonal Fallowing Pilot Program (Pilot) incentivizes farmers to fallow land irrigated with Colorado River water for the spring and summer months in order to reduce water consumption in

the Quechan tribal land and augment Metropolitan's Colorado River supplies. Since the Quechan Tribe's water supplies have a higher priority than Metropolitan's on the Colorado River, Metropolitan benefits from the reduced water consumption as the saved water will remain in the Colorado River and be made available for diversion.

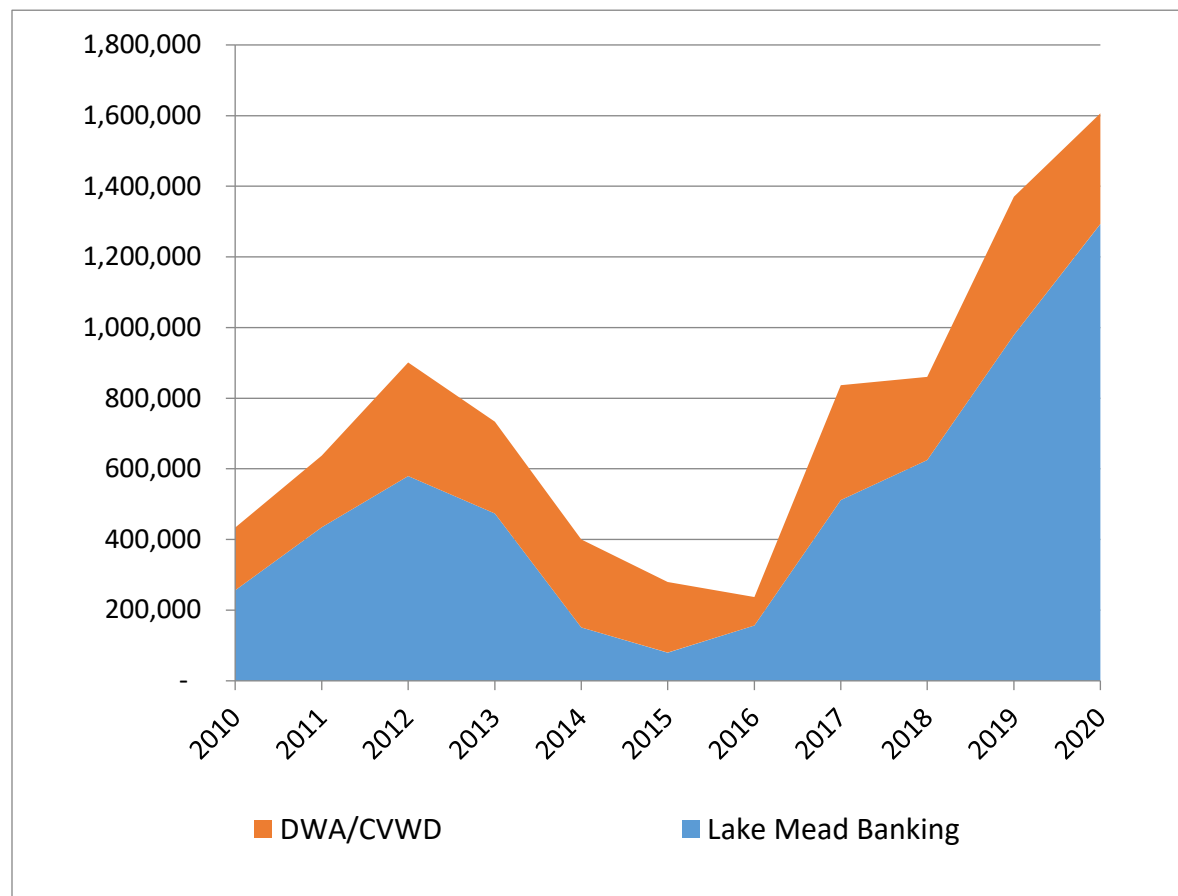
- Southern Nevada Water Authority and Metropolitan Storage and Interstate Release Agreement: Under this 2004 agreement and a related Operational Agreement, the Southern Nevada Water Authority (SNWA) may offer a portion of its Colorado River water supplies to Metropolitan when there is space available in the CRA to receive the water. SNWA may call for return of the water in a future year, in which Metropolitan would reduce its Colorado River water order to return this water to SNWA. In 2009, 2012, and 2015, Metropolitan, the Colorado River Commission of Nevada, and SNWA amended the related Operational Agreement dealing with volumes of water that may be stored or called at various times. The agreements can be terminated upon 90 days' notice following the return of the water stored by Metropolitan.
- Lower Colorado Water Supply Project: This project develops additional water supplies by pumping groundwater into the All-American Canal for delivery to IID. An equal volume of Colorado River water is then made available for other water users along the river. Under a contract among Metropolitan, the City of Needles, and the United States Bureau of Reclamation, Metropolitan receives any excess unused water developed by the project. Metropolitan makes payments to a trust fund to develop a replacement project or to desalt the groundwater should the groundwater become too saline for discharge into the All-American Canal.
- Exchange with the United States (San Luis Rey): 16,000 acre-feet from the All-American and Coachella Canal lining projects is allocated to the San Luis Rey Settlement Parties. The United States furnishes this water at Metropolitan's Colorado River Intake on Lake Havasu. Metropolitan takes possession of the water and by exchange delivers an equal volume of Metropolitan's blended supplies to SDCWA. By separate agreement, SDCWA conveys the water to the San Luis Rey Settlement Parties.
- California ICS Agreement: Under a 2007 agreement and its amendment, Metropolitan may store a portion of IID's excess conservation in Metropolitan's service area, subject to both annual creation and total accumulation limits. IID may call for return of the water in a future year, in which Metropolitan would reduce its Colorado River water order to return the water.
- Lake Mead Storage Program: In December 2007, Metropolitan entered into agreements to set forth the guidelines under which Intentionally Created Surplus (ICS) water is developed and stored in and delivered from Lake Mead. The amount of water stored in Lake Mead must be created through extraordinary conservation, system efficiency, or tributary conservation methods. ICS is available for delivery in a subsequent year, with Extraordinary Conservation ICS subject to a one-time deduction to benefit the river system and annual evaporation losses. Extraordinary conservation methods used by Metropolitan to date are: water saved by fallowing in the Palo Verde Valley, projects implemented with IID in its service area, the Lower Colorado Water Supply Project, All American and Coachella Canal water received under the San Luis Rey Indian Water Rights Settlement Agreement prior to the settlement parties receiving the water, groundwater desalination, groundwater recovery, water conserved from Metropolitan's Landscape Transformation Program, water conserved from implementation of indoor water conservation devices, and water recycling. "System Efficiency ICS" can be created through the development and funding of system efficiency projects that save water that would otherwise be lost from the Colorado River. Metropolitan has participated in two projects to create System Efficiency ICS, and two projects to create ICS by conservation in Mexico:
 - Yuma Desalting Pilot Project: Metropolitan contributed funds toward the 2010-2011 pilot run of the Yuma Desalting Plant in exchange for a portion of the desalinated water produced by the project. The Yuma Desalting Plant treated brackish agricultural drainage that flows into Mexico to the Ciénega de Santa Clara at the terminus of the Colorado River but does not count as deliveries to Mexico under the Mexican Water Treaty. Metropolitan's portion of the desalinated

water was 24,397 acre-feet and this water was stored in Lake Mead. Metropolitan can take delivery of up to the entire amount in any single year.

- Drop 2 (Warren H. Brock) Reservoir: Metropolitan contributed funds toward the U.S. Bureau of Reclamation's construction of an 8,000 acre-foot off-stream regulating reservoir near Drop 2 of the All-American Canal in Imperial County. This reservoir conserves about 55,000 acre-feet of water per year by capturing and storing otherwise non-storable flow. In return for its funding, Metropolitan received 100,000 acre-feet of water that was stored in Lake Mead and has the ability to take delivery of up to 25,000 acre-feet of water in any single year. Besides the additional water supply, the new reservoir adds to the flexibility of Colorado River operations.
- In November 2012, Metropolitan executed agreements in support of a program to augment Metropolitan's Colorado River supply between 2013 and 2017 through an international pilot project in Mexico. Metropolitan's total share of costs was \$5 million for 47,500 acre-feet of project supplies. The costs were paid and the conserved water was credited to Metropolitan's intentionally-created surplus water account. In December 2013, Metropolitan and IID executed an agreement under which IID paid half of Metropolitan's program costs, or \$2.5 million, in return for half of the project supplies, 23,750 acre-feet.
- In September 2017, Metropolitan executed agreements in support and continuation of a program to augment Metropolitan's Colorado River supply through international pilot projects in Mexico. Under the new set of agreements, Metropolitan's total share of costs are expected to be \$3.75 million for 27,275 acre-feet of project supplies. The costs will be paid in three parts in 2020, 2023, and 2026. Water was and will be received in the year of payment.
- Desert Water Agency/Coachella Valley Water District/Metropolitan Water Exchange and Advance Delivery Programs: Under these programs, Metropolitan delivers Colorado River water to the DWA and CVWD, in exchange for future deliveries by DWA and CVWD of an equal volume of their SWP supplies. By delivering enough water in advance to cover Metropolitan's exchange obligations, Metropolitan is able to receive DWA and CVWD's available SWP supplies in years in which Metropolitan's supplies are insufficient to deliver an equivalent amount of Colorado River water⁹.

Figure 13 shows the year-end balance in Metropolitan's Colorado River storage programs. The combined capacity of the Lake Mead Storage program and the DWA/CVWD advance delivery program is 2,300,000 acre-feet, plus the amount of water in storage in Lake Mead as a result of the Drop 2 Reservoir and Yuma Desalting Plant system efficiency projects.

⁹ DWA has a SWP Table A contract right of 55,750 acre-feet per year and CVWD has a SWP Table A contract right of 138,350 acre-feet per year, for a total of 194,100 acre-feet per year. In addition to their Table A supplies, DWA and CVWD, subject to Metropolitan's written consent may by exchange take delivery of SWP supplies available under Article 21 of their SWP Contracts, the Turn-back Pool Program, and non-SWP supplies they may acquire and convey through SWP facilities. Under the Metropolitan-CVWD Delivery and Exchange Agreement for 35,000 Acre-feet, up to 35,000 acre-feet of Metropolitan's SWP Table A supply can be requested annually by CVWD for delivery by exchange. Through the Second Amendment to this agreement, CVWD can request an additional 15,000 acre-feet annually from 2020 through 2026, for an additional transfer amount of 105,000 acre-feet.

Figure 13: Colorado River Storage Programs, acre-feet

In addition to the supply programs developed by Metropolitan, Metropolitan entered into an exchange agreement with the San Diego County Water Authority (SDCWA) in 1998, which was amended in 2003. The entire agreement, consideration exchanged between the parties, and obligations are found in the Amended and Restated Exchange Agreement and the related QSA Agreements. SDCWA acquires Colorado River water from two sources and exchanges up to 277,700 with Metropolitan for Metropolitan water deliveries. SDCWA makes available to Metropolitan Colorado water it purchases from IID that is conserved within IID and conserved water from the lining of the All- American and Coachella canals. In exchange, Metropolitan delivers its own blended water to SDCWA in even monthly installments.

Supply Programs Developed in Basin

Metropolitan has developed a number of local programs to work with its member agencies to increase storage in groundwater basins. Metropolitan has encouraged storage through its cyclic and conjunctive use storage programs. These programs allow Metropolitan to deliver water into a groundwater basin in advance of agency demands. Metropolitan has drawn on dry-year supply from nine contractual conjunctive use storage programs to address shortages from the State Water Project and the CRA.

- **Cyclic Storage Agreements:** Under these agreements, the pre-delivery of imported water is used for recharge into groundwater basins in excess of an agency's planned and budgeted deliveries making best use of available capacity in conveyance pipelines, use of storm channels for delivery to spreading basins, and use of spreading basins. This water is then purchased at a later time when the agency has a need for groundwater replenishment deliveries. Total program capacity is 525,000 AF.

- Conjunctive Use Agreements: Under these agreements, excess imported water can be stored, and then called for use by Metropolitan during dry, drought, or emergency conditions. During a dry period, Metropolitan has the option to call water stored in the groundwater basins pursuant to its contractual conjunctive use agreements. At the time of the call, the member agency pays Metropolitan the prevailing rate for that water. Nine conjunctive use projects provide about 210,000 acre-feet of groundwater storage and have a combined extraction capacity of about 70,000 acre-feet per year.
- Operational Shift Cost-Offset Program: Under these agreements, Metropolitan works with the member agencies to shift the points of delivery to meet demands wherever possible to preserve SWP storage during calendar years 2021 and 2022. Shifts are made at Metropolitan's request and in accordance with the member agencies' capabilities. Metropolitan provides these member agencies a credit of up to \$332/AF in CY 2021 and \$349/AF in CY 2022 to offset additional operational costs the member agencies may accrue from shifting delivery locations. OSCOP allows for improved availability of storage reserves to supplement supplies during dry years by maximizing current available resources from the Colorado River and SWP storage. This program helps reduce the need for purchasing more expensive transfer supplies and helps Metropolitan fully utilize its diverse portfolio to increase reliability for the entire region. This Program continues through end of CY 2022, which covers the first half of the first fiscal year of the proposed biennial budget.

The budget for the Supply Programs is \$105.1 million in FY 2022/23 and \$110.1 million in FY 2023/24. This includes expenditures of \$38.4 million in FY 2022/23 and \$46.0 million in FY 2023/24 for the AVEK High Desert Water Bank that are proposed to be bond funded. The expenditures for the Supply Programs are described in detail in the Biennial Budget document.

Demand Management Programs

Demand Management is an operational function Metropolitan undertakes to enable it to provide its full-service water to its member agencies, as well as to benefit Metropolitan's integrated system used for contractual arrangements such as wheeling and exchanges. Demand Management costs are Metropolitan's expenditures for funding local water resource development programs, water conservation programs, the Future Supply Actions Program, and the Stormwater Pilot Program. These Demand Management Programs incentivize the development of local water supplies and the conservation of water to reduce the need to import water to deliver to Metropolitan's member agencies. These programs are implemented below the delivery points between Metropolitan's and its member agencies' distribution systems and, as such, do not add any water to Metropolitan's supplies. Rather, the effect of these downstream programs is to produce a local supply of water for the local agencies and to reduce demands by member agencies for water imported through Metropolitan's system.

Metropolitan also pursues conservation and local water resource development because it has uniquely been directed to do so by the state Legislature. In 1999, then Governor Davis signed SB 60 (Hayden) into law. SB 60 amended the Metropolitan Water District Act to direct Metropolitan to increase conservation and local resource development. No other water utility in California, public or private, has been specifically identified by the state Legislature and directed to pursue water conservation and local water resource development.

Metropolitan's Demand Management programs also support the region's compliance with the requirements of SB X7-7. In 2009, the state Legislature passed SB X7-7, which was enacted to reduce urban per capita water use by 20 percent by December 31, 2020. Urban retail water suppliers are not eligible for state water grants or loans unless they comply with the water conservation requirements of the legislation. Demand Management programs helped the region achieve urban per capita water use reductions.

AB 1668 and SB 606 build on Governor Brown's efforts to make water conservation a way of life in California and create a new foundation for long-term improvements in water conservation and drought planning. These bills establish guidelines for efficient water use and a framework for the implementation and oversight of the new standards, which will set a new target for retail agencies in 2026. Metropolitan's Demand Management programs will also support Metropolitan's member agencies' ability to meet these guidelines and standards.

Demand Management costs also support the Strategic Plan Policy Principles approved by Metropolitan's Board on December 14, 1999. These principles represent the Board's vision that Metropolitan is a regional provider of wholesale water services. In this capacity, Metropolitan is the steward of regional infrastructure and the regional planner responsible for coordinated drought management and the collaborative development of additional supply reliability and necessary capacity expansion. Through these regional services, Metropolitan ensures a baseline level of reliability and quality for service in its service area.

Capital Financing Costs

Capital financing costs are Metropolitan's expenditures for Revenue Bond debt service, General Obligation bond debt service, debt administration costs, and the funding of capital expenditures from current operating revenues or Pay-As-You-Go (PAYGO).

Budgeted amounts for Capital Financing represent the expenditures for existing and future debt service, anticipated debt administration costs to support the debt portfolio, and PAYGO amounts to support the Capital Investment Plan (CIP). Metropolitan generally incurs long-term debt to finance projects or purchase assets which will have useful lives equal to or greater than the related debt. Revenue supported debt can be authorized by Metropolitan's Board of Directors.

- **Revenue Bond Debt Service:** Includes the annual principal and interest payments for Metropolitan's outstanding and estimated future Revenue Bond debt service costs. Revenue bonds are used to finance the majority of Metropolitan's CIP. Long-term interest rates are assumed to be 2.75 percent for new fixed rate bonds issued over the biennium.
- **G.O. Bond Debt Service:** Includes Metropolitan's currently outstanding General Obligation (GO) bond interest and principal payments. In the long-term, it is assumed that no additional GO debt is issued to finance the CIP.
- **Debt administration costs:** Includes liquidity, remarketing, and broker-dealer fees.
- **PAYGO:** For FY 2022/23 and 2023/24, 45 percent of Metropolitan's capital costs are assumed to be funded from current revenues. It is projected that \$135 million PAYGO funding will be available per year, which is revenue collected through the rates and charges for this purpose over the next two fiscal years.

Expenditures for Capital Financing are \$423 million in FY 2022/23 and \$436 million in FY 2023/24. The Capital Financing costs are described in more detail in the Biennial Budget document.

Required Reserves

Metropolitan's Administrative Code and provisions of the revenue bond covenants require that reserves be held in certain funds at certain times. Therefore, as costs increase, reserves also increase to meet the Administrative Code and revenue bond covenants requirements. This line item reflects current policy requiring O&M fund and minimum requirements for the Revenue Remainder Fund. The increase in Required Reserves is \$5.5 million in FY 2022/23 and \$7.1 million in FY 2023/24.

Functional Costs

Metropolitan undertakes several major operational functions in order to deliver full-service water to Metropolitan's member agencies. These include the supply itself, the conveyance capacity and energy used to move the supply, storage of water, distribution of supplies within Metropolitan's system, and treatment of these supplies. Metropolitan's rate structure recovers the majority of the costs of these functions through rates and charges.

The functional categories developed for Metropolitan's cost of service process are consistent with the AWWA rate setting guidelines. A standard chart of accounts for utilities is provided in the AWWA publication "Financial Management for Water Utilities: Principles of Finance, Accounting, and Management Controls".

Figure 5-2, page 46, lists Operation and Maintenance (O&M) Expense Accounts. As noted, these are Expense Accounts, which provide the means by which O&M and capital financing costs are functionalized for COS. Because all water utilities are not identical, the functional categories used in the COS reflect, as they should, Metropolitan's unique physical, financial, and institutional characteristics, as permitted under the AWWA guidelines. Metropolitan has modified these functional categories as follows:

Pumping: Metropolitan functionalizes its pumping costs for the SWP and the CRA to a Conveyance and Aqueduct subaccount.

Customer Accounts, Customer Service and Sales Promotion: These are not applicable as Metropolitan is not a retail utility.

Storage: Metropolitan provides significant emergency storage, dry-year supply and regulatory services, and functionalizes costs to Storage to reflect Metropolitan's unique physical and operational reliability services.

Demand Management: Metropolitan incurs expenditures to support its Demand Management program, as described throughout this document.

Hydroelectric: Metropolitan has developed recovery generation facilities throughout its distribution system and recovers the costs and revenues from this investment in its COS.

A key goal of functional assignment is to maximize the degree to which rates and charges reflect the costs of undertaking different types of operational functions. For functional assignment to be of maximum benefit, two criteria must be kept in mind when establishing functional categories.

- The categories should correlate rates and charges elements with the costs of the functions associated with those elements; and
- Each function should include reasonable allocation bases by which costs may be allocated.

Each of the functions developed for the cost of service process is described below.

Supply

This function includes costs for those SWP and CRA facilities and programs that relate to managing and developing supplies to meet the member agencies' demands.

Metropolitan has a contractual right to a proportionate share of the project water that DWR determines is available for allocation to the Contractors. This determination is made each year based on existing supplies in storage, forecasted hydrology, and other factors. Available project water is then allocated to the Contractors in proportion to the amounts set forth in Table A of their State Water Contracts (Table A Allocation). The costs of the SWP supply are paid pursuant to Metropolitan's State Water Contract.

DWR's Delta Water Charge recovers the Capital and Minimum Operation, Maintenance, Power and Replacement (OMP&R) costs for the facilities that DWR determines are Conservation costs, meaning they conserve water to supply to the Contractors. Metropolitan reviews DWR's determination for purposes of functionalization. The Delta Water Charge is based on Contractors' cumulative Table A Allocations, which is approximately 46 percent for Metropolitan, regardless of whether it receives any Table A water in a year.

Under its contract with the federal government, Metropolitan has a fourth priority to 550,000 acre-feet per year of Colorado River water, less certain use by higher priority holders and Indian tribes in California. Metropolitan also holds a fifth priority for an additional 662,000 acre-feet per year that exceeds California's 4.4-million-acre-foot normal year basic apportionment, 38,000 acre-feet under the sixth priority during the term of the Colorado River Water Delivery Agreement, and another 180,000 acre-feet per year when surplus flows are available. Metropolitan can obtain water under the fourth, fifth, and sixth priorities from:

- Water unused by the California holders of priorities 1 through 3;
- Water saved by extraordinary conservation and crop rotation programs; or,
- When the U.S. Secretary of the Interior makes available:

- Surplus water, Intentionally Created Surplus water, and/or
- Water apportioned to, but unused by, Arizona and Nevada.

In fiscal years 2022/23 and 2023/24 it is projected that Metropolitan will receive annual CRA water diversions of approximately 1.01 MAF and 0.92 MAF respectively.

The costs of the CRA supply portfolio developed by Metropolitan are paid by Metropolitan. The CRA supply portfolio is supported by Water Resource Management labor, materials and supplies, outside services and professional services. The CRA supply portfolio activities benefit from Water Resource Management support services and management supervision, as well as Administrative and General activities of Metropolitan.

Metropolitan's supply related costs include investments in the Conservation Agreement with the IID, the PVID Program, and other CRA supply programs previously described. SWP programs include the Kern Delta Program, Semitropic Water Storage Program, Yuba Accord Program, Arvin-Edison Water Storage Program, Mojave Storage Program, AVEK Storage and Water Bank Programs, and others as previously described. Costs for programs within Metropolitan's service area, such as Conjunctive Use Agreements and Cyclic Storage Agreements, are also included.

Metropolitan finances past, current and future capital improvements associated with the supply portfolio capital assets and capitalizes investments associated with IID/Metropolitan Conservation Program, the PVID Land Management, Crop Rotation, and Water Supply Program, the Kern Delta Storage Program, Semitropic Storage Program, the Arvin-Edison Storage Program, and the AVEK High Desert Water Bank Program as Participation Rights.

California EcoRestore

California EcoRestore represents the state's near-term effort to accelerate habitat restoration in the Delta. This effort parallels a Delta Conveyance project and is a separate effort to improve the long-term health of the Delta. To date, California EcoRestore efforts include tidal restoration, fish passage improvements in the Yolo Bypass, tidal marsh restoration efforts, and floodplain projects. State Water Contractors and Central Valley Contractors have an obligation to pay for an existing commitment for habitat restoration. Any future costs are a public benefit and not a cost of the SWP. Any costs incurred by the SWP under the existing habitat restoration commitment under existing operating permits are likely to be recovered through the Delta Water Charge in Metropolitan's SWP bills and functionalized to Supply.

Conveyance and Aqueduct

This function includes the capital, operations, maintenance, and overhead costs for SWP and CRA facilities that convey water to Metropolitan's internal distribution system. Variable power costs for the SWP and CRA are also considered to be Conveyance and Aqueduct costs but are separately reported under a "power" sub-function. Conveyance and Aqueduct facilities can be distinguished from Metropolitan's other facilities primarily by the fact that they do not typically include direct connections to the member agencies. For purposes of this analysis, the Inland Feeder Project functions as an extension of the SWP East Branch and is therefore considered a Conveyance and Aqueduct facility as well.

Conveyance and Aqueduct: SWP¹⁰

Since inception, the State Water Contract provided Contractors the ability to use the SWP to convey non-SWP water under certain circumstances. Specifically, Article 18(c)(2) of the original SWC addressed situations where there is a shortage in the supply of water made available under the contract and stated, "[T]he District, at its option, shall have the right to use any of the project transportation facilities which by reason of such permanent shortage in the supply of project water to be made available to the District are not required for delivery of project water to the District, to transport water procured by it from any other source: [p]rovided, [t]hat such use shall be within the limits of the capacities provided in the project transportation facilities for service to the District under this contract". However, Article 18(c)(2) only applied in the event a permanent shortage was declared by DWR and it was unclear how costs would be charged for using SWP facilities to transport non-project water. In 1994, the Contractors and DWR negotiated the Monterey Amendments to the State Water Contract, including Article 55, which made explicit the Contractors' rights to use the portion of the SWP conveyance system necessary to deliver water to them (their "reaches") also includes the right to convey non-SWP water at no additional cost as long as capacity exists. Power is charged at the SWP average power rate. The Monterey Amendments also expanded the ability to carryover SWP water in SWP storage facilities, allowed Contractors to store water in groundwater storage facilities outside a Contractor's service area for later use, and permitted certain Contractors to borrow water from terminal reservoirs. These amendments, approved by Metropolitan's Board in 1995, secured the means for individual Contractors to increase supply reliability through water transfers and storage outside their service areas.

The impact of the Monterey Amendments on SWP operations is shown in Tables 11 and 12 below, which are based on information supplied by DWR¹¹. In the nine calendar years ending in 2020, only 67.7 percent of the SWP deliveries to Metropolitan were Table A water delivered in the year it is paid for. Fully 32.3 percent of the deliveries were for non-Table A water. Non-SWP water comprised 8.6 percent of Metropolitan's deliveries from the SWP. For the other Contractors, 46.2 percent of the SWP deliveries were what one would consider "supply", or Table A water delivered in the year it is paid for; 53.8 percent of the deliveries are for non-Table A water. Non-SWP water transported by the other Contractors comprised 23.8 percent of their deliveries from the SWP. Non-Contractors using the SWP to wheel transfer supplies comprised 4.3 percent of all deliveries through the SWP. Fully 20.9 percent of the deliveries on the SWP were for non-SWP water.

¹⁰ For historical and current information regarding the SWP, refer to Bulletin 132, published periodically by DWR since 1963. The most recently published Bulletin is Bulletin 132-18, dated January 2021 and titled, "Management of the California State Water Project." Appendices to the Bulletin are also updated separately. Both are available at: <https://water.ca.gov/Programs/State-Water-Project/Management/Bulletin-132>.

¹¹ DWR, Water Deliveries Section, State Water Project Analysis Office, January 27, 2022.

Table 11: State Water Project Water Management Activities, CY 2010 through 2020, Acre-Feet

SWP Deliveries--Acre-feet											
Metropolitan				Other SWP Contractors				Non-SWC Agencies		Total Deliveries ⁴	
(a)	(b)	(c)	(d) = (a) + (b) + (c)	(e)	(f)	(g)	(h) = (e) + (f) + (g)	(i) = (d) + (h)	(j)	(k) = (i) + (j)	
Table A ¹	Other SWP ²	Non-SWP ³	Total MWD	Table A ¹	Other SWP ²	Non-SWP ³	Total Other SWC	Total SWC	Non-SWP ⁴		
2010	639,537	352,831	265,720	1,258,088	686,826	360,138	355,908	1,402,872	2,660,960	148,986	2,809,946
2011	857,794	590,003	145,907	1,593,704	1,218,697	601,769	182,579	2,003,045	3,596,749	61,739	3,658,488
2012	906,009	308,689	10,010	1,224,708	933,103	445,898	250,144	1,629,145	2,853,853	109,064	2,962,917
2013	613,271	145,147	113,469	871,887	472,427	392,367	371,733	1,236,527	2,108,414	130,642	2,239,056
2014	59,181	224,077	114,032	397,290	25,291	167,928	488,830	682,049	1,079,339	97,493	1,176,832
2015	379,296	37,459	148,149	564,904	253,861	176,621	380,150	810,632	1,375,536	57,810	1,433,346
2016	989,125	12,646	42,081	1,043,852	717,887	248,552	232,388	1,198,827	2,242,679	70,404	2,313,083
2017	1,084,494	453,261	37,521	1,575,276	1,146,288	712,860	291,728	2,150,876	3,726,152	83,270	3,809,422
2018	562,026	78,366	30,247	670,639	417,894	511,356	384,834	1,314,084	1,984,723	193,316	2,178,039
2019	1,012,458	322,158	10,975	1,345,591	914,657	568,778	219,533	1,702,968	3,048,559	131,516	3,180,075
2020	330,879	78,112	22,514	431,505	222,086	360,065	444,255	1,026,406	1,457,911	89,414	1,547,325
Total	7,434,070	2,602,749	940,625	10,977,444	7,009,017	4,546,332	3,602,082	15,157,431	26,134,875	1,173,654	27,308,529

¹ Table A delivered and not exchanged or transferred or stored² Other SWP = SWP Exchanges, Transfers, Carryover Storage, Flexible Storage, Article 21, Pool A/B, settlement³ Non-SWP = banking, non-SWP transfers and exchanges, Dry Year Purchase Program, local water, general conveyance water, operations exchange⁴ Deliveries made to non State Water Contractors. Does not include FSRA, include BBID and CVC. Del="Y", SWP="N"**Table 12: State Water Project Water Management Activities, CY 2010 through 2020, percentages**

SWP Deliveries--Percentages								
	=(a) / (d)	=((b) + (c)) / (d)	= (c) / (d)	= (e) / (h) Other	= ((f) + (g)) / (h)	= (g) / (h)	= (j) / (k)	=((c)+(g)+(j)) / (k)
MWD Table A	MWD Non-Table A	MWD Non-Table A	MWD Non-SWP	Contractors Table A	Other Contractors Non-Table A	Other Contractors Non-SWP	Non SWC to Total	Total non-SWP to Total
2010	50.8%	49.2%	21.1%	49.0%	51.0%	25.4%	5.3%	27.4%
2011	53.8%	46.2%	9.2%	60.8%	39.2%	9.1%	1.7%	10.7%
2012	74.0%	26.0%	0.8%	57.3%	42.7%	15.4%	3.7%	12.5%
2013	70.3%	29.7%	13.0%	38.2%	61.8%	30.1%	5.8%	27.5%
2014	14.9%	85.1%	28.7%	3.7%	96.3%	71.7%	8.3%	59.5%
2015	67.1%	32.9%	26.2%	31.3%	68.7%	46.9%	4.0%	40.9%
2016	94.8%	5.2%	4.0%	59.9%	40.1%	19.4%	3.0%	14.9%
2017	68.8%	31.2%	2.4%	53.3%	46.7%	13.6%	2.2%	10.8%
2018	83.8%	16.2%	4.5%	31.8%	68.2%	29.3%	8.9%	27.9%
2019	75.2%	24.8%	0.8%	53.7%	46.3%	12.9%	4.1%	11.4%
2020	76.7%	23.3%	5.2%	21.6%	78.4%	43.3%	5.8%	35.9%
Total	67.7%	32.3%	8.6%	46.2%	53.8%	23.8%	4.3%	20.9%

The SWP has transformed from being solely a transporter of SWP water to a transporter of other water sources as well for Metropolitan, other State Water Contractors, and non-Contractors. The reason for this is quite simple: the SWP has allocated only about 50 percent on average of the water due to State Water Contractors. The State Water Contractors have a significant investment in the costs of operating, maintaining and financing the SWP, and have developed creative programs to develop additional supplies and improved supply reliability by using the SWP as a transportation system. Specifically, during times of shortage or low SWP supply allocations, Metropolitan uses the SWP facilities to transport non-SWP water, which is water it has acquired through use of non-SWP sources, to its service area. When Metropolitan conveys non-project water, it is using the SWP transportation facilities in transactions that have nothing to do with SWP water supply. The ability to move non-SWP water through the SWP facilities, either as a result of purchases of non-SWP water or withdrawals from banking programs, enhances Metropolitan's operational flexibility and contributes to regional system reliability from which all member agencies benefit.

In addition, Metropolitan has, from time to time, used its capacity in the SWP to wheel non-Metropolitan water to its member agencies. Examples include water delivered to Santa Margarita Water District (1,665.2 acre-feet net in 1998-2000) and Irvine Ranch Water District (1,000 acre-feet in 2015), sub-agencies of the Municipal Water District of Orange County, and for the San Diego County Water Authority (23,077 acre-feet in 2008 and 15,520 acre-feet net in 2009).

The costs of the SWP conveyance facilities are paid pursuant to Metropolitan's State Water Contract. DWR's Transportation Charge recovers the costs associated with the various aqueduct reaches that deliver project water to the Contractors. The Capital and fixed OMP&R portions of the SWP Transportation Charge recover costs from the Contractors based on the accumulation of allocated costs for each aqueduct reach to each Contractor. Unlike the Delta Water Charge, which is uniform for a unit of Table A water, the allocation of these portions of the Transportation Charge will vary based on the aqueduct segments needed to deliver water to a specific Contractor. The further a Contractor is from the Delta and the greater its capacity in the transportation facilities, the greater its allocation of the Capital and fixed OMP&R Transportation Charges. Payment of the Transportation Charge allocates Contractors the right to use their capacity in the SWP facilities for transportation of SWP or non-SWP water, on a space available basis, under the SWC. A Contractor that participates in the repayment of a particular reach, or segment of the SWP, has already paid the costs of using that reach for the conveyance of water supplies through the Transportation Charge. On average, Metropolitan pays approximately 57 percent of the total fixed transportation costs of the SWP.

Delta Conveyance

In May 2019, Governor Newsom announced actions to begin the environmental review process for a single-tunnel conveyance in the Delta (which has become known as the "Delta Conveyance Project"). At this time, the environmental review process of Delta Conveyance is underway. Metropolitan is working with the administration to advance the single-tunnel project.

DWR has not provided an analysis for how it proposes to categorize the capital financing and operating costs of the Delta Conveyance Project on State Water Contractor Statement of Charges. In fiscal year 2022/23, Metropolitan's planned contribution for Delta Conveyance Project planning activities are budgeted at \$34.5 million in fiscal year 2022/23 and \$64.5 million in fiscal year 2023/24, as explained above. Metropolitan has allocated these costs as transportation costs based on the intended function of the facility, which is to convey water from the Delta.

Conveyance and Aqueduct: CRA

The CRA has also transformed from being source dedicated to delivering only Metropolitan's entitlement of Colorado River water to a delivery system supporting many different supply sources. Specifically, Metropolitan uses the CRA to:

- transport water made available as a result of cooperative programs implemented through agreements with other water agencies, either in the year made available or in a subsequent year as intentionally-created surplus from Lake Mead storage to its service area;
- recharge water in a groundwater basin so that it can subsequently plan to recover it for delivery to Metropolitan's service area; and
- exchange water with and deliver water in advance to other water agencies.

When Metropolitan conveys water made available as a result of cooperative programs implemented through agreements with other water agencies, to recharge water and subsequently recover it, or to exchange water with or deliver water in advance to other agencies, it is by definition using the CRA as a transportation facility. The ability to convey such water through the CRA facilities enhances Metropolitan's operational flexibility and contributes to regional system reliability for the benefit of all member agencies. Metropolitan's total calendar year CRA water management activities from 2010 through 2020 are shown in Table 13.

Table 13: CRA Water Management Activities in Acre-Feet, CY 2010 through 2020

CRA Water Management Activities--Acre-Feet								
	(a)	(b)	(c)	(d)	(e)	(f)	(g) = (a) / (f)	= ((f) - (a)) / (f)
				Other, including	MWD			
	Priority 4 & 5	IID/MWD	PVID + Bard**	Storage (to)/from	Exchange w SDCWA	Total Net Diversion	Priority 4 & 5 to Total	Non Priority 4 and 5 to Total
2010	815,525	97,000	148,600	(113,571)	151,507	1,099,061	74.2%	25.8%
2011	485,178	99,940	122,200	(151,571)	143,243	698,990	69.4%	30.6%
2012	467,166	93,677	73,700	(85,285)	186,861	736,119	63.5%	36.5%
2013	545,087	98,307	32,750	156,315	180,256	1,012,715	53.8%	46.2%
2014	484,937	84,305	43,010	383,959	180,123	1,176,334	41.2%	58.8%
2015	616,685	101,105	94,477	187,311	179,347	1,178,925	52.3%	47.7%
2016	613,491	90,374	126,383	(11,503)	178,278	997,023	61.5%	38.5%
2017	590,021	105,000	121,689	(319,009)	179,326	677,027	87.1%	12.9%
2018	663,915	105,000	95,752	(183,305)	207,746	889,108	74.7%	25.3%
2019	610,573	105,000	44,477	(460,154)	237,711	537,607	113.6%	-13.6%
2020	721,720	105,000	49,933	(331,235)	270,200	815,618	88.5%	11.5%
Total	2,797,893	1,084,708	903,038	(136,659)	2,094,598	6,743,578	41.5%	58.5%

(a) Use by holders of Indian and Miscellaneous present perfected rights and use by holders of Priorities 1, 2, and 3b above 420,000 acre-feet absent the Metropolitan-PVID Land Management, Crop Rotation, and Water Supply Program have been deducted from the Priority 4 supply of 550,000 acre-feet.

In the 11 calendar years ending 2020, approximately 42 percent of the CRA diversions to Metropolitan represent Metropolitan's entitlements under the Seven Party Agreement system. The remaining 58 percent represents volumes of Colorado River water moved through other programs. Metropolitan periodically transports water for Tijuana, Mexico through the CRA. Recent amounts are 316 acre-feet in calendar year 2018, 706 acre-feet in 2019, and 1,502 acre-feet in 2020.

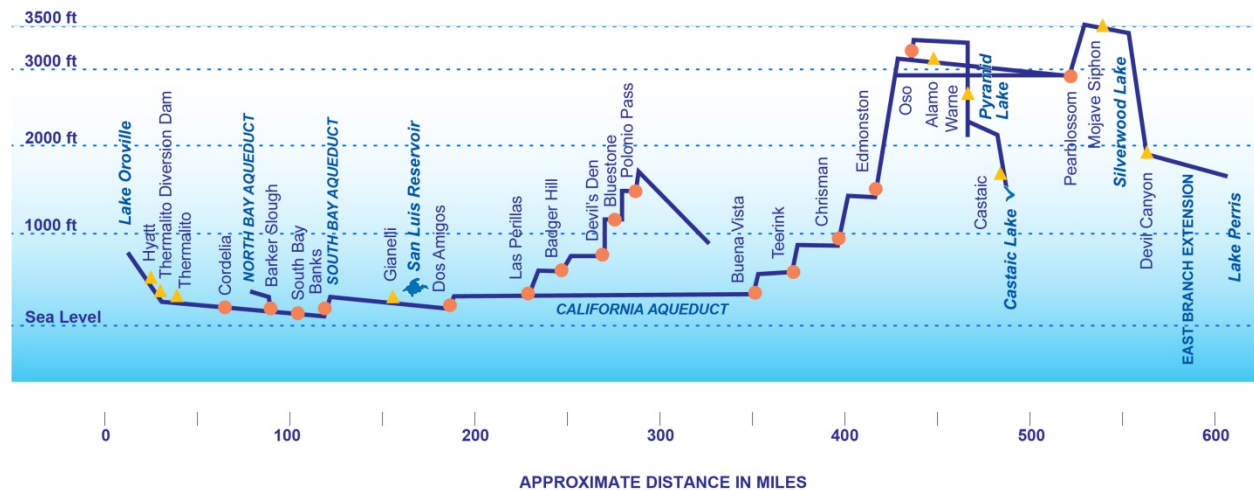
With regard to use as a transportation facility, the CRA differs from the SWP's California Aqueduct in that the capacity of the CRA is uniform through its entire length. The CRA was designed to move a relatively uniform volume of water through its entire length, and Metropolitan relies on the entire length to move water. There are no "reaches", or segments of the aqueduct, that are associated with deliveries to take-out points. The 4 regulating reservoirs are small, so water cannot be "batched" like the SWP, where pumps are cycled on and off to take advantage of cheaper time periods of the day to use electricity. Unlike the SWP, each CRA pump is uniformly sized at 225 cfs; none are variable speed pumps. This means the pumps are either operating at 225 cfs of capacity or are off at 0cfs.

The costs of the CRA itself are paid by Metropolitan directly, as it operates the CRA. Metropolitan incurs capital and operations and maintenance expenditures to support the CRA activities. The costs of the CRA activities include labor, materials and supplies, outside services to provide repair and maintenance, and professional services. The CRA activities benefit from Water System Operations support services and management supervision, as well as Administrative and General activities of Metropolitan. Metropolitan finances past, current and future capital improvements on the CRA, and capitalizes those improvements as assets. The costs of Metropolitan's capital financing activities are apportioned to operational functions, such as conveyance and aqueduct.

Conveyance and Aqueduct: SWP Power

In addition to the charges for supply (the Delta Water Charge capital and OMP&R) and Transportation (Transportation Capital and OMP&R), DWR also charges for the power needed to deliver project water throughout the system. Two charges recover these power costs: the variable OMP&R portion of the Transportation Charge (Variable Charge) and the Off-Aqueduct Power Facilities (OAPF) charge. Because the State Water Contracts are cost recovery contracts, DWR invoices Contractors on an estimated basis for any calendar year, and then provides credits in later years once cost true-ups are finished.

Figure 14: Pumping Lift and Recovery Generation Facilities, SWP



The Variable Charge includes the annually estimated cost of purchased power including capacity and energy, cost of SWP power generation facilities, program costs to offset annual fish losses at the Banks Pumping Plant, purchased transmission services, and credits for sales of ancillary services and excess SWP system power sales. The various lifts and recovery generation facilities of the SWP are shown in Figure 14; the orange circles indicate pumps to lift water, and the yellow triangles indicate recovery generation facilities.

The Variable Charge is calculated on the basis of the energy required to pump an acre-foot of water to its take-out point multiplied by the system energy rate, less energy from the recovery generation plants. The system energy rate is a system-wide average rate calculated as the net cost of energy--total costs less revenues--divided by the net energy required to pump all water. That rate is applied to each acre-foot of water delivered to SWP customer based on the power required to pump the water to designated delivery points on the system. DWR can adjust the system energy rate as the calendar year progresses in order to reflect actual costs.

The OAPF charge recovers only ongoing environmental remediation costs of power generation facilities not on the aqueduct, namely Reid Gardner Unit 4, and is negligible at this time.

The SWP uses low-cost hydroelectric and recovery generation resources, but they only provide about 50 percent of the SWP energy needs in an average water year. The SWP relies on the wholesale market and contractual resources with exposure to market price volatility for as much as 30 to 35 percent of its needs, using other contractual resources to fill in the difference.

The SWP energy required to move water to Metropolitan is related to the transportation on the East Branch through Devil Canyon and on the West Branch through Castaic. Because Metropolitan moves the largest amount of water on the SWP and Metropolitan's delivery points on the East and West Branch are at or near the southern extreme of the SWP, Metropolitan pays approximately 70 percent of the SWP power costs. The cost of power per acre-foot to Metropolitan's delivery points on the East and West Branches are shown in Table 14.

Table 14: Cost of SWP Power for Metropolitan Terminal Delivery Points, \$ per Acre-Foot

	CY 2017 DWR	CY 2018 DWR	CY 2019 DWR	CY 2020 DWR	CY 2021 Estimated	CY 2022 Estimated	CY 2023 Estimated
East Branch	\$149.60	\$173.92	\$157.28	\$171.47	\$287.46	\$369.32	\$307.83
West Branch	\$148.70	\$161.50	\$144.89	\$167.40	\$274.45	\$395.45	\$329.61

The SWP energy costs are impacted by two factors. First, the annual hydrology, secondly the energy policies of the state of California. The SWP has invested heavily in hydroelectric power generation facilities. The unit cost of operating the power facilities declines as the amount of available water increases. The SWP is acquiring renewable resources, primarily solar to date, to meet its obligation to reduce greenhouse gas emissions. The SWP energy costs are also impacted by the increasing cost of using the California Independent System Operator's (CAISO) grid to deliver power from its generating sources and the wholesale power market to its pumping loads. The SWP does not own high voltage transmission facilities and must use the CAISO grid to move power. Finally, the SWP has an obligation to acquire and surrender emissions allowances for the generating facilities the SWP owns, primarily the Lodi Energy Center.

Conveyance and Aqueduct: CRA Power

Metropolitan operates five pumping plants on the CRA, which are shown in Figure 15. Water enters the aqueduct system from Lake Havasu at the Whitsett Intake Pumping Plant (Intake). It is then pumped to its highest elevation of 1,807 feet above sea level at the Hinds Pumping Plant (Hinds), which is about 126 miles west of Intake. Five pumping plants lift the water a total of 1,617 feet to the Hinds Pumping Plant. From Hinds, the water flows 116 miles by gravity to Lake Mathews.

Metropolitan currently has four basic sources of power available to meet CRA energy requirements: Hoover Power, Parker Power, wholesale purchases from inside and outside of the California Independent System Operator (CAISO). For wholesale power purchases within the CAISO, the standard index is South-of-Path 15 for southern California (SP15) to indicate CAISO power prices, whereas wholesale power purchases outside of CAISO utilize the MEAD bi-lateral index. MEAD substation is an import interconnection point for power into CAISO and can be utilized by Metropolitan to import power for the CRA from entities throughout the western United States. For budgeting purposes, it is assumed that Metropolitan buys supplemental power at forecasted SP15 rates.

Under a contract between the United States, Department of Energy, Western Area Power Administration, and Metropolitan, Metropolitan currently has a right to approximately 250 megawatts (MW) of capacity at the Hoover Dam power plant. Metropolitan has an annual firm energy entitlement of 1,291,227 megawatt-hours (MWh). The cost charged to Metropolitan for Hoover power is based on the revenue required by the U.S. Bureau of Reclamation to operate and maintain the power plant. This source of power has historically been at a lower cost than power purchased at market rates.

Metropolitan funded the total cost of construction of Parker Dam and incidental facilities, and 50 percent of the construction cost of the Parker Power plant. In consideration for this funding, Metropolitan is entitled in perpetuity to 50 percent of the capacity and energy of the four Parker generating units, which is approximately 54 MW of capacity. Parker power is also cost-based.

Figure 15: Metropolitan CRA Pumping Plants

Metropolitan's current basic power resource mix comprised of generation from Hoover and Parker dams is very cost effective but is not enough to provide power supply to pump Metropolitan's Colorado River water supplies in all years. For that reason, Metropolitan is required to purchase additional or supplemental power to transport Colorado River water supplies in some years. As a result, Metropolitan requires any party seeking to wheel non-Metropolitan water through its CRA to purchase, or arrange for Metropolitan to purchase, the power supplies required to pump that water. Any Colorado River water that is pumped through Metropolitan's CRA is diverted above Parker Dam and cannot generate energy for Metropolitan's use at the Parker Dam Power plant. To compensate for this loss, an additional 32 kilowatt-hours per acre-foot are required to make Metropolitan whole for undertaking to pump non-Metropolitan water through the CRA that would otherwise have flowed through the Parker Power plant. In total, 2,032 kilowatt-hours (or 2.032 MWh) of energy must be provided to Metropolitan to convey each acre-foot of non-Metropolitan water supplies through the CRA.

Supplemental power can be purchased to pump non-Metropolitan water through the CRA. The market rate for electric energy prices is regularly tracked and published for various regions in California. Metropolitan uses the CAISO Open Access Same-time Information System (OASIS) Day Ahead Locational Marginal Price as reflective of the supplemental power costs for electric energy used for its pumping plants on the CRA. The regional index applicable to energy sold for use on the CRA is designated as South-of-Path 15, or SP15, and is reflective of Southern California market energy prices.

Any party seeking to pump non-Metropolitan water through the CRA would have to purchase, or arrange for Metropolitan to purchase on its behalf, supplemental power. The market costs for purchases of power for the CRA are reflected in the CAISO OASIS Day Ahead Locational Marginal Price. Because Metropolitan utilizes the pumping capacity on the CRA for its own water supplies during off-peak hours to minimize its costs, the pumping of non-Metropolitan wheeled water would occur during on-peak hours and the on-peak price index published on the CAISO OASIS Day Ahead Locational Marginal Price is indicative of the price that would be paid to pump non-Metropolitan water.

Table 15: Cost of CRA Power Sources, \$ per Megawatt-hour (MWh)

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
Hoover ¹	\$17.86	\$18.46	\$18.33	\$17.64	\$15.76
Parker ¹	\$15.40	\$14.38	\$17.67	\$18.34	\$15.86
SP15, off-peak ²	\$26.48	\$28.27	\$38.52	\$27.29	\$35.73
SP15, on-peak ³	\$33.46	\$38.84	\$49.97	\$31.69	\$46.60
MEAD, off-peak ⁴	\$22.94	\$25.09	\$31.89	\$23.61	\$36.98
MEAD, on-peak ⁵	\$30.25	\$33.16	\$44.31	\$29.01	\$65.89

¹Information from Annual Reports for years 2017, 2018, 2019, 2020 and 2021

²SP15, off-peak is used to determine Metropolitan's off-peak energy costs. The costs were calculated by taking the annual average.

³SP15, on-peak is used to determine the market value of Metropolitan sales of excess energy, if any. SP15, on-peak is also used to determine the pumping costs associated with pumping non-Metropolitan water through the CRA system, unless otherwise provided by contract. The costs were calculated by taking the annual average.

⁴MEAD, off-peak is used to determine Metropolitan's off-peak supplemental energy costs imported at MEAD substation for power outside of the CAISO.

⁵MEAD, on-peak is used to determine Metropolitan's on-peak supplemental energy costs imported at MEAD substation for power outside of the CAISO.

The market value of Metropolitan's sales of excess energy, when not all power supply is needed for the CRA pumps, if any is valued at SP15 index for on and off-peak periods.

Metropolitan from time to time sells excess energy into the wholesale market and realizes revenues, which offset the total cost of energy as reflected in the System Power Rate. If Metropolitan were to deliver additional water through the CRA, these sales become a lost opportunity. The on-peak price index published on the CAISO OASIS Day Ahead Locational Marginal Price is indicative of the price that Metropolitan could realize by selling excess energy.

Table 16: South-of-Path 15 On-Peak Energy Prices (\$/MWh*)

	CY 2017	CY 2018	CY 2019	CY 2020	CY 2021
January	\$ 36.22	\$ 37.09	\$ 42.56	\$ 33.60	\$ 33.22
February	\$ 28.52	\$ 36.84	\$ 72.73	\$ 26.85	\$ 71.09
March	\$ 23.97	\$ 32.39	\$ 35.98	\$ 25.49	\$ 29.91
April	\$ 26.71	\$ 27.69	\$ 24.83	\$ 17.11	\$ 28.04
May	\$ 32.08	\$ 24.12	\$ 20.25	\$ 16.81	\$ 26.59
June	\$ 38.14	\$ 31.45	\$ 24.81	\$ 23.72	\$ 56.06
July	\$ 41.49	\$ 101.04	\$ 35.24	\$ 31.63	\$ 78.89
August	\$ 54.96	\$ 85.22	\$ 36.39	\$ 108.05	\$ 65.08
September	\$ 43.18	\$ 38.32	\$ 40.35	\$ 46.14	\$ 72.09
October	\$ 47.86	\$ 41.09	\$ 35.71	\$ 48.29	\$ 57.89
November	\$ 44.82	\$ 55.50	\$ 37.44	\$ 39.32	\$ 60.14
December	\$ 44.21	\$ 57.26	\$ 37.80	\$ 40.80	\$ 63.40

*MWh = megawatt-hour, or 1,000 kilowatt-hours

The budget assumes all supplement energy purchased at forecasted SP 15 rates.

Metropolitan has an obligation to acquire and surrender emissions allowances for fossil-fuel energy generated out-of-state and imported into California through its 230,000-volt transmission system. Alternatively, Metropolitan can purchase power in California, which already incorporates any necessary emissions allowances, but must pay to use the CAISO transmission network. Metropolitan has contracted with Arizona Electric Power Cooperative (AEPCCO) to provide energy management and scheduling services on a per Megawatt-hour basis. AEPCCO also provides operational services for Metropolitan's CRA transmission system, assuring compliance with federal reliability requirements. Finally, Metropolitan's CRA power system is within the Balancing Authority Area of the CAISO; Metropolitan incurs Grid Management Charges from the CAISO on a per Megawatt-hour basis and may realize a Resource Adequacy obligation depending on its pumping load and available firm resources.

Storage

Storage costs include the capital financing, operating, maintenance, and overhead costs for Diamond Valley Lake, Lake Mathews, Lake Skinner, and five smaller regulatory reservoirs within the Distribution System. Metropolitan's larger storage facilities are operated to provide: (1) emergency storage in the event of an earthquake or similar system outage; (2) drought storage that produces additional supplies during times of shortage; and (3) regulatory storage to balance system demands and supplies and provide for operating flexibility. To reasonably allocate the costs of storage capacity among member agencies, the storage function is categorized into sub-functions of emergency, drought, and regulatory storage.

Table 17: Functional Assignment of Metropolitan Storage Facilities

Storage Facilities	Functional Assignments		
	Emergency	Drought	Regulatory
Diamond Valley Lake	54%	33%	13%
Other Regulatory			100%
Lake Skinner	77%		23%
Lake Mathews	44%		56%
Semi-Tropic		100%	
Arvin-Edison		100%	
CRA Off-Stream		100%	
Groundwater Conjunctive Use		100%	

(a) DVL allocations are based on the 2019 Update of Metropolitan's Emergency Storage Objective, the 2010-2019 DVL Daily Average Available Storage, and the WSO Regulatory Storage White Paper.

(b) Lake Skinner and Lake Matthews allocation percentages are derived from the 2019 Update of Metropolitan's Emergency Storage Objective, and the WSO Regulatory Storage White Paper.

Treatment

This function includes capital financing, operating, maintenance, and overhead costs for Metropolitan's five treatment plants and is considered separately from other costs so that the treatment function may be priced separately.

Distribution

This function includes capital financing, operating, maintenance, and overhead costs for the Distribution System of feeders, canals, pipelines, laterals, and other appurtenant works. The Distribution System facilities are distinguished from Conveyance and Aqueduct facilities at the point of connection to the SWP, Lake Mathews (CRA), and other major turnouts along the CRA facilities. Examples include the Rialto Pipeline; the Etiwanda Pipeline; the Foothill Feeder; the Sepulveda Feeder; the Santa Monica Feeder; the Upper, Middle, and Lower Feeders; and the San Diego Pipelines No. 1, No. 2, No. 3, No. 4, and No. 5.

Demand Management

A separate demand management function has been used to clearly identify the cost of Metropolitan's programs designed to reduce the need to import water, such as conservation, incentives for local resource projects like recycling and desalination, the Future Supply Action Program, and the Stormwater Pilot Program. Demand management is an important part of Metropolitan's resource management efforts. Metropolitan's incentives in these areas contribute to savings for all users of the system in terms of lower capital costs that would otherwise have been required to expand and maintain the system.

Metropolitan increased the emphasis on Demand Management programs after the devastating drought of the early 1990's. Metropolitan's 1996 Integrated Resources Plan identified the Preferred Resource Mix as the resource plan that achieved the region's reliability goal of providing the full capability to meet all retail-level demands during foreseeable hydrologic events, represented the least-cost sustainable resources plan, met the region's water quality objectives, was balanced and diversified and minimized risks, and was flexible, allowing for adjustments should future conditions change.

The Preferred Resource Mix included locally developed water supplies and conservation and recognized that regional participation was important to achieve their development. Additional imported supplies frequently have relatively lower development costs but can create a large cost commitment for regional infrastructure to transport and store those imported supplies. On the other hand, local projects, like those designed to recycle water or increase groundwater production, may have higher development costs but require little or no additional infrastructure to distribute water supplies to customers. This trade-off between relatively lower-cost imported supplies requiring large regional infrastructure investments and relatively higher-cost local supply development requiring less additional local infrastructure was an important consideration in the development of the Preferred Resource Mix. A strategy of aggressively investing in imported water supply would lead to higher costs for the region because of the larger investments required in infrastructure.

Metropolitan's 1996 Integrated Resource Plan included an analysis of future demand scenarios and their effect on infrastructure requirements. A comparison of capital infrastructure costs with and without Demand Management Programs showed a difference of around \$2 billion. In other words, the ability to meet demand through local Demand Management Programs resulted in an anticipated \$2 billion in capital cost savings. A sensitivity analysis further showed that a 5 percent increase or decrease in demand had a correlative effect on when Metropolitan would need to incur capital infrastructure costs. Since then, Metropolitan has seen the benefits materialize. Metropolitan has been able to defer the need to build additional infrastructure such as the Central Pool Augmentation Project tunnel and pipeline, completion of San Diego Pipeline No. 6, the West Valley Interconnection, and the completion of the SWP East Branch expansion. Overall, the decrease in demand resulting from these projects is estimated to defer the need for projects between four and twenty-five years at a savings of approximately \$3 billion in 2019 dollars.

Since 1996, the Integrated Resources Plan has been updated three times, in 2004, 2010, and 2015, with a fourth update for 2020 in process, reaffirming long-term sustainability of the region's water supply through implementation of conservation and local resource development. Based on the 1996 IRP and its updates, Metropolitan determined Demand Management Programs decrease and avoid operating and capital maintenance and improvement costs, such as costs for repair of and construction of additional or expanded water conveyance, distribution, and storage facilities. Investments in demand side management programs like conservation, water recycling, and groundwater recovery help defer the need for additional conveyance, distribution, and storage facilities. The programs also free up capacity in Metropolitan's system to convey both Metropolitan water, and water from other non-Metropolitan sources.

Metropolitan allocated demand management costs to the transportation operational functions since the unbundling of its rate structure in 2001, which was implemented in January 2003. The functionalization of the costs was supported by the 1996 Integrated Resources Plan's (IRP) 25-year capital and resource planning, which expired this year. SDCWA challenged that allocation in court beginning in June 2010, alleging the Water Stewardship Rate could not be collected as part of Metropolitan's pre-set wheeling rate or the transportation rates charged under the SDCWA-Metropolitan Exchange Agreement. On June 21, 2017, the Court of Appeal entered a decision. The appellate court ruled Metropolitan may collect State Water Project transportation costs as part of Metropolitan's System Access Rate and System Power Rate in the wheeling rate and the Exchange Agreement price. However, the appellate court found the administrative record before it for the rates in calendar years (CYs) 2011 through 2014 did not support Metropolitan's inclusion of the Water Stewardship Rate in the wheeling rate or the transportation rates charged under the Exchange Agreement, but the opinion did not address the allocation in subsequent years based on a different record.

On September 21, 2021, the Court of Appeal issued a new appellate decision in which it interpreted its 2017 appellate decision. The Court of Appeal clarified that its 2017 decision regarding the Water Stewardship Rate was not limited to 2011-2014, and that it prohibits the inclusion of the Water Stewardship Rate in transportation rates charged under Metropolitan's wheeling rate and in the price term of the SDCWA-Metropolitan Exchange Agreement from 2015 forward. Accordingly, staff removed all Demand Management Cost Recovery Alternatives that include transportation rate elements for the Board Workshop on November 8, 2021. On November 23, 2021, the Metropolitan Board of Directors directed staff to incorporate 100 percent of demand management costs into the Supply rate elements the proposals for rates and charges.

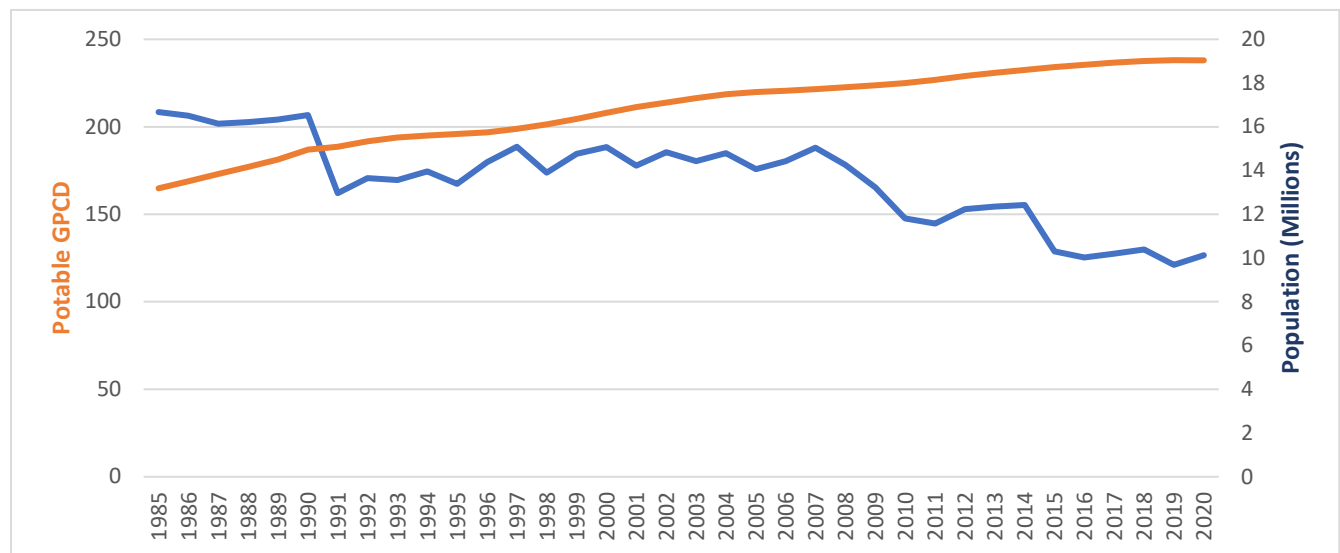
Accordingly, all demand management costs are functionalized as supply and collected on the Tier 1 and Tier 2 supply rates. However, because there are no projected Tier 2 transactions in the biennium, the demand managements costs are allocated entirely to Tier 1.

Demand Management: SB-60

In September 1999, Governor Gray Davis signed SB 60 (Hayden) into law. SB 60 amended the Metropolitan Water District Act to direct Metropolitan to increase “sustainable, environmentally sound, and cost-effective water conservation, recycling, and groundwater storage and replenishment measures.” SB 60 also requires Metropolitan to hold an annual public hearing to review its urban water management plan for adequacy in achieving an increased emphasis on cost-effective conservation and local water resource development, and to invite knowledgeable persons from the water conservation and sustainability fields to these hearings. Finally, Metropolitan is required to annually prepare and submit to the Legislature a report on its progress in achieving the goals of SB 60. SB 60 specifically indicated that no reimbursement was required by legislation because Metropolitan, as a local agency, has the authority to levy service charges, fees or assessments sufficient to pay for the program or level of service mandated by SB 60. No other water utility in California, public or private, has been specifically identified by the state Legislature and directed to pursue water conservation and local water resource development.

In fiscal year 2020/21 alone, Metropolitan’s service area achieved 1.7 million acre-feet of water savings from conservation, recycled water and groundwater recovery programs. Figure 16 below compares population in millions on the right axis and gallons per capita daily (GPCD) water use on the left axis. While the population has increased to approximately 19 million in 2020, GPCD water use has decreased to approximately 127 GPCD. These reductions derived from programs for which Metropolitan paid incentives, as well as code-based conservation achieved through legislation, building and plumbing codes and ordinances, and reduced consumption resulting from changes in water pricing. Cumulatively, since 1982 Metropolitan has invested \$1.5 billion and Metropolitan’s service area has achieved 7.6 million acre-feet of water savings. These water savings reduce per capita water demands, allowing Metropolitan to serve a growing population with existing supplies and without constructing additional facilities to import water.

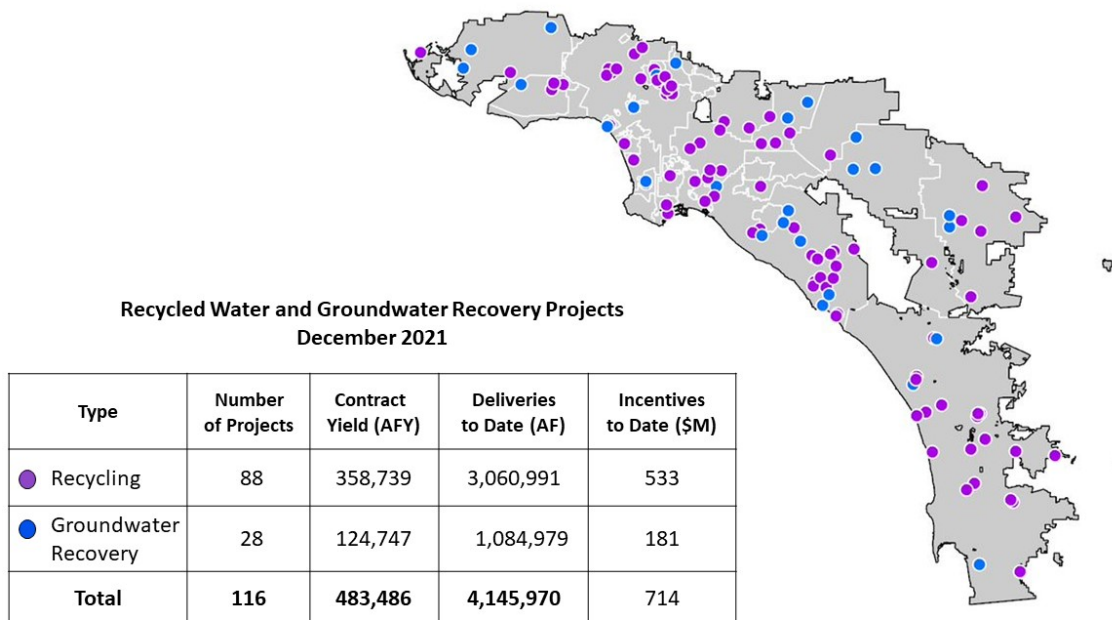
Figure 16: Population and Per Capita Daily Water Use



Metropolitan's Conservation Credits Program provides incentives to residents and businesses for use of water-efficient products and qualified water-saving activities. Rebates have been provided to residential customers for turf removal and purchasing of high-efficiency clothes washers and toilets. Rebates are also provided to businesses and institutions for water-saving devices. In fiscal year 2020/21, the Conservation Credits Program achieved 1.1 million acre-feet of saved water through new and existing conservation initiatives funded with incentives and maintained through plumbing codes. Cumulatively, through fiscal year 2020/21 the Conservation Credits Program has achieved 3.5 million acre-feet of water savings.

Metropolitan provides financial incentives through its Local Resources Program for the development and use of recycled water and recovered groundwater for the participants. The Local Resources Program consists of 88 recycling projects and 28 groundwater recovery projects located throughout Metropolitan's service area, of which 116 projects are in operation, as shown in Figure 17. From the Local Resources Program's inception in 1982 through FY 2020/21, Metropolitan has paid out about \$528 million in incentives to produce about 3.0 million acre-feet of recycled water. Metropolitan also provided approximately \$181 million to produce 1,099,000 acre-feet of recovered degraded groundwater for municipal use.

Figure 17: Local Resources Program Projects



Demand Management: SB X7-7, AB 1668, and SB 606

SB X7-7 mandated a new requirement to lower urban per capita water use 20 percent by December 31, 2020. Enacted by the state Legislature and signed into law by Governor Schwarzenegger as part of a historic package of water reforms in November 2009, the "20x2020" plan gave local communities flexibility in meeting this target while accounting for previous efforts in conservation and recycling. The Legislature found that reducing water use through conservation and regional water resources management would result in protecting and restoring fish and wildlife habitats, reducing dependence on water through the Delta, and providing significant energy and environmental benefits. Metropolitan coordinated closely with its member agencies to achieve these targets both at a retail agency level in compliance with legislative requirements, and as a region, in achieving a true 20 percent reduction in per-capita water use.

AB 1668 and SB 606 build on Governor Brown's efforts to make water conservation a way of life in California and create a new foundation for long-term improvements in water conservation and drought planning. These bills establish guidelines for efficient water use and a framework for the implementation and oversight of the new standards, which must be in place by 2022. The two bills strengthen the state's water resiliency in the face of future droughts with provisions that include:

- Establishing water use objectives and long-term standards for efficient water use that apply to urban retail water suppliers; comprised of indoor residential water use, outdoor residential water use, commercial, industrial and institutional (CII) irrigation with dedicated meters, water loss, and other unique local uses.
- Providing incentives for water suppliers to recycle water.
- Identifying small water suppliers and rural communities that may be at risk of drought and water shortage vulnerability and provide recommendations for drought planning.
- Requiring both urban and agricultural water suppliers to set annual water budgets and prepare for drought.

Metropolitan coordinates closely with its member agencies to achieve these provisions both at a retail agency level in compliance with legislative requirements and as a region.

Administrative and General (A&G)

These costs occur in each of the Groups' departmental budgets and reflect overhead costs that cannot be directly functionalized. The COS process allocates A&G costs to the operational functions based on the labor costs of non-A&G dollars allocated to each function.

Hydroelectric

Hydroelectric costs include the capital financing, operating, maintenance, and overhead costs incurred to operate the 16 small hydroelectric plants located throughout the water distribution system.

Functional Assignment Bases

The functional assignment bases are used to assign costs that make up the Revenue Requirement into the various operational functions. The primary functional assignment bases used in the COS process are listed below.

- Direct assignment
- Net Book Value plus Work-In-Progress
- Prorating in proportion to other allocations
- Manager analysis
- Prior year results

Schedule 3 summarizes the total dollar amounts assigned, including the absolute value of Revenue Offsets (rather than showing Revenue Offsets as a reduction to costs), using each of the above types of assignment bases, for FY 2022/23 and FY 2023/24. It assigns both total Revenue Requirements before Revenue Offsets and Revenue Offsets by summing the items before assigning dollars to the primary functional assignment bases. To ensure the correct amount has been assigned, the Revenue Requirement is restated at the bottom portion of each fiscal year chart.

Schedule 3: Summary of Functional Assignments by Type of Assignment Basis, FY 2022/23 and FY 2023/24

Primary Functional Assignment Bases	Estimated for FY 2023	% of Assigned Dollars
Direct Assignment	\$ 1,256,435,150	58.0%
Net Book Value	469,868,579	21.7%
Pro-Rating	109,299,564	5.0%
Manager Analysis	161,954,550	7.5%
Prior-Year Results	103,632,571	4.8%
Other	66,659,522	3.1%
Total Dollars Assigned	\$ 2,167,849,937	100.0%
Portion of Above Assignment Relating to:		
Revenue Requirements before Offsets	1,922,706,963	
Revenue Offsets	245,142,974	
Total Dollars Assigned	\$ 2,167,849,937	
Net Revenue Requirements		
Revenue Requirements before Offsets	1,922,706,963	
Revenue Offsets	(245,142,974)	
Net Revenue Requirements	\$ 1,677,563,989	

Totals may not foot due to rounding

Primary Functional Assignment Bases	Estimated for FY 2024	% of Assigned Dollars
Direct Assignment	\$ 1,303,555,881	58.2%
Net Book Value	482,150,752	21.5%
Pro-Rating	116,453,480	5.2%
Manager Analysis	168,366,342	7.5%
Prior-Year Results	106,640,477	4.8%
Other	64,100,985	2.9%
Total Dollars Assigned	\$ 2,241,267,917	100.0%
Portion of Above Assignment Relating to:		
Revenue Requirements before Offsets	2,005,495,873	
Revenue Offsets	235,772,044	
Total Dollars Assigned	\$ 2,241,267,917	
Net Revenue Requirements		
Revenue Requirements before Offsets	2,005,495,873	
Revenue Offsets	(235,772,044)	
Net Revenue Requirements	\$ 1,769,723,828	

Totals may not foot due to rounding

Each of the primary assignment bases is discussed in detail in the remainder of this section. Discussion of each assignment basis includes examples of costs assigned using that particular basis.

(a) Direct assignment

Direct assignment makes use of a clear and direct connection between a revenue requirement and the function being served by that revenue requirement. Directly assigned costs typically include: purely administrative costs; and certain distribution and conveyance departmental costs. Examples of costs that are directly assigned to specific functional categories are given below.

- Water Conveyance and Distribution, Desert Region Unit departmental O&M costs are directly assigned to Conveyance and Aqueduct, CRA.
- Transportation Capital and OMP&R charges for State Water Contract are directly assigned to Conveyance and Aqueduct SWP.

(b) Net Book Value Plus Work-In-Progress

Capital financing costs, including debt service and funding replacements and refurbishments from operating revenues, comprise about 22 percent in FY 2022/23 and 22 percent in FY 2023/24 of Metropolitan's annual revenue requirements. One approach would be to assign payments on each debt issue in direct proportion to specific project expenditures made using bond proceeds and assign PAYGO expenditures in a similar fashion. However, this approach would result in a high degree of volatility in relative capital cost assignments from year to year.

The approach used in this analysis is one widely used in water industry cost of service studies. Debt-related costs and PAYGO are allocated on the basis of the net book values of fixed assets plus work in progress for assets under construction within each functional category. This approach produces capital cost assignments that are consistent with the functional distribution of assets. Also, since the assignment basis is tied to fixed asset records rather than debt payment records, the resulting assignments are more reflective of the true useful lives of assets. Use of net book values as an assignment basis provides an improved matching of functional costs with asset lives. A listing of fixed asset net book values summarized by asset function is shown in Schedule 4 for FY 2022/23 and FY 2023/24.

Schedule 4: Net Book Value and Work in Progress Assignment Base, FY 2022/23 and FY 2023/24

Functional Categories	NBV for FY 2023	% of Total NBV
Source of Supply	\$ 354,980,855	4.0%
Conveyance & Aqueduct	1,947,472,918	21.7%
Storage	2,093,641,553	23.4%
Treatment	2,250,004,915	25.1%
Distribution	1,637,682,794	18.3%
Administrative & General	545,917,527	6.1%
Hydro-electric	134,462,445	1.5%
Total Fixed Assets Net Book Value	\$ 8,964,163,008	100.0%

Totals may not foot due to rounding

Functional Categories	NBV for FY 2024	% of Total NBV
Source of Supply	\$ 355,024,209	4.0%
Conveyance & Aqueduct	1,932,904,257	21.6%
Storage	2,073,708,957	23.2%
Treatment	2,228,514,685	24.9%
Distribution	1,666,619,997	18.6%
Administrative & General	558,022,939	6.2%
Hydro-electric	127,880,257	1.4%
Total Fixed Assets Net Book Value	\$ 8,942,675,301	100.0%

Totals may not foot due to rounding

In most instances, the cost of service process uses net book value plus work-in-progress to develop assignment bases for debt service costs and PAYGO. Examples of revenue requirements assignments using these net book value and work-in-progress assignments follow.

- Revenue Bond Debt Service: assigned using Net Book Value plus Work In Progress.
- Annual deposit of operating revenue to replacement and refurbishment fund: assigned using Net Book Value plus Work in Progress.

To calculate the relative percentage of fixed assets in each functional category, Metropolitan staff conducted a detailed analysis of historical accounting records and built a database of fixed asset accounts that contains records for all facilities currently in service and under construction. Each facility was sorted into the major operational function that best represented the facilities primary purpose and was then further categorized into the appropriate sub-functions described earlier.

(c) Pro-rating in proportion to other assignments

Utility COS studies frequently contain line items for which it would be difficult to identify an assignment basis specific to that line item. In these cases, the most logical assignment basis is often a pro-rata blend of assignment results calculated for other revenue requirements in the same departmental group, or general category. Reasonable pro-rata allocations are based on a logical nexus between a cost and the purpose which it serves. For example: Human Resources Section costs are allocated using all labor costs, since Human Resources spends its time and resources attending to the labor force.

(d) Manager analyses

The functional interrelationships of some organizational units are developed with extensive input from the organization's managers. In these cases, managers use their firsthand knowledge of the organization's internal operations to generate a functional analysis of departmental costs. For example, Fleet Services Unit costs are assigned to treatment, storage, conveyance, and distribution based on vehicle count by Section and Unit.

(e) Prior year results

If available, accounting data for the prior fiscal year by appropriation are used to functionalize Departmental O&M costs for several units or sections. Many of the appropriations parallel the operational functions used in the COS analysis. For example, Conveyance and Distribution Eastern and Western Units' costs are assigned to distribution, hydroelectric, and conveyance functions based on the prior year accounting data by appropriation.

A summary of the functional assignment results is shown in Schedules 5 through 8. Schedules 5 and 6 provide a breakdown of the revenue requirement for FY 2022/23 and FY 2023/24, respectively, into the major operational functions and sub-functions prior to the redistribution of administrative and general costs. Schedules 7 and 8 serve as a cross-reference summarizing how the budget line items are distributed among the operational functions for FY 2022/23 and FY 2023/24, respectively. The largest functional component of Metropolitan's revenue requirement is the Conveyance and Aqueduct function, which constitutes approximately 39.1 percent of the assigned revenue requirement in FY 2022/23 40.1 percent in FY 2023/24. Schedule 9 summarizes the budget line items distributed among the operational functions by sub-function for both FY 2022/23 and FY 2023/24.

Functional Assignment of Revenue Offsets

Revenue Offsets are assigned to the operational functions based on why these revenues were generated. For example, ad valorem property tax revenues are assigned to the General Obligation bonds debt service into Treatment and Distribution based on Net Book Values. The remaining property tax revenues are assigned proportionate to SWP costs. Hydroelectric sales revenues are assigned to the Hydroelectric function. Interest income is assigned to the operational functions proportional to Revenue Requirements. Miscellaneous revenues and fees are functionalized as Administrative and General, and thus are assigned to the operational functions proportional to Labor Costs.

Schedule 5: Revenue Requirement (by function), FY 2022/23

Functional Categories	Fiscal Year Ending 2023	% of Assigned Dollars (1)
Source of Supply		
CRA	\$ 56,409,172	3.4%
SWP	153,296,452	9.1%
Other Supply	31,837,822	1.9%
Total	241,543,445	14.4%
Conveyance & Aqueduct		
CRA		
CRA Power	113,877,508	6.8%
CRA All Other	66,517,700	4.0%
SWC		
SWC Power	155,002,944	9.2%
SWC All Other	250,301,773	14.9%
Other Conveyance & Aqueduct	71,117,758	4.2%
Total	656,817,683	39.1%
Storage		
Storage Costs Other Than Power		
Emergency	55,588,134	3.3%
Drought	52,864,152	3.1%
Regulatory	27,062,362	1.6%
Storage Power	(679,733)	0.0%
Total	134,834,915	8.1%
Treatment		
Jensen	51,775,954	3.1%
Weymouth	52,883,401	3.1%
Diemer	59,478,542	3.5%
Mills	29,813,392	1.8%
Skinner	50,634,383	3.0%
Total	244,585,672	14.6%
Distribution	193,378,514	11.5%
Demand Management	62,405,068	3.7%
Hydro-electric	280,370	0.0%
Administrative & General	143,718,322	8.6%
Total Functional Assignment:	\$ 1,677,563,989	100.0%
(1) Given as a percentage of the absolute values of total dollars Assigned. Totals may not foot due to rounding		

Schedule 6: Revenue Requirement (by function), FY 2023/24

Functional Categories	Fiscal Year Ending 2024	% of Assigned Dollars (1)
Source of Supply		
CRA	\$ 60,473,562	3.4%
SWP	158,301,591	8.9%
Other Supply	33,036,911	1.9%
Total	251,812,064	14.2%
Conveyance & Aqueduct		
CRA		
<i>CRA Power</i>	94,748,625	5.4%
<i>CRA All Other</i>	68,725,524	3.9%
SWC		
<i>SWC Power</i>	195,345,837	11.0%
<i>SWC All Other</i>	279,473,310	15.8%
Other Conveyance & Aqueduct	71,352,888	4.0%
Total	709,646,184	40.1%
Storage		
Storage Costs Other Than Power		
<i>Emergency</i>	55,910,310	3.2%
<i>Drought</i>	49,010,617	2.8%
<i>Regulatory</i>	27,606,203	1.6%
Storage Power	(545,067)	0.0%
Total	131,982,063	7.5%
Treatment		
Jensen	53,304,096	3.0%
Weymouth	54,513,870	3.1%
Diemer	61,345,860	3.5%
Mills	30,562,197	1.7%
Skinner	51,516,009	2.9%
Total	251,242,032	14.2%
Distribution	199,988,286	11.3%
Demand Management	62,136,367	3.5%
Hydro-electric	2,145,085	0.1%
Administrative & General	160,771,748	9.1%
Total Functional Assignment:	\$ 1,769,723,828	100.0%
(1) Given as a percentage of the absolute values of total dollars Assigned. Totals may not foot due to rounding		

Schedule 7: Operational function Revenue Requirements (by budget line item), FY 2022/23

Fiscal Year Ending 2023	Source of Supply	Conveyance & Aqueduct	Storage	Treatment	Distribution	Demand Management	Hydro Electric	Administrative & General	Total \$ Functionalized
Departmental Operations & Maintenance									
Office of General Manager	\$ 509,848	\$ 1,140,285	\$ 233,318	\$ 1,797,083	\$ 1,506,409	\$ 140,304	\$ 85,289	\$ 4,162,987	\$ 9,575,522
Water Systems Operations	14,053,888	45,552,499	2,271,460	108,595,255	88,475,761	-	5,010,618	6,111,647	270,071,127
Water Resources Management	16,487,583	54,224	-	-	416,996	6,564,813	-	37,957	23,561,574
Engineering Services	1,845,697	10,113,859	11,074,184	11,687,854	8,497,703	93,690	697,992	2,834,129	46,845,108
Bay Delta Initiatives	-	11,461,862	-	-	-	-	-	-	11,461,862
Business Technology	3,192,586	7,140,277	1,460,997	11,253,041	9,432,889	878,558	534,067	45,551,800	79,444,215
Real Property	1,738,199	9,139,561	2,270,873	-	3,437,148	-	-	11,449,683	28,035,463
Human Resources	1,020,523	2,282,419	467,014	3,597,081	3,015,262	280,835	170,717	4,264,440	15,098,290
Office of the Chief Financial Officer	-	-	-	-	-	-	-	28,405,697	28,405,697
External Affairs	-	-	-	-	-	2,732,349	-	23,275,296	26,007,645
General Counsel	-	-	-	-	-	-	-	15,833,730	15,833,730
General Auditor	-	-	-	-	-	-	-	4,599,034	4,599,034
Ethics Office	-	-	-	-	-	-	-	2,662,039	2,662,039
Sustainability, Resilience & Innovation	-	-	-	-	-	-	-	9,831,427	9,831,427
Diversity, Equity & Inclusion	-	-	-	-	-	-	-	1,371,646	1,371,646
Equal Employment Opportunity	-	-	-	-	-	-	-	1,943,227	1,943,227
Total Departmental O&M	38,848,324	86,884,985	17,777,845	136,930,314	114,782,168	10,690,548	6,498,683	162,334,740	574,747,607
General District Requirements									
State Water Contract*	190,552,288	491,156,833	-	-	-	-	-	-	681,709,121
Colorado River Aqueduct Power Costs	-	105,857,041	-	-	-	-	-	-	105,857,041
Supply Programs (cash funded portion)	48,447,861	-	18,211,661	-	-	-	-	-	66,659,522
Demand Management (cash funded portion)	-	-	-	-	-	50,815,317	-	-	50,815,317
Capital Financing	16,589,556	90,905,714	99,537,336	105,544,356	77,856,873	842,109	6,273,715	25,473,811	423,023,470
Other Operating Costs	972,979	2,176,084	445,256	3,429,498	2,874,785	267,751	162,763	4,065,767	14,394,884
Increase/(Decrease) in Required Reserves	-	-	-	-	-	-	-	5,500,000	5,500,000
Total General District Requirements	256,562,684	690,095,672	118,194,253	108,973,854	80,731,659	51,925,178	6,436,479	35,039,578	1,347,959,356
Revenue Offsets	(53,867,563)	(120,162,975)	(1,137,183)	(1,318,496)	(2,135,312)	(210,658)	(12,654,792)	(53,655,995)	(245,142,974)
Net Revenue Requirements	\$ 241,543,445	\$ 656,817,683	\$ 134,834,915	\$ 244,585,672	\$ 193,378,514	\$ 62,405,068	\$ 280,370	\$ 143,718,322	\$ 1,677,563,989

* Includes Delta Conveyance planning costs net of California WaterFix refund

Totals may not foot due to rounding

Schedule 8: Operational function Revenue Requirements (by budget line item), FY 2023/24

Fiscal Year Ending 2024	Source of Supply	Conveyance & Aqueduct	Storage	Treatment	Distribution	Demand Management	Hydro Electric	Administrative & General	Total \$ Functionalized
Departmental Operations & Maintenance									
Office of General Manager	\$ 539,650	\$ 1,206,787	\$ 238,623	\$ 1,910,324	\$ 1,582,168	\$ 152,905	\$ 89,008	\$ 4,262,595	\$ 9,982,060
Water Systems Operations	14,101,482	47,368,047	2,262,491	113,296,460	90,711,578	-	5,156,101	6,289,571	279,185,730
Water Resources Management	17,479,276	56,975	-	-	451,763	6,908,051	-	39,883	24,935,947
Engineering Services	1,835,795	9,820,121	10,968,646	11,323,813	8,514,769	175,277	650,370	2,836,719	46,125,509
Bay Delta Initiatives	-	12,080,310	-	-	-	-	-	-	12,080,310
Business Technology	3,458,287	7,733,553	1,529,186	12,242,088	10,139,142	979,873	570,399	47,229,429	83,881,957
Real Property	1,787,629	9,399,470	2,335,451	-	3,534,893	-	-	11,775,287	28,832,731
Human Resources	1,063,669	2,378,617	470,333	3,765,312	3,118,507	301,381	175,438	4,271,581	15,544,838
Office of the Chief Financial Officer	-	-	-	-	-	-	-	25,316,770	25,316,770
External Affairs	-	-	-	-	-	2,891,442	-	23,788,618	26,680,060
General Counsel	-	-	-	-	-	-	-	15,716,806	15,716,806
General Auditor	-	-	-	-	-	-	-	4,737,939	4,737,939
Ethics Office	-	-	-	-	-	-	-	2,759,274	2,759,274
Sustainability, Resilience & Innovation	-	-	-	-	-	-	-	9,216,241	9,216,241
Diversity, Equity & Inclusion	-	-	-	-	-	-	-	1,426,072	1,426,072
Equal Employment Opportunity	-	-	-	-	-	-	-	2,036,286	2,036,286
Total Departmental O&M	40,265,789	90,043,879	17,804,730	142,537,997	118,052,820	11,408,929	6,641,317	161,703,068	588,458,528
General District Requirements									
State Water Contract*	192,495,249	568,744,742	-	-	-	-	-	-	761,239,991
Colorado River Aqueduct Power Costs	-	85,626,149	-	-	-	-	-	-	85,626,149
Supply Programs (cash funded portion)	52,379,998	-	11,720,987	-	-	-	-	-	64,100,985
Demand Management (cash funded portion)	-	-	-	-	-	49,108,217	-	-	49,108,217
Capital Financing	17,275,568	92,411,266	103,219,347	107,044,197	81,610,541	1,649,426	6,120,239	26,694,659	436,025,242
Other Operating Costs	946,792	2,117,253	418,653	3,351,577	2,775,843	268,265	156,161	3,802,216	13,836,761
Increase/(Decrease) in Required Reserves	-	-	-	-	-	-	-	7,100,000	7,100,000
Total General District Requirements	263,097,607	748,899,410	115,358,988	110,395,774	84,386,384	51,025,907	6,276,400	37,596,875	1,417,037,345
Revenue Offsets	(51,551,332)	(129,297,105)	(1,181,655)	(1,691,739)	(2,450,917)	(298,469)	(10,772,632)	(38,528,195)	(235,772,044)
Net Revenue Requirements	\$ 251,812,064	\$ 709,646,184	\$ 131,982,063	\$ 251,242,032	\$ 199,988,286	\$ 62,136,367	\$ 2,145,085	\$ 160,771,748	\$ 1,769,723,828

* Includes Delta Conveyance planning costs net of California WaterFix refund

Totals may not foot due to rounding

Schedule 9: Revenue Requirement by sub-function and budget line item, FY 2022/23 and FY 2023/24

Fiscal Year Ending 2023	Supply			Conveyance & Aqueduct					Storage				Treatment	Distribution	Demand Mgt.	Hydro	Total
	CRA	SWC	Other	CRA power	CRA other	SWC power	SWC other	Other C&A	Emergency	Drought	Regulatory	Power					
Dept. Operations & Maintenance	9,172,010	15,915,229	13,761,085	3,453,729	52,336,638	-	23,095,346	7,999,272	7,749,864	5,924,522	4,103,459	-	136,930,314	114,782,168	10,690,548	6,498,683	412,412,867
General District Requirements																	
State Water Contract*	-	-	-	-	-	(4,981,305)	90,506,317	-	-	-	-	-	-	-	-	-	165,962,151
Capital	-	80,437,139	-	-	-	-	194,057,356	-	-	-	-	-	-	-	-	-	515,746,970
O&M	-	110,115,149	-	-	-	211,574,465	-	-	-	-	-	-	-	-	-	-	105,857,041
Colorado River Aqueduct Power	-	-	-	105,857,041	-	-	-	-	-	18,211,661	-	-	-	-	-	-	66,659,522
Supply Programs (cash funded portion)	47,197,861	-	1,250,000	-	-	-	-	-	-	-	-	-	-	-	50,815,317	-	50,815,317
Demand Management (cash funded portion)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	397,549,660
Capital Financing Program	-	-	16,589,556	8,252,673	13,094,802	-	6,400,032	63,158,208	47,831,816	28,758,037	22,947,482	-	105,544,356	77,856,873	842,109	6,273,715	10,329,117
Other Operating Costs	229,718	398,606	344,654	86,501	1,310,801	-	578,436	200,346	194,100	148,383	102,773	-	3,429,498	2,874,785	267,751	162,763	
Revenue Offsets	(190,417)	(53,569,672)	(107,473)	(3,772,435)	(224,540)	(51,590,216)	(64,335,715)	(240,068)	(187,646)	(178,451)	(91,353)	(679,733)	(1,318,496)	(2,135,312)	(210,658)	(12,654,792)	(191,486,979)
Admin. & General	8,236,941	22,384,549	4,649,001	957,620	8,708,963	(1,160,641)	30,778,238	5,494,302	796,354	7,719,293	1,840,716	5,090	20,261,858	21,211,160	9,112,470	2,722,409	143,718,322
Net Revenue Requirement	64,646,113	175,681,001	36,486,823	114,835,128	75,226,664	153,842,303	281,080,010	76,612,060	56,384,488	60,583,445	28,903,077	(674,644)	264,847,530	214,589,674	71,517,538	3,002,778	1,677,563,989

* Includes Delta Conveyance planning costs net of California WaterFix refund

Totals may not foot due to rounding

Fiscal Year Ending 2024	Supply			Conveyance & Aqueduct					Storage				Treatment	Distribution	Demand Mgt.	Hydro	Total
	CRA	SWC	Other	CRA power	CRA other	SWC power	SWC other	Other C&A	Emergency	Drought	Regulatory	Power					
Dept. Operations & Maintenance	9,412,719	16,520,056	14,333,014	3,598,625	54,576,937	-	24,118,260	7,750,058	7,602,478	6,128,659	4,073,593	-	142,537,997	118,052,820	11,408,929	6,641,317	426,755,460
General District Requirements																	
State Water Contract*	-	-	-	-	-	(3,654,765)	115,160,127	-	-	-	-	-	-	-	-	-	197,000,320
Capital	-	85,494,959	-	-	-	-	198,687,447	-	-	-	-	-	-	-	-	-	564,239,670
O&M	-	107,000,290	-	-	-	258,551,933	-	-	-	-	-	-	-	-	-	-	85,626,149
Colorado River Aqueduct Power	-	-	-	85,626,149	-	-	-	-	-	11,720,987	-	-	-	-	-	-	64,100,985
Supply Programs (cash funded portion)	51,129,998	-	1,250,000	-	-	-	-	-	-	-	-	-	-	-	49,108,217	-	49,108,217
Demand Management (cash funded portion)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	409,330,584
Capital Financing Program	-	-	17,275,568	8,898,220	13,195,409	-	6,554,298	63,763,339	48,397,633	31,252,283	23,569,430	-	107,044,197	81,610,541	1,649,426	6,120,239	10,034,545
Other Operating Costs	221,327	388,445	337,020	84,617	1,283,299	-	567,106	182,232	178,761	144,107	95,785	-	3,351,577	2,775,843	268,265	156,161	
Revenue Offsets	(290,482)	(51,102,159)	(158,691)	(3,458,985)	(330,120)	(59,551,331)	(65,613,929)	(342,740)	(268,563)	(235,420)	(132,605)	(545,067)	(1,691,739)	(2,450,917)	(298,469)	(10,772,632)	(197,243,849)
Admin. & General	9,156,192	23,968,156	5,002,059	2,309,982	9,413,390	962,964	34,986,615	5,936,095	1,374,727	7,420,608	2,054,846	(2,687)	22,872,054	23,096,982	9,407,954	2,811,810	160,771,748
Net Revenue Requirement	69,629,754	182,269,747	38,038,969	97,058,607	78,138,914	196,308,801	314,459,925	77,288,983	57,285,037	56,431,225	29,661,049	(547,754)	274,114,085	223,085,269	71,544,321	4,956,895	1,769,723,828

* Includes Delta Conveyance planning costs net of California WaterFix refund

Totals may not foot due to rounding

Allocated Costs

In the cost allocation step, functionalized costs are further categorized based on the causes and behavioral characteristics of these costs. An important part of the allocation process is identifying which costs are incurred to meet average demands versus peak demands and which costs are incurred for standby. As with the functional assignment process, the proposed allocation process is consistent with AWWA guidelines, but has been tailored to meet Metropolitan's specific operational structure and service environment.

Two methods are discussed in the AWWA M1 Manual, Principles of Water Rates, Fees and Charges. These two methods are the Commodity/Demand method and the Base/Extra Capacity method.

In the simplest sense, these approaches offer alternative means of distinguishing between utility costs incurred to meet average or base demands and costs incurred to meet peak demands. The Commodity/Demand method allocates costs that vary with the amount of water produced to the commodity category with all other costs associated with water production allocated to the demand category. In the Base/Extra Capacity method, costs related to average demand conditions are allocated to the base category, and capacity costs associated with meeting above average demand conditions are allocated to the extra capacity category.

The Commodity/Demand approach was modified for its application to Metropolitan's rate structure by adding a separate cost allocation for costs related to standby. Analysis of system operating data indicated that a modified Commodity/Demand approach was most appropriate for developing Metropolitan's cost of service allocation bases.

A modified Commodity/Demand approach is the most appropriate for Metropolitan's cost of service needs because this approach is best suited for systems that are not designed to meet peak-day or peak-hour demands or provide flows for fire-fighting requirements. Metropolitan's system is designed to meet weekly demand peaks rather than daily or hourly peaks. It is also designed to provide available capacity to meet operational flexibility and reliability for emergencies, outages, and hydrologic variability.

Allocation categories used in the analysis include:

- Fixed Demand costs
- Fixed Commodity costs
- Fixed Standby costs
- Variable Commodity costs
- Hydroelectric costs

Fixed Demand costs are incurred to meet peak demands. Only the *direct* capital financing costs were included in the Fixed Demand allocation category. A portion of capital financing costs was included in the Fixed Demand allocation category because in order to meet peak demands additional physical capacity is designed into the system and, therefore, additional capital costs are incurred.

Variable Commodity costs vary with the amount of water produced, and include costs of chemicals, most power costs, and other O&M cost components that increase or decrease in relation to the volume of water supplied. Fixed Commodity costs include fixed operations and maintenance and comprise the balance of Metropolitan's O&M expenses. Fixed Commodity costs also include capital financing costs associated with meeting average demands. Fixed Commodity costs do not vary with the amount of water produced.

Fixed Standby costs relate to Metropolitan's role in ensuring system reliability during emergencies such as an earthquake, an outage of a major facility like the CRA and SWP, and hydrologic variability due to weather variances locally or in the two major supply basins Metropolitan relies on. Only the *direct* capital financing

costs were included in the Fixed Standby allocation category. The Fixed Standby costs identified include the emergency storage capacity within the system, and the available capacity within the conveyance and distribution systems.

An additional component used in Metropolitan's cost allocation process is the hydroelectric component. While not a part of most water utilities' cost allocation procedures, the Hydroelectric allocation component is necessary to segregate revenue requirements carried from the hydroelectric function established in the functional assignment process. Hydroelectric revenue requirements are ultimately recovered in the distribution system portion of the System Access Rate. Any net revenues generated by the hydroelectric operations offset the distribution costs and reduce the System Access Rate. All users of the distribution system benefit proportionately from the revenue offset provided by the sale of hydroelectric energy.

Schedules 10 and 11 provide the allocation percentages used to allocate the capital financing operational function costs into Fixed Demand, Fixed Commodity and Fixed Standby allocation categories for FY 2022/23 and FY 2023/24, respectively.

All capital financing costs functionalized to Supply are allocated as Fixed Commodity costs. Because these particular supply costs have been incurred to provide an amount of annual reliable system yield and not to provide peak demand delivery capability or standby availability, they are reasonably treated as Fixed Commodity costs.

Costs for the Conveyance and Aqueduct (C&A) function are allocated into Fixed Commodity, Fixed Demand and Fixed Standby categories. Because the capital costs for C&A were incurred to meet all three allocation categories, an analysis of C&A capacity usage was used. C&A capacity is the sum of the CRA actual capacity of 1.3 million acre-feet plus the SWP amount attributable to Metropolitan of 1.9 million acre-feet under a 100 percent allocation, for a total Conveyance Capacity of approximately 3.2 million acre-feet. For FY 2022/23, 49 percent of the available conveyance capacity varies with the quantity of water produced and is allocated to Fixed Commodity. A system peak factor¹² of 1.17 was applied to the annual usage to determine that 8 percent of available capacity is used to meet peak monthly deliveries to the member agencies and is allocated to Fixed Demand. The remaining portion of C&A, about 43 percent, is allocated to Fixed Standby. The same allocation percentages are applied to the CRA, SWP, and Other (Inland Feeder) Conveyance and Aqueduct sub-functions. The allocation shares reflect the system average use of conveyance capacity and not the usage of individual facilities. All Conveyance and Aqueduct energy costs for pumping water to Southern California are allocated as Variable Commodity costs and, therefore, are not shown in Schedule 6 because they carry through the allocation step. For FY 2023/24, 47 percent of the available conveyance capacity varies with the quantity of water produced and is allocated to Fixed Commodity. A system peak factor of 1.17 was applied to the annual usage to determine that 8 percent of available capacity is used to meet peak monthly deliveries to the member agencies and is allocated to Fixed Demand. The remaining portion of C&A, about 44 percent, is allocated to Fixed Standby.

Storage function costs for emergency, drought and regulatory storage are also distributed to the allocation categories based on the purpose they serve. Emergency storage costs are allocated as 100 percent Fixed Standby. Emergency storage is a prime example of a cost Metropolitan incurs to ensure the reliability of deliveries to the member agencies. In effect, through the emergency storage capacity in the system, Metropolitan is "standing by" with available capacity and water supply to provide service in the event of a catastrophe such as a major earthquake that disrupts regional conveyance capacity for an extended period of time. Drought carryover storage serves to provide reliable supplies by carrying over surplus supplies from periods of above normal precipitation and snowpack to drought periods when supplies decrease. Drought storage creates supply and is one component of the portfolio of resources that result in a reliable amount of

¹² Peak monthly deliveries to the member agencies average about 41 percent more than the average monthly deliveries.

annual system supplies. As a result, drought storage is allocated as a Fixed Commodity cost, in the same manner as Metropolitan's supply costs. Regulatory storage within the Metropolitan system provides operational flexibility in meeting peak demands and flow requirements, essentially increasing the physical distribution capacity. Therefore, regulatory storage is allocated in the same manner as Distribution costs.

Distribution function costs were allocated as Fixed Commodity by using projected transactions data for the test year. For FY 2022/23, 40 percent of the system distribution capacity is associated with the quantity of water delivered and is allocated to Fixed Commodity. Distribution function costs were allocated to Fixed Demand by using three years of recorded non-coincident peak demands. The difference between the three-year average non-coincident peak demand and the fixed commodity flows divided by the system capacity, or 33 percent of the distribution capacity, was used to meet non-coincident peak day demands, and is allocated to Fixed Demand. Although the Metropolitan Distribution System has a great deal of operational flexibility, the total amount of distribution capacity was limited to the historical non-coincident¹³ peak (maximum) day flow of all the member agencies; based on the last 20 years that maximum flow was 5,510 cfs in 2004. The remaining 27 percent of distribution capacity is associated with Standby and is allocated to Fixed Standby. For FY 2023/24, 39 percent of the system distribution capacity is associated with the quantity of water delivered, and is allocated to Fixed Commodity, 35 percent was used to meet non-coincident peak (maximum) day demands and is allocated to Fixed Demand, and the remaining 27 percent of distribution capacity is associated with Standby, and is allocated to Fixed Standby.

Treatment function costs were allocated to Fixed Commodity by using projected treated deliveries to the member agencies for the test year. The Treatment Fixed Demand calculation uses the system non-coincident peak factor of 2.1 applied to the test year usage; the remaining capacity is associated with Fixed Standby. Total treated water capacity of 3,652cfs, which is the total design capacity of all the treatment plants, was used in the calculation. General and Administrative costs have been assigned to the allocation categories by operational function based on the ratio of allocated non-A&G function costs to total non-A&G function costs.

¹³ The term "non-coincident" means that the peak day for each agency may or may not coincide with the peak day for the system. A non-coincident approach is used in the rate design to capture the different operating characteristics of the member agencies. The sum of the member agency peak day demands is used as a proxy for peak week. For Metropolitan, "peak" and "maximum" flows, measured in cfs, are synonymous.

Schedule 10: Capital Financing Allocation Percentages, FY 2022/23

Fiscal year ending 2023	Allocation Percentages			Total % Allocated	Comments
	Fixed Commodity	Fixed Demand	Fixed Standby		
Source of Supply					
Colorado River Aqueduct	100%	0%	0%	100%	Supply costs allocated as fixed commodity
State Water Project	100%	0%	0%	100%	Supply costs allocated as fixed commodity
Conveyance & Aqueduct					
Colorado River Aqueduct	49%	8%	43%	100%	Demand percentage represents amount of system conveyance capacity used to meet maximum demands. Commodity percentage represents amount of capacity that is a function of the amount of water delivered. Standby percentage is the remaining conveyance capacity. SWP, CRA, and Other are treated the same due to the use of a uniform system-wide System Access Rate.
State Water Project	49%	8%	43%	100%	
Other	49%	8%	43%	100%	
Storage					
Emergency	0%	0%	100%	100%	Allocated as Standby (recovered by RTS)
Drought	100%	0%	0%	100%	Allocated as fixed commodity (recovered by Supply Rates)
Regulatory	40%	33%	27%	100%	Allocated the same way as distribution.
Treatment					
	29%	31%	39%	100%	Demand percentage represents amount of system treatment capacity used to meet maximum demands. Commodity percentage represents amount of capacity that is a function of the amount of treated water delivered. Standby percentage is the remaining treatment capacity. The same allocations is applied to all five treatment plants due to the use of a uniform system-wide Treatment Surcharge.
Distribution					
	40%	33%	27%	100%	Demand percentage represents amount of system distribution capacity used to meet maximum demands. Commodity percentage represents amount of capacity that is a function of the amount of water delivered. Standby percentage is the remaining distribution capacity. The same allocations is applied to all distribution facilities due to the use of a uniform system-wide System Access Rate.
Demand Management	100%	0%	0%	100%	Allocated as fixed commodity (recovered by Supply Rates)

Totals may not foot due to rounding

Schedule 11: Capital Financing Allocation Percentages, FY 2023/24

Fiscal year ending 2024 Function	Allocation Percentages			Total % Allocated	Comments
	Fixed Commodity	Fixed Demand	Fixed Standby		
Source of Supply					
Colorado River Aqueduct	100%	0%	0%	100%	Supply costs allocated as fixed commodity
State Water Project	100%	0%	0%	100%	Supply costs allocated as fixed commodity
Conveyance & Aqueduct					
Colorado River Aqueduct	47%	8%	44%	100%	Demand percentage represents amount of system conveyance capacity used to meet maximum demands. Commodity percentage represents amount of capacity that is a function of the amount of water delivered. Standby percentage is the remaining conveyance capacity. SWP, CRA, and Other are treated the same due to the use of a uniform system-wide System Access Rate.
State Water Project	47%	8%	44%	100%	
Other	47%	8%	44%	100%	
Storage					
Emergency	0%	0%	100%	100%	Allocated as Standby (recovered by RTS)
Drought	100%	0%	0%	100%	Allocated as fixed commodity (recovered by Supply Rates)
Regulatory	39%	35%	27%	100%	Allocated the same way as distribution.
Treatment	29%	32%	39%	100%	Demand percentage represents amount of system treatment capacity used to meet maximum demands. Commodity percentage represents amount of capacity that is a function of the amount of treated water delivered. Standby percentage is the remaining treatment capacity. The same allocations is applied to all five treatment plants due to the use of a uniform system-wide Treatment Surcharge.
Distribution	39%	35%	27%	100%	Demand percentage represents amount of system distribution capacity used to meet maximum demands. Commodity percentage represents amount of capacity that is a function of the amount of water delivered. Standby percentage is the remaining distribution capacity. The same allocations is applied to all distribution facilities due to the use of a uniform system-wide System Access Rate.
Demand Management	100%	0%	0%	100%	Allocated as fixed commodity (recovered by Supply Rates)

Totals may not foot due to rounding

FY 2022/23 Operational Function Revenue Requirements (by allocation category)

A summary of cost allocation results for FY 2022/23 is shown in Schedules 12 and 13. The allocation of the functionalized costs results in about 5 percent, or \$78 million of the total revenue requirements, being allocated to the Fixed Demand allocation category. This amount represents a reasonable estimate of the annual fixed capital financing costs incurred to meet peak demands (plus the allocated administrative and general costs). A portion of Metropolitan's property tax revenue is allocated to Conveyance and Aqueduct Fixed Demand costs and is used to pay for the general obligation bond debt service allocated to the C&A costs, and other SWP costs. This revenue offsets the amount that needs to be recovered through rates.

About 68 percent of the revenue requirement (\$1,137 million) is allocated as Fixed Commodity. These fixed capital and operating costs are incurred by Metropolitan to meet annual average service needs and are typically recovered by a combination of fixed charges and volumetric rates. Fixed capital costs allocated to the Fixed Standby category total about \$178 million and account for about 11 percent of the revenue requirements. Standby costs are commonly recovered by a fixed charge allocated on a reasonable representation of a customer's need for standby availability. The Variable Commodity costs for power on the conveyance and aqueduct systems, and power, chemicals and solids handling at the treatment plants change with the amount of water delivered to the member agencies. These costs are allocated as Variable Commodity costs, total about \$281 million, and account for about 17 percent of the total revenue requirement. Because of the variable nature of these costs, it is appropriate to recover them through volumetric rates.

With regard to Metropolitan's planned contribution for Delta Conveyance Project planning costs, consistent with the treatment of SWP Conveyance and Aqueduct capital costs, 49 percent of costs are allocated to Fixed Commodity, which is recovered through the System Access Rate, and 51 percent of costs are allocated to Fixed Demand and Fixed Standby, which is recovered through the Readiness-to-Serve Charge.

FY 2023/24 Operational Function Revenue Requirement (by allocation category)

A summary of cost allocation results for FY 2023/24 is shown in Schedule 14 and 15. The allocation of the functionalized costs results in about 5 percent, or \$83 million of the total revenue requirements, being allocated to the Fixed Demand allocation category. This amount represents a reasonable estimate of the annual fixed capital financing costs incurred to meet peak demands (plus the allocated administrative and general costs). A portion of Metropolitan's property tax revenue is allocated to C&A Fixed Demand costs and is used to pay for the general obligation bond debt service allocated to the C&A costs, and other SWP costs. This revenue offsets the amount that needs to be recovered through rates.

About 67 percent of the revenue requirement (\$1,180 million) is allocated as Fixed Commodity. These fixed capital and operating costs are incurred by Metropolitan to meet annual average service needs and are typically recovered by a combination of fixed charges and volumetric rates. Fixed capital costs allocated to the Fixed Standby category total about \$193 million and account for about 11 percent of the revenue requirements. Standby costs are commonly recovered by a fixed charge allocated on a reasonable representation of a customer's need for standby. The Variable Commodity costs for power on the conveyance and aqueduct systems, and power, chemicals and solids handling at the treatment plants change with the amount of water delivered to the member agencies. These costs are allocated as Variable Commodity costs, total about \$308 million, and account for about 17 percent of the total revenue requirement. Because of the variable nature of these costs, it is appropriate to recover them through volumetric rates.

In FY 2023/24, consistent with the treatment of SWP Conveyance and Aqueduct capital costs, 47 percent of Metropolitan's planned contribution of Delta Conveyance Project planning costs are allocated to Fixed

Commodity, which is recovered through the System Access Rate, and 53 percent of costs are allocated to Fixed Demand and Fixed Standby, which is recovered through the Readiness-to-Serve Charge.

Schedule 12: Revenue Requirements by sub-function and allocation category, FY 2022/23

Fiscal Year Ending 2023	Supply			Conveyance & Aqueduct				Storage				Treatment	Distribution	Demand Mgt.	Hydro	Total
	CRA	SWC	Other	CRA power	CRA other	SWC power	SWC other	Other C&A	Emergency	Drought	Regulatory	Power				
Fixed Demand																
engineering factors	-	-	-	0.0%	8.3%	0.0%	8.3%	8.3%	0.0%	0.0%	33.5%	0.0%	31.4%	33.5%	-	-
SWC Capital	-	-	-	-	-	-	7,541,538	-	-	-	-	-	-	-	-	7,541,538
Capital Financing	-	-	-	-	1,091,139	-	533,290	5,262,727	-	-	7,684,107	-	33,193,206	26,070,857	-	73,835,324
A&G less Offsets	-	-	-	-	(26,103)	-	(1,953,063)	(274,693)	-	-	(52,971)	-	(487,206)	(671,076)	-	(3,465,111)
Total fixed demand	-	-	-	-	1,065,036	-	6,121,765	4,988,034	-	-	7,631,136	-	32,706,000	25,399,780	-	77,911,751
Fixed Commodity																
engineering factors	100%	100%	100%	100%	49.0%	0%	49.0%	49.0%	0%	100%	39.9%	0%	29.1%	39.9%	100%	-
Capital Financing	-	-	16,589,556	8,252,673	6,418,463	-	3,136,998	30,957,217	-	28,758,037	9,147,249	-	30,734,450	31,035,048	842,109	165,871,800
SWC Capital*	-	80,437,139	-	-	-	-	44,361,989	-	-	-	-	-	-	-	-	124,799,128
SWC O&M	-	110,115,149	-	-	-	-	194,057,356	-	-	-	-	-	-	-	-	304,172,505
Dept. O&M	9,172,010	15,915,229	13,761,085	3,453,729	52,336,638	-	23,095,346	7,999,272	7,749,864	5,924,522	4,103,459	-	104,466,023	114,782,168	10,690,548	373,449,893
Supply Programs (cash funded portion)	47,197,861	-	1,250,000	-	-	-	-	-	-	18,211,661	-	-	-	-	-	66,659,522
Demand Management (cash funded portion)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	50,815,317	50,815,317
Other Operating Costs	229,718	398,606	344,654	86,501	1,310,801	-	578,436	200,346	194,100	148,383	102,773	-	3,429,498	2,874,785	267,751	10,166,354
A&G less Offsets	8,046,524	(31,185,123)	4,541,527	1,722,015	8,644,772	-	(21,603,654)	5,717,733	937,545	7,540,842	1,845,200	-	26,015,202	20,283,410	8,901,813	41,407,807
Total fixed commodity	64,646,113	175,681,001	36,486,823	13,514,918	68,710,673	-	243,626,471	44,874,568	8,881,509	60,583,445	15,198,682	-	164,645,174	168,975,411	71,517,538	1,137,342,326
Fixed Standby																
engineering factors	-	-	-	0%	43%	0%	42.7%	42.7%	100%	0%	26.7%	0%	39.4%	26.7%	-	-
SWC Capital	-	-	-	-	-	-	38,602,790	-	-	-	-	-	-	-	-	38,602,790
Capital Financing	-	-	-	-	5,585,200	-	2,729,744	26,938,264	47,831,816	-	6,116,127	-	41,616,700	20,750,969	-	151,568,820
A&G less Offsets	-	-	-	-	(134,246)	-	(10,000,760)	(188,806)	(328,837)	-	(42,867)	-	(1,103,365)	(536,487)	-	(12,335,368)
Total fixed standby	-	-	-	-	5,450,954	-	31,331,774	26,749,458	47,502,979	-	6,073,260	-	40,513,335	20,214,482	-	177,836,242
Variable Commodity																
SWC Power	-	-	-	-	-	206,593,160	-	-	-	-	-	-	-	-	-	206,593,160
CRA Power	-	-	-	105,857,041	-	-	-	-	-	-	-	-	-	-	-	105,857,041
Variable Treatment	-	-	-	-	-	-	-	-	-	-	-	-	32,464,291	-	-	32,464,291
A&G less Offsets	-	-	-	(4,536,831)	-	(52,750,857)	-	-	-	-	(674,644)	-	(5,481,269)	-	-	(63,443,600)
Total variable commodity	-	-	-	101,320,210	-	153,842,303	-	-	-	-	(674,644)	-	26,983,022	-	-	281,470,891
Hydroelectric																
A&G less Offsets	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12,935,162	12,935,162
Total hydroelectric	-	-	-	-	-	-	-	-	-	-	-	-	-	-	(9,932,384)	(9,932,384)
Total Costs	64,646,113	175,681,001	36,486,823	114,835,128	75,226,664	153,842,303	281,080,010	76,612,060	56,384,488	60,583,445	28,903,077	(674,644)	264,847,530	214,589,674	71,517,538	1,677,563,989

* Includes Delta Conveyance planning costs net of California WaterFix refund

Totals may not foot due to rounding

Schedule 13: Operational function Revenue Requirements (by allocation category), FY 2022/23

Fiscal year ending 2023 Functional categories (by sub-Function)	Fixed Demand	Fixed Commodity	Fixed Standby	Variable Commodity	Hydroelectric	Total allocated
Source of Supply						
CRA	\$ -	\$ 64,646,113	\$ -	\$ -	\$ -	\$ 64,646,113
SWP	-	175,681,001	-	-	-	175,681,001
Other Supply	-	36,486,823	-	-	-	36,486,823
Subtotal: Source of Supply	-	276,813,936	-	-	-	276,813,936
Conveyance & Aqueduct						
CRA						
CRA Power	-	13,514,918	-	101,320,210	-	114,835,128
CRA All Other	1,065,036	68,710,673	5,450,954	-	-	75,226,664
SWP*						
SWP Power	-	-	-	153,842,303	-	153,842,303
SWP All Other	6,121,765	243,626,471	31,331,774	-	-	281,080,010
Other Conveyance & Aqueduct	4,988,034	44,874,568	26,749,458	-	-	76,612,060
Subtotal: Conveyance & Aqueduct	12,174,835	370,726,630	63,532,186	255,162,513	-	701,596,165
Storage						
Storage Costs Other Than Power						
Emergency	-	8,881,509	47,502,979	-	-	56,384,488
Drought	-	60,583,445	-	-	-	60,583,445
Regulatory	7,631,136	15,198,682	6,073,260	-	-	28,903,077
Storage Power	-	-	-	(674,644)	-	(674,644)
Subtotal: Storage	7,631,136	84,663,636	53,576,238	(674,644)	-	145,196,367
Treatment	32,706,000	164,645,174	40,513,335	26,983,022	-	264,847,530
Distribution	25,399,780	168,975,411	20,214,482	-	-	214,589,674
Demand Management	-	71,517,538	-	-	-	71,517,538
Hydroelectric	-	-	-	-	3,002,778	3,002,778
Total Costs Allocated	\$ 77,911,751	\$ 1,137,342,326	\$ 177,836,242	\$ 281,470,891	\$ 3,002,778	\$ 1,677,563,989

* Includes Delta Conveyance planning costs net of California WaterFix refund

Totals may not foot due to rounding

Schedule 14: Revenue Requirements by sub-function and allocation category, FY 2023/24

Fiscal Year Ending 2024	Supply			Conveyance & Aqueduct					Storage				Treatment	Distribution	Demand Mgt.	Hydro	Total
	CRA	SWC	Other	CRA power	CRA other	SWC power	SWC other	Other C&A	Emergency	Drought	Regulatory	Power					
Fixed Demand																	
engineering factors	-	-	-	0.0%	8.1%	0.0%	8.1%	8.1%	0.0%	0.0%	34.7%	0.0%	31.8%	34.7%	-	-	-
SWC Capital	-	-	-	-	-	-	9,291,517	-	-	-	-	-	-	-	-	-	9,291,517
Capital Financing	-	-	-	-	1,064,651	-	528,823	5,144,647	-	-	8,190,332	-	34,088,003	28,359,507	-	-	77,375,964
A&G less Offsets	-	-	-	-	(21,924)	-	(2,119,370)	(320,947)	-	-	37,171	-	(232,093)	(548,537)	-	-	(3,205,700)
Total fixed demand	-	-	-	-	1,042,727	-	7,700,971	4,823,699	-	-	8,227,503	-	33,855,911	27,810,970	-	-	83,461,781
Fixed Commodity																	
engineering factors	100%	100%	100%	100%	47.5%	0%	47.5%	47.5%	0%	100%	38.6%	0%	29.5%	38.6%	100%	-	-
Capital Financing	-	-	17,275,568	8,898,220	6,262,654	-	3,110,726	30,262,628	-	31,252,283	9,097,206	-	31,562,966	31,499,610	1,649,426	-	170,871,287
SWC Capital*	-	85,494,959	-	-	-	-	54,655,984	-	-	-	-	-	-	-	-	-	140,150,942
SWC O&M	-	107,000,290	-	-	-	-	198,687,447	-	-	-	-	-	-	-	-	-	305,687,738
Dept. O&M	9,412,719	16,520,056	14,333,014	3,598,625	54,576,937	-	24,118,260	7,750,058	7,602,478	6,128,659	4,073,593	-	107,654,724	118,052,820	11,408,929	-	385,230,870
Supply Programs (cash funded portion)	51,129,998	-	1,250,000	-	-	-	-	-	-	11,720,987	-	-	-	-	-	-	64,100,985
Demand Management (cash funded portion)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	49,108,217	-	49,108,217
Other Operating Costs	221,327	388,445	337,020	84,617	1,283,299	-	567,106	182,232	178,761	144,107	95,785	-	3,351,577	2,775,843	268,265	-	9,878,384
A&G less Offsets	8,865,710	(27,134,003)	4,843,367	1,904,936	9,225,514	-	(16,830,339)	5,783,023	972,316	7,185,188	1,855,987	-	27,682,063	21,613,386	9,109,485	-	55,076,633
Total fixed commodity	69,629,754	182,269,747	38,038,969	14,486,397	71,348,403	-	264,309,185	43,977,939	8,753,555	56,431,225	15,122,570	-	170,251,330	173,941,660	71,544,321	-	1,180,105,055
Fixed Standby																	
engineering factors	-	-	-	0%	44%	0%	44.5%	44.5%	100%	0%	26.7%	0%	38.7%	26.7%	-	-	-
SWC Capital	-	-	-	-	-	-	51,212,626	-	-	-	-	-	-	-	-	-	51,212,626
Capital Financing	-	-	-	-	5,868,103	-	2,914,749	28,356,065	48,397,633	-	6,281,893	-	41,393,227	21,751,423	-	-	154,963,094
A&G less Offsets	-	-	-	-	(120,319)	-	(11,677,605)	131,279	133,849	-	29,083	-	(762,922)	(418,784)	-	-	(12,685,419)
Total fixed standby	-	-	-	-	5,747,784	-	42,449,770	28,487,345	48,531,482	-	6,310,976	-	40,630,305	21,332,639	-	-	193,490,301
Variable Commodity																	
SWC Power	-	-	-	-	-	254,897,168	-	-	-	-	-	-	-	-	-	-	254,897,168
CRA Power	-	-	-	85,626,149	-	-	-	-	-	-	-	-	-	-	-	-	85,626,149
Variable Treatment	-	-	-	-	-	-	-	-	-	-	-	-	34,883,273	-	-	-	34,883,273
A&G less Offsets	-	-	-	(3,053,939)	-	(58,588,367)	-	-	-	-	-	(547,754)	(5,506,734)	-	-	-	(67,696,793)
Total variable commodity	-	-	-	82,572,210	-	196,308,801	-	-	-	-	-	(547,754)	29,376,539	-	-	-	307,709,796
Hydroelectric																	
A&G less Offsets	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12,917,717	12,917,717
Total hydroelectric	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	(7,960,822)	(7,960,822)
Total Costs	69,629,754	182,269,747	38,038,969	97,058,607	78,138,914	196,308,801	314,459,925	77,288,983	57,285,037	56,431,225	29,661,049	(547,754)	274,114,085	223,085,269	71,544,321	4,956,895	1,769,723,828

* Includes Delta Conveyance planning costs net of California WaterFix refund

Totals may not foot due to rounding

Schedule 15: Operational function Revenue Requirements (by allocation category), FY 2023/24

Fiscal year ending 2024 Functional categories (by sub-Function)	Fixed Demand	Fixed Commodity	Fixed Standby	Variable Commodity	Hydroelectric	Total allocated
Source of Supply						
CRA	\$ -	\$ 69,629,754	\$ -	\$ -	\$ -	\$ 69,629,754
SWP	-	182,269,747	-	-	-	182,269,747
Other Supply	-	38,038,969	-	-	-	38,038,969
Subtotal: Source of Supply	-	289,938,470	-	-	-	289,938,470
Conveyance & Aqueduct						
CRA						
CRA Power	-	14,486,397	-	82,572,210	-	97,058,607
CRA All Other	1,042,727	71,348,403	5,747,784	-	-	78,138,914
SWP*						
SWP Power	-	-	-	196,308,801	-	196,308,801
SWP All Other	7,700,971	264,309,185	42,449,770	-	-	314,459,925
Other Conveyance & Aqueduct	4,823,699	43,977,939	28,487,345	-	-	77,288,983
Subtotal: Conveyance & Aqueduct	13,567,397	394,121,924	76,684,899	278,881,011	-	763,255,231
Storage						
Storage Costs Other Than Power						
Emergency	-	8,753,555	48,531,482	-	-	57,285,037
Drought	-	56,431,225	-	-	-	56,431,225
Regulatory	8,227,503	15,122,570	6,310,976	-	-	29,661,049
Storage Power	-	-	-	(547,754)	-	(547,754)
Subtotal: Storage	8,227,503	80,307,350	54,842,458	(547,754)	-	142,829,557
Treatment	33,855,911	170,251,330	40,630,305	29,376,539	-	274,114,085
Distribution	27,810,970	173,941,660	21,332,639	-	-	223,085,269
Demand Management	-	71,544,321	-	-	-	71,544,321
Hydroelectric	-	-	-	-	4,956,895	4,956,895
Total Costs Allocated	\$ 83,461,781	\$ 1,180,105,055	\$ 193,490,301	\$ 307,709,796	\$ 4,956,895	\$ 1,769,723,828

* Includes Delta Conveyance planning costs net of California WaterFix refund

Totals may not foot due to rounding

Distribution of Costs: Rates and Charges

Use of System-Wide (Postage Stamp) Rates

Metropolitan's rate structure consists of unbundled rate elements designed to provide transparency regarding the cost of specific functions to member agencies (system access, untreated water supplies, water treatment, etc.). The rates for each of these unbundled rate elements are uniform across Metropolitan's entire regional service area; they do not vary by member agency and they do not vary by geographic zone or distance.

In the utility industry, system-wide rates that are the same for all customers are referred to as "postage stamp" rates. Under a postage stamp rate design approach, every customer pays the same average rate for a service regardless of whether the cost caused by, or the benefit derived by, a customer for a given transaction varies from the average. The postage stamp rate design approach stands in contrast to alternative rate design approaches such as distance sensitive pricing schemes that attempt to develop rates applicable to specific geographic zones.

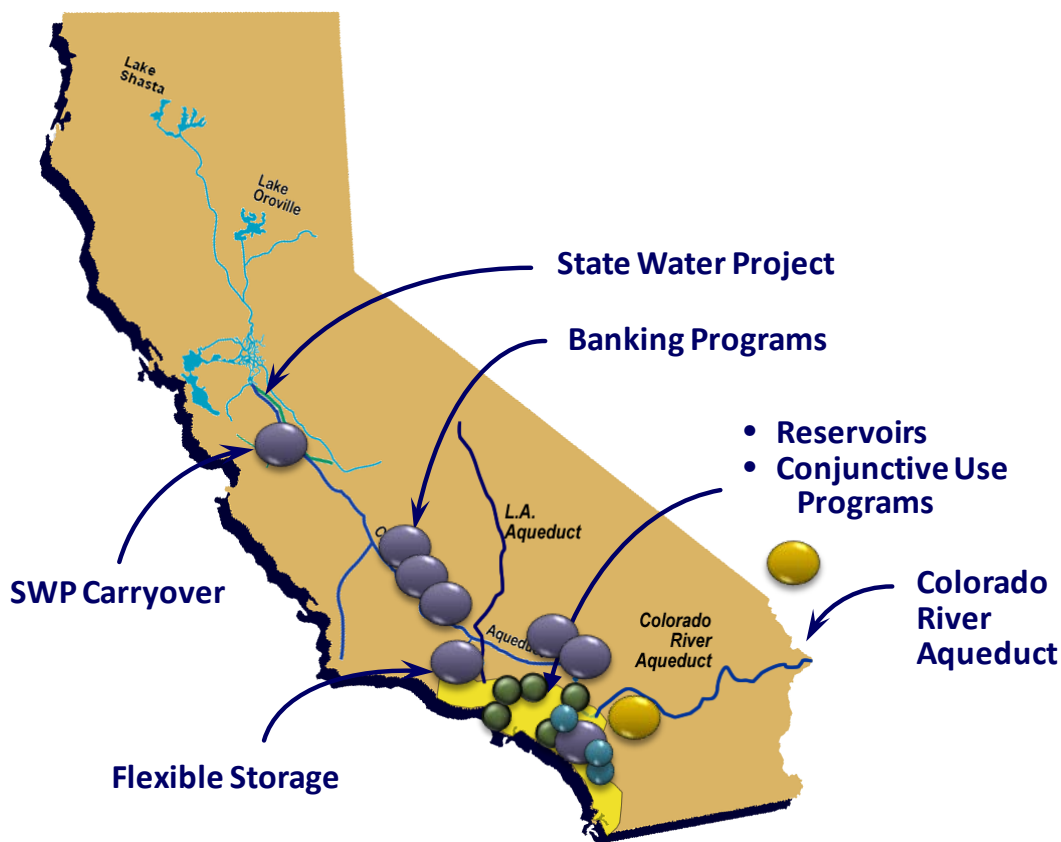
Metropolitan's postage stamp rate design is appropriate given Metropolitan's integrated regional system that benefits all member agencies. Metropolitan's system is not a point-to-point service, but an interconnected regional system. In order to balance the local concerns within the region, Metropolitan has long maintained postage stamp rates. In fact, Metropolitan has used uniform postage stamp rates since it started delivering water in 1942. Under the postage stamp approach, an agency develops an average rate for a service, as opposed to a point-to-point rate based on each customer's specific use, and all customers receiving that service pay the average rate. This allows the agency to establish non-discriminatory rates that match the cost of providing the service to a customer class. A postage stamp approach is especially appropriate for an interconnected regional system because it allows the agency to develop reliable alternatives to point-to-point service. Metropolitan's uniform, postage stamp rate structure has allowed it to develop an interconnected regional conveyance and distribution system with the ability to deliver supplies from the SWP, the Colorado River, and its storage portfolio throughout its vast and diverse service area. Metropolitan's conveyance and distribution system can deliver water from both the SWP and Colorado River to almost every member agency. This flexibility benefits all member agencies. Uniform postage stamp rates provide a region-wide funding mechanism to recover the costs of Metropolitan's integrated system, help ensure economies of scale, and result in lower costs for all of Metropolitan's member agencies. Given Metropolitan's integrated system, it is not logical to do otherwise.

Metropolitan's system draws on diverse supply sources, transports water across a large part of the State, distributes water in six counties, and serves an area that is home to 19 million residents. The 2007 Integrated Area Study (IAS), emphasized regional system flexibility as a key component of overall reliability.¹⁴ Metropolitan must maintain operational flexibility—the ability to respond to short-term changes in regional water supply, water quality, treatment requirements, and member agency demands. And it must maintain delivery flexibility—the ability to maintain partial to full water supply deliveries during planned and unplanned facility outages. Metropolitan is also required by state statute to have the objective, to the extent determined to be reasonable and practical, to deliver a blend of water constituting at least 50 percent of SWP water. (MWD Act, Sec. 136.) Each of Metropolitan's integrated conveyance, distribution and storage assets contributes to regional system reliability. It is fair and reasonable, therefore, to expect member agencies to share the cost of developing and maintaining these assets because all member agencies benefit from regional system reliability. And all member agencies are voluntary members of the cooperative formed to benefit from pooling of resources to enhance regional benefits to their service areas.

¹⁴ 2007 Integrated Area Study, Report No. 1317, pg. 2-10.

Operational flexibility has been achieved by creating an interconnected regional delivery network integrating the SWP and the CRA conveyance systems with the Distribution System. This integrated network allows Metropolitan to incorporate supply from the SWP and the Colorado River with a diverse portfolio of geographically dispersed storage programs, including the Central Valley groundwater storage programs, carryover storage in San Luis Reservoir, flexible storage capacity in Castaic Lake and Lake Perris, Lake Mead storage, the DWCV Advanced Delivery account, in-basin surface storage in DVL and Lake Mathews, and in-basin groundwater Conjunctive Use Programs. This integrated, regional network allows Metropolitan to move supplies throughout the system in response to service demands, supply availability and operational needs, and is shown in Figure 18.

Figure 18: Metropolitan Facilities, Supplies and Storage Portfolio



System flexibility and integration is easily demonstrated. In a year with a high SWP allocation, SWP supplies can be moved from the West Branch down into the Central Pool as far as western Orange County; on the East Branch, moving SWP supplies results in high SWP blends for eastern areas all the way into south San Diego County, with relatively little Colorado River water delivered to the Skinner area. In a year with a low SWP allocation, Colorado River water will dominate; this impact is mitigated by blending Colorado River water with SWP supplies stored in DVL. Under normal operations these CRA supplies can be pushed as far west as the Santa Monica Feeder.

The system flexibility can be seen through the operations of the system during calendar year 2020. As water conditions shifted, so did Metropolitan's operations to ensure continued water supply reliability. At the beginning of 2020, operations were transitioning from the extraordinary surplus year of 2019. Metropolitan strategically began repositioning storage to reduce the risk of spill and provide operational flexibility.

Figure 19: Operating Flexibility and Regional System Reliability: Moderate Deliveries of SWP Supplies (40% SWP Blend Target)



As calendar year 2020 progressed and hydrologic conditions turned dry, Metropolitan shifted system operations to minimize SWP deliveries with SWP blends at zero percent, and with Colorado River water supplies maximized throughout the distribution system through the end of the year.

Figure 20: Operating Flexibility and Regional System Reliability: Minimized Deliveries of SWP Supplies (0% SWP Blend Target Supplies)



The integrated conveyance and distribution network that Metropolitan has developed to serve the member agencies enables water supplies from multiple sources to be delivered throughout its service area to provide regional reliability. In 2014, the SWP allocation was a historically low 5 percent. Metropolitan re-operated its system to move CRA water all the way west to deliver to the areas south, west and east of the Jensen treatment plant, which are normally served with SWP water and Metropolitan is maximizing all flexibility during the current historic low Table A allocation.

Metropolitan's operational flexibility developed over time to where Metropolitan now has substantial operational flexibility to accommodate short-term changes in water supply, treatment, and demands. This is the result of having multiple water supplies and the ability to blend the supplies, robust treatment processes, and large storage capacities in multiple treated and untreated water reservoirs.

Delivery flexibility helps mitigate the impacts of regional facility outages. Metropolitan's delivery flexibility also developed over time. The 2007 IAS reported that 260 of 344 service connections, or 76 percent, had full back-up capability for single failures within Metropolitan's Distribution System. In the event of a treatment plant outage, 299 of 344 service connections, or 87 percent, had full back-up capability¹⁵.

The same flexibility principles inform development and operation of Metropolitan's storage functionality. Metropolitan's ability to shift among resources in its storage portfolio in order to enhance the regional reliability of Metropolitan's imported water service in the face of so many changing conditions is the result of its integrated, flexible operating system, consisting of its right to use the SWP conveyance pursuant to its participation therein, the CRA, and the Distribution System. Metropolitan is able to accomplish system reliability and operational flexibility while accommodating outages, managing to water quality goals, minimizing the risk of invasive species infestation and maintaining emergency storage reserves.

¹⁵ 2007 Integrated Area Study, Report No. 1317, pp. 2-10 and 2-11.

Metropolitan's integrated, flexible system directly benefits all agencies as to all services, including wheeling and exchange transactions. Wheeling and exchange transactions benefit from a robust and flexible system, including Metropolitan's right to use SWP facilities. Given the operating flexibility of Metropolitan's system, Metropolitan allocates costs in a way that allows it to develop and maintain such a flexible system. And every member agency is served by this system flexibility.

The vast majority of utilities operate under an implicit regulatory compact, which provides the exclusive service area in exchange for the obligation to serve. Metropolitan's system is a wholesale system and provides only "supplemental" wholesale supplies, meaning that Metropolitan is not the exclusive water source for its member agencies. Metropolitan is a wholesaler that has no exclusive right to serve in its service area. To the degree a member agency has local resources, develops local resources, implements conservation, or otherwise reduces demands, that member agency may not require Metropolitan's deliveries, although all member agencies rely on the availability of Metropolitan's services for various reasons. Moreover, member agencies are free to acquire supplies from other sources. Indeed, Metropolitan's Board has adopted the concept of "direct access", or customer choice for supplier, to accommodate a water transfer market.¹⁶

Metropolitan maintains an unbundled rate structure based on types of functions creating the costs, which provides transparency. Member agencies pay rates based on the services they use (full-service treated or full-service untreated), and agencies that use the same service pay the same rate. Agencies that take treated full-service water cover treatment costs, whereas agencies that take untreated full-service water pay no treatment costs. In fact, Metropolitan provides incentives for conservation and local resource development so member agencies do not have to take full-service water from Metropolitan.

This is an important distinction in the context of not having an exclusive service area. A water agency with an exclusive service area has more certainty in its revenues because it has no competition for its services. Metropolitan does have competition for its services. Therefore, Metropolitan has developed its unbundled rate structure in a fair and reasonable manner to ensure that system users pay for the services they use and the costs of Metropolitan's functions are transparent. Fair and reasonable rates that reflect applicable costs avoid negatively impacting the rates and charges paid by member agencies who do not acquire their own supplies to move through Metropolitan's interconnected delivery network. This is particularly true with regard to member agencies exercising choice of supplier. Compared to other water systems, Metropolitan's system is used to move significant amounts of non-Metropolitan supplies.

One Customer Class

Metropolitan, a wholesaler, provides full-service water service (treated or untreated) for which the Board sets rates and charges, as well as wheeling, exchange, and other arrangements pursuant to negotiated agreements. Metropolitan has one class of customers: its member agencies. The level of rate unbundling in Metropolitan's rate structure provides transparency to show that charges recover only for functions involved in the applicable service, and that no cross-subsidy of costs exists.

Metropolitan's volumetric rates recover operating costs as well as the portion of the conveyance and distribution system capital costs that are associated with meeting average water demands using system-wide rates that are the same for all customers, or "postage stamp" rates, as explained previously. Under a postage stamp rate design approach, every customer pays the same average rate for a service regardless of whether the cost caused by, or the benefit derived by, a customer for a given transaction varies from the average.

The Readiness-to-Serve (RTS) Charge recovers system capital costs for emergency storage capacity and ensures there is adequate capacity in the conveyance and distribution systems to reliably deliver supplies

¹⁶The Metropolitan Board adopted Strategic Plan Policy Principles on December 14, 1999, consisting of seven principles, presented on page 5.

during emergencies, major facility outages, hydrologic variability, and variances in local resources. The Capacity Charge recovers distribution system capital costs necessary to meet peak member agency needs on Metropolitan's distribution system during the summer.

Member agencies have unique usage characteristics that are captured in the Metropolitan rates and charges relating to treatment, peak use on the Metropolitan system, the need for emergency and available capacity, or average use. For this reason, it is not necessary to group member agencies into traditional customer classes as would be done in a typical retail rate setting process. The end result of the Metropolitan process is the determination of the cost of each service available to a member agency and to the extent a member agency uses that service, an amount, a rate or charge, is paid by the member agency that is reflective of the cost of that service.

Distributed Costs to Services

Schedules 16 and 17 provide a cross-reference between the allocated function costs and their distribution to the rate design elements for FY 2022/23 and FY 2023/24, respectively. The specifics of each rate design element are discussed in detail in the following section.

Schedule 16: Allocated Operational function Revenue Requirements (Distributed to rate design element): FY 2022/23

Fiscal year ending 2023	Rate Design Elements							Total Costs
	Supply Rates	System Access Rate	Supply - DM	System Power Rate	Capacity Charge	Readiness-to-Serve Charge	Treatment Surcharge	
Supply								
Fixed Demand	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Fixed Commodity	276,813,936	-	-	-	-	-	-	276,813,936
Fixed Standby	-	-	-	-	-	-	-	-
Variable Commodity	-	-	-	-	-	-	-	-
Hydroelectric	-	-	-	-	-	-	-	-
Subtotal: Supply	276,813,936	-	-	-	-	-	-	276,813,936
Conveyance and Aqueduct	-	-	-	-	-	-	-	-
Fixed Demand	-	-	-	-	-	12,174,835	-	12,174,835
Fixed Commodity	-	370,726,630	-	-	-	-	-	370,726,630
Fixed Standby	-	-	-	-	-	63,532,186	-	63,532,186
Variable Commodity	-	-	-	255,162,513	-	-	-	255,162,513
Hydroelectric	-	-	-	-	-	-	-	-
Subtotal: Conveyance and Aqueduct	-	370,726,630	-	255,162,513	-	75,707,021	-	701,596,165
Storage	-	-	-	-	-	-	-	-
Fixed Demand	-	-	-	-	7,631,136	-	-	7,631,136
Fixed Commodity	60,583,445	24,080,191	-	-	-	-	-	84,663,636
Fixed Standby	-	-	-	-	-	53,576,238	-	53,576,238
Variable Commodity	(674,644)	-	-	-	-	-	-	(674,644)
Hydroelectric	-	-	-	-	-	-	-	-
Subtotal: Storage	59,908,802	24,080,191	-	-	7,631,136	53,576,238	-	145,196,367
Treatment	-	-	-	-	-	-	-	-
Fixed Demand	-	-	-	-	-	-	32,706,000	32,706,000
Fixed Commodity	-	-	-	-	-	-	164,645,174	164,645,174
Fixed Standby	-	-	-	-	-	-	40,513,335	40,513,335
Variable Commodity	-	-	-	-	-	-	26,983,022	26,983,022
Hydroelectric	-	-	-	-	-	-	-	-
Subtotal: Treatment	-	-	-	-	-	-	264,847,530	264,847,530
Distribution	-	-	-	-	-	-	-	-
Fixed Demand	-	-	-	-	25,399,780	-	-	25,399,780
Fixed Commodity	-	168,975,411	-	-	-	-	-	168,975,411
Fixed Standby	-	-	-	-	-	20,214,482	-	20,214,482
Variable Commodity	-	-	-	-	-	-	-	-
Hydroelectric	-	3,002,778	-	-	-	-	-	3,002,778
Subtotal: Distribution	-	171,978,189	-	-	25,399,780	20,214,482	-	217,592,452
Demand Management	-	-	-	-	-	-	-	-
Fixed Demand	-	-	-	-	-	-	-	-
Fixed Commodity	-	-	71,517,538	-	-	-	-	71,517,538
Fixed Standby	-	-	-	-	-	-	-	-
Variable Commodity	-	-	-	-	-	-	-	-
Hydroelectric	-	-	-	-	-	-	-	-
Subtotal: Demand Management	-	-	71,517,538	-	-	-	-	71,517,538
Total	-	-	-	-	-	-	-	-
Fixed Demand	-	-	-	-	33,030,916	12,174,835	32,706,000	77,911,751
Fixed Commodity	337,397,381	563,782,233	71,517,538	-	-	-	164,645,174	1,137,342,326
Fixed Standby	-	-	-	-	-	137,322,907	40,513,335	177,836,242
Variable Commodity	(674,644)	-	-	255,162,513	-	-	26,983,022	281,470,891
Hydroelectric	-	3,002,778	-	-	-	-	-	3,002,778
Total	\$ 336,722,738	\$ 566,785,011	\$ 71,517,538	\$ 255,162,513	\$ 33,030,916	\$ 149,497,742	\$ 264,847,530	\$ 1,677,563,989

Totals may not foot due to rounding

Schedule 17: Allocated Operational function Revenue Requirements (Distributed to rate design element): FY 2023/24

Fiscal year ending 2024	Rate Design Elements							Total Costs
	Supply Rates	System Access Rate	Supply - DM	System Power Rate	Capacity Charge	Readiness-to-Serve Charge	Treatment Surcharge	
Supply								
Fixed Demand	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Fixed Commodity	289,938,470	-	-	-	-	-	-	289,938,470
Fixed Standby	-	-	-	-	-	-	-	-
Variable Commodity	-	-	-	-	-	-	-	-
Hydroelectric	-	-	-	-	-	-	-	-
Subtotal: Supply	289,938,470	-	-	-	-	-	-	289,938,470
Conveyance and Aqueduct	-	-	-	-	-	-	-	-
Fixed Demand	-	-	-	-	-	13,567,397	-	13,567,397
Fixed Commodity	-	394,121,924	-	-	-	-	-	394,121,924
Fixed Standby	-	-	-	-	-	76,684,899	-	76,684,899
Variable Commodity	-	-	-	278,881,011	-	-	-	278,881,011
Hydroelectric	-	-	-	-	-	-	-	-
Subtotal: Conveyance and Aqueduct	-	394,121,924	-	278,881,011	-	90,252,296	-	763,255,231
Storage	-	-	-	-	-	-	-	-
Fixed Demand	-	-	-	-	8,227,503	-	-	8,227,503
Fixed Commodity	56,431,225	23,876,125	-	-	-	-	-	80,307,350
Fixed Standby	-	-	-	-	-	54,842,458	-	54,842,458
Variable Commodity	(547,754)	-	-	-	-	-	-	(547,754)
Hydroelectric	-	-	-	-	-	-	-	-
Subtotal: Storage	55,883,471	23,876,125	-	-	8,227,503	54,842,458	-	142,829,557
Treatment	-	-	-	-	-	-	-	-
Fixed Demand	-	-	-	-	-	-	33,855,911	33,855,911
Fixed Commodity	-	-	-	-	-	-	170,251,330	170,251,330
Fixed Standby	-	-	-	-	-	-	40,630,305	40,630,305
Variable Commodity	-	-	-	-	-	-	29,376,539	29,376,539
Hydroelectric	-	-	-	-	-	-	-	-
Subtotal: Treatment	-	-	-	-	-	-	274,114,085	274,114,085
Distribution	-	-	-	-	-	-	-	-
Fixed Demand	-	-	-	-	27,810,970	-	-	27,810,970
Fixed Commodity	-	173,941,660	-	-	-	-	-	173,941,660
Fixed Standby	-	-	-	-	-	21,332,639	-	21,332,639
Variable Commodity	-	-	-	-	-	-	-	-
Hydroelectric	-	4,956,895	-	-	-	-	-	4,956,895
Subtotal: Distribution	-	178,898,555	-	-	27,810,970	21,332,639	-	228,042,164
Demand Management	-	-	-	-	-	-	-	-
Fixed Demand	-	-	-	-	-	-	-	-
Fixed Commodity	-	-	71,544,321	-	-	-	-	71,544,321
Fixed Standby	-	-	-	-	-	-	-	-
Variable Commodity	-	-	-	-	-	-	-	-
Hydroelectric	-	-	-	-	-	-	-	-
Subtotal: Demand Management	-	-	71,544,321	-	-	-	-	71,544,321
Total	-	-	-	-	-	-	-	-
Fixed Demand	-	-	-	-	36,038,473	13,567,397	33,855,911	83,461,781
Fixed Commodity	346,369,695	591,939,709	71,544,321	-	-	-	170,251,330	1,180,105,055
Fixed Standby	-	-	-	-	-	152,859,996	40,630,305	193,490,301
Variable Commodity	(547,754)	-	-	278,881,011	-	-	29,376,539	307,709,796
Hydroelectric	-	4,956,895	-	-	-	-	-	4,956,895
Total	\$ 345,821,942	\$ 596,896,604	\$ 71,544,321	\$ 278,881,011	\$ 36,038,473	\$ 166,427,393	\$ 274,114,085	\$ 1,769,723,828

Totals may not foot due to rounding

Proof of Revenue

FY 2022/23

Schedule 18 shows the Proof of Revenue for FY 2022/23. Based on expected transactions of 1.59 MAF, the expected revenues would be about \$61.5million higher than the total revenue requirement, if the rates and charges were in effect the entire test year period. The cost of service allocation assuming a full twelve months of revenue is used to allocate costs among the various rate elements but should not be interpreted as over- or under-collection during a given fiscal year. However, because the recommended rates do not take effect until January 1, 2023, the expected revenues for FY 2022/23 will be about \$4.3 million lower than the total revenue requirement in FY 2022/23. The total revenue requirement includes a \$20.8 million decrease in the required reserves for the Revenue Remainder Fund. Deposits to the Treatment Surcharge Stabilization Fund are \$2.4 million in FY 2022/23. Withdrawals from the Water Stewardship Fund are \$56.1 million in FY 2022/23. Accounting for these adjustments, the withdrawal from reserves is about \$28.6 million in FY 2022/23.

FY 2023/24

Schedule 19 shows the Proof of Revenue for FY 2023/24. Based on expected sales of 1.54 MAF the expected revenues would be about \$24.1 million higher than the total revenue requirement, if the rates and charges were in effect the entire test year period. The cost of service allocation assuming a full twelve months of revenue is used to allocate costs among the various rate elements but should not be interpreted as over- or under-collection during a given fiscal year. However, because the recommended rates do not take effect until January 1, 2024, the expected revenues for FY 2023/24 will be about \$40.9 million lower than the total revenue requirement in FY 2023/24. The total revenue requirement includes a \$12.1 million increase in the required reserves for the Revenue Remainder Fund. Deposits to the Treatment Surcharge Stabilization Fund are \$3.6 million in FY 2023/24. Withdrawals from the Water Stewardship Fund are \$0 million in FY 2023/24. Accounting for these adjustments, the deposit to reserves is about \$32.5 million in FY 2023/24. Schedule 20 summarizes the rates and charges that would be effective on January 1, 2023 and January 1, 2024 using the assumptions and methodology of this report. Member agency impacts will vary depending upon an agency's RTS allocation, capacity charge and relative proportions of treated and untreated Tier 1 and Tier 2 purchases.

Schedule 18: FY 2022/23 Proof of Revenue (\$ millions)***Proof of Revenue FY2023 if Rates Effective for Full Test Year***

Rate Elements	Revenue Requirements	% Over (Under) Collected		Revenues if Rates Effective July 1st	Billing Determinant	Unit Rate
	\$M	\$M	%	\$M	MAF	\$/AF
Supply	408.2	15.2	4%	423.4	1.31	323
System Access Rate	566.8	21.6	4%	588.4	1.59	370
System Power Rate	255.2	8.8	3%	264.0	1.59	166
Treatment Surcharge	264.8	9.3	3%	274.1	0.77	356
Readiness-to-serve Charge	149.5	5.5	4%	155.0		
Capacity Charge	33.0	1.2	4%	34.2		
Total	1,677.6	61.5	4%	1,739.0		

Totals may not foot due to rounding

Proof of Revenue FY2023 if Rates Effective January 1st

Fiscal Year Ending 2023	Revenue Requirements	% Over (Under) Collected		Revenues if Rates Effective Jan 1st
Supply	408.2	(64.3)	-16%	344.0
System Access Rate	566.8	44.0	8%	610.8
System Power Rate	255.2	10.0	4%	265.1
Treatment Surcharge	264.8	2.4	1%	267.2
Readiness-to-serve Charge	149.5	(2.0)	-1%	147.5
Capacity Charge	33.0	5.6	17%	38.7
Total	1,677.6	(4.3)	0%	1,673.3

Totals may not foot due to rounding

Schedule 19: FY 2023/24 Proof of Revenue (\$ millions)***Proof of Revenue FY2023 if Rates Effective for Full Test Year***

Rate Elements	Revenue Requirements	% Over (Under) Collected		Revenues if Rates Effective July 1st	Billing Determinant	Unit Rate
	\$M	\$M	%	\$M	MAF	\$/AF
Supply	417.4	5.4	1%	422.8	1.26	335
System Access Rate	596.9	8.2	1%	605.1	1.54	393
System Power Rate	278.9	2.9	1%	281.8	1.54	183
Treatment Surcharge	274.1	4.2	2%	278.3	0.78	357
Readiness-to-serve Charge	166.4	2.6	2%	169.0		
Capacity Charge	36.0	0.7	2%	36.8		
Total	1,769.7	24.1	1%	1,793.8		

Totals may not foot due to rounding

Proof of Revenue FY2023 if Rates Effective January 1st

Fiscal Year Ending 2024	Revenue Requirements	% Over (Under) Collected		Revenues if Rates Effective Jan 1st
Supply	417.4	(5.8)	-1%	411.5
System Access Rate	596.9	(17.6)	-3%	579.3
System Power Rate	278.9	(16.2)	-6%	262.7
Treatment Surcharge	274.1	3.6	1%	277.7
Readiness-to-serve Charge	166.4	(4.4)	-3%	162.0
Capacity Charge	36.0	(0.6)	-2%	35.5
Total	1,769.7	(40.9)	-2%	1,728.8

Totals may not foot due to rounding

Schedule 20: Rates and Charges Summary

Effective January 1st	2022	2023	2024
Tier 1 Supply Rate (\$/AF)	\$243	\$323	\$335
Tier 2 Supply Rate (\$/AF)	\$285	\$531	\$532
System Access Rate (\$/AF)	\$389	\$370	\$393
System Power Rate (\$/AF)	\$167	\$166	\$183
Full Service Untreated Volumetric Cost (\$/AF)			
Tier 1	\$799	\$859	\$911
Tier 2	\$841	\$1,067	\$1,108
Treatment Surcharge (\$/AF)	\$344	\$356	\$357
Full Service Treated Volumetric Cost (\$/AF)			
Tier 1	\$1,143	\$1,215	\$1,268
Tier 2	\$1,185	\$1,423	\$1,465
Readiness-to-Serve Charge (\$M)	\$140	\$155	\$169
Capacity Charge (\$/cfs)	\$12,200	\$10,600	\$11,400

System Access Rate (SAR)

The SAR is a volumetric¹⁷ system-wide rate charged on each acre-foot of water sold to member public agencies, which water is conveyed through Metropolitan's interconnected regional delivery network, including Metropolitan's right to use SWP facilities for conveyance of SWP and non-SWP water. The SAR would decrease to \$370 per acre-foot in 2023 primarily due to reduced Delta Conveyance, SWC Capital costs and RRWP planning costs, and increase to \$393 per acre-foot in 2024, primarily due to increasing Delta Conveyance and SWC Capital costs. The SAR recovers the cost of providing conveyance and distribution capacity to meet average annual demands, and a portion of Regulatory/Emergency Storage.

The SAR recovers, among other costs, the capital, operating, maintenance, and overhead costs associated with the interconnected regional delivery network necessary to deliver water to meet member agencies' average annual demands, which include the costs of conveyance facilities (facilities outside of Metropolitan's service area) and distribution facilities (facilities within Metropolitan's Distribution System), and portions of Regulatory/Emergency Storage facilities.

Metropolitan's delivery network costs are treated the same whether they were incurred for the SWP or the CRA. The fact that, unlike the CRA, Metropolitan does not hold legal title to the SWP facilities and does not operate the SWP facilities is immaterial for purposes of cost functionalization for the COS and rate determination process.

Metropolitan, like the other State Water Contractors, is obligated to pay all operating expenses and capital costs incurred by the SWP to provide the contractual supply and transportation services. The expenses include all unexpected expenses resulting from operational issues and changes in regulations. DWR charges Metropolitan based on estimated expenses and has the right to charge Metropolitan for any expenses beyond the estimates. The State Water Contractors carry all financial risk and must pay any costs without any regard for Metropolitan's own cash flows. By allocating costs, DWR does not bear any of these risks; the risks fall to

¹⁷ A volumetric rate is a charge applied to the actual amount of water delivered.

the State Water Contractors. Metropolitan was even responsible for paying for the SWP costs during the extended original construction period, years before Metropolitan received any SWP water. This is also not something typical of a supply contract and hence supportive of Metropolitan's cost functionalization process.

Metropolitan is also responsible for managing its SWP supply and transportation resources. Metropolitan determines what water to store and deliver in any year from its resource portfolio. On October 1 prior to the beginning of the Calendar Year, Metropolitan must provide its initial water order, plus any variations requested by DWR. The planning for this water order begins as early as the preceding July. A considerable amount of strategy goes in to determining which resource Metropolitan will dispatch when and deliver where to maximize resources. Examples of issues that Metropolitan must consider when managing SWP resources include:

- the level of the Table A allocation, and the amount of Table A supply available to Metropolitan, Desert Water Agency (DWA) and Coachella Valley Water District CVWD;
- shaping deliveries to the order to accommodate Article 21 (surplus water), turnback pool water (Table A allocation not needed by a Contractor) or Article 56 (b) water (water rescheduled due to system outages) if available;
- the amount of Carryover water in San Luis Reservoir, and the timing and location of need;
- the maximum input and withdrawal capacities of the Central Valley Storage programs, depending on whether Metropolitan is storing or withdrawing from these programs, and considering the level of water stored;
- the availability or need to refill Flexible Storage in Castaic and Perris Reservoirs;
- the availability of water transfer supplies; and,
- the supply conditions on the Colorado River.

Metropolitan, not DWR, is responsible for determining how, when or where to deliver any of the supply sources Metropolitan has that can be conveyed on the SWP. As a result of the execution of Monterey Amendments, the SWP can convey SWP water and non-SWP water and can be used by non-State Water Contractors; it is, therefore, appropriate to consider the SWP as part of Metropolitan's interconnected regional delivery network as has been confirmed by the Court of Appeal in *SDCWA v. MWD* (2017) 12 Cal.App.5th 1124. The volume of water delivered under arrangements, other than the contracts for delivery of water with the DWR, is also not determinative of the cost treatment; the ability to move *any* volume is what is relevant to the functionalization of Metropolitan's costs.

Like the SWP costs, Metropolitan fully pays the operating and capital costs of the CRA maintenance, operations and supply portfolio and the risks fall on Metropolitan.

Metropolitan uses the CRA for the conveyance of its multiple CRA resources. It is responsible for determining what water to store and deliver in any year from its resource portfolio. Prior to the beginning of the calendar year, Metropolitan must provide its Plan for the Creation of Extraordinary Conservation ICS to the Bureau of Reclamation in June and its best estimate of monthly diversion requirements in September. The amount of Extraordinary Conservation ICS which Metropolitan plans to create is deducted from the total supply available for diversion. In October or November, Reclamation staff conducts a consultation with Metropolitan prior to Reclamation's Regional Director making an annual determination of Metropolitan's estimated water requirements for the ensuing calendar year to the end that deliveries of Colorado River water to Metropolitan will not exceed those reasonably required for beneficial use. Reclamation provides Metropolitan with a notice of the Regional Director's determination regarding Metropolitan's proposed diversion and beneficial use of Colorado River water for the calendar year. A considerable amount of strategy is employed to determine which resources Metropolitan will dispatch and deliver to maximize use of the resources. Examples of issues that Metropolitan must consider when managing CRA resources include:

- the magnitude of the SWP Table A allocation, and the amount of Table A supply available to Metropolitan, DWA and CVWD;
- the amount of SWP surplus, turnback pool, and carryover water;
- the amount of ICS water that can be accessed;
- the amount of water in the DWA/CVWD advance delivery account; and,
- the Colorado River supply conditions and the projection of the likelihood of Lake Mead shortage, normal, and surplus conditions in future years.

Metropolitan is responsible for determining how, when and where to deliver any of the supply sources Metropolitan has that can be transported by the CRA. Metropolitan also uses the CRA to convey non-Metropolitan water to non-member agencies: the temporary emergency wheeling of Mexican Treaty Waters of the Colorado River for Tijuana. Given that the CRA can deliver water as a result of the execution of agreements apart from Metropolitan's 1930 contract for delivery of water, 1931 supplementary contract for delivery of water, 1946 contract merging the rights of the City of San Diego and Metropolitan, and 1987 contract for delivery of surplus flows from the Colorado River with the U.S. Department of the Interior, and that it is capable of delivering water to other water agencies, it is appropriate to consider the CRA as part of Metropolitan's interconnected regional delivery network. The volume of water delivered under arrangements, other than the contracts for delivery of water with the U.S. Department of the Interior, is also not determinative of the cost treatment; the ability to move *any* volume is what is relevant to the functionalization of Metropolitan's costs.

Metropolitan's Conveyance and Aqueduct and Distribution System form a single integrated system for all imported water, which is available to Metropolitan for the conveyance of SWP and CRA water, as well as water supply obtained from supply programs and other water transfers. Metropolitan's rights and ownership of the facilities create regional system flexibility to maintain operating flexibility and delivery flexibility and meet Metropolitan's mission as a public steward of water resources. Metropolitan's member agencies and all residents of Metropolitan's service area benefit from the integration of the SWP and CRA as Metropolitan's Conveyance and Aqueduct facilities, as it allows Metropolitan to meet varying regional demands, accommodate outages, manage water quality goals, maintain emergency storage reserves, and minimize the risk of invasive species infestation.

The treatment of Metropolitan's Conveyance and Aqueduct facilities as one integrated system for purposes of rate-setting is not uncommon or novel. The Federal Energy Regulatory Commission (FERC), for example, recognizes the practice of rolling the costs of transmission facilities into a single rate when the facilities are part of an integrated system. The practice is recognized regardless of legal ownership of (or allocations in) a particular facility.

Benefits

The SAR benefits include: (1) support of a regional approach; (2) accommodates a water transfer market that does not unfairly advantage one user over another; (3) provides a clear linkage between costs and benefits; and (4) establishes a simple approach to recovering the costs of conveyance and distribution functions.

The SAR supports a regional approach through the uniform, postage stamp rate element. This region-wide funding mechanism helps ensure economies of scale and low costs for all of Metropolitan's member agencies.

The SAR is a cost-based rate. By providing a non-discriminatory rate element to all parties that wish to use available system capacity to move water anywhere in the Metropolitan service area, the uniform SAR creates the opportunity for a fair and efficient water transfer market to develop. In keeping with the spirit of a regional provider approach, the SAR is uniform throughout the service area. Member agencies that receive

full-service water from Metropolitan will pay the exact same cost for access to the system as a customer that obtains supply from another supply source.

Charging all users, the same price for access to essential facilities is a basic principle of regulatory economics. The SAR provides a clear linkage between costs and benefits. The cost of service process clearly identifies the costs that are recovered by the SAR. The operational function revenue requirements for conveyance and aqueduct, distribution, and storage are identified and then allocated into commodity (average use), demand (peak use), and standby (emergency and available capacity) related costs.

Only commodity-related costs are allocated to the SAR. The SAR is an easily understood approach. The SAR is a uniform, volumetric per acre-foot rate and is straightforward for both Metropolitan and the member agencies to implement and administer.

System Power Rate (SPR)

The SPR is a volumetric, system-wide rate charged on each acre-foot of Metropolitan supplies moving through the Metropolitan system. SPR would decrease to \$166 per acre-foot for 2023 and increase to \$183 in 2024, primarily due to higher State Water Contract power costs and higher CRA power costs. The SPR is a volumetric rate element that recovers the costs of pumping water to Southern California. The SPR recovers the cost of power for both the SWP and CRA.

Benefits

The primary benefit of the SPR is that it clearly identifies Metropolitan's average cost of power.

Treatment Surcharge

The Treatment Surcharge is a system-wide volumetric rate charged on water treated by Metropolitan. The Treatment Surcharge recovers the cost of treating water, including commodity, demand and standby-related costs as determined in the COS for all five treatment plants. The Treatment Surcharge would increase to \$356 per acre-foot in 2023, and increase to \$357 per acre-foot in FY 2024 primarily due to lower treated water sales.

Benefits

There are several primary benefits provided by the Treatment Surcharge. First, only treated water users pay for the costs of treatment. Second, by averaging the costs of providing treated water service over the entire system the regional economies of scale are preserved.

Capacity Charge

The Capacity Charge would decrease to \$10,600 per cubic-foot-second of capacity during calendar year 2023, as less capital costs are allocated to meet peak day system use, reflecting recent member agency non-coincident peaks and reduced capital financing costs. The Capacity Charge would increase to \$11,400 per cubic-foot-second of capacity during calendar year 2024, reflecting the increases to capital financing costs. The Capacity Charge is charged on the peak (maximum) summer day demand, measured in cfs, placed on the distribution system between May 1 and September 30 for a three-calendar year period, calculated for each member agency. The calculation is non-coincident, meaning the peak day will differ for each member agency. The sum of the member agency non-coincident peak day demands is a proxy for peak week demands, which are the design criteria for the Metropolitan Distribution system. The three-year period ending December 31,

2021 is used to charge the Capacity Charge effective January 1, 2023 through December 31, 2023. Demands measured for the purposes of billing the Capacity Charge include all firm demands including wheeling service and exchange.

The Capacity Charge is intended to pay for the cost of providing peak day capacity on Metropolitan's Distribution System, while providing an incentive for local agencies to decrease their use of the Metropolitan system to meet peak day demands and to shift demands into lower use time periods particularly October through April. Over time, a member agency will benefit from local supply investments and operational strategies that reduce its peak day demand on the system in the form of a lower total Capacity Charge. The estimated Capacity Charge to be paid by each member agency in calendar year 2023 is included in Schedule 21.

Benefits

The Capacity Charge provides several benefits including: (1) increasing the overall efficiency of water use; (2) improving the fair allocation of costs among member agencies based upon the demand imposed by each agency; and (3) providing a source of fixed revenue.

The Capacity Charge will improve the overall efficiency of water use by encouraging local agencies to invest in cost effective local storage and resources to avoid using the Metropolitan system to meet peak (maximum) day demands. In addition, significant regional savings can be realized through the deferral of expensive capacity expansion.

Schedule 21: Capacity Charge (by member agency)

Calendar Year 2023 Capacity Charge					
	Peak Day Demand (cfs) (May 1 through September 30)				Rate (\$/cfs): \$10,600
	Calendar Year				
Member Agency	2019	2020	2021	3-Year Peak	Calendar Year 2023 Capacity Charge
Anaheim	37.1	84.1	77.2	84.1	\$891,460
Beverly Hills	23.5	23.2	24.8	24.8	\$262,880
Burbank	17.3	16.6	15.5	17.3	\$183,380
Calleguas	168.9	178.2	189.6	189.6	\$2,009,760
Central Basin	48.6	51.9	54.1	54.1	\$573,460
Compton	2.9	0.0	0.0	2.9	\$30,740
Eastern	196.8	211.5	215.3	215.3	\$2,282,180
Foothill	16.0	19.3	22.8	22.8	\$241,680
Fullerton	13.1	14.1	20.0	20.0	\$212,000
Glendale	32.2	37.9	32.5	37.9	\$401,740
Inland Empire	118.7	98.4	101.4	118.7	\$1,258,220
Las Virgenes	39.4	41.7	42.9	42.9	\$454,740
Long Beach	51.8	67.3	45.7	67.3	\$713,380
Los Angeles	283.2	339.0	584.1	584.1	\$6,191,460
MWDOC	262.8	272.0	332.4	332.4	\$3,523,440
Pasadena	39.9	46.4	48.2	48.2	\$510,920
San Diego CWA	672.1	723.4	672.5	723.4	\$7,668,040
San Fernando	0.0	0.0	0.0	0.0	\$0
San Marino	2.3	7.3	5.4	7.3	\$77,380
Santa Ana	19.4	21.7	18.3	21.7	\$230,020
Santa Monica	20.7	17.0	15.1	20.7	\$219,420
Three Valleys	128.1	134.3	138.3	138.3	\$1,465,980
Torrance	27.8	28.9	27.2	28.9	\$306,340
Upper San Gabriel	29.1	21.1	32.4	32.4	\$343,440
West Basin	211.8	196.0	218.2	218.2	\$2,312,920
Western MWD	186.1	175.1	189.4	189.4	\$2,007,640
Total	2,649.6	2,826.4	3,123.3	3,242.7	\$34,372,620
Totals may not foot due to rounding					

The Capacity Charge also improves the equitable distribution of costs among the member agencies. Agencies that have relatively high peak demand to average demand ratios will bear a greater share of the costs of providing peak (maximum) day distribution capacity. The Capacity Charge also increases the portion of Metropolitan's fixed costs that are recovered by fixed charges.

Readiness-to-Serve Charge

The RTS recovers the costs of providing emergency storage capacity and available capacity to meet outages and hydrologic variability. The RTS will increase to \$155 million in calendar year 2023. The RTS increases to \$169 million in calendar year 2024, reflecting increases in capital financing costs and Delta Conveyance planning costs.

The RTS is allocated to the member agencies based on each agency's share of a ten-year rolling average of all firm demands, including water transfers and exchanges that use Metropolitan system capacity.¹⁸ A ten-year rolling average leads to a relatively stable RTS allocation that reasonably represents an agency's potential long-term need for available capacity under different hydrologic conditions. Member agencies that so choose may have a portion of their total RTS obligation offset by Standby Charge collections collected by Metropolitan on behalf of the member agency. The estimated RTS for each member agency for calendar year 2023 is shown in Schedule 22.

Benefits

The RTS provides two major benefits. These include: (1) a better matching of costs and benefits; and (2) a SAR that recovers only those costs associated with providing average annual service.

The proposed RTS matches costs and benefits in two ways. First, the RTS will recover the amount of emergency storage and available capacity costs needed to maintain reliable deliveries during outages and service interruptions and during periods of hydrologic variability, as identified in the COS, that is not paid for by ad valorem property tax revenues. Second, the proposed RTS allocates the emergency storage and available capacity costs among the member agencies in a manner that better represents each agency's potential need for standby availability. The RTS uses a ten-year rolling average of demands. A long-term rolling average like the ten-year measure is a simple and reasonable representation of an agency's potential need for available capacity under a range of 91 conditions.

¹⁸ The SDCWA exchange water transactions are excluded from the calculation of the ten-year rolling average per the terms of the parties' exchange agreement.

Schedule 22: Readiness-to-Serve Charge (by member agency)

Calendar Year 2023 RTS Charge			
Member Agency	Rolling Ten-Year Average Firm Deliveries (Acre-Feet) FY2011/12 - FY2020/21	RTS Share	12 months @ \$155 million per year (1/23-12/23)
Anaheim	19,376.9	1.37%	\$ 2,116,669
Beverly Hills	10,308.7	0.73%	1,126,089
Burbank	13,354.6	0.94%	1,458,813
Calleguas MWD	96,573.4	6.81%	10,549,363
Central Basin MWD	34,311.0	2.42%	3,748,022
Compton	340.2	0.02%	37,162
Eastern MWD	97,570.2	6.88%	10,658,250
Foothill MWD	8,306.1	0.59%	907,331
Fullerton	7,280.1	0.51%	795,254
Glendale	16,256.7	1.15%	1,775,829
Inland Empire Utilities Agency	55,761.7	3.93%	6,091,226
Las Virgenes MWD	20,715.7	1.46%	2,262,915
Long Beach	29,251.8	2.06%	3,195,371
Los Angeles	273,537.0	19.28%	29,880,289
Municipal Water District of Orange County	195,277.4	13.76%	21,331,465
Pasadena	18,954.2	1.34%	2,070,495
San Diego County Water Authority	214,362.4	15.11%	23,416,248
San Fernando	29.7	0.00%	3,244
San Marino	974.0	0.07%	106,397
Santa Ana	9,606.6	0.68%	1,049,394
Santa Monica	4,607.4	0.32%	503,297
Three Valleys MWD	63,736.2	4.49%	6,962,334
Torrance	15,549.0	1.10%	1,698,522
Upper San Gabriel Valley MWD	30,096.0	2.12%	3,287,589
West Basin MWD	113,660.3	8.01%	12,415,880
Western MWD	69,139.3	4.87%	7,552,551
MWD Total	1,418,936.6	100.00%	\$ 155,000,000

Totals may not foot due to rounding

Purchase Order

Purchase Orders were developed to establish a financial commitment from the member agency to Metropolitan in exchange for the ability to purchase more water at the lower Tier 1 Supply Rate. In November 2014, the Metropolitan Board approved new Purchase Orders effective January 1, 2015 through December 31, 2024. Twenty-one of the twenty-six-member agencies have Purchase Orders, which commit the member agencies to purchase a minimum amount of supply from Metropolitan (the Purchase Order Commitment) over a ten-year period.

There is no annual minimum or maximum purchase commitment required by the Purchase Order. A member agency has the full ten-year term to fulfill the Purchase Order Commitment. In exchange for this commitment, the member agency can purchase an amount of firm water supply equal to 90 percent of its cumulative Base Period Demand over the full ten years at the lower Tier 1 Supply Rate. An agency that determined that a Purchase Order is not in its best interest may purchase up to 60 percent of its Revised Base Firm Demand annually at the lower Tier 1 Supply Rate. The terms and conditions of the Purchase Order are uniform for all member agencies.

The Base Period Demand was established for each member agency. Member agencies chose a base amount of (1) the member agency's Revised Base Firm Demand which is the highest fiscal year purchases during the 13-year period of fiscal year 1990 through fiscal year 2002, or (2) the highest year purchases in the most recent 12-year period of fiscal year 2003 through fiscal year 2014.

At the end of the Purchase Order Term, if the member agency has not purchased enough firm supply to meet its Purchase Order Commitment, it will be billed for the remaining balance of the Purchase Order Commitment at the average of the Tier 1 Supply Rate in effect during the Term. This payment may be prorated with interest evenly over the next 12 invoices.

If a member agency fulfills its Purchase Order Commitment prior to the end of the Purchase Order Term, (e.g. purchased ten times 60 percent of the Initial Base Period Demand) then the member agency has met its obligation under the Purchase Order. The member agency may continue to purchase up to 90 percent of its cumulative Base Period Demand over the Term at the Tier 1 Supply Rate for the duration of the Purchase Order Term.

Although the maximum amount of water that can be purchased at the Tier 1 Supply Rate may increase over time if the agency's Base Period Demand increases, the Purchase Order Commitment is fixed for the entire Purchase Order Term and does not increase.

Tier 1 Supply Rate

The Tier 1 Supply Rate is a volumetric rate charged on Metropolitan water transactions that are within a member agency's Tier 1 maximum. The Tier 1 Supply Rate would increase to \$323 per acre-foot in 2023 due to increasing Supply Program costs. The Tier 1 Supply Rate would increase to \$335 per acre-foot in 2024. The Tier 1 Supply Rate supports a regional approach through the uniform, postage stamp rate element. The Tier 1 Supply Rate is calculated as the amount of the total supply revenue requirement that is not recovered by the Tier 2 Supply Rate divided by the estimated amount of Tier 1 water transactions.

Tier 2 Supply Rate

The Tier 2 Supply Rate is a volumetric rate that reflects the costs in Tier 1, plus Metropolitan's cost of purchasing water transfers north of the Delta. The Tier 2 Supply Rate is charged on Metropolitan water transactions that exceed a member agency's Tier 1 maximum. The Tier 2 Supply Rate also encourages the member agencies and their customers to maintain existing local supplies and develop cost-effective local

supply resources and conservation. The Tier 2 Supply Rate would increase to \$531 per acre-foot in 2023 and to \$532 in 2024. At an expected average sales level of 1.59 MAF in cash year 2022/23 and 1.54 MAF in cash year 2023/24, it is estimated that no supply will be sold at the Tier 2 Supply Rate in either fiscal year.

Benefits

The use of the Tier 2 Supply Rate provides several benefits including, efficient resource management and clear price signals to accommodate a water transfer market. By pricing supplies that exceed 90 percent of a member agency's Base demand at a price reflecting Metropolitan's supply cost, a price incentive exists to encourage efficient regional resource management. Member agencies will be encouraged to invest in cost-effective conservation measures and local resources like water recycling. Metropolitan has historically set its water rates with the primary objective of recovering cost. The Tier 2 Supply Rate is a pricing tool designed specifically for the purpose of creating a greater incentive for member agencies to make economic resource management decisions, while recognizing additional costs associated with securing more supply resources.

The Tier 2 Supply Rate will reflect Metropolitan's cost of acquiring transfers from north of the Delta. In so doing, Metropolitan will be competing in the water transfer market along with other providers of imported water supplies. If other providers of imported supply can develop additional supply at a lower cost than Metropolitan's Tier 2 Supply Rate, the water transfer market will expand to meet the region's increasing demands.

Transactions

Staff estimates of water transactions used for developing the rate recommendation were based on current member agency demands and information and an expectation that demands will trend to levels expected under normal weather conditions. "Firm Transactions" refers to member agency purchases that are subject to the calculation of transactions subject to the Readiness-to-Serve Charge and to the calculation of Base Firm Demand used to determine the threshold for the applicability of Tier 2 to member agency purchases. Table 23 summarizes projected water transactions by service type for Cash Year 2022/23 and Cash Year 2023/24.

Schedule 23: Cash Year Transactions, by Type

Cash Year Ending	2023	2024
Transactions by Treatment Type		
Treated Firm Transactions	770	780
Untreated Firm Transactions	541	482
Untreated Exchange	279	278
Total Transactions	1,590	1,540
Firm Transactions by Type		
Tier 1	1,311	1,262
Tier 2	-	-
Total Firm Transactions	1,311	1,262

APPENDIX: COS TABLES

4/12/2022 Board Meeting

		1	2	3	4	5	6	7
		Labor And Labor Additive	Outside Services	Utilities	Chemicals	Other O&M	O&M Capitalization (pro-rated)	Projected Total To Be functionalized
Departmental O&M								
Group	Item							
Office of General Manager	Office of General Manager	6,744,043	900,000	-	-	188,035	(289,049)	7,543,028
Office of General Manager	Board of Directors	1,515,902	105,000	-	-	489,190	(77,598)	2,032,494
Bay Delta Initiatives	Bay Delta Initiatives	5,395,138	3,179,244	-	-	3,331,365	(443,885)	11,461,862
External Affairs	Legislative Services	3,940,933	1,220,500	5,250	-	990,348	(229,337)	5,927,694
External Affairs	Media Communications Services	4,944,111	335,449	-	-	534,290	(212,049)	5,601,801
External Affairs	Manager, External Affairs/Special Projects	6,498,698	775,172	-	-	2,103,558	(363,975)	9,013,452
External Affairs	Conservation & Community Services	3,766,266	1,050,500	-	-	851,650	(212,718)	5,464,698
Human Resources	Office of the Manager	11,753,659	1,925,692	-	-	1,995,334	(576,395)	15,098,290
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	8,091,928	245,000	3,000,000	-	201,715	(419,112)	11,119,530
Water Systems Operations	Office of the Manager, Treatment Section	826,403	-	-	-	51,930	(32,220)	846,113
Water Systems Operations	Office of the Manager, Operations Support Services	413,201	110,000	-	-	693,500	(43,722)	1,172,979
Water Systems Operations	Operations Support Services	1,620,867	323,000	6,500	-	275,350	(81,053)	2,144,664
Water Systems Operations	Desert Region / C&D CRA	6,895,307	195,000	45,600	-	788,563	(291,184)	7,633,287
Water Systems Operations	System Operations Unit	26,171,637	451,300	198,000	13,800	6,430,526	(1,224,584)	32,040,678
Water Systems Operations	Power Operations and Planning	7,384,406	69,700	66,580	-	1,744,315	(345,374)	8,919,628
Water Systems Operations	Operations Planning & Programs Unit	3,115,611	223,000	-	-	437,317	(135,186)	3,637,740
Water Systems Operations	Treatment Jensen	1,955,862	-	-	-	145,086	(77,119)	2,023,830
Water Systems Operations	Treatment Skinner	11,384,580	342,000	1,859,640	5,294,053	928,855	(701,630)	19,107,498
Water Systems Operations	Treatment Weymouth	10,932,194	223,600	2,994,449	6,201,492	549,785	(744,381)	20,157,139
Water Systems Operations	Treatment Mills	10,373,485	244,242	900,965	2,216,092	637,245	(528,079)	13,843,950
Water Systems Operations	Treatment Skinner	10,167,420	144,070	2,127,753	3,759,531	571,838	(601,087)	16,169,524
Water Systems Operations	Water Quality Section	11,854,442	113,000	1,619,124	5,491,193	559,706	(754,192)	18,692,273
Water Systems Operations	C&D, Eastern Unit	21,871,602	3,286,696	461,000	-	3,346,165	(1,060,334)	27,914,130
Water Systems Operations	C&D, Western Unit	14,493,022	2,729,100	1,799,700	-	2,549,374	(791,276)	20,779,919
Water Systems Operations	CSS, Manufacturing Services Unit	12,171,383	1,525,000	2,985,705	-	1,691,230	(672,374)	17,700,944
Water Systems Operations	Environmental Health & Safety Section	7,556,246	223,700	238,100	-	624,981	(313,521)	8,227,505
Water Systems Operations	CSS, Fleet Services Unit	12,221,562	1,280,591	1,400,000	-	1,388,704	(595,757)	15,695,101
Water Systems Operations	CSS, Power Support Unit	7,557,416	455,100	13,100	-	4,822,949	(478,691)	12,369,874
Water Systems Operations	Office of the Manager, Operations & Planning Section	8,014,741	318,500	60,000	-	624,869	(338,868)	8,879,343
Water Systems Operations	Security Team & Security Management	720,771	23,000	-	-	81,922	(30,215)	795,478
Sustainability, Resilience & Innovation	Office of the Manager	6,029,297	3,830,000	-	-	338,574	(366,444)	9,831,427
Diversity, Equity & Inclusion	Office of the Manager	981,639	400,000	-	-	42,540	(52,532)	1,371,646
Equal Employment Opportunity	Office of the Manager	1,597,156	400,000	-	-	18,820	(72,750)	1,943,227
Business Technology	Office of the Manager	13,264,757	1,730,900	-	-	14,475,659	(1,065,619)	28,405,697
Engineering Services	Administrative Services	37,547,929	7,951,000	85,000	-	3,065,837	(1,804,658)	46,845,108
Business Technology	Information Technology	18,421,920	12,449,476	-	-	2,559,855	(1,220,048)	32,211,003
Business Technology	Resource Planning & Development	32,540,201	4,981,340	-	-	11,521,865	(1,810,194)	47,233,212
Water Resources Management	Resource Implementation	4,109,602	560,000	-	-	441,907	(202,894)	4,908,615
Water Resources Management	Office of the Group Manager	10,536,399	1,157,800	-	-	5,098,764	(622,845)	16,170,118
Ethics Office	Office of the Group Manager	2,427,096	75,000	-	-	75,090	(94,346)	2,482,840
Real Property	Real Property	2,388,777	270,369	-	-	80,460	(77,566)	2,662,039
General Counsel	General Counsel	11,802,597	9,124,955	1,742,000	-	6,447,132	(1,081,221)	28,035,463
General Auditor	General Auditor	13,057,727	2,810,000	-	-	549,000	(582,997)	15,833,730
Total Departmental O&M		4,130,870	500,000	-	-	137,500	(169,336)	4,599,034
GENERAL DISTRICT REQUIREMENTS		399,188,802	66,275,996	21,606,466	22,976,160	84,591,596	(21,891,413)	574,747,607
State Water Contract*								
Supply - O&M								110,115,149
Supply - Capital								80,437,139
Power - O&M & Off-Ag Capital								211,574,465
Power - Capital (less Off-Ag)								(4,981,305)
Transmission - Capital - Commodity, Demand, & Standby								60,506,317
Transmission - O&M - Commodity only								194,057,356
Delta Conveyance - Other								30,000,000
Total State Water Contract								681,709,121
Colorado River Aqueduct Power Costs								105,857,041
Supply Programs (cash funded portion)								66,659,522
Demand Management (cash funded portion)								
Local Resources Program								22,175,417
Future Supply Actions & Stormwater Pilot								3,639,900
Conservation Program (cash funded portion)								25,000,000
Total Demand Management Costs								50,815,317
Capital Financing								
Revenue Bond Debt Service net of BABs Interest Subsidy Payment								283,264,623
G.O. Bond Debt Service								1,968,750
Debt Administration								2,790,098
Bond Deleassance								
PAYGO								135,000,000
Total Capital Financing Costs								423,023,470
Other Operating Costs								
Operating Equipment								9,394,884
Succession Planning Labor Pool								5,000,000
OPEB/PEPS Pre-Funding								-
Total Other Operating Costs								14,394,884
Increase/(Decrease) in Required Reserves								5,500,000
Total General District Requirements								1,347,959,356
REQUIREMENTS BEFORE OFFSETS:								1,922,706,963
Revenue Offsets								
Property Taxes - MWD Portion of SWC GO Debt Service								564,249
Property Taxes - MWD GO Debt Service								1,968,750
Interest on Investments								6,468,546
Hydro-Power Revenue								12,611,274
CRA Power Revenue								3,376,627
Wadsworth Pumping Plant (DVL) Power Revenue								679,733
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)								52,991,971
Misc. allocated to supply (PVID Lease)								5,930,280
Property Taxes - SWC								160,551,544
Revenue Reserve used for Revenue Bonds - I&P								-
Amortization								-
Total Revenue Offsets								245,142,974
NET REVENUE REQUIREMENTS:								1,677,563,989

1332

1333

1334

		Functionalization	Allocation Percentages					% Total
			Fixed			Variable		
			Demand	Commodity	Standby	Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		120,374	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Office of General Manager	Board of Directors	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Bay Delta Initiatives	Bay Delta Initiatives	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Legislative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Media Communications Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Manager, External Affairs/Special Projects	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Conservation & Community Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Human Resources		240,943	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager	205,804	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Treatment Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations Support Services	39,694	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Support Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Desert Region / C&D CRA	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	System Operations Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Power Operations and Planning	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Planning & Programs Unit	674,610	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Jensen	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Diemer	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Mills	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Skinner	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Weymouth	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Water Quality Section	3,749,798	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Eastern Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Western Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Manufacturing Services Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Environmental Health & Safety Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Fleet Services Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Power Support Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations & Planning Section	14,723	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Security Team & Security Management	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Sustainability, Resilience & Innovation		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Diversity, Equity & Inclusion		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Equal Employment Opportunity		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Office of the Chief Financial Officer		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Office of Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Engineering Services		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Administrative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Information Technology	753,763	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Planning & Development	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Implementation	2,440,071	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Office of the Group Manager	287,413	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Ethics Office		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Real Property		644,816	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
General Counsel		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
General Auditor		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Departmental O&M		9,172,010	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
GENERAL DISTRICT REQUIREMENTS								
State Water Contract*								
Supply - O&M		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Supply - Capital		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Power - O&M & Off-Aq Capital		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Power - Capital (less Off-Aq)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Transmission - Capital - Commodity, Demand, & Standby		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Transmission - O&M - Commodity only		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Supply		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Power		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Other		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total State Water Contract		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Colorado River Aqueduct Power Costs								
		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Supply Programs (cash funded portion)								
		47,197,861	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Demand Management (cash funded portion)								
Local Resources Program		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Future Supply Actions & Stormwater Pilot		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Conservation Program (cash funded portion)		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Demand Management Costs		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Capital Financing								
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
G.O. Bond Debt Service		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Debt Administration		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Bond Defeasance		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
PAYGO		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total Capital Financing Costs		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Other Operating Costs								
Operating Equipment		149,927	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Succession Planning Labor Pool		79,792	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
OPEB/PERS Pre-Funding		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Other Operating Costs		229,718	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Increase/(Decrease) in Required Reserves								
		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total General District Requirements								
		47,427,579	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
REQUIREMENTS BEFORE OFFSETS:								
		56,599,589	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Revenue Offsets								
Property Taxes - MWD Portion of SWC GO Debt Service		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Property Taxes - MWD GO Debt Service		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Interest on Investments		190,417	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Hydro-Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
CRA Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Wadsworth Pumping Plant (DVL) Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to supply (PVID Lease)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Property Taxes - SWC		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Revenue Reserve used for Revenue Bonds - I&P		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Annexation		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total Revenue Offsets		190,417	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
NET REVENUE REQUIREMENTS:								
		56,409,172	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

		Functionalization	Allocation Percentages					Total	
			Demand	Fixed Commodity	Standby	Variable Commodity	Other		Hydroelectric
Departmental O&M									
Group	Item								
Office of General Manager		120,374	-	120,374	-	-	-	-	120,374
Office of General Manager	Board of Directors	-	-	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-	-	-
Human Resources		240,943	-	240,943	-	-	-	-	240,943
Water Systems Operations	Office of the Manager	205,804	-	205,804	-	-	-	-	205,804
Water Systems Operations	Office of the Manager, Conveyance & Distribution S	-	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	-	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations Support Services	39,694	-	39,694	-	-	-	-	39,694
Water Systems Operations	Operations Support Services	-	-	-	-	-	-	-	-
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	674,610	-	674,610	-	-	-	-	674,610
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	3,749,798	-	3,749,798	-	-	-	-	3,749,798
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	-	-	-	-	-	-	-	-
Water Systems Operations	Environmental Health & Safety Section	-	-	-	-	-	-	-	-
Water Systems Operations	OSS, Fleet Services Unit	-	-	-	-	-	-	-	-
Water Systems Operations	OSS, Power Support Unit	-	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations & Planning Secti	14,723	-	14,723	-	-	-	-	14,723
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-	-	-
Sustainability, Resilience & Innova		-	-	-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-	-	-
Office of the Chief Financial Office		-	-	-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-	-	-
Engineering Services		-	-	-	-	-	-	-	-
Business Technology	Administrative Services	-	-	-	-	-	-	-	-
Business Technology	Information Technology	753,763	-	753,763	-	-	-	-	753,763
Water Resources Management	Resource Planning & Development	-	-	-	-	-	-	-	-
Water Resources Management	Resource Implementation	2,440,071	-	2,440,071	-	-	-	-	2,440,071
Water Resources Management	Office of the Group Manager	287,413	-	287,413	-	-	-	-	287,413
Ethics Office		-	-	-	-	-	-	-	-
Real Property		644,816	-	644,816	-	-	-	-	644,816
General Counsel		-	-	-	-	-	-	-	-
General Auditor		-	-	-	-	-	-	-	-
Total Departmental O&M	-	9,172,010	-	9,172,010	-	-	-	-	9,172,010
GENERAL DISTRICT REQUIREMENTS									
State Water Contract*		-	-	-	-	-	-	-	-
Supply - O&M		-	-	-	-	-	-	-	-
Supply - Capital		-	-	-	-	-	-	-	-
Power - O&M & Off-Aq Capital		-	-	-	-	-	-	-	-
Power - Capital (less Off-Aq)		-	-	-	-	-	-	-	-
Transmission - Capital - Commodity, Demand, & Standby		-	-	-	-	-	-	-	-
Transmission - O&M - Commodity only		-	-	-	-	-	-	-	-
Delta Conveyance - Supply	-	-	-	-	-	-	-	-	-
Delta Conveyance - Power	-	-	-	-	-	-	-	-	-
Delta Conveyance - Other	-	-	-	-	-	-	-	-	-
Total State Water Contract		-	-	-	-	-	-	-	-
Colorado River Aqueduct Power Costs		-	-	-	-	-	-	-	-
Supply Programs (cash funded portion)		47,197,861	-	47,197,861	-	-	-	-	47,197,861
Demand Management (cash funded portion)		-	-	-	-	-	-	-	-
Local Resources Program		-	-	-	-	-	-	-	-
Future Supply Actions & Stormwater Pilot		-	-	-	-	-	-	-	-
Conservation Program (cash funded portion)		-	-	-	-	-	-	-	-
Total Demand Management Costs		-	-	-	-	-	-	-	-
Capital Financing		-	-	-	-	-	-	-	-
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		-	-	-	-	-	-	-	-
G.O. Bond Debt Service		-	-	-	-	-	-	-	-
Debt Administration		-	-	-	-	-	-	-	-
Bond Defeasance		-	-	-	-	-	-	-	-
PAYGO		-	-	-	-	-	-	-	-
Total Capital Financing Costs		-	-	-	-	-	-	-	-
Other Operating Costs		-	-	-	-	-	-	-	-
Operating Equipment		149,927	-	149,927	-	-	-	-	149,927
Succession Planning Labor Pool	-	79,792	-	79,792	-	-	-	-	79,792
OPEB/PERS Pre-Funding		-	-	-	-	-	-	-	-
Total Other Operating Costs		229,718	-	229,718	-	-	-	-	229,718
Increase/(Decrease) in Required Reserves		-	-	-	-	-	-	-	-
Total General District Requirements		47,427,579	-	47,427,579	-	-	-	-	47,427,579
REQUIREMENTS BEFORE OFFSETS:		56,599,589	-	56,599,589	-	-	-	-	56,599,589
Revenue Offsets		-	-	-	-	-	-	-	-
Property Taxes - MWD Portion of SWC GO Debt Service		-	-	-	-	-	-	-	-
Property Taxes - MWD GO Debt Service		-	-	-	-	-	-	-	-
Interest on Investments		190,417	-	190,417	-	-	-	-	190,417
Hydro-Power Revenue		-	-	-	-	-	-	-	-
CRA Power Revenue		-	-	-	-	-	-	-	-
Wadsworth Pumping Plant (DVL) Power Revenue		-	-	-	-	-	-	-	-
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)		-	-	-	-	-	-	-	-
Misc. allocated to supply (PVID Lease)		-	-	-	-	-	-	-	-
Property Taxes - SWC		-	-	-	-	-	-	-	-
Revenue Reserve used for Revenue Bonds - I&P		-	-	-	-	-	-	-	-
Annexation		-	-	-	-	-	-	-	-
Total Revenue Offsets		190,417	-	190,417	-	-	-	-	190,417
NET REVENUE REQUIREMENTS:		56,409,172	-	56,409,172	-	-	-	-	56,409,172

		Functionalization	Allocation Percentages					Total	
			Fixed			Variable Commodity	Other		Hydroelectric
			Demand	Commodity	Standby				
Departmental O&M									
Group	Item								
Office of General Manager		107,624	-	107,624	-	-	-	-	107,624
Office of General Manager	Board of Directors	-	-	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-	-	-
Human Resources		187,569	-	187,569	-	-	-	-	187,569
Water Systems Operations	Office of the Manager	149,768	-	149,768	-	-	-	-	149,768
Water Systems Operations	Office of the Manager, Conveyance & Distribution Sec	-	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	-	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations Support Services	30,000	-	30,000	-	-	-	-	30,000
Water Systems Operations	Operations Support Services	-	-	-	-	-	-	-	-
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	651,954	-	651,954	-	-	-	-	651,954
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	2,938,085	-	2,938,085	-	-	-	-	2,938,085
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	-	-	-	-	-	-	-	-
Water Systems Operations	Environmental Health & Safety Section	-	-	-	-	-	-	-	-
Water Systems Operations	OSS, Fleet Services Unit	-	-	-	-	-	-	-	-
Water Systems Operations	OSS, Power Support Unit	-	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations & Planning Section	13,340	-	13,340	-	-	-	-	13,340
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-	-	-
Sustainability, Resilience & Innovati		-	-	-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-	-	-
Office of the Chief Financial Officer		-	-	-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-	-	-
Engineering Services		-	-	-	-	-	-	-	-
Business Technology	Administrative Services	-	-	-	-	-	-	-	-
Business Technology	Information Technology	519,287	-	519,287	-	-	-	-	519,287
Water Resources Management	Resource Planning & Development	-	-	-	-	-	-	-	-
Water Resources Management	Resource Implementation	1,589,943	-	1,589,943	-	-	-	-	1,589,943
Water Resources Management	Office of the Group Manager	280,960	-	280,960	-	-	-	-	280,960
Ethics Office		-	-	-	-	-	-	-	-
Real Property		271,460	-	271,460	-	-	-	-	271,460
General Counsel		-	-	-	-	-	-	-	-
General Auditor		-	-	-	-	-	-	-	-
Total Departmental O&M		6,739,989	-	6,739,989	-	-	-	-	6,739,989

		Functionalization	Allocation Percentages					% Total
			Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		208,873	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Office of General Manager	Board of Directors	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Bay Delta Initiatives	Bay Delta Initiatives	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Legislative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Media Communications Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Manager, External Affairs/Special Projects	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Conservation & Community Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Human Resources		418,084	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager	205,804	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Treatment Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations Support Services	39,694	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Support Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Desert Region / C&D CRA	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	System Operations Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Power Operations and Planning	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Planning & Programs Unit	674,610	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Jensen	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Diemer	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Mills	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Skinner	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Weymouth	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Water Quality Section	3,749,798	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Eastern Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Western Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Manufacturing Services Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Environmental Health & Safety Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Fleet Services Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Power Support Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations & Planning Section	14,723	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Security Team & Security Management	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Sustainability, Resilience & Innovation		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Diversity, Equity & Inclusion		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Equal Employment Opportunity		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Office of the Chief Financial Officer		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Office of Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Engineering Services		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Administrative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Information Technology	1,307,926	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Planning & Development	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Implementation	7,338,000	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Office of the Group Manager	864,335	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Ethics Office		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Real Property		1,093,383	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
General Counsel		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
General Auditor		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Departmental O&M		15,915,229	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
GENERAL DISTRICT REQUIREMENTS								
State Water Contract*								
Supply - O&M		110,115,149	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Supply - Capital		80,437,139	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Power - O&M & Off-Aq Capital		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Power - Capital (less Off-Aq)		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Transmission - Capital - Commodity, Demand, & Standby		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Transmission - O&M - Commodity only		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Delta Conveyance - Supply		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Delta Conveyance - Power		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Delta Conveyance - Other		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total State Water Contract		190,552,288	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Colorado River Aqueduct Power Costs								
		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Supply Programs (cash funded portion)								
		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Demand Management (cash funded portion)								
Local Resources Program		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Future Supply Actions & Stormwater Pilot		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Conservation Program (cash funded portion)		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Demand Management Costs		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Capital Financing								
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
G.O. Bond Debt Service		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Debt Administration		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Bond Defeasance		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
PAYGO		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total Capital Financing Costs		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Other Operating Costs								
Operating Equipment		260,152	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Succession Planning Labor Pool		138,454	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
OPEB/PERS Pre-Funding		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Other Operating Costs		398,606	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Increase/(Decrease) in Required Reserves								
		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total General District Requirements								
		190,950,894	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
REQUIREMENTS BEFORE OFFSETS:								
		206,866,124	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Revenue Offsets								
Property Taxes - MWD Portion of SWC GO Debt Service		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Property Taxes - MWD GO Debt Service		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Interest on Investments		695,958	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Hydro-Power Revenue		-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
CRA Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Wadsworth Pumping Plant (DVL) Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to supply (PVID Lease)		5,930,280	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Property Taxes - SWC		46,943,434	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Revenue Reserve used for Revenue Bonds - I&P		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Annexation		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total Revenue Offsets		53,569,672	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
NET REVENUE REQUIREMENTS:								
-		153,296,452	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

	Functionalization	Allocation Percentages					Total
		Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M							
Group	Item						
Office of General Manager	Office of General Manager	208,873	-	208,873	-	-	208,873
Office of General Manager	Board of Directors	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-
Human Resources	Human Resources	418,084	-	418,084	-	-	418,084
Water Systems Operations	Office of the Manager	205,804	-	205,804	-	-	205,804
Water Systems Operations	Office of the Manager, Conveyance & Distribution S	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations Support Services	39,694	-	39,694	-	-	39,694
Water Systems Operations	Operations Support Services	-	-	-	-	-	-
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	674,610	-	674,610	-	-	674,610
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	3,749,798	-	3,749,798	-	-	3,749,798
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	-	-	-	-	-	-
Water Systems Operations	Environmental Health & Safety Section	-	-	-	-	-	-
Water Systems Operations	OSS, Fleet Services Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Power Support Unit	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations & Planning Secti	14,723	-	14,723	-	-	14,723
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-
Sustainability, Resilience & Inn	Sustainability, Resilience & Inn	-	-	-	-	-	-
Diversity, Equity & Inclusion	Diversity, Equity & Inclusion	-	-	-	-	-	-
Equal Employment Opportunity	Equal Employment Opportunity	-	-	-	-	-	-
Office of the Chief Financial O	Office of the Chief Financial O	-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-
Engineering Services	Engineering Services	-	-	-	-	-	-
Business Technology	Administrative Services	-	-	-	-	-	-
Business Technology	Information Technology	1,307,926	-	1,307,926	-	-	1,307,926
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	7,338,000	-	7,338,000	-	-	7,338,000
Water Resources Managemen	Office of the Group Manager	864,335	-	864,335	-	-	864,335
Ethics Office	Ethics Office	-	-	-	-	-	-
Real Property	Real Property	1,093,383	-	1,093,383	-	-	1,093,383
General Counsel	General Counsel	-	-	-	-	-	-
General Auditor	General Auditor	-	-	-	-	-	-
Total Departmental O&M		15,915,229	-	15,915,229	-	-	15,915,229
GENERAL DISTRICT REQUIREMENTS		-	-	-	-	-	-
State Water Contract*		-	-	-	-	-	-
Supply - O&M	Supply - O&M	110,115,149	-	110,115,149	-	-	110,115,149
Supply - Capital	Supply - Capital	80,437,139	-	80,437,139	-	-	80,437,139
Power - O&M & Off-Aq Capital	Power - O&M & Off-Aq Capital	-	-	-	-	-	-
Power - Capital (less Off-Aq)	Power - Capital (less Off-Aq)	-	-	-	-	-	-
Transmission - Capital - Commodity, Demand, & Standby	Transmission - Capital - Commodity, Demand, & Standby	-	-	-	-	-	-
Transmission - O&M - Commodity only	Transmission - O&M - Commodity only	-	-	-	-	-	-
Delta Conveyance - Supply	Delta Conveyance - Supply	-	-	-	-	-	-
Delta Conveyance - Power	Delta Conveyance - Power	-	-	-	-	-	-
Delta Conveyance - Other	Delta Conveyance - Other	-	-	-	-	-	-
Total State Water Contract		190,552,288	-	190,552,288	-	-	190,552,288
Colorado River Aqueduct Power Costs		-	-	-	-	-	-
Supply Programs (cash funded portion)		-	-	-	-	-	-
Demand Management (cash funded portion)		-	-	-	-	-	-
Local Resources Program	Local Resources Program	-	-	-	-	-	-
Future Supply Actions & Stormwater Pilot	Future Supply Actions & Stormwater Pilot	-	-	-	-	-	-
Conservation Program (cash funded portion)	Conservation Program (cash funded portion)	-	-	-	-	-	-
Total Demand Management Costs		-	-	-	-	-	-
Capital Financing		-	-	-	-	-	-
Revenue Bond Debt Service net of BABs Interest Subsidy Payment	Revenue Bond Debt Service net of BABs Interest Subsidy Payment	-	-	-	-	-	-
G.O. Bond Debt Service	G.O. Bond Debt Service	-	-	-	-	-	-
Debt Administration	Debt Administration	-	-	-	-	-	-
Bond Defeasance	Bond Defeasance	-	-	-	-	-	-
PAYGO	PAYGO	-	-	-	-	-	-
Total Capital Financing Costs		-	-	-	-	-	-
Other Operating Costs		-	-	-	-	-	-
Operating Equipment	Operating Equipment	260,152	-	260,152	-	-	260,152
Succession Planning Labor Pool	Succession Planning Labor Pool	138,454	-	138,454	-	-	138,454
OPEB/PERS Pre-Funding	OPEB/PERS Pre-Funding	-	-	-	-	-	-
Total Other Operating Costs		398,606	-	398,606	-	-	398,606
Increase/(Decrease) in Required Reserves		-	-	-	-	-	-
Total General District Requirements		190,950,894	-	190,950,894	-	-	190,950,894
REQUIREMENTS BEFORE OFFSETS:		206,866,124	-	206,866,124	-	-	206,866,124
Revenue Offsets							
Property Taxes - MWD Portion of SWC GO Debt Service	Property Taxes - MWD Portion of SWC GO Debt Service	-	-	-	-	-	-
Property Taxes - MWD GO Debt Service	Property Taxes - MWD GO Debt Service	-	-	-	-	-	-
Interest on Investments	Interest on Investments	695,958	-	695,958	-	-	695,958
Hydro-Power Revenue	Hydro-Power Revenue	-	-	-	-	-	-
CRA Power Revenue	CRA Power Revenue	-	-	-	-	-	-
Wadsworth Pumping Plant (DVL) Power Revenue	Wadsworth Pumping Plant (DVL) Power Revenue	-	-	-	-	-	-
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)	Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)	-	-	-	-	-	-
Misc. allocated to supply (PVID Lease)	Misc. allocated to supply (PVID Lease)	5,930,280	-	5,930,280	-	-	5,930,280
Property Taxes - SWC	Property Taxes - SWC	46,943,434	-	46,943,434	-	-	46,943,434
Revenue Reserve used for Revenue Bonds - I&P	Revenue Reserve used for Revenue Bonds - I&P	-	-	-	-	-	-
Annexation	Annexation	-	-	-	-	-	-
Total Revenue Offsets		53,569,672	-	53,569,672	-	-	53,569,672
NET REVENUE REQUIREMENTS:		153,296,452	-	153,296,452	-	-	153,296,452

		Functionalization	Allocation Percentages					Total
			Fixed			Variable		
			Demand	Commodity	Standby	Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		186,748	-	186,748	-	-	-	186,748
Office of General Manager	Board of Directors	-	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-	-
Human Resources		325,468	-	325,468	-	-	-	325,468
Water Systems Operations	Office of the Manager	149,768	-	149,768	-	-	-	149,768
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations Support Services	30,000	-	30,000	-	-	-	30,000
Water Systems Operations	Operations Support Services	-	-	-	-	-	-	-
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	651,954	-	651,954	-	-	-	651,954
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	2,938,085	-	2,938,085	-	-	-	2,938,085
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	-	-	-	-	-	-	-
Water Systems Operations	Environmental Health & Safety Section	-	-	-	-	-	-	-
Water Systems Operations	OSS, Fleet Services Unit	-	-	-	-	-	-	-
Water Systems Operations	OSS, Power Support Unit	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations & Planning Section	13,340	-	13,340	-	-	-	13,340
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-	-
Sustainability, Resilience & Inr		-	-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-	-
Engineering Services		-	-	-	-	-	-	-
Business Technology	Administrative Services	-	-	-	-	-	-	-
Business Technology	Information Technology	901,065	-	901,065	-	-	-	901,065
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	4,781,418	-	4,781,418	-	-	-	4,781,418
Water Resources Managemen	Office of the Group Manager	844,929	-	844,929	-	-	-	844,929
Ethics Office		-	-	-	-	-	-	-
Real Property		460,301	-	460,301	-	-	-	460,301
General Counsel		-	-	-	-	-	-	-
General Auditor		-	-	-	-	-	-	-
Total Departmental O&M		11,283,076	-	11,283,076	-	-	-	11,283,076

		Functionalization	Allocation Percentages					% Total
			Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		180,601	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Office of General Manager	Board of Directors	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Bay Delta Initiatives	Bay Delta Initiatives	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Legislative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Media Communications Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Manager, External Affairs/Special Projects	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Conservation & Community Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Human Resources		361,496	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager	205,804	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Treatment Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations Support Services	39,694	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Support Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Desert Region / C&D CRA	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	System Operations Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Power Operations and Planning	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Planning & Programs Unit	674,610	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Jensen	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Diemer	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Mills	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Skinner	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Weymouth	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Water Quality Section	3,749,798	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Eastern Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Western Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Manufacturing Services Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Environmental Health & Safety Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Fleet Services Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Power Support Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations & Planning Section	14,723	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Security Team & Security Management	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Sustainability, Resilience & Innovation		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Diversity, Equity & Inclusion		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Equal Employment Opportunity		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Office of the Chief Financial Officer		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Office of Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Engineering Services		1,845,697	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Administrative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Information Technology	1,130,897	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Planning & Development	4,255,769	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Implementation	716,336	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Office of the Group Manager	585,659	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Ethics Office		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Real Property		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
General Counsel		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
General Auditor		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Departmental O&M		13,761,085	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
GENERAL DISTRICT REQUIREMENTS								
State Water Contract*								
Supply - O&M		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Supply - Capital		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Power - O&M & Off-Aq Capital		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Power - Capital (less Off-Aq)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Transmission - Capital - Commodity, Demand, & Standby		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Transmission - O&M - Commodity only		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Supply		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Power		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Other		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total State Water Contract		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Colorado River Aqueduct Power Costs								
		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Supply Programs (cash funded portion)								
		1,250,000	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Demand Management (cash funded portion)								
Local Resources Program		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Future Supply Actions & Stormwater Pilot		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Conservation Program (cash funded portion)		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Demand Management Costs		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Capital Financing								
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		11,160,626	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
G.O. Bond Debt Service		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Debt Administration		109,930	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Bond Defeasance		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
PAYGO		5,319,000	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Capital Financing Costs		16,589,556	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Other Operating Costs								
Operating Equipment		224,940	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Succession Planning Labor Pool		119,714	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
OPEB/PERS Pre-Funding		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Other Operating Costs		344,654	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Increase/(Decrease) in Required Reserves								
		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total General District Requirements								
		18,184,210	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
REQUIREMENTS BEFORE OFFSETS:								
		31,945,295	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Revenue Offsets								
Property Taxes - MWD Portion of SWC GO Debt Service		-	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Property Taxes - MWD GO Debt Service		-	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Interest on Investments		107,473	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Hydro-Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
CRA Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Wadsworth Pumping Plant (DVL) Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to supply (PVID Lease)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Property Taxes - SWC		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Revenue Reserve used for Revenue Bonds - I&P		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Annexation		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total Revenue Offsets		107,473	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
NET REVENUE REQUIREMENTS:								
		31,837,822	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

	Functionalization	Allocation Percentages					Total
		Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M							
Group	Item						
Office of General Manager		180,601	-	180,601	-	-	180,601
Office of General Manager	Board of Directors	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-
Human Resources		361,496	-	361,496	-	-	361,496
Water Systems Operations	Office of the Manager	205,804	-	205,804	-	-	205,804
Water Systems Operations	Office of the Manager, Conveyance & Distribution S	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations Support Services	39,694	-	39,694	-	-	39,694
Water Systems Operations	Operations Support Services	-	-	-	-	-	-
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	674,610	-	674,610	-	-	674,610
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	3,749,798	-	3,749,798	-	-	3,749,798
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	-	-	-	-	-	-
Water Systems Operations	Environmental Health & Safety Section	-	-	-	-	-	-
Water Systems Operations	OSS, Fleet Services Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Power Support Unit	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations & Planning Secti	14,723	-	14,723	-	-	14,723
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-
Sustainability, Resilience & Inn		-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-
Engineering Services		1,845,697	-	1,845,697	-	-	1,845,697
Business Technology	Administrative Services	-	-	-	-	-	-
Business Technology	Information Technology	1,130,897	-	1,130,897	-	-	1,130,897
Water Resources Managemen	Resource Planning & Development	4,255,769	-	4,255,769	-	-	4,255,769
Water Resources Managemen	Resource Implementation	716,336	-	716,336	-	-	716,336
Water Resources Managemen	Office of the Group Manager	585,659	-	585,659	-	-	585,659
Ethics Office		-	-	-	-	-	-
Real Property		-	-	-	-	-	-
General Counsel		-	-	-	-	-	-
General Auditor		-	-	-	-	-	-
Total Departmental O&M		13,761,085	-	13,761,085	-	-	13,761,085
GENERAL DISTRICT REQUIREMENTS		-	-	-	-	-	-
State Water Contract*		-	-	-	-	-	-
Supply - O&M		-	-	-	-	-	-
Supply - Capital		-	-	-	-	-	-
Power - O&M & Off-Aq Capital		-	-	-	-	-	-
Power - Capital (less Off-Aq)		-	-	-	-	-	-
Transmission - Capital - Commodity, Demand, & Standby		-	-	-	-	-	-
Transmission - O&M - Commodity only		-	-	-	-	-	-
Delta Conveyance - Supply		-	-	-	-	-	-
Delta Conveyance - Power		-	-	-	-	-	-
Delta Conveyance - Other		-	-	-	-	-	-
Total State Water Contract		-	-	-	-	-	-
Colorado River Aqueduct Power Costs		-	-	-	-	-	-
Supply Programs (cash funded portion)		1,250,000	-	1,250,000	-	-	1,250,000
Demand Management (cash funded portion)		-	-	-	-	-	-
Local Resources Program		-	-	-	-	-	-
Future Supply Actions & Stormwater Pilot		-	-	-	-	-	-
Conservation Program (cash funded portion)		-	-	-	-	-	-
Total Demand Management Costs		-	-	-	-	-	-
Capital Financing		-	-	-	-	-	-
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		11,160,626	-	11,160,626	-	-	11,160,626
G.O. Bond Debt Service		-	-	-	-	-	-
Debt Administration		109,930	-	109,930	-	-	109,930
Bond Defeasance		-	-	-	-	-	-
PAYGO		5,319,000	-	5,319,000	-	-	5,319,000
Total Capital Financing Costs		16,589,556	-	16,589,556	-	-	16,589,556
Other Operating Costs		-	-	-	-	-	-
Operating Equipment		224,940	-	224,940	-	-	224,940
Succession Planning Labor Pool		119,714	-	119,714	-	-	119,714
OPEB/PERS Pre-Funding		-	-	-	-	-	-
Total Other Operating Costs		344,654	-	344,654	-	-	344,654
Increase/(Decrease) in Required Reserves		-	-	-	-	-	-
Total General District Requirements		18,184,210	-	18,184,210	-	-	18,184,210
REQUIREMENTS BEFORE OFFSETS:		31,945,295	-	31,945,295	-	-	31,945,295
Revenue Offsets		-	-	-	-	-	-
Property Taxes - MWD Portion of SWC GO Debt Service		-	-	-	-	-	-
Property Taxes - MWD GO Debt Service		-	-	-	-	-	-
Interest on Investments		107,473	-	107,473	-	-	107,473
Hydro-Power Revenue		-	-	-	-	-	-
CRA Power Revenue		-	-	-	-	-	-
Wadsworth Pumping Plant (DVL) Power Revenue		-	-	-	-	-	-
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)		-	-	-	-	-	-
Misc. allocated to supply (PVID Lease)		-	-	-	-	-	-
Property Taxes - SWC		-	-	-	-	-	-
Revenue Reserve used for Revenue Bonds - I&P		-	-	-	-	-	-
Annexation		-	-	-	-	-	-
Total Revenue Offsets		107,473	-	107,473	-	-	107,473
NET REVENUE REQUIREMENTS:		31,837,822	-	31,837,822	-	-	31,837,822

		Functionalization	Allocation Percentages					Total
			Fixed			Variable		
			Demand	Commodity	Standby	Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		161,471	-	161,471	-	-	-	161,471
Office of General Manager	Board of Directors	-	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-	-
Human Resources		281,416	-	281,416	-	-	-	281,416
Water Systems Operations	Office of the Manager	149,768	-	149,768	-	-	-	149,768
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations Support Services	30,000	-	30,000	-	-	-	30,000
Water Systems Operations	Operations Support Services	-	-	-	-	-	-	-
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	651,954	-	651,954	-	-	-	651,954
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	2,938,085	-	2,938,085	-	-	-	2,938,085
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	-	-	-	-	-	-	-
Water Systems Operations	Environmental Health & Safety Section	-	-	-	-	-	-	-
Water Systems Operations	OSS, Fleet Services Unit	-	-	-	-	-	-	-
Water Systems Operations	OSS, Power Support Unit	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations & Planning Section	13,340	-	13,340	-	-	-	13,340
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-	-
Sustainability, Resilience & Inr		-	-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-	-
Engineering Services		1,479,388	-	1,479,388	-	-	-	1,479,388
Business Technology	Administrative Services	-	-	-	-	-	-	-
Business Technology	Information Technology	779,105	-	779,105	-	-	-	779,105
Water Resources Managemen	Resource Planning & Development	3,563,025	-	3,563,025	-	-	-	3,563,025
Water Resources Managemen	Resource Implementation	466,762	-	466,762	-	-	-	466,762
Water Resources Managemen	Office of the Group Manager	572,510	-	572,510	-	-	-	572,510
Ethics Office		-	-	-	-	-	-	-
Real Property		-	-	-	-	-	-	-
General Counsel		-	-	-	-	-	-	-
General Auditor		-	-	-	-	-	-	-
Total Departmental O&M	-	11,086,824	-	11,086,824	-	-	-	11,086,824

		Functionalization	Allocation Percentages					% Total
			Demand	Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		45,327	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Office of General Manager	Board of Directors	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Bay Delta Initiatives	Bay Delta Initiatives	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Legislative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Media Communications Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Manager, External Affairs/Special Projects	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Conservation & Community Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Human Resources		90,727	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager	99,807	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Treatment Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations Support Services	19,250	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Support Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Desert Region / C&D CRA	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	System Operations Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Power Operations and Planning	1,185,903	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Planning & Programs Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Jensen	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Diemer	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Mills	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Skinner	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Weymouth	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Water Quality Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Eastern Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Western Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Manufacturing Services Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Environmental Health & Safety Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Fleet Services Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Power Support Unit	803,581	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations & Planning Section	7,140	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Security Team & Security Management	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Sustainability, Resilience & Innovation		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Diversity, Equity & Inclusion		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Equal Employment Opportunity		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Office of the Chief Financial Officer		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Office of Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Engineering Services		918,164	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Administrative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Information Technology	283,830	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Planning & Development	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Implementation	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Office of the Group Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Ethics Office		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Real Property		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
General Counsel		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
General Auditor		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Departmental O&M		3,453,729	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
GENERAL DISTRICT REQUIREMENTS								
State Water Contract*								
Supply - O&M		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Supply - Capital		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Power - O&M & Off-Aq Capital		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Power - Capital (less Off-Aq)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Transmission - Capital - Commodity, Demand, & Standby		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Transmission - O&M - Commodity only		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Supply		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Power		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Other		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total State Water Contract		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Colorado River Aqueduct Power Costs		105,857,041	0.0%	0.0%	0.0%	100.0%	0.0%	100.0%
Supply Programs (cash funded portion)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Demand Management (cash funded portion)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Local Resources Program		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Future Supply Actions & Stormwater Pilot		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Conservation Program (cash funded portion)		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Demand Management Costs		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Capital Financing		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		5,551,987	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
G.O. Bond Debt Service		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Debt Administration		54,686	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Bond Defeasance		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
PAYGO		2,646,000	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Capital Financing Costs		8,252,673	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Other Operating Costs								
Operating Equipment		56,455	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Succession Planning Labor Pool		30,046	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
OPEB/PERS Pre-Funding		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Other Operating Costs		86,501	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Increase/(Decrease) in Required Reserves		-	0.0%	7.3%	0.0%	92.7%	0.0%	100.0%
Total General District Requirements		114,196,214	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
REQUIREMENTS BEFORE OFFSETS:		117,649,943	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Revenue Offsets								
Property Taxes - MWD Portion of SWC GO Debt Service		-	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Property Taxes - MWD GO Debt Service		-	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Interest on Investments		395,809	0.0%	0.0%	0.0%	100.0%	0.0%	100.0%
Hydro-Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
CRA Power Revenue		3,376,627	0.0%	0.0%	0.0%	100.0%	0.0%	100.0%
Wadsworth Pumping Plant (DVL) Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to supply (PVID Lease)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Property Taxes - SWC		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Revenue Reserve used for Revenue Bonds - I&P		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Annexation		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Revenue Offsets		3,772,435	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
NET REVENUE REQUIREMENTS:	-	113,877,508	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

		Functionalization	Allocation Percentages					Total
			Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
	Office of General Manager	45,327	-	45,327	-	-	-	45,327
	Office of General Manager							
	Board of Directors	-	-	-	-	-	-	-
	Bay Delta Initiatives	-	-	-	-	-	-	-
	Bay Delta Initiatives	-	-	-	-	-	-	-
	External Affairs	-	-	-	-	-	-	-
	Legislative Services	-	-	-	-	-	-	-
	Media Communications Services	-	-	-	-	-	-	-
	Manager, External Affairs/Special Projects	-	-	-	-	-	-	-
	Conservation & Community Services	-	-	-	-	-	-	-
	Human Resources	90,727	-	90,727	-	-	-	90,727
	Office of the Manager	99,807	-	99,807	-	-	-	99,807
	Office of the Manager, Conveyance & Distribution S	-	-	-	-	-	-	-
	Office of the Manager, Treatment Section	-	-	-	-	-	-	-
	Office of the Manager, Operations Support Services	19,250	-	19,250	-	-	-	19,250
	Operations Support Services	-	-	-	-	-	-	-
	Desert Region / C&D CRA	-	-	-	-	-	-	-
	System Operations Unit	-	-	-	-	-	-	-
	Power Operations and Planning	1,185,903	-	1,185,903	-	-	-	1,185,903
	Operations Planning & Programs Unit	-	-	-	-	-	-	-
	Treatment Jensen	-	-	-	-	-	-	-
	Treatment Diemer	-	-	-	-	-	-	-
	Treatment Mills	-	-	-	-	-	-	-
	Treatment Skinner	-	-	-	-	-	-	-
	Treatment Weymouth	-	-	-	-	-	-	-
	Water Quality Section	-	-	-	-	-	-	-
	C&D, Eastern Unit	-	-	-	-	-	-	-
	C&D, Western Unit	-	-	-	-	-	-	-
	OSS, Manufacturing Services Unit	-	-	-	-	-	-	-
	Environmental Health & Safety Section	-	-	-	-	-	-	-
	OSS, Fleet Services Unit	-	-	-	-	-	-	-
	OSS, Power Support Unit	803,581	-	803,581	-	-	-	803,581
	Office of the Manager, Operations & Planning Secti	7,140	-	7,140	-	-	-	7,140
	Security Team & Security Management	-	-	-	-	-	-	-
	Sustainability, Resilience & Inn	-	-	-	-	-	-	-
	Diversity, Equity & Inclusion	-	-	-	-	-	-	-
	Equal Employment Opportunity	-	-	-	-	-	-	-
	Office of the Chief Financial O	-	-	-	-	-	-	-
	Office of Manager	-	-	-	-	-	-	-
	Business Technology	918,164	-	918,164	-	-	-	918,164
	Administrative Services	-	-	-	-	-	-	-
	Information Technology	283,830	-	283,830	-	-	-	283,830
	Resource Planning & Development	-	-	-	-	-	-	-
	Resource Implementation	-	-	-	-	-	-	-
	Office of the Group Manager	-	-	-	-	-	-	-
	Ethics Office	-	-	-	-	-	-	-
	Real Property	-	-	-	-	-	-	-
	General Counsel	-	-	-	-	-	-	-
	General Auditor	-	-	-	-	-	-	-
	Total Departmental O&M	3,453,729	-	3,453,729	-	-	-	3,453,729
GENERAL DISTRICT REQUIREMENTS								
		-	-	-	-	-	-	-
	State Water Contract*	-	-	-	-	-	-	-
	Supply - O&M	-	-	-	-	-	-	-
	Supply - Capital	-	-	-	-	-	-	-
	Power - O&M & Off-Aq Capital	-	-	-	-	-	-	-
	Power - Capital (less Off-Aq)	-	-	-	-	-	-	-
	Transmission - Capital - Commodity, Demand, & Standby	-	-	-	-	-	-	-
	Transmission - O&M - Commodity only	-	-	-	-	-	-	-
	Delta Conveyance - Supply	-	-	-	-	-	-	-
	Delta Conveyance - Power	-	-	-	-	-	-	-
	Delta Conveyance - Other	-	-	-	-	-	-	-
	Total State Water Contract	-	-	-	-	-	-	-
		-	-	-	-	-	-	-
	Colorado River Aqueduct Power Costs	105,857,041	-	-	105,857,041	-	-	105,857,041
		-	-	-	-	-	-	-
	Supply Programs (cash funded portion)	-	-	-	-	-	-	-
		-	-	-	-	-	-	-
	Demand Management (cash funded portion)	-	-	-	-	-	-	-
	Local Resources Program	-	-	-	-	-	-	-
	Future Supply Actions & Stormwater Pilot	-	-	-	-	-	-	-
	Conservation Program (cash funded portion)	-	-	-	-	-	-	-
	Total Demand Management Costs	-	-	-	-	-	-	-
		-	-	-	-	-	-	-
	Capital Financing	-	-	-	-	-	-	-
	Revenue Bond Debt Service net of BABs Interest Subsidy Payment	5,551,987	-	5,551,987	-	-	-	5,551,987
	G.O. Bond Debt Service	-	-	-	-	-	-	-
	Debt Administration	54,686	-	54,686	-	-	-	54,686
	Bond Defeasance	-	-	-	-	-	-	-
	PAYGO	2,646,000	-	2,646,000	-	-	-	2,646,000
	Total Capital Financing Costs	8,252,673	-	8,252,673	-	-	-	8,252,673
		-	-	-	-	-	-	-
	Other Operating Costs	-	-	-	-	-	-	-
	Operating Equipment	56,455	-	56,455	-	-	-	56,455
	Succession Planning Labor Pool	30,046	-	30,046	-	-	-	30,046
	OPEB/PERS Pre-Funding	-	-	-	-	-	-	-
	Total Other Operating Costs	86,501	-	86,501	-	-	-	86,501
		-	-	-	-	-	-	-
	Increase/(Decrease) in Required Reserves	-	-	-	-	-	-	-
		-	-	-	-	-	-	-
	Total General District Requirements	114,196,214	-	8,339,173	105,857,041	-	-	114,196,214
		-	-	-	-	-	-	-
	REQUIREMENTS BEFORE OFFSETS:	117,649,943	-	11,792,903	105,857,041	-	-	117,649,943
		-	-	-	-	-	-	-
	Revenue Offsets	-	-	-	-	-	-	-
	Property Taxes - MWD Portion of SWC GO Debt Service	-	-	-	-	-	-	-
	Property Taxes - MWD GO Debt Service	-	-	-	-	-	-	-
	Interest on Investments	395,809	-	-	395,809	-	-	395,809
	Hydro-Power Revenue	-	-	-	-	-	-	-
	CRA Power Revenue	3,376,627	-	-	3,376,627	-	-	3,376,627
	Wadsworth Pumping Plant (DVL) Power Revenue	-	-	-	-	-	-	-
	Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)	-	-	-	-	-	-	-
	Misc. allocated to supply (PVID Lease)	-	-	-	-	-	-	-
	Property Taxes - SWC	-	-	-	-	-	-	-
	Revenue Reserve used for Revenue Bonds - I&P	-	-	-	-	-	-	-
	Annexation	-	-	-	-	-	-	-
	Total Revenue Offsets	3,772,435	-	-	3,772,435	-	-	3,772,435
		-	-	-	-	-	-	-
	NET REVENUE REQUIREMENTS:	113,877,508	-	11,792,903	102,084,606	-	-	113,877,508

		Functionalization	Allocation Percentages					Total
			Fixed			Variable		
			Demand	Commodity	Standby	Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		40,526	-	40,526	-	-	-	40,526
Office of General Manager	Board of Directors	-	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-	-
Human Resources		70,629	-	70,629	-	-	-	70,629
Water Systems Operations	Office of the Manager	72,632	-	72,632	-	-	-	72,632
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations Support Services	14,549	-	14,549	-	-	-	14,549
Water Systems Operations	Operations Support Services	-	-	-	-	-	-	-
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	1,015,689	-	1,015,689	-	-	-	1,015,689
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	-	-	-	-	-	-	-
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	-	-	-	-	-	-	-
Water Systems Operations	Environmental Health & Safety Section	-	-	-	-	-	-	-
Water Systems Operations	OSS, Fleet Services Unit	-	-	-	-	-	-	-
Water Systems Operations	OSS, Power Support Unit	725,334	-	725,334	-	-	-	725,334
Water Systems Operations	Office of the Manager, Operations & Planning Section	6,469	-	6,469	-	-	-	6,469
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-	-
Sustainability, Resilience & Inr		-	-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-	-
Engineering Services		735,939	-	735,939	-	-	-	735,939
Business Technology	Administrative Services	-	-	-	-	-	-	-
Business Technology	Information Technology	195,538	-	195,538	-	-	-	195,538
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	-	-	-	-	-	-	-
Water Resources Managemen	Office of the Group Manager	-	-	-	-	-	-	-
Ethics Office		-	-	-	-	-	-	-
Real Property		-	-	-	-	-	-	-
General Counsel		-	-	-	-	-	-	-
General Auditor		-	-	-	-	-	-	-
Total Departmental O&M	-	2,877,305	-	2,877,305	-	-	-	2,877,305

		Functionalization	Allocation Percentages					% Total
			Demand	Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		686,870	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Office of General Manager	Board of Directors	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Bay Delta Initiatives	Bay Delta Initiatives	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Legislative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Media Communications Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Manager, External Affairs/Special Projects	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Conservation & Community Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Human Resources		1,374,853	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager	1,767,261	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	430,789	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Treatment Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations Support Services	340,858	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Support Services	201,519	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Desert Region / C&D CRA	32,040,678	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	System Operations Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Power Operations and Planning	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Planning & Programs Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Jensen	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Diemer	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Mills	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Skinner	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Weymouth	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Water Quality Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Eastern Unit	1,045,230	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Western Unit	354	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Manufacturing Services Unit	394,920	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Environmental Health & Safety Section	2,402,920	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Fleet Services Unit	1,784,973	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Power Support Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations & Planning Section	126,428	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Security Team & Security Management	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Sustainability, Resilience & Innovation		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Diversity, Equity & Inclusion		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Equal Employment Opportunity		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Office of the Chief Financial Officer		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Office of Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Engineering Services		1,456,883	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Administrative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Information Technology	4,301,066	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Planning & Development	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Implementation	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Office of the Group Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Ethics Office		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Real Property		3,981,036	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
General Counsel		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
General Auditor		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Departmental O&M		52,336,638	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
GENERAL DISTRICT REQUIREMENTS								
State Water Contract*								
Supply - O&M		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Supply - Capital		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Power - O&M & Off-Aq Capital		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Power - Capital (less Off-Aq)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Transmission - Capital - Commodity, Demand, & Standby		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Transmission - O&M - Commodity only		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Supply		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Power		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Other		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total State Water Contract		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Colorado River Aqueduct Power Costs								
		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Supply Programs (cash funded portion)								
		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Demand Management (cash funded portion)								
Local Resources Program		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Future Supply Actions & Stormwater Pilot		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Conservation Program (cash funded portion)		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Demand Management Costs		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Capital Financing								
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		8,809,530	8.3%	49.0%	42.7%	0.0%	0.0%	100.0%
G.O. Bond Debt Service		-	8.3%	49.0%	42.7%	0.0%	0.0%	100.0%
Debt Administration		86,772	8.3%	49.0%	42.7%	0.0%	0.0%	100.0%
Bond Defeasance		-	8.3%	49.0%	42.7%	0.0%	0.0%	100.0%
PAYGO		4,198,500	8.3%	49.0%	42.7%	0.0%	0.0%	100.0%
Total Capital Financing Costs		13,094,802	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Other Operating Costs								
Operating Equipment		855,500	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Succession Planning Labor Pool		455,301	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
OPEB/PERS Pre-Funding		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Other Operating Costs		1,310,801	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Increase/(Decrease) in Required Reserves								
		-	7.6%	53.7%	38.8%	0.0%	0.0%	100.0%
Total General District Requirements								
		14,405,603	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
REQUIREMENTS BEFORE OFFSETS:								
		66,742,241	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Revenue Offsets								
Property Taxes - MWD Portion of SWC GO Debt Service		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Property Taxes - MWD GO Debt Service		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Interest on Investments		224,540	8.3%	49.0%	42.7%	0.0%	0.0%	100.0%
Hydro-Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
CRA Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Wadsworth Pumping Plant (DVL) Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to supply (PVID Lease)		-	1.6%	90.0%	8.4%	0.0%	0.0%	100.0%
Property Taxes - SWC		-	8.3%	49.0%	42.7%	0.0%	0.0%	100.0%
Revenue Reserve used for Revenue Bonds - I&P		-	50.0%	50.0%	0.0%	0.0%	0.0%	100.0%
Annexation		-	8.3%	49.0%	42.7%	0.0%	0.0%	100.0%
Total Revenue Offsets		224,540	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
NET REVENUE REQUIREMENTS:								
	-	66,517,700	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

	Functionalization	Allocation Percentages					Total
		Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M							
Group	Item						
Office of General Manager		686,870	-	686,870	-	-	686,870
Office of General Manager	Board of Directors	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-
Human Resources		1,374,853	-	1,374,853	-	-	1,374,853
Water Systems Operations	Office of the Manager	1,767,261	-	1,767,261	-	-	1,767,261
Water Systems Operations	Office of the Manager, Conveyance & Distribution S	430,789	-	430,789	-	-	430,789
Water Systems Operations	Office of the Manager, Treatment Section	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations Support Services	340,858	-	340,858	-	-	340,858
Water Systems Operations	Operations Support Services	201,519	-	201,519	-	-	201,519
Water Systems Operations	Desert Region / C&D CRA	32,040,678	-	32,040,678	-	-	32,040,678
Water Systems Operations	System Operations Unit	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	-	-	-	-	-	-
Water Systems Operations	C&D, Eastern Unit	1,045,230	-	1,045,230	-	-	1,045,230
Water Systems Operations	C&D, Western Unit	354	-	354	-	-	354
Water Systems Operations	OSS, Manufacturing Services Unit	394,920	-	394,920	-	-	394,920
Water Systems Operations	Environmental Health & Safety Section	2,402,920	-	2,402,920	-	-	2,402,920
Water Systems Operations	OSS, Fleet Services Unit	1,784,973	-	1,784,973	-	-	1,784,973
Water Systems Operations	OSS, Power Support Unit	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations & Planning Secti	126,428	-	126,428	-	-	126,428
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-
Sustainability, Resilience & Inn		-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-
Engineering Services		1,456,883	-	1,456,883	-	-	1,456,883
Business Technology	Administrative Services	-	-	-	-	-	-
Business Technology	Information Technology	4,301,066	-	4,301,066	-	-	4,301,066
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	-	-	-	-	-	-
Water Resources Managemen	Office of the Group Manager	-	-	-	-	-	-
Ethics Office		-	-	-	-	-	-
Real Property		3,981,036	-	3,981,036	-	-	3,981,036
General Counsel		-	-	-	-	-	-
General Auditor		-	-	-	-	-	-
Total Departmental O&M	-	52,336,638	-	52,336,638	-	-	52,336,638
GENERAL DISTRICT REQUIREMENTS							
		-	-	-	-	-	-
State Water Contract*							
		-	-	-	-	-	-
Supply - O&M		-	-	-	-	-	-
Supply - Capital		-	-	-	-	-	-
Power - O&M & Off-Aq Capital		-	-	-	-	-	-
Power - Capital (less Off-Aq)		-	-	-	-	-	-
Transmission - Capital - Commodity, Demand, & Standby		-	-	-	-	-	-
Transmission - O&M - Commodity only		-	-	-	-	-	-
Delta Conveyance - Supply		-	-	-	-	-	-
Delta Conveyance - Power		-	-	-	-	-	-
Delta Conveyance - Other		-	-	-	-	-	-
Total State Water Contract		-	-	-	-	-	-
Colorado River Aqueduct Power Costs							
		-	-	-	-	-	-
Supply Programs (cash funded portion)							
		-	-	-	-	-	-
Demand Management (cash funded portion)							
		-	-	-	-	-	-
Local Resources Program		-	-	-	-	-	-
Future Supply Actions & Stormwater Pilot		-	-	-	-	-	-
Conservation Program (cash funded portion)		-	-	-	-	-	-
Total Demand Management Costs		-	-	-	-	-	-
Capital Financing							
		-	-	-	-	-	-
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		8,809,530	734,064	4,318,022	3,757,444	-	8,809,530
G.O. Bond Debt Service		-	-	-	-	-	-
Debt Administration		86,772	7,230	42,532	37,010	-	86,772
Bond Defeasance		-	-	-	-	-	-
PAYGO		4,198,500	349,845	2,057,909	1,790,746	-	4,198,500
Total Capital Financing Costs		13,094,802	1,091,139	6,418,463	5,585,200	-	13,094,802
Other Operating Costs							
		-	-	-	-	-	-
Operating Equipment		855,500	-	855,500	-	-	855,500
Succession Planning Labor Pool		455,301	-	455,301	-	-	455,301
OPEB/PERS Pre-Funding		-	-	-	-	-	-
Total Other Operating Costs		1,310,801	-	1,310,801	-	-	1,310,801
Increase/(Decrease) in Required Reserves							
		-	-	-	-	-	-
Total General District Requirements		14,405,603	1,091,139	7,729,264	5,585,200	-	14,405,603
REQUIREMENTS BEFORE OFFSETS:							
		66,742,241	1,091,139	60,065,902	5,585,200	-	66,742,241
Revenue Offsets							
		-	-	-	-	-	-
Property Taxes - MWD Portion of SWC GO Debt Service		-	-	-	-	-	-
Property Taxes - MWD GO Debt Service		-	-	-	-	-	-
Interest on Investments		224,540	18,710	110,059	95,771	-	224,540
Hydro-Power Revenue		-	-	-	-	-	-
CRA Power Revenue		-	-	-	-	-	-
Wadsworth Pumping Plant (DVL) Power Revenue		-	-	-	-	-	-
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)		-	-	-	-	-	-
Misc. allocated to supply (PVID Lease)		-	-	-	-	-	-
Property Taxes - SWC		-	-	-	-	-	-
Revenue Reserve used for Revenue Bonds - I&P		-	-	-	-	-	-
Annexation		-	-	-	-	-	-
Total Revenue Offsets		224,540	18,710	110,059	95,771	-	224,540
NET REVENUE REQUIREMENTS:							
		66,517,700	1,072,429	59,955,843	5,489,429	-	66,517,700

		Functionalization	Allocation Percentages					Total
			Fixed			Variable		
			Demand	Commodity	Standby	Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		614,114	-	614,114	-	-	-	614,114
Office of General Manager	Board of Directors	-	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-	-
Human Resources		1,070,291	-	1,070,291	-	-	-	1,070,291
Water Systems Operations	Office of the Manager	1,286,075	-	1,286,075	-	-	-	1,286,075
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	420,754	-	420,754	-	-	-	420,754
Water Systems Operations	Office of the Manager, Treatment Section	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations Support Services	257,609	-	257,609	-	-	-	257,609
Water Systems Operations	Operations Support Services	-	-	182,036	-	-	-	182,036
Water Systems Operations	Desert Region / C&D CRA	26,171,637	-	26,171,637	-	-	-	26,171,637
Water Systems Operations	System Operations Unit	-	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	-	-	-	-	-	-	-
Water Systems Operations	C&D, Eastern Unit	728,999	-	728,999	-	-	-	728,999
Water Systems Operations	C&D, Western Unit	243	-	243	-	-	-	243
Water Systems Operations	OSS, Manufacturing Services Unit	362,700	-	362,700	-	-	-	362,700
Water Systems Operations	Environmental Health & Safety Section	1,871,121	-	1,871,121	-	-	-	1,871,121
Water Systems Operations	OSS, Fleet Services Unit	1,090,535	-	1,090,535	-	-	-	1,090,535
Water Systems Operations	OSS, Power Support Unit	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations & Planning Section	114,554	-	114,554	-	-	-	114,554
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-	-
Sustainability, Resilience & Inr		-	-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-	-
Engineering Services		1,167,741	-	1,167,741	-	-	-	1,167,741
Business Technology	Administrative Services	-	-	-	-	-	-	-
Business Technology	Information Technology	2,963,118	-	2,963,118	-	-	-	2,963,118
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	-	-	-	-	-	-	-
Water Resources Managemen	Office of the Group Manager	-	-	-	-	-	-	-
Ethics Office		-	-	-	-	-	-	-
Real Property		1,675,969	-	1,675,969	-	-	-	1,675,969
General Counsel		-	-	-	-	-	-	-
General Auditor		-	-	-	-	-	-	-
Total Departmental O&M	-	39,977,495	-	39,977,495	-	-	-	39,977,495

		Functionalization	Allocation Percentages					% Total
			Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Office of General Manager	Board of Directors	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Bay Delta Initiatives	Bay Delta Initiatives	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Legislative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Media Communications Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Manager, External Affairs/Special Projects	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Conservation & Community Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Human Resources		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Treatment Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations Support Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Support Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Desert Region / C&D CRA	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	System Operations Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Power Operations and Planning	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Planning & Programs Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Jensen	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Diemer	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Mills	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Skinner	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Weymouth	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Water Quality Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Eastern Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Western Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Manufacturing Services Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Environmental Health & Safety Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Fleet Services Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Power Support Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations & Planning Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Security Team & Security Management	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Sustainability, Resilience & Innovation		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Diversity, Equity & Inclusion		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Equal Employment Opportunity		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Office of the Chief Financial Officer		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Office of Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Engineering Services		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Administrative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Information Technology	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Planning & Development	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Implementation	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Office of the Group Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Ethics Office		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Real Property		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
General Counsel		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
General Auditor		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Departmental O&M		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
GENERAL DISTRICT REQUIREMENTS								
State Water Contract*								
Supply - O&M		-	0.0%	0.0%	0.0%	100.0%	0.0%	100.0%
Supply - Capital		-	0.0%	0.0%	0.0%	100.0%	0.0%	100.0%
Power - O&M & Off-Aq Capital	211,574,465	-	0.0%	0.0%	0.0%	100.0%	0.0%	100.0%
Power - Capital (less Off-Aq)	(4,981,305)	-	0.0%	0.0%	0.0%	100.0%	0.0%	100.0%
Transmission - Capital - Commodity, Demand, & Standby		-	0.0%	0.0%	0.0%	100.0%	0.0%	100.0%
Transmission - O&M - Commodity only		-	0.0%	0.0%	0.0%	100.0%	0.0%	100.0%
Delta Conveyance - Supply		-	0.0%	0.0%	0.0%	100.0%	0.0%	100.0%
Delta Conveyance - Power		-	0.0%	0.0%	0.0%	100.0%	0.0%	100.0%
Delta Conveyance - Other		-	0.0%	0.0%	0.0%	100.0%	0.0%	100.0%
Total State Water Contract	206,593,160	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Colorado River Aqueduct Power Costs			-	0.0%	0.0%	0.0%	0.0%	0.0%
Supply Programs (cash funded portion)			-	0.0%	0.0%	0.0%	0.0%	0.0%
Demand Management (cash funded portion)			-	0.0%	0.0%	0.0%	0.0%	0.0%
Local Resources Program		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Future Supply Actions & Stormwater Pilot		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Conservation Program (cash funded portion)		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Demand Management Costs		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Capital Financing			-	0.0%	0.0%	0.0%	0.0%	0.0%
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
G.O. Bond Debt Service		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Debt Administration		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Bond Defeasance		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
PAYGO		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total Capital Financing Costs		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Other Operating Costs								
Operating Equipment		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Succession Planning Labor Pool		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
OPEB/PERS Pre-Funding		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Other Operating Costs		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Increase/(Decrease) in Required Reserves			-	0.0%	0.0%	100.0%	0.0%	100.0%
Total General District Requirements			206,593,160	0.0%	0.0%	0.0%	0.0%	0.0%
REQUIREMENTS BEFORE OFFSETS:			206,593,160	0.0%	0.0%	0.0%	0.0%	0.0%
Revenue Offsets								
Property Taxes - MWD Portion of SWC GO Debt Service		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Property Taxes - MWD GO Debt Service		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Interest on Investments	695,040	-	0.0%	0.0%	0.0%	100.0%	0.0%	100.0%
Hydro-Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
CRA Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Wadsworth Pumping Plant (DVL) Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to supply (PVID Lease)		-	0.0%	0.0%	0.0%	100.0%	0.0%	100.0%
Property Taxes - SWC	50,895,177	-	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Revenue Reserve used for Revenue Bonds - I&P		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Annexation		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total Revenue Offsets	51,590,216	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
NET REVENUE REQUIREMENTS:			-	155,002,944	0.0%	0.0%	0.0%	0.0%

	Functionalization	Allocation Percentages					Total
		Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M							
Group	Item						
Office of General Manager	Office of General Manager	-	-	-	-	-	-
Office of General Manager	Board of Directors	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-
Human Resources		-	-	-	-	-	-
Water Systems Operations	Office of the Manager	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Conveyance & Distribution S	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations Support Services	-	-	-	-	-	-
Water Systems Operations	Operations Support Services	-	-	-	-	-	-
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	-	-	-	-	-	-
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	-	-	-	-	-	-
Water Systems Operations	Environmental Health & Safety Section	-	-	-	-	-	-
Water Systems Operations	OSS, Fleet Services Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Power Support Unit	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations & Planning Secti	-	-	-	-	-	-
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-
Sustainability, Resilience & Inn		-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-
Engineering Services		-	-	-	-	-	-
Business Technology	Administrative Services	-	-	-	-	-	-
Business Technology	Information Technology	-	-	-	-	-	-
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	-	-	-	-	-	-
Water Resources Managemen	Office of the Group Manager	-	-	-	-	-	-
Ethics Office		-	-	-	-	-	-
Real Property		-	-	-	-	-	-
General Counsel		-	-	-	-	-	-
General Auditor		-	-	-	-	-	-
Total Departmental O&M	-	-	-	-	-	-	-
GENERAL DISTRICT REQUIREMENTS		-	-	-	-	-	-
State Water Contract*		-	-	-	-	-	-
Supply - O&M		-	-	-	-	-	-
Supply - Capital		-	-	-	-	-	-
Power - O&M & Off-Aq Capital	211,574,465	-	-	-	211,574,465	-	211,574,465
Power - Capital (less Off-Aq)	(4,981,305)	-	-	-	(4,981,305)	-	(4,981,305)
Transmission - Capital - Commodity, Demand, & Standby		-	-	-	-	-	-
Transmission - O&M - Commodity only		-	-	-	-	-	-
Delta Conveyance - Supply		-	-	-	-	-	-
Delta Conveyance - Power		-	-	-	-	-	-
Delta Conveyance - Other		-	-	-	-	-	-
Total State Water Contract	206,593,160	-	-	-	206,593,160	-	206,593,160
Colorado River Aqueduct Power Costs		-	-	-	-	-	-
Supply Programs (cash funded portion)		-	-	-	-	-	-
Demand Management (cash funded portion)		-	-	-	-	-	-
Local Resources Program		-	-	-	-	-	-
Future Supply Actions & Stormwater Pilot		-	-	-	-	-	-
Conservation Program (cash funded portion)		-	-	-	-	-	-
Total Demand Management Costs		-	-	-	-	-	-
Capital Financing		-	-	-	-	-	-
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		-	-	-	-	-	-
G.O. Bond Debt Service		-	-	-	-	-	-
Debt Administration		-	-	-	-	-	-
Bond Defeasance		-	-	-	-	-	-
PAYGO		-	-	-	-	-	-
Total Capital Financing Costs		-	-	-	-	-	-
Other Operating Costs		-	-	-	-	-	-
Operating Equipment		-	-	-	-	-	-
Succession Planning Labor Pool		-	-	-	-	-	-
OPEB/PERS Pre-Funding		-	-	-	-	-	-
Total Other Operating Costs		-	-	-	-	-	-
Increase/(Decrease) in Required Reserves		-	-	-	-	-	-
Total General District Requirements	206,593,160	-	-	-	206,593,160	-	206,593,160
REQUIREMENTS BEFORE OFFSETS:	206,593,160	-	-	-	206,593,160	-	206,593,160
Revenue Offsets		-	-	-	-	-	-
Property Taxes - MWD Portion of SWC GO Debt Service		-	-	-	-	-	-
Property Taxes - MWD GO Debt Service		-	-	-	-	-	-
Interest on Investments	695,040	-	-	-	695,040	-	695,040
Hydro-Power Revenue		-	-	-	-	-	-
CRA Power Revenue		-	-	-	-	-	-
Wadsworth Pumping Plant (DVL) Power Revenue		-	-	-	-	-	-
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)		-	-	-	-	-	-
Misc. allocated to supply (PVID Lease)		-	-	-	-	-	-
Property Taxes - SWC	50,895,177	-	-	-	50,895,177	-	50,895,177
Revenue Reserve used for Revenue Bonds - I&P		-	-	-	-	-	-
Annexation		-	-	-	-	-	-
Total Revenue Offsets	51,590,216	-	-	-	51,590,216	-	51,590,216
NET REVENUE REQUIREMENTS:	155,002,944	-	-	-	155,002,944	-	155,002,944

	Functionalization	Allocation Percentages					Total
		Fixed			Variable	Hydroelectric	
		Demand	Commodity	Standby	Commodity		
Departmental O&M							
Group	Item						
Office of General Manager		-	-	-	-	-	-
Office of General Manager	Board of Directors	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-
Human Resources		-	-	-	-	-	-
Water Systems Operations	Office of the Manager	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations Support Services	-	-	-	-	-	-
Water Systems Operations	Operations Support Services	-	-	-	-	-	-
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	-	-	-	-	-	-
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	-	-	-	-	-	-
Water Systems Operations	Environmental Health & Safety Section	-	-	-	-	-	-
Water Systems Operations	OSS, Fleet Services Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Power Support Unit	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations & Planning Section	-	-	-	-	-	-
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-
Sustainability, Resilience & Inr		-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-
Equal Employment Opportuniti		-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-
Engineering Services		-	-	-	-	-	-
Business Technology	Administrative Services	-	-	-	-	-	-
Business Technology	Information Technology	-	-	-	-	-	-
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	-	-	-	-	-	-
Water Resources Managemen	Office of the Group Manager	-	-	-	-	-	-
Ethics Office		-	-	-	-	-	-
Real Property		-	-	-	-	-	-
General Counsel		-	-	-	-	-	-
General Auditor		-	-	-	-	-	-
Total Departmental O&M	-	-	-	-	-	-	-

		Functionalization	Allocation Percentages					% Total
			Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		303,105	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Office of General Manager	Board of Directors	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Bay Delta Initiatives	Bay Delta Initiatives	11,461,862	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Legislative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Media Communications Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Manager, External Affairs/Special Projects	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Conservation & Community Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Human Resources		606,701	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager	110,553	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	30,407	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Treatment Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations Support Services	21,323	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Support Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Desert Region / C&D CRA	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	System Operations Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Power Operations and Planning	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Planning & Programs Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Jensen	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Diemer	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Mills	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Skinner	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Weymouth	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Water Quality Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Eastern Unit	2,146,566	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Western Unit	584,131	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Manufacturing Services Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Environmental Health & Safety Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Fleet Services Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Power Support Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations & Planning Section	7,909	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Security Team & Security Management	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Sustainability, Resilience & Innovation		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Diversity, Equity & Inclusion		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Equal Employment Opportunity		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Office of the Chief Financial Officer		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Office of Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Engineering Services		712,046	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Administrative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Information Technology	1,897,994	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Planning & Development	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Implementation	48,510	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Office of the Group Manager	5,714	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Ethics Office		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Real Property		5,158,525	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
General Counsel		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
General Auditor		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Departmental O&M		23,095,346	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
GENERAL DISTRICT REQUIREMENTS								
State Water Contract*								
Supply - O&M		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Supply - Capital		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Power - O&M & Off-Aq Capital		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Power - Capital (less Off-Aq)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Transmission - Capital - Commodity, Demand, & Standby		60,506,317	8.3%	49.0%	42.7%	0.0%	0.0%	100.0%
Transmission - O&M - Commodity only		194,057,356	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Delta Conveyance - Supply		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Delta Conveyance - Power		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Delta Conveyance - Other		30,000,000	8.3%	49.0%	42.7%	0.0%	0.0%	100.0%
Total State Water Contract		284,563,673	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Colorado River Aqueduct Power Costs								
		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Supply Programs (cash funded portion)								
		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Demand Management (cash funded portion)								
Local Resources Program		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Future Supply Actions & Stormwater Pilot		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Conservation Program (cash funded portion)		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Demand Management Costs		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Capital Financing								
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
G.O. Bond Debt Service	4,305,622	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Debt Administration	42,409	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Bond Defeasance	-	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
PAYGO	2,052,000	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Capital Financing Costs	6,400,032	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Other Operating Costs								
Operating Equipment	377,519	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Succession Planning Labor Pool	200,917	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
OPEB/PERS Pre-Funding	-	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Other Operating Costs	578,436	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Increase/(Decrease) in Required Reserves								
		-	2.6%	84.2%	13.2%	0.0%	0.0%	100.0%
Total General District Requirements								
		291,542,141	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
REQUIREMENTS BEFORE OFFSETS:								
		314,637,487	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Revenue Offsets								
Property Taxes - MWD Portion of SWC GO Debt Service	564,249	-	8.3%	49.0%	42.7%	0.0%	0.0%	100.0%
Property Taxes - MWD GO Debt Service	-	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Interest on Investments	1,058,532	-	8.3%	49.0%	42.7%	0.0%	0.0%	100.0%
Hydro-Power Revenue	-	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
CRA Power Revenue	-	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Wadsworth Pumping Plant (DVL) Power Revenue	-	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)	-	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to supply (PVID Lease)	-	-	2.4%	85.3%	12.3%	0.0%	0.0%	100.0%
Property Taxes - SWC	62,712,933	-	2.0%	87.9%	10.1%	0.0%	0.0%	100.0%
Revenue Reserve used for Revenue Bonds - I&P	-	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Annexation	-	-	8.3%	49.0%	42.7%	0.0%	0.0%	100.0%
Total Revenue Offsets	64,335,715	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
NET REVENUE REQUIREMENTS:								
-		250,301,773	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

	Functionalization	Allocation Percentages					Total
		Demand	Fixed	Standby	Variable	Hydroelectric	
			Commodity		Commodity		
Departmental O&M							
Group	Item						
Office of General Manager		303,105	-	303,105	-	-	303,105
Office of General Manager	Board of Directors	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	11,461,862	-	11,461,862	-	-	11,461,862
External Affairs	Legislative Services	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-
Human Resources		606,701	-	606,701	-	-	606,701
Water Systems Operations	Office of the Manager	110,553	-	110,553	-	-	110,553
Water Systems Operations	Office of the Manager, Conveyance & Distribution S	30,407	-	30,407	-	-	30,407
Water Systems Operations	Office of the Manager, Treatment Section	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations Support Services	21,323	-	21,323	-	-	21,323
Water Systems Operations	Operations Support Services	-	-	-	-	-	-
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	-	-	-	-	-	-
Water Systems Operations	C&D, Eastern Unit	2,146,566	-	2,146,566	-	-	2,146,566
Water Systems Operations	C&D, Western Unit	584,131	-	584,131	-	-	584,131
Water Systems Operations	OSS, Manufacturing Services Unit	-	-	-	-	-	-
Water Systems Operations	Environmental Health & Safety Section	-	-	-	-	-	-
Water Systems Operations	OSS, Fleet Services Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Power Support Unit	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations & Planning Secti	7,909	-	7,909	-	-	7,909
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-
Sustainability, Resilience & Inn		-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-
Engineering Services		712,046	-	712,046	-	-	712,046
Business Technology	Administrative Services	-	-	-	-	-	-
Business Technology	Information Technology	1,897,994	-	1,897,994	-	-	1,897,994
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	48,510	-	48,510	-	-	48,510
Water Resources Managemen	Office of the Group Manager	5,714	-	5,714	-	-	5,714
Ethics Office		-	-	-	-	-	-
Real Property		5,158,525	-	5,158,525	-	-	5,158,525
General Counsel		-	-	-	-	-	-
General Auditor		-	-	-	-	-	-
Total Departmental O&M	-	23,095,346	-	23,095,346	-	-	23,095,346
GENERAL DISTRICT REQUIREMENTS							
		-	-	-	-	-	-
State Water Contract*		-	-	-	-	-	-
Supply - O&M		-	-	-	-	-	-
Supply - Capital		-	-	-	-	-	-
Power - O&M & Off-Aq Capital		-	-	-	-	-	-
Power - Capital (less Off-Aq)		-	-	-	-	-	-
Transmission - Capital - Commodity, Demand, & Standby		60,506,317	5,041,755	29,657,383	25,807,178	-	60,506,317
Transmission - O&M - Commodity only		194,057,356	-	194,057,356	-	-	194,057,356
Delta Conveyance - Supply		-	-	-	-	-	-
Delta Conveyance - Power		-	-	-	-	-	-
Delta Conveyance - Other		30,000,000	2,499,783	14,704,605	12,795,612	-	30,000,000
Total State Water Contract		284,563,673	7,541,538	238,419,345	38,602,790	-	284,563,673
Colorado River Aqueduct Power Costs							
		-	-	-	-	-	-
Supply Programs (cash funded portion)		-	-	-	-	-	-
Demand Management (cash funded portion)							
Local Resources Program		-	-	-	-	-	-
Future Supply Actions & Stormwater Pilot		-	-	-	-	-	-
Conservation Program (cash funded portion)		-	-	-	-	-	-
Total Demand Management Costs		-	-	-	-	-	-
Capital Financing							
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		4,305,622	-	4,305,622	-	-	4,305,622
G.O. Bond Debt Service		-	-	-	-	-	-
Debt Administration		42,409	-	42,409	-	-	42,409
Bond Defeasance		-	-	-	-	-	-
PAYGO		2,052,000	-	2,052,000	-	-	2,052,000
Total Capital Financing Costs		6,400,032	-	6,400,032	-	-	6,400,032
Other Operating Costs							
Operating Equipment		377,519	-	377,519	-	-	377,519
Succession Planning Labor Pool		200,917	-	200,917	-	-	200,917
OPEB/PERS Pre-Funding		-	-	-	-	-	-
Total Other Operating Costs		578,436	-	578,436	-	-	578,436
Increase/(Decrease) in Required Reserves							
		-	-	-	-	-	-
Total General District Requirements		291,542,141	7,541,538	245,397,813	38,602,790	-	291,542,141
REQUIREMENTS BEFORE OFFSETS:		314,637,487	7,541,538	268,493,159	38,602,790	-	314,637,487
Revenue Offsets							
Property Taxes - MWD Portion of SWC GO Debt Service		564,249	47,017	276,569	240,664	-	564,249
Property Taxes - MWD GO Debt Service		-	-	-	-	-	-
Interest on Investments		1,058,532	88,203	518,843	451,486	-	1,058,532
Hydro-Power Revenue		-	-	-	-	-	-
CRA Power Revenue		-	-	-	-	-	-
Wadsworth Pumping Plant (DVL) Power Revenue		-	-	-	-	-	-
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)		-	-	-	-	-	-
Misc. allocated to supply (PVID Lease)		-	-	-	-	-	-
Property Taxes - SWC		62,712,933	1,242,060	55,113,157	6,357,717	-	62,712,933
Revenue Reserve used for Revenue Bonds - I&P		-	-	-	-	-	-
Annexation		-	-	-	-	-	-
Total Revenue Offsets		64,335,715	1,377,280	55,908,568	7,049,867	-	64,335,715
NET REVENUE REQUIREMENTS:		250,301,773	6,164,258	212,584,590	31,552,924	-	250,301,773

	Functionalization	Allocation Percentages					Total
		Fixed			Variable		
		Demand	Commodity	Standby	Commodity	Hydroelectric	
Departmental O&M							
Group	Item						
Office of General Manager		270,999	-	270,999	-	-	270,999
Office of General Manager	Board of Directors	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	5,395,138	-	5,395,138	-	-	5,395,138
External Affairs	Legislative Services	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-
Human Resources		472,303	-	472,303	-	-	472,303
Water Systems Operations	Office of the Manager	80,452	-	80,452	-	-	80,452
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	29,699	-	29,699	-	-	29,699
Water Systems Operations	Office of the Manager, Treatment Section	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations Support Services	16,115	-	16,115	-	-	16,115
Water Systems Operations	Operations Support Services	-	-	-	-	-	-
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	-	-	-	-	-	-
Water Systems Operations	C&D, Eastern Unit	1,497,129	-	1,497,129	-	-	1,497,129
Water Systems Operations	C&D, Western Unit	401,656	-	401,656	-	-	401,656
Water Systems Operations	OSS, Manufacturing Services Unit	-	-	-	-	-	-
Water Systems Operations	Environmental Health & Safety Section	-	-	-	-	-	-
Water Systems Operations	OSS, Fleet Services Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Power Support Unit	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations & Planning Section	7,166	-	7,166	-	-	7,166
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-
Sustainability, Resilience & Inr		-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-
Engineering Services		570,729	-	570,729	-	-	570,729
Business Technology	Administrative Services	-	-	-	-	-	-
Business Technology	Information Technology	1,307,578	-	1,307,578	-	-	1,307,578
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	31,609	-	31,609	-	-	31,609
Water Resources Managemen	Office of the Group Manager	5,586	-	5,586	-	-	5,586
Ethics Office		-	-	-	-	-	-
Real Property		2,171,678	-	2,171,678	-	-	2,171,678
General Counsel		-	-	-	-	-	-
General Auditor		-	-	-	-	-	-
Total Departmental O&M	-	12,257,835	-	12,257,835	-	-	12,257,835

		Functionalization	Allocation Percentages					% Total
			Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
	Office of General Manager	104,983	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Office of General Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Bay Delta Initiatives	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	External Affairs	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	External Affairs	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	External Affairs	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	External Affairs	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Human Resources	210,136	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems							

	Functionalization	Allocation Percentages					Total
		Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M							
Group	Item						
Office of General Manager		104,983	-	104,983	-	-	104,983
Office of General Manager	Board of Directors	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-
Human Resources		210,136	-	210,136	-	-	210,136
Water Systems Operations	Office of the Manager	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Conveyance & Distribution S	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations Support Services	-	-	-	-	-	-
Water Systems Operations	Operations Support Services	-	-	-	-	-	-
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	-	-	-	-	-	-
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	-	-	-	-	-	-
Water Systems Operations	Environmental Health & Safety Section	-	-	-	-	-	-
Water Systems Operations	OSS, Fleet Services Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Power Support Unit	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations & Planning Secti	-	-	-	-	-	-
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-
Sustainability, Resilience & Inn		-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-
Engineering Services		7,026,766	-	7,026,766	-	-	7,026,766
Business Technology	Administrative Services	-	-	-	-	-	-
Business Technology	Information Technology	657,386	-	657,386	-	-	657,386
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	-	-	-	-	-	-
Water Resources Managemen	Office of the Group Manager	-	-	-	-	-	-
Ethics Office		-	-	-	-	-	-
Real Property		-	-	-	-	-	-
General Counsel		-	-	-	-	-	-
General Auditor		-	-	-	-	-	-
Total Departmental O&M		7,999,272	-	7,999,272	-	-	7,999,272
GENERAL DISTRICT REQUIREMENTS		-	-	-	-	-	-
State Water Contract*		-	-	-	-	-	-
Supply - O&M		-	-	-	-	-	-
Supply - Capital		-	-	-	-	-	-
Power - O&M & Off-Aq Capital		-	-	-	-	-	-
Power - Capital (less Off-Aq)		-	-	-	-	-	-
Transmission - Capital - Commodity, Demand, & Standby		-	-	-	-	-	-
Transmission - O&M - Commodity only		-	-	-	-	-	-
Delta Conveyance - Supply		-	-	-	-	-	-
Delta Conveyance - Power		-	-	-	-	-	-
Delta Conveyance - Other		-	-	-	-	-	-
Total State Water Contract		-	-	-	-	-	-
Colorado River Aqueduct Power Costs		-	-	-	-	-	-
Supply Programs (cash funded portion)		-	-	-	-	-	-
Demand Management (cash funded portion)		-	-	-	-	-	-
Local Resources Program		-	-	-	-	-	-
Future Supply Actions & Stormwater Pilot		-	-	-	-	-	-
Conservation Program (cash funded portion)		-	-	-	-	-	-
Total Demand Management Costs		-	-	-	-	-	-
Capital Financing		-	-	-	-	-	-
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		42,489,693	3,540,500	20,826,472	18,122,721	-	42,489,693
G.O. Bond Debt Service		-	-	-	-	-	-
Debt Administration		418,515	34,873	205,136	178,505	-	418,515
Bond Defeasance		-	-	-	-	-	-
PAYGO		20,250,000	1,687,353	9,925,609	8,637,038	-	20,250,000
Total Capital Financing Costs		63,158,208	5,262,727	30,957,217	26,938,264	-	63,158,208
Other Operating Costs		-	-	-	-	-	-
Operating Equipment		130,757	-	130,757	-	-	130,757
Succession Planning Labor Pool		69,589	-	69,589	-	-	69,589
OPEB/PERS Pre-Funding		-	-	-	-	-	-
Total Other Operating Costs		200,346	-	200,346	-	-	200,346
Increase/(Decrease) in Required Reserves		-	-	-	-	-	-
Total General District Requirements		63,358,554	5,262,727	31,157,563	26,938,264	-	63,358,554
REQUIREMENTS BEFORE OFFSETS:		71,357,826	5,262,727	39,156,836	26,938,264	-	71,357,826
Revenue Offsets		-	-	-	-	-	-
Property Taxes - MWD Portion of SWC GO Debt Service		-	-	-	-	-	-
Property Taxes - MWD GO Debt Service		-	-	-	-	-	-
Interest on Investments		240,068	240,068	-	-	-	240,068
Hydro-Power Revenue		-	-	-	-	-	-
CRA Power Revenue		-	-	-	-	-	-
Wadsworth Pumping Plant (DVL) Power Revenue		-	-	-	-	-	-
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)		-	-	-	-	-	-
Misc. allocated to supply (PVID Lease)		-	-	-	-	-	-
Property Taxes - SWC		-	-	-	-	-	-
Revenue Reserve used for Revenue Bonds - I&P		-	-	-	-	-	-
Annexation		-	-	-	-	-	-
Total Revenue Offsets		240,068	240,068	-	-	-	240,068
NET REVENUE REQUIREMENTS:		71,117,758	5,022,658	39,156,836	26,938,264	-	71,117,758

		Functionalization	Allocation Percentages					Total
			Fixed			Variable		
			Demand	Commodity	Standby	Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		93,863	-	93,863	-	-	-	93,863
Office of General Manager	Board of Directors		-	-	-	-	-	
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-	
External Affairs	Legislative Services	-	-	-	-	-	-	
External Affairs	Media Communications Services	-	-	-	-	-	-	
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-	
External Affairs	Conservation & Community Services	-	-	-	-	-	-	
Human Resources		163,586	-	163,586	-	-	-	163,586
Water Systems Operations	Office of the Manager	-	-	-	-	-	-	
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	-	-	-	-	-	
Water Systems Operations	Office of the Manager, Treatment Section	-	-	-	-	-	-	
Water Systems Operations	Office of the Manager, Operations Support Services	-	-	-	-	-	-	
Water Systems Operations	Operations Support Services	-	-	-	-	-	-	
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-	
Water Systems Operations	System Operations Unit	-	-	-	-	-	-	
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-	
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-	
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-	
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-	
Water Systems Operations	Treatment Mills	-	-	-	-	-	-	
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-	
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-	
Water Systems Operations	Water Quality Section	-	-	-	-	-	-	
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-	
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-	
Water Systems Operations	OSS, Manufacturing Services Unit	-	-	-	-	-	-	
Water Systems Operations	Environmental Health & Safety Section	-	-	-	-	-	-	
Water Systems Operations	OSS, Fleet Services Unit	-	-	-	-	-	-	
Water Systems Operations	OSS, Power Support Unit	-	-	-	-	-	-	
Water Systems Operations	Office of the Manager, Operations & Planning Section	-	-	-	-	-	-	
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-	
Sustainability, Resilience & Inr		-	-	-	-	-	-	
Diversity, Equity & Inclusion		-	-	-	-	-	-	
Equal Employment Opportunity		-	-	-	-	-	-	
Office of the Chief Financial O		-	-	-	-	-	-	
Business Technology	Office of Manager	-	-	-	-	-	-	
Engineering Services		5,632,189	-	5,632,189	-	-	-	5,632,189
Business Technology	Administrative Services	-	-	-	-	-	-	
Business Technology	Information Technology	452,891	-	452,891	-	-	-	452,891
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-	
Water Resources Managemen	Resource Implementation	-	-	-	-	-	-	
Water Resources Managemen	Office of the Group Manager	-	-	-	-	-	-	
Ethics Office		-	-	-	-	-	-	
Real Property		-	-	-	-	-	-	
General Counsel		-	-	-	-	-	-	
General Auditor		-	-	-	-	-	-	
Total Departmental O&M	-	6,342,529	-	6,342,529	-	-	-	6,342,529

		Functionalization	Allocation Percentages					% Total
			Demand	Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		101,710	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Office of General Manager	Board of Directors	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Bay Delta Initiatives	Bay Delta Initiatives	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Legislative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Media Communications Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Manager, External Affairs/Special Projects	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Conservation & Community Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Human Resources		203,584	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager	32,181	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Treatment Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations Support Services	6,207	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Support Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Desert Region / C&D CRA	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	System Operations Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Power Operations and Planning	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Planning & Programs Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Jensen	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Diemer	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Mills	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Skinner	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Weymouth	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Water Quality Section	716,463	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Eastern Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Western Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Manufacturing Services Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Environmental Health & Safety Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Fleet Services Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Power Support Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations & Planning Section	2,302	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Security Team & Security Management	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Sustainability, Resilience & Innovation		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Diversity, Equity & Inclusion		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Equal Employment Opportunity		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Office of the Chief Financial Officer		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Office of Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Engineering Services		5,321,604	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Administrative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Information Technology	636,890	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Planning & Development	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Implementation	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Office of the Group Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Ethics Office		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Real Property		728,922	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
General Counsel		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
General Auditor		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Departmental O&M		7,749,864	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
GENERAL DISTRICT REQUIREMENTS								
State Water Contract*								
Supply - O&M		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Supply - Capital		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Power - O&M & Off-Aq Capital		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Power - Capital (less Off-Aq)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Transmission - Capital - Commodity, Demand, & Standby		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Transmission - O&M - Commodity only		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Supply		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Power		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Other		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total State Water Contract		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Colorado River Aqueduct Power Costs								
		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Supply Programs (cash funded portion)								
		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Demand Management (cash funded portion)								
Local Resources Program		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Future Supply Actions & Stormwater Pilot		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Conservation Program (cash funded portion)		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Demand Management Costs		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Capital Financing								
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
G.O. Bond Debt Service	32,178,861	-	0.0%	0.0%	100.0%	0.0%	0.0%	100.0%
Debt Administration	316,955	-	0.0%	0.0%	100.0%	0.0%	0.0%	100.0%
Bond Defeasance	-	-	0.0%	0.0%	100.0%	0.0%	0.0%	100.0%
PAYGO	15,336,000	-	0.0%	0.0%	100.0%	0.0%	0.0%	100.0%
Total Capital Financing Costs	47,831,816	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Other Operating Costs								
Operating Equipment	126,680	-	0.0%	0.0%	100.0%	0.0%	0.0%	100.0%
Succession Planning Labor Pool	67,420	-	0.0%	0.0%	100.0%	0.0%	0.0%	100.0%
OPEB/PERS Pre-Funding	-	-	0.0%	0.0%	100.0%	0.0%	0.0%	100.0%
Total Other Operating Costs	194,100	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Increase/(Decrease) in Required Reserves								
		-	0.0%	0.0%	100.0%	0.0%	0.0%	100.0%
Total General District Requirements								
		48,025,916	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
REQUIREMENTS BEFORE OFFSETS:								
		55,775,780	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Revenue Offsets								
Property Taxes - MWD Portion of SWC GO Debt Service		-	0.0%	0.0%	100.0%	0.0%	0.0%	100.0%
Property Taxes - MWD GO Debt Service		-	0.0%	0.0%	100.0%	0.0%	0.0%	100.0%
Interest on Investments	187,646	-	0.0%	0.0%	100.0%	0.0%	0.0%	100.0%
Hydro-Power Revenue	-	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
CRA Power Revenue	-	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Wadsworth Pumping Plant (DVL) Power Revenue	-	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)	-	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to supply (PVID Lease)	-	-	0.0%	0.0%	100.0%	0.0%	0.0%	100.0%
Property Taxes - SWC	-	-	0.0%	0.0%	100.0%	0.0%	0.0%	100.0%
Revenue Reserve used for Revenue Bonds - I&P	-	-	0.0%	0.0%	100.0%	0.0%	0.0%	100.0%
Annexation	-	-	0.0%	0.0%	100.0%	0.0%	0.0%	100.0%
Total Revenue Offsets	187,646	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
NET REVENUE REQUIREMENTS:								
-		55,588,134	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

	Functionalization	Allocation Percentages					Total
		Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M							
Group	Item						
Office of General Manager		101,710	-	101,710	-	-	101,710
Office of General Manager	Board of Directors	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-
Human Resources		203,584	-	203,584	-	-	203,584
Water Systems Operations	Office of the Manager	32,181	-	32,181	-	-	32,181
Water Systems Operations	Office of the Manager, Conveyance & Distribution S	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations Support Services	6,207	-	6,207	-	-	6,207
Water Systems Operations	Operations Support Services	-	-	-	-	-	-
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	716,463	-	716,463	-	-	716,463
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	-	-	-	-	-	-
Water Systems Operations	Environmental Health & Safety Section	-	-	-	-	-	-
Water Systems Operations	OSS, Fleet Services Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Power Support Unit	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations & Planning Secti	2,302	-	2,302	-	-	2,302
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-
Sustainability, Resilience & Inn		-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-
Engineering Services		5,321,604	-	5,321,604	-	-	5,321,604
Business Technology	Administrative Services	-	-	-	-	-	-
Business Technology	Information Technology	636,890	-	636,890	-	-	636,890
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	-	-	-	-	-	-
Water Resources Managemen	Office of the Group Manager	-	-	-	-	-	-
Ethics Office		-	-	-	-	-	-
Real Property		728,922	-	728,922	-	-	728,922
General Counsel		-	-	-	-	-	-
General Auditor		-	-	-	-	-	-
Total Departmental O&M		7,749,864	-	7,749,864	-	-	7,749,864
GENERAL DISTRICT REQUIREMENTS		-	-	-	-	-	-
State Water Contract*		-	-	-	-	-	-
Supply - O&M		-	-	-	-	-	-
Supply - Capital		-	-	-	-	-	-
Power - O&M & Off-Aq Capital		-	-	-	-	-	-
Power - Capital (less Off-Aq)		-	-	-	-	-	-
Transmission - Capital - Commodity, Demand, & Standby		-	-	-	-	-	-
Transmission - O&M - Commodity only		-	-	-	-	-	-
Delta Conveyance - Supply		-	-	-	-	-	-
Delta Conveyance - Power		-	-	-	-	-	-
Delta Conveyance - Other		-	-	-	-	-	-
Total State Water Contract		-	-	-	-	-	-
Colorado River Aqueduct Power Costs		-	-	-	-	-	-
Supply Programs (cash funded portion)		-	-	-	-	-	-
Demand Management (cash funded portion)		-	-	-	-	-	-
Local Resources Program		-	-	-	-	-	-
Future Supply Actions & Stormwater Pilot		-	-	-	-	-	-
Conservation Program (cash funded portion)		-	-	-	-	-	-
Total Demand Management Costs		-	-	-	-	-	-
Capital Financing		-	-	-	-	-	-
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		32,178,861	-	32,178,861	-	-	32,178,861
G.O. Bond Debt Service		-	-	-	-	-	-
Debt Administration		316,955	-	316,955	-	-	316,955
Bond Defeasance		-	-	-	-	-	-
PAYGO		15,336,000	-	15,336,000	-	-	15,336,000
Total Capital Financing Costs		47,831,816	-	47,831,816	-	-	47,831,816
Other Operating Costs		-	-	-	-	-	-
Operating Equipment		126,680	-	126,680	-	-	126,680
Succession Planning Labor Pool		67,420	-	67,420	-	-	67,420
OPEB/PERS Pre-Funding		-	-	-	-	-	-
Total Other Operating Costs		194,100	-	194,100	-	-	194,100
Increase/(Decrease) in Required Reserves		-	-	-	-	-	-
Total General District Requirements		48,025,916	-	48,025,916	-	-	48,025,916
REQUIREMENTS BEFORE OFFSETS:		55,775,780	-	7,749,864	48,025,916	-	55,775,780
Revenue Offsets		-	-	-	-	-	-
Property Taxes - MWD Portion of SWC GO Debt Service		-	-	-	-	-	-
Property Taxes - MWD GO Debt Service		-	-	-	-	-	-
Interest on Investments		187,646	-	187,646	-	-	187,646
Hydro-Power Revenue		-	-	-	-	-	-
CRA Power Revenue		-	-	-	-	-	-
Wadsworth Pumping Plant (DVL) Power Revenue		-	-	-	-	-	-
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)		-	-	-	-	-	-
Misc. allocated to supply (PVID Lease)		-	-	-	-	-	-
Property Taxes - SWC		-	-	-	-	-	-
Revenue Reserve used for Revenue Bonds - I&P		-	-	-	-	-	-
Annexation		-	-	-	-	-	-
Total Revenue Offsets		187,646	-	187,646	-	-	187,646
NET REVENUE REQUIREMENTS:		55,588,134	-	7,749,864	47,838,270	-	55,588,134

		Functionalization	Allocation Percentages					Total
			Fixed			Variable		
			Demand	Commodity	Standby	Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		90,936	-	90,936	-	-	-	90,936
Office of General Manager	Board of Directors	-	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-	-
Human Resources		158,486	-	158,486	-	-	-	158,486
Water Systems Operations	Office of the Manager	23,419	-	23,419	-	-	-	23,419
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations Support Services	4,691	-	4,691	-	-	-	4,691
Water Systems Operations	Operations Support Services	-	-	-	-	-	-	-
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	561,371	-	561,371	-	-	-	561,371
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	-	-	-	-	-	-	-
Water Systems Operations	Environmental Health & Safety Section	-	-	-	-	-	-	-
Water Systems Operations	OSS, Fleet Services Unit	-	-	-	-	-	-	-
Water Systems Operations	OSS, Power Support Unit	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations & Planning Section	2,086	-	2,086	-	-	-	2,086
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-	-
Sustainability, Resilience & Inr		-	-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-	-
Engineering Services		4,265,445	-	4,265,445	-	-	-	4,265,445
Business Technology	Administrative Services	-	-	-	-	-	-	-
Business Technology	Information Technology	438,770	-	438,770	-	-	-	438,770
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	-	-	-	-	-	-	-
Water Resources Managemen	Office of the Group Manager	-	-	-	-	-	-	-
Ethics Office		-	-	-	-	-	-	-
Real Property		306,868	-	306,868	-	-	-	306,868
General Counsel		-	-	-	-	-	-	-
General Auditor		-	-	-	-	-	-	-
Total Departmental O&M	-	5,852,072	-	5,852,072	-	-	-	5,852,072

		Functionalization	Allocation Percentages					% Total
			Demand	Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		77,754	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Office of General Manager	Board of Directors	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Bay Delta Initiatives	Bay Delta Initiatives	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Legislative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Media Communications Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Manager, External Affairs/Special Projects	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Conservation & Community Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Human Resources		155,634	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager	32,181	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Treatment Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations Support Services	6,207	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Support Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Desert Region / C&D CRA	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	System Operations Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Power Operations and Planning	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Planning & Programs Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Jensen	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Diemer	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Mills	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Skinner	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Weymouth	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Water Quality Section	716,463	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Eastern Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Western Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Manufacturing Services Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Environmental Health & Safety Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Fleet Services Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Power Support Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations & Planning Section	2,302	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Security Team & Security Management	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Sustainability, Resilience & Innovation		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Diversity, Equity & Inclusion		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Equal Employment Opportunity		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Office of the Chief Financial Officer		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Office of Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Engineering Services		3,199,521	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Administrative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Information Technology	486,882	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Planning & Development	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Implementation	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Office of the Group Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Ethics Office		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Real Property		1,247,578	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
General Counsel		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
General Auditor		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Departmental O&M		5,924,522	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
GENERAL DISTRICT REQUIREMENTS								
State Water Contract*								
Supply - O&M		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Supply - Capital		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Power - O&M & Off-Aq Capital		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Power - Capital (less Off-Aq)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Transmission - Capital - Commodity, Demand, & Standby		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Transmission - O&M - Commodity only		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Supply		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Power		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Other		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total State Water Contract		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Colorado River Aqueduct Power Costs								
		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Supply Programs (cash funded portion)								
		18,211,661	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Demand Management (cash funded portion)								
Local Resources Program		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Future Supply Actions & Stormwater Pilot		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Conservation Program (cash funded portion)		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Demand Management Costs		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Capital Financing								
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		19,346,974	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
G.O. Bond Debt Service		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Debt Administration		190,564	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Bond Defeasance		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
PAYGO		9,220,500	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Capital Financing Costs		28,758,037	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Other Operating Costs								
Operating Equipment		96,843	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Succession Planning Labor Pool		51,540	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
OPEB/PERS Pre-Funding		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Other Operating Costs		148,383	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Increase/(Decrease) in Required Reserves								
		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total General District Requirements								
		47,118,081	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
REQUIREMENTS BEFORE OFFSETS:								
		53,042,603	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Revenue Offsets								
Property Taxes - MWD Portion of SWC GO Debt Service		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Property Taxes - MWD GO Debt Service		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Interest on Investments		178,451	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Hydro-Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
CRA Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Wadsworth Pumping Plant (DVL) Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to supply (PVID Lease)		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Property Taxes - SWC		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Revenue Reserve used for Revenue Bonds - I&P		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Annexation		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Revenue Offsets		178,451	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
NET REVENUE REQUIREMENTS:								
-		52,864,152	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

	Functionalization	Allocation Percentages					Total
		Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M							
Group	Item						
Office of General Manager		77,754	-	77,754	-	-	77,754
Office of General Manager	Board of Directors	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-
Human Resources		155,634	-	155,634	-	-	155,634
Water Systems Operations	Office of the Manager	32,181	-	32,181	-	-	32,181
Water Systems Operations	Office of the Manager, Conveyance & Distribution S	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations Support Services	6,207	-	6,207	-	-	6,207
Water Systems Operations	Operations Support Services	-	-	-	-	-	-
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	716,463	-	716,463	-	-	716,463
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	-	-	-	-	-	-
Water Systems Operations	Environmental Health & Safety Section	-	-	-	-	-	-
Water Systems Operations	OSS, Fleet Services Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Power Support Unit	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations & Planning Secti	2,302	-	2,302	-	-	2,302
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-
Sustainability, Resilience & Inn		-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-
Engineering Services		3,199,521	-	3,199,521	-	-	3,199,521
Business Technology	Administrative Services	-	-	-	-	-	-
Business Technology	Information Technology	486,882	-	486,882	-	-	486,882
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	-	-	-	-	-	-
Water Resources Managemen	Office of the Group Manager	-	-	-	-	-	-
Ethics Office		-	-	-	-	-	-
Real Property		1,247,578	-	1,247,578	-	-	1,247,578
General Counsel		-	-	-	-	-	-
General Auditor		-	-	-	-	-	-
Total Departmental O&M		5,924,522	-	5,924,522	-	-	5,924,522
GENERAL DISTRICT REQUIREMENTS		-	-	-	-	-	-
State Water Contract*		-	-	-	-	-	-
Supply - O&M		-	-	-	-	-	-
Supply - Capital		-	-	-	-	-	-
Power - O&M & Off-Aq Capital		-	-	-	-	-	-
Power - Capital (less Off-Aq)		-	-	-	-	-	-
Transmission - Capital - Commodity, Demand, & Standby		-	-	-	-	-	-
Transmission - O&M - Commodity only		-	-	-	-	-	-
Delta Conveyance - Supply		-	-	-	-	-	-
Delta Conveyance - Power		-	-	-	-	-	-
Delta Conveyance - Other		-	-	-	-	-	-
Total State Water Contract		-	-	-	-	-	-
Colorado River Aqueduct Power Costs		-	-	-	-	-	-
Supply Programs (cash funded portion)		18,211,661	-	18,211,661	-	-	18,211,661
Demand Management (cash funded portion)		-	-	-	-	-	-
Local Resources Program		-	-	-	-	-	-
Future Supply Actions & Stormwater Pilot		-	-	-	-	-	-
Conservation Program (cash funded portion)		-	-	-	-	-	-
Total Demand Management Costs		-	-	-	-	-	-
Capital Financing		-	-	-	-	-	-
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		19,346,974	-	19,346,974	-	-	19,346,974
G.O. Bond Debt Service		-	-	-	-	-	-
Debt Administration		190,564	-	190,564	-	-	190,564
Bond Defeasance		-	-	-	-	-	-
PAYGO		9,220,500	-	9,220,500	-	-	9,220,500
Total Capital Financing Costs		28,758,037	-	28,758,037	-	-	28,758,037
Other Operating Costs		-	-	-	-	-	-
Operating Equipment		96,843	-	96,843	-	-	96,843
Succession Planning Labor Pool		51,540	-	51,540	-	-	51,540
OPEB/PERS Pre-Funding		-	-	-	-	-	-
Total Other Operating Costs		148,383	-	148,383	-	-	148,383
Increase/(Decrease) in Required Reserves		-	-	-	-	-	-
Total General District Requirements		47,118,081	-	47,118,081	-	-	47,118,081
REQUIREMENTS BEFORE OFFSETS:		53,042,603	-	53,042,603	-	-	53,042,603
Revenue Offsets		-	-	-	-	-	-
Property Taxes - MWD Portion of SWC GO Debt Service		-	-	-	-	-	-
Property Taxes - MWD GO Debt Service		-	-	-	-	-	-
Interest on Investments		178,451	-	178,451	-	-	178,451
Hydro-Power Revenue		-	-	-	-	-	-
CRA Power Revenue		-	-	-	-	-	-
Wadsworth Pumping Plant (DVL) Power Revenue		-	-	-	-	-	-
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)		-	-	-	-	-	-
Misc. allocated to supply (PVID Lease)		-	-	-	-	-	-
Property Taxes - SWC		-	-	-	-	-	-
Revenue Reserve used for Revenue Bonds - I&P		-	-	-	-	-	-
Annexation		-	-	-	-	-	-
Total Revenue Offsets		178,451	-	178,451	-	-	178,451
NET REVENUE REQUIREMENTS:		52,864,152	-	52,864,152	-	-	52,864,152

		Functionalization	Allocation Percentages					Total
			Fixed			Variable		
			Demand	Commodity	Standby	Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		69,518	-	69,518	-	-	-	69,518
Office of General Manager	Board of Directors	-	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-	-
Human Resources		121,157	-	121,157	-	-	-	121,157
Water Systems Operations	Office of the Manager	23,419	-	23,419	-	-	-	23,419
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations Support Services	4,691	-	4,691	-	-	-	4,691
Water Systems Operations	Operations Support Services	-	-	-	-	-	-	-
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	561,371	-	561,371	-	-	-	561,371
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	-	-	-	-	-	-	-
Water Systems Operations	Environmental Health & Safety Section	-	-	-	-	-	-	-
Water Systems Operations	OSS, Fleet Services Unit	-	-	-	-	-	-	-
Water Systems Operations	OSS, Power Support Unit	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations & Planning Section	2,086	-	2,086	-	-	-	2,086
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-	-
Sustainability, Resilience & Inr		-	-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-	-
Engineering Services		2,564,524	-	2,564,524	-	-	-	2,564,524
Business Technology	Administrative Services	-	-	-	-	-	-	-
Business Technology	Information Technology	335,426	-	335,426	-	-	-	335,426
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	-	-	-	-	-	-	-
Water Resources Managemen	Office of the Group Manager	-	-	-	-	-	-	-
Ethics Office		-	-	-	-	-	-	-
Real Property		525,216	-	525,216	-	-	-	525,216
General Counsel		-	-	-	-	-	-	-
General Auditor		-	-	-	-	-	-	-
Total Departmental O&M	-	4,207,407	-	4,207,407	-	-	-	4,207,407

		Functionalization	Allocation Percentages					% Total
			Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		53,854	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Office of General Manager	Board of Directors	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Bay Delta Initiatives	Bay Delta Initiatives	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Legislative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Media Communications Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Manager, External Affairs/Special Projects	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Conservation & Community Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Human Resources		107,796	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager	32,181	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Treatment Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations Support Services	6,207	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Support Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Desert Region / C&D CRA	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	System Operations Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Power Operations and Planning	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Planning & Programs Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Jensen	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Diemer	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Mills	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Skinner	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Weymouth	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Water Quality Section	716,463	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Eastern Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Western Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Manufacturing Services Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Environmental Health & Safety Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Fleet Services Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Power Support Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations & Planning Section	2,302	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Security Team & Security Management	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Sustainability, Resilience & Innovation		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Diversity, Equity & Inclusion		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Equal Employment Opportunity		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Office of the Chief Financial Officer		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Office of Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Engineering Services		2,553,058	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Administrative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Information Technology	337,226	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Planning & Development	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Implementation	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Office of the Group Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Ethics Office		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Real Property		294,372	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
General Counsel		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
General Auditor		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Departmental O&M		4,103,459	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
GENERAL DISTRICT REQUIREMENTS								
State Water Contract*								
Supply - O&M		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Supply - Capital		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Power - O&M & Off-Aq Capital		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Power - Capital (less Off-Aq)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Transmission - Capital - Commodity, Demand, & Standby		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Transmission - O&M - Commodity only		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Supply		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Power		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Other		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total State Water Contract		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Colorado River Aqueduct Power Costs								
		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Supply Programs (cash funded portion)								
		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Demand Management (cash funded portion)								
Local Resources Program		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Future Supply Actions & Stormwater Pilot		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Conservation Program (cash funded portion)		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Demand Management Costs		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Capital Financing								
		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		15,437,922	33.5%	39.9%	26.7%	0.0%	0.0%	100.0%
G.O. Bond Debt Service		-	33.5%	39.9%	26.7%	0.0%	0.0%	100.0%
Debt Administration		152,060	33.5%	39.9%	26.7%	0.0%	0.0%	100.0%
Bond Defeasance		-	33.5%	39.9%	26.7%	0.0%	0.0%	100.0%
PAYGO		7,357,500	33.5%	39.9%	26.7%	0.0%	0.0%	100.0%
Total Capital Financing Costs		22,947,482	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Other Operating Costs								
Operating Equipment		67,076	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Succession Planning Labor Pool		35,698	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
OPEB/PERS Pre-Funding		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Other Operating Costs		102,773	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Increase/(Decrease) in Required Reserves								
		-	33.3%	40.1%	26.5%	0.0%	0.0%	100.0%
Total General District Requirements								
		23,050,256	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
REQUIREMENTS BEFORE OFFSETS:								
		27,153,715	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Revenue Offsets								
Property Taxes - MWD Portion of SWC GO Debt Service		-	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Property Taxes - MWD GO Debt Service		-	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Interest on Investments		91,353	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Hydro-Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
CRA Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Wadsworth Pumping Plant (DVL) Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to supply (PVID Lease)		-	28.3%	49.2%	22.5%	0.0%	0.0%	100.0%
Property Taxes - SWC		-	33.5%	39.9%	26.7%	0.0%	0.0%	100.0%
Revenue Reserve used for Revenue Bonds - I&P		-	33.5%	39.9%	26.7%	0.0%	0.0%	100.0%
Annexation		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total Revenue Offsets		91,353	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
NET REVENUE REQUIREMENTS:								
-		27,062,362	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

	Functionalization	Allocation Percentages					Total
		Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M							
Group	Item						
Office of General Manager	Office of General Manager	53,854	-	53,854	-	-	53,854
Office of General Manager	Board of Directors	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-
Human Resources	Human Resources	107,796	-	107,796	-	-	107,796
Water Systems Operations	Office of the Manager	32,181	-	32,181	-	-	32,181
Water Systems Operations	Office of the Manager, Conveyance & Distribution S	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations Support Services	6,207	-	6,207	-	-	6,207
Water Systems Operations	Operations Support Services	-	-	-	-	-	-
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	716,463	-	716,463	-	-	716,463
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	-	-	-	-	-	-
Water Systems Operations	Environmental Health & Safety Section	-	-	-	-	-	-
Water Systems Operations	OSS, Fleet Services Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Power Support Unit	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations & Planning Secti	2,302	-	2,302	-	-	2,302
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-
Sustainability, Resilience & Inn	Sustainability, Resilience & Inn	-	-	-	-	-	-
Diversity, Equity & Inclusion	Diversity, Equity & Inclusion	-	-	-	-	-	-
Equal Employment Opportunity	Equal Employment Opportunity	-	-	-	-	-	-
Office of the Chief Financial O	Office of the Chief Financial O	-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-
Engineering Services	Engineering Services	2,553,058	-	2,553,058	-	-	2,553,058
Business Technology	Administrative Services	-	-	-	-	-	-
Business Technology	Information Technology	337,226	-	337,226	-	-	337,226
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	-	-	-	-	-	-
Water Resources Managemen	Office of the Group Manager	-	-	-	-	-	-
Ethics Office	Ethics Office	-	-	-	-	-	-
Real Property	Real Property	294,372	-	294,372	-	-	294,372
General Counsel	General Counsel	-	-	-	-	-	-
General Auditor	General Auditor	-	-	-	-	-	-
Total Departmental O&M	-	4,103,459	-	4,103,459	-	-	4,103,459
GENERAL DISTRICT REQUIREMENTS							
State Water Contract*							
Supply - O&M	Supply - O&M	-	-	-	-	-	-
Supply - Capital	Supply - Capital	-	-	-	-	-	-
Power - O&M & Off-Aq Capital	Power - O&M & Off-Aq Capital	-	-	-	-	-	-
Power - Capital (less Off-Aq)	Power - Capital (less Off-Aq)	-	-	-	-	-	-
Transmission - Capital - Commodity, Demand, & Standby	Transmission - Capital - Commodity, Demand, & Standby	-	-	-	-	-	-
Transmission - O&M - Commodity only	Transmission - O&M - Commodity only	-	-	-	-	-	-
Delta Conveyance - Supply	Delta Conveyance - Supply	-	-	-	-	-	-
Delta Conveyance - Power	Delta Conveyance - Power	-	-	-	-	-	-
Delta Conveyance - Other	Delta Conveyance - Other	-	-	-	-	-	-
Total State Water Contract							
Colorado River Aqueduct Power Costs							
Supply Programs (cash funded portion)							
Demand Management (cash funded portion)							
Local Resources Program	Local Resources Program	-	-	-	-	-	-
Future Supply Actions & Stormwater Pilot	Future Supply Actions & Stormwater Pilot	-	-	-	-	-	-
Conservation Program (cash funded portion)	Conservation Program (cash funded portion)	-	-	-	-	-	-
Total Demand Management Costs							
Capital Financing							
Revenue Bond Debt Service net of BABs Interest Subsidy Payment	Revenue Bond Debt Service net of BABs Interest Subsidy Payment	15,437,922	5,169,484	6,153,813	4,114,625	-	15,437,922
G.O. Bond Debt Service	G.O. Bond Debt Service	-	-	-	-	-	-
Debt Administration	Debt Administration	152,060	50,918	60,814	40,528	-	152,060
Bond Defeasance	Bond Defeasance	-	-	-	-	-	-
PAYGO	PAYGO	7,357,500	2,463,704	2,932,822	1,960,973	-	7,357,500
Total Capital Financing Costs		22,947,482	7,684,107	9,147,249	6,116,127	-	22,947,482
Other Operating Costs							
Operating Equipment	Operating Equipment	67,076	-	67,076	-	-	67,076
Succession Planning Labor Pool	Succession Planning Labor Pool	35,698	-	35,698	-	-	35,698
OPEB/PERS Pre-Funding	OPEB/PERS Pre-Funding	-	-	-	-	-	-
Total Other Operating Costs		102,773	-	102,773	-	-	102,773
Increase/(Decrease) in Required Reserves							
Total General District Requirements		23,050,256	7,684,107	9,250,022	6,116,127	-	23,050,256
REQUIREMENTS BEFORE OFFSETS:		27,153,715	7,684,107	13,353,482	6,116,127	-	27,153,715
Revenue Offsets							
Property Taxes - MWD Portion of SWC GO Debt Service	Property Taxes - MWD Portion of SWC GO Debt Service	-	-	-	-	-	-
Property Taxes - MWD GO Debt Service	Property Taxes - MWD GO Debt Service	-	-	-	-	-	-
Interest on Investments	Interest on Investments	91,353	-	91,353	-	-	91,353
Hydro-Power Revenue	Hydro-Power Revenue	-	-	-	-	-	-
CRA Power Revenue	CRA Power Revenue	-	-	-	-	-	-
Wadsworth Pumping Plant (DVL) Power Revenue	Wadsworth Pumping Plant (DVL) Power Revenue	-	-	-	-	-	-
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)	Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)	-	-	-	-	-	-
Misc. allocated to supply (PVID Lease)	Misc. allocated to supply (PVID Lease)	-	-	-	-	-	-
Property Taxes - SWC	Property Taxes - SWC	-	-	-	-	-	-
Revenue Reserve used for Revenue Bonds - I&P	Revenue Reserve used for Revenue Bonds - I&P	-	-	-	-	-	-
Annexation	Annexation	-	-	-	-	-	-
Total Revenue Offsets		91,353	-	91,353	-	-	91,353
NET REVENUE REQUIREMENTS:		27,062,362	7,684,107	13,262,129	6,116,127	-	27,062,362

	Functionalization	Allocation Percentages					Total
		Fixed			Variable		
		Demand	Commodity	Standby	Commodity	Hydroelectric	
Departmental O&M							
Group	Item						
Office of General Manager		48,150	-	48,150	-	-	48,150
Office of General Manager	Board of Directors	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-
Human Resources		83,916	-	83,916	-	-	83,916
Water Systems Operations	Office of the Manager	23,419	-	23,419	-	-	23,419
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations Support Services	4,691	-	4,691	-	-	4,691
Water Systems Operations	Operations Support Services	-	-	-	-	-	-
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	561,371	-	561,371	-	-	561,371
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	-	-	-	-	-	-
Water Systems Operations	Environmental Health & Safety Section	-	-	-	-	-	-
Water Systems Operations	OSS, Fleet Services Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Power Support Unit	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations & Planning Section	2,086	-	2,086	-	-	2,086
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-
Sustainability, Resilience & Inr		-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-
Engineering Services		2,046,362	-	2,046,362	-	-	2,046,362
Business Technology	Administrative Services	-	-	-	-	-	-
Business Technology	Information Technology	232,324	-	232,324	-	-	232,324
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	-	-	-	-	-	-
Water Resources Managemen	Office of the Group Manager	-	-	-	-	-	-
Ethics Office		-	-	-	-	-	-
Real Property		123,927	-	123,927	-	-	123,927
General Counsel		-	-	-	-	-	-
General Auditor		-	-	-	-	-	-
Total Departmental O&M	-	3,126,246	-	3,126,246	-	-	3,126,246

		Functionalization	Allocation Percentages					% Total
			Fixed			Variable Commodity	Hydroelectric	
			Demand	Commodity	Standby			
Departmental O&M								
Group	Item							
	Office of General Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Office of General Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Bay Delta Initiatives	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	External Affairs	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	External Affairs	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	External Affairs	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	External Affairs	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Human Resources	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0		

	Functionalization	Allocation Percentages					Total
		Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M							
Group	Item						
Office of General Manager	Office of General Manager	-	-	-	-	-	-
Office of General Manager	Board of Directors	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-
Human Resources		-	-	-	-	-	-
Water Systems Operations	Office of the Manager	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Conveyance & Distribution S	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations Support Services	-	-	-	-	-	-
Water Systems Operations	Operations Support Services	-	-	-	-	-	-
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	-	-	-	-	-	-
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	-	-	-	-	-	-
Water Systems Operations	Environmental Health & Safety Section	-	-	-	-	-	-
Water Systems Operations	OSS, Fleet Services Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Power Support Unit	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations & Planning Secti	-	-	-	-	-	-
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-
Sustainability, Resilience & Inn		-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-
Engineering Services		-	-	-	-	-	-
Business Technology	Administrative Services	-	-	-	-	-	-
Business Technology	Information Technology	-	-	-	-	-	-
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	-	-	-	-	-	-
Water Resources Managemen	Office of the Group Manager	-	-	-	-	-	-
Ethics Office		-	-	-	-	-	-
Real Property		-	-	-	-	-	-
General Counsel		-	-	-	-	-	-
General Auditor		-	-	-	-	-	-
Total Departmental O&M	-	-	-	-	-	-	-
GENERAL DISTRICT REQUIREMENTS		-	-	-	-	-	-
State Water Contract*		-	-	-	-	-	-
Supply - O&M		-	-	-	-	-	-
Supply - Capital		-	-	-	-	-	-
Power - O&M & Off-Aq Capital		-	-	-	-	-	-
Power - Capital (less Off-Aq)		-	-	-	-	-	-
Transmission - Capital - Commodity, Demand, & Standby		-	-	-	-	-	-
Transmission - O&M - Commodity only		-	-	-	-	-	-
Delta Conveyance - Supply		-	-	-	-	-	-
Delta Conveyance - Power		-	-	-	-	-	-
Delta Conveyance - Other		-	-	-	-	-	-
Total State Water Contract		-	-	-	-	-	-
Colorado River Aqueduct Power Costs		-	-	-	-	-	-
Supply Programs (cash funded portion)		-	-	-	-	-	-
Demand Management (cash funded portion)		-	-	-	-	-	-
Local Resources Program		-	-	-	-	-	-
Future Supply Actions & Stormwater Pilot		-	-	-	-	-	-
Conservation Program (cash funded portion)		-	-	-	-	-	-
Total Demand Management Costs		-	-	-	-	-	-
Capital Financing		-	-	-	-	-	-
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		-	-	-	-	-	-
G.O. Bond Debt Service		-	-	-	-	-	-
Debt Administration		-	-	-	-	-	-
Bond Defeasance		-	-	-	-	-	-
PAYGO		-	-	-	-	-	-
Total Capital Financing Costs		-	-	-	-	-	-
Other Operating Costs		-	-	-	-	-	-
Operating Equipment		-	-	-	-	-	-
Succession Planning Labor Pool		-	-	-	-	-	-
OPEB/PERS Pre-Funding		-	-	-	-	-	-
Total Other Operating Costs		-	-	-	-	-	-
Increase/(Decrease) in Required Reserves		-	-	-	-	-	-
Total General District Requirements		-	-	-	-	-	-
REQUIREMENTS BEFORE OFFSETS:		-	-	-	-	-	-
Revenue Offsets		-	-	-	-	-	-
Property Taxes - MWD Portion of SWC GO Debt Service		-	-	-	-	-	-
Property Taxes - MWD GO Debt Service		-	-	-	-	-	-
Interest on Investments		-	-	-	-	-	-
Hydro-Power Revenue		-	-	-	-	-	-
CRA Power Revenue		-	-	-	-	-	-
Wadsworth Pumping Plant (DVL) Power Revenue	679,733	-	-	-	679,733	-	679,733
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)		-	-	-	-	-	-
Misc. allocated to supply (PVID Lease)		-	-	-	-	-	-
Property Taxes - SWC		-	-	-	-	-	-
Revenue Reserve used for Revenue Bonds - I&P		-	-	-	-	-	-
Annexation		-	-	-	-	-	-
Total Revenue Offsets	679,733	-	-	-	679,733	-	679,733
NET REVENUE REQUIREMENTS:	(679,733)	-	-	-	(679,733)	-	(679,733)

	Functionalization	Allocation Percentages					Total
		Fixed			Variable		
		Demand	Commodity	Standby	Commodity	Hydroelectric	
Departmental O&M							
Group	Item						
Office of General Manager		-	-	-	-	-	-
Office of General Manager	Board of Directors	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-
Human Resources		-	-	-	-	-	-
Water Systems Operations	Office of the Manager	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations Support Services	-	-	-	-	-	-
Water Systems Operations	Operations Support Services	-	-	-	-	-	-
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	-	-	-	-	-	-
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	-	-	-	-	-	-
Water Systems Operations	Environmental Health & Safety Section	-	-	-	-	-	-
Water Systems Operations	OSS, Fleet Services Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Power Support Unit	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations & Planning Section	-	-	-	-	-	-
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-
Sustainability, Resilience & Inr		-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-
Engineering Services		-	-	-	-	-	-
Business Technology	Administrative Services	-	-	-	-	-	-
Business Technology	Information Technology	-	-	-	-	-	-
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	-	-	-	-	-	-
Water Resources Managemen	Office of the Group Manager	-	-	-	-	-	-
Ethics Office		-	-	-	-	-	-
Real Property		-	-	-	-	-	-
General Counsel		-	-	-	-	-	-
General Auditor		-	-	-	-	-	-
Total Departmental O&M	-	-	-	-	-	-	-

		Functionalization	Allocation Percentages					Total
			Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		381,048	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Office of General Manager	Board of Directors	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Bay Delta Initiatives	Bay Delta Initiatives	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Legislative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Media Communications Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Manager, External Affairs/Special Projects	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Conservation & Community Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Human Resources		762,715	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager	803,106	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Treatment Section	212,101	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations Support Services	154,898	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Support Services	95,263	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Desert Region / C&D CRA	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	System Operations Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Power Operations and Planning	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Planning & Programs Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Jensen	16,604,416	0.0%	63.9%	0.0%	36.1%	0.0%	100.0%
Water Systems Operations	Treatment Diemer	-	0.0%	56.0%	0.0%	44.0%	0.0%	100.0%
Water Systems Operations	Treatment Mills	-	0.0%	78.3%	0.0%	21.7%	0.0%	100.0%
Water Systems Operations	Treatment Skinner	-	0.0%	64.9%	0.0%	35.1%	0.0%	100.0%
Water Systems Operations	Treatment Weymouth	-	0.0%	63.8%	0.0%	36.2%	0.0%	100.0%
Water Systems Operations	Water Quality Section	2,903,069	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Eastern Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Western Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Manufacturing Services Unit	139,242	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Environmental Health & Safety Section	1,259,375	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Fleet Services Unit	535,121	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Power Support Unit	271,708	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations & Planning Section	57,453	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Security Team & Security Management	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Sustainability, Resilience & Innovation		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Diversity, Equity & Inclusion		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Equal Employment Opportunity		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Office of the Chief Financial Officer		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Office of Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Engineering Services		2,468,737	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Administrative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Information Technology	2,386,063	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Planning & Development	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Implementation	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Office of the Group Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Ethics Office		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Real Property		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
General Counsel		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
General Auditor		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Departmental O&M		29,034,316	0.0%		0.0%	0.0%	0.0%	0.0%
GENERAL DISTRICT REQUIREMENTS								
State Water Contract*								
Supply - O&M		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Supply - Capital		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Power - O&M & Off-Aq Capital		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Power - Capital (less Off-Aq)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Transmission - Capital - Commodity, Demand, & Standby		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Transmission - O&M - Commodity only		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Supply		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Power		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Other		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total State Water Contract		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Colorado River Aqueduct Power Costs								
		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Supply Programs (cash funded portion)								
		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Demand Management (cash funded portion)								
Local Resources Program		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Future Supply Actions & Stormwater Pilot		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Conservation Program (cash funded portion)		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Demand Management Costs		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Capital Financing								
		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		14,928,046	31.4%	29.1%	39.4%	0.0%	0.0%	100.0%
G.O. Bond Debt Service		103,753	31.4%	29.1%	39.4%	0.0%	0.0%	100.0%
Debt Administration		147,038	31.4%	29.1%	39.4%	0.0%	0.0%	100.0%
Bond Defeasance		-	31.4%	29.1%	39.4%	0.0%	0.0%	100.0%
PAYGO		7,114,500	31.4%	29.1%	39.4%	0.0%	0.0%	100.0%
Total Capital Financing Costs		22,293,337	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Other Operating Costs								
Operating Equipment		474,598	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Succession Planning Labor Pool		252,583	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
OPEB/PERS Pre-Funding		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Other Operating Costs		727,181	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Increase/(Decrease) in Required Reserves								
		-	30.5%	31.4%	38.2%	0.0%	0.0%	100.0%
Total General District Requirements								
		23,020,518	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
REQUIREMENTS BEFORE OFFSETS:								
		52,054,834	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Revenue Offsets								
Property Taxes - MWD Portion of SWC GO Debt Service		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Property Taxes - MWD GO Debt Service		103,753	0.0%	0.0%	100.0%	0.0%	0.0%	100.0%
Interest on Investments		175,128	31.4%	29.1%	39.4%	0.0%	0.0%	100.0%
Hydro-Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
CRA Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Wadsworth Pumping Plant (DVL) Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to supply (PVID Lease)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Property Taxes - SWC		-	31.4%	29.1%	39.4%	0.0%	0.0%	100.0%
Revenue Reserve used for Revenue Bonds - I&P		-	31.4%	29.1%	39.4%	0.0%	0.0%	100.0%
Annexation		-	31.4%	29.1%	39.4%	0.0%	0.0%	100.0%
Total Revenue Offsets		278,881	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
NET REVENUE REQUIREMENTS:								
-		51,775,954	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

	Functionalization	Allocation Percentages					Total
		Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M							
Group	Item						
Office of General Manager		381,048	-	381,048	-	-	381,048
Office of General Manager	Board of Directors	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-
Human Resources		762,715	-	762,715	-	-	762,715
Water Systems Operations	Office of the Manager	803,106	-	803,106	-	-	803,106
Water Systems Operations	Office of the Manager, Conveyance & Distribution S	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	212,101	-	212,101	-	-	212,101
Water Systems Operations	Office of the Manager, Operations Support Services	154,898	-	154,898	-	-	154,898
Water Systems Operations	Operations Support Services	95,263	-	95,263	-	-	95,263
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	16,604,416	-	10,608,044	5,996,372	-	16,604,416
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	2,903,069	-	2,903,069	-	-	2,903,069
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	139,242	-	139,242	-	-	139,242
Water Systems Operations	Environmental Health & Safety Section	1,259,375	-	1,259,375	-	-	1,259,375
Water Systems Operations	OSS, Fleet Services Unit	535,121	-	535,121	-	-	535,121
Water Systems Operations	OSS, Power Support Unit	271,708	-	271,708	-	-	271,708
Water Systems Operations	Office of the Manager, Operations & Planning Secti	57,453	-	57,453	-	-	57,453
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-
Sustainability, Resilience & Inn		-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-
Engineering Services		2,468,737	-	2,468,737	-	-	2,468,737
Business Technology	Administrative Services	-	-	-	-	-	-
Business Technology	Information Technology	2,386,063	-	2,386,063	-	-	2,386,063
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	-	-	-	-	-	-
Water Resources Managemen	Office of the Group Manager	-	-	-	-	-	-
Ethics Office		-	-	-	-	-	-
Real Property		-	-	-	-	-	-
General Counsel		-	-	-	-	-	-
General Auditor		-	-	-	-	-	-
Total Departmental O&M	-	29,034,316	-	23,037,945	5,996,372	-	29,034,316
GENERAL DISTRICT REQUIREMENTS							
		-	-	-	-	-	-
State Water Contract*							
Supply - O&M		-	-	-	-	-	-
Supply - Capital		-	-	-	-	-	-
Power - O&M & Off-Aq Capital		-	-	-	-	-	-
Power - Capital (less Off-Aq)		-	-	-	-	-	-
Transmission - Capital - Commodity, Demand, & Standby		-	-	-	-	-	-
Transmission - O&M - Commodity only		-	-	-	-	-	-
Delta Conveyance - Supply		-	-	-	-	-	-
Delta Conveyance - Power		-	-	-	-	-	-
Delta Conveyance - Other		-	-	-	-	-	-
Total State Water Contract		-	-	-	-	-	-
Colorado River Aqueduct Power Costs							
		-	-	-	-	-	-
Supply Programs (cash funded portion)							
		-	-	-	-	-	-
Demand Management (cash funded portion)							
Local Resources Program		-	-	-	-	-	-
Future Supply Actions & Stormwater Pilot		-	-	-	-	-	-
Conservation Program (cash funded portion)		-	-	-	-	-	-
Total Demand Management Costs		-	-	-	-	-	-
Capital Financing							
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		14,928,046	4,694,800	4,347,037	5,886,208	-	14,928,046
G.O. Bond Debt Service		103,753	32,630	30,213	40,910	-	103,753
Debt Administration		147,038	46,243	42,817	57,978	-	147,038
Bond Defeasance		-	-	-	-	-	-
PAYGO		7,114,500	2,237,477	2,071,738	2,805,285	-	7,114,500
Total Capital Financing Costs		22,293,337	7,011,150	6,491,806	8,790,381	-	22,293,337
Other Operating Costs							
Operating Equipment		474,598	-	474,598	-	-	474,598
Succession Planning Labor Pool		252,583	-	252,583	-	-	252,583
OPEB\PERS Pre-Funding		-	-	-	-	-	-
Total Other Operating Costs		727,181	-	727,181	-	-	727,181
Increase/(Decrease) in Required Reserves							
		-	-	-	-	-	-
Total General District Requirements		23,020,518	7,011,150	7,218,987	8,790,381	-	23,020,518
REQUIREMENTS BEFORE OFFSETS:		52,054,834	7,011,150	30,256,932	8,790,381	5,996,372	52,054,834
Revenue Offsets							
Property Taxes - MWD Portion of SWC GO Debt Service		-	-	-	-	-	-
Property Taxes - MWD GO Debt Service		103,753	-	-	103,753	-	103,753
Interest on Investments		175,128	55,077	50,997	69,054	-	175,128
Hydro-Power Revenue		-	-	-	-	-	-
CRA Power Revenue		-	-	-	-	-	-
Wadsworth Pumping Plant (DVL) Power Revenue		-	-	-	-	-	-
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)		-	-	-	-	-	-
Misc. allocated to supply (PVID Lease)		-	-	-	-	-	-
Property Taxes - SWC		-	-	-	-	-	-
Revenue Reserve used for Revenue Bonds - I&P		-	-	-	-	-	-
Annexation		-	-	-	-	-	-
Total Revenue Offsets		278,881	55,077	50,997	172,807	-	278,881
NET REVENUE REQUIREMENTS:		51,775,954	6,956,073	30,205,935	8,617,574	5,996,372	51,775,954

		Functionalization	Allocation Percentages					Total
			Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		340,686	-	340,686	-	-	-	340,686
Office of General Manager	Board of Directors	-	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-	-
Human Resources		593,755	-	593,755	-	-	-	593,755
Water Systems Operations	Office of the Manager	584,438	-	584,438	-	-	-	584,438
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	74,716	-	74,716	-	-	-	74,716
Water Systems Operations	Office of the Manager, Operations Support Services	117,067	-	117,067	-	-	-	117,067
Water Systems Operations	Operations Support Services	86,053	-	86,053	-	-	-	86,053
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	9,893,200	-	9,893,200	-	-	-	9,893,200
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	2,274,647	-	2,274,647	-	-	-	2,274,647
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	127,882	-	127,882	-	-	-	127,882
Water Systems Operations	Environmental Health & Safety Section	980,658	-	980,658	-	-	-	980,658
Water Systems Operations	OSS, Fleet Services Unit	326,934	-	326,934	-	-	-	326,934
Water Systems Operations	OSS, Power Support Unit	245,251	-	245,251	-	-	-	245,251
Water Systems Operations	Office of the Manager, Operations & Planning Section	52,058	-	52,058	-	-	-	52,058
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-	-
Sustainability, Resilience & Inr		-	-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-	-
Equal Employment Opportuniti		-	-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-	-
Engineering Services		1,978,776	-	1,978,776	-	-	-	1,978,776
Business Technology	Administrative Services	-	-	-	-	-	-	-
Business Technology	Information Technology	1,643,822	-	1,643,822	-	-	-	1,643,822
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	-	-	-	-	-	-	-
Water Resources Managemen	Office of the Group Manager	-	-	-	-	-	-	-
Ethics Office		-	-	-	-	-	-	-
Real Property		-	-	-	-	-	-	-
General Counsel		-	-	-	-	-	-	-
General Auditor		-	-	-	-	-	-	-
Total Departmental O&M		19,319,943	-	19,319,943	-	-	-	19,319,943

		Functionalization	Allocation Percentages					Total
			Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		380,720	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Office of General Manager	Board of Directors	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Bay Delta Initiatives	Bay Delta Initiatives	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Legislative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Media Communications Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Manager, External Affairs/Special Projects	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Conservation & Community Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Human Resources		762,058	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager	826,689	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Treatment Section	220,855	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations Support Services	159,447	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Support Services	95,263	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Desert Region / C&D CRA	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	System Operations Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Power Operations and Planning	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Planning & Programs Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Jensen	-	0.0%	63.9%	0.0%	36.1%	0.0%	100.0%
Water Systems Operations	Treatment Diemer	-	0.0%	56.0%	0.0%	44.0%	0.0%	100.0%
Water Systems Operations	Treatment Mills	-	0.0%	78.3%	0.0%	21.7%	0.0%	100.0%
Water Systems Operations	Treatment Skinner	-	0.0%	64.9%	0.0%	35.1%	0.0%	100.0%
Water Systems Operations	Treatment Weymouth	16,417,385	0.0%	63.8%	0.0%	36.2%	0.0%	100.0%
Water Systems Operations	Water Quality Section	2,903,069	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Eastern Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Western Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Manufacturing Services Unit	139,242	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Environmental Health & Safety Section	1,259,375	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Fleet Services Unit	535,121	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Power Support Unit	271,708	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations & Planning Section	59,140	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Security Team & Security Management	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Sustainability, Resilience & Innovation		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Diversity, Equity & Inclusion		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Equal Employment Opportunity		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Office of the Chief Financial Officer		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Office of Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Engineering Services		2,595,219	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Administrative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Information Technology	2,384,007	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Planning & Development	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Implementation	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Office of the Group Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Ethics Office		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Real Property		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
General Counsel		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
General Auditor		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Departmental O&M		29,009,299	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
GENERAL DISTRICT REQUIREMENTS								
State Water Contract*								
Supply - O&M		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Supply - Capital		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Power - O&M & Off-Aq Capital		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Power - Capital (less Off-Aq)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Transmission - Capital - Commodity, Demand, & Standby		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Transmission - O&M - Commodity only		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Supply		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Power		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Other		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total State Water Contract		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Colorado River Aqueduct Power Costs								
		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Supply Programs (cash funded portion)								
		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Demand Management (cash funded portion)								
Local Resources Program		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Future Supply Actions & Stormwater Pilot		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Conservation Program (cash funded portion)		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Demand Management Costs		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Capital Financing								
		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		15,692,860	31.4%	29.1%	39.4%	0.0%	0.0%	100.0%
G.O. Bond Debt Service		109,069	31.4%	29.1%	39.4%	0.0%	0.0%	100.0%
Debt Administration		154,571	31.4%	29.1%	39.4%	0.0%	0.0%	100.0%
Bond Defeasance		-	31.4%	29.1%	39.4%	0.0%	0.0%	100.0%
PAYGO		7,479,000	31.4%	29.1%	39.4%	0.0%	0.0%	100.0%
Total Capital Financing Costs		23,435,500	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Other Operating Costs								
Operating Equipment		474,189	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Succession Planning Labor Pool		252,366	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
OPEB/PERS Pre-Funding		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Other Operating Costs		726,555	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Increase/(Decrease) in Required Reserves								
		-	30.5%	31.3%	38.2%	0.0%	0.0%	100.0%
Total General District Requirements								
		24,162,055	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
REQUIREMENTS BEFORE OFFSETS:								
		53,171,354	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Revenue Offsets								
Property Taxes - MWD Portion of SWC GO Debt Service		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Property Taxes - MWD GO Debt Service		109,069	0.0%	0.0%	100.0%	0.0%	0.0%	100.0%
Interest on Investments		178,884	31.4%	29.1%	39.4%	0.0%	0.0%	100.0%
Hydro-Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
CRA Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Wadsworth Pumping Plant (DVL) Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to supply (PVID Lease)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Property Taxes - SWC		-	31.4%	29.1%	39.4%	0.0%	0.0%	100.0%
Revenue Reserve used for Revenue Bonds - I&P		-	31.4%	29.1%	39.4%	0.0%	0.0%	100.0%
Annexation		-	31.4%	29.1%	39.4%	0.0%	0.0%	100.0%
Total Revenue Offsets		287,953	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
NET REVENUE REQUIREMENTS:								
	-	52,883,401	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

	Functionalization	Allocation Percentages					Total
		Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M							
Group	Item						
Office of General Manager		380,720	-	380,720	-	-	380,720
Office of General Manager	Board of Directors	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-
Human Resources		762,058	-	762,058	-	-	762,058
Water Systems Operations	Office of the Manager	826,689	-	826,689	-	-	826,689
Water Systems Operations	Office of the Manager, Conveyance & Distribution S	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	220,855	-	220,855	-	-	220,855
Water Systems Operations	Office of the Manager, Operations Support Services	159,447	-	159,447	-	-	159,447
Water Systems Operations	Operations Support Services	95,263	-	95,263	-	-	95,263
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	16,417,385	-	10,475,715	5,941,670	-	16,417,385
Water Systems Operations	Water Quality Section	2,903,069	-	2,903,069	-	-	2,903,069
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	139,242	-	139,242	-	-	139,242
Water Systems Operations	Environmental Health & Safety Section	1,259,375	-	1,259,375	-	-	1,259,375
Water Systems Operations	OSS, Fleet Services Unit	535,121	-	535,121	-	-	535,121
Water Systems Operations	OSS, Power Support Unit	271,708	-	271,708	-	-	271,708
Water Systems Operations	Office of the Manager, Operations & Planning Secti	59,140	-	59,140	-	-	59,140
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-
Sustainability, Resilience & Inn		-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-
Engineering Services		2,595,219	-	2,595,219	-	-	2,595,219
Business Technology	Administrative Services	-	-	-	-	-	-
Business Technology	Information Technology	2,384,007	-	2,384,007	-	-	2,384,007
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	-	-	-	-	-	-
Water Resources Managemen	Office of the Group Manager	-	-	-	-	-	-
Ethics Office		-	-	-	-	-	-
Real Property		-	-	-	-	-	-
General Counsel		-	-	-	-	-	-
General Auditor		-	-	-	-	-	-
Total Departmental O&M		29,009,299	-	23,067,629	5,941,670	-	29,009,299
GENERAL DISTRICT REQUIREMENTS		-	-	-	-	-	-
State Water Contract*		-	-	-	-	-	-
Supply - O&M		-	-	-	-	-	-
Supply - Capital		-	-	-	-	-	-
Power - O&M & Off-Aq Capital		-	-	-	-	-	-
Power - Capital (less Off-Aq)		-	-	-	-	-	-
Transmission - Capital - Commodity, Demand, & Standby		-	-	-	-	-	-
Transmission - O&M - Commodity only		-	-	-	-	-	-
Delta Conveyance - Supply		-	-	-	-	-	-
Delta Conveyance - Power		-	-	-	-	-	-
Delta Conveyance - Other		-	-	-	-	-	-
Total State Water Contract		-	-	-	-	-	-
Colorado River Aqueduct Power Costs		-	-	-	-	-	-
Supply Programs (cash funded portion)		-	-	-	-	-	-
Demand Management (cash funded portion)		-	-	-	-	-	-
Local Resources Program		-	-	-	-	-	-
Future Supply Actions & Stormwater Pilot		-	-	-	-	-	-
Conservation Program (cash funded portion)		-	-	-	-	-	-
Total Demand Management Costs		-	-	-	-	-	-
Capital Financing		-	-	-	-	-	-
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		15,692,860	4,935,331	4,569,751	6,187,778	-	15,692,860
G.O. Bond Debt Service		109,069	34,302	31,761	43,006	-	109,069
Debt Administration		154,571	48,612	45,011	60,948	-	154,571
Bond Defeasance		-	-	-	-	-	-
PAYGO		7,479,000	2,352,110	2,177,880	2,949,009	-	7,479,000
Total Capital Financing Costs		23,435,500	7,370,355	6,824,403	9,240,742	-	23,435,500
Other Operating Costs		-	-	-	-	-	-
Operating Equipment		474,189	-	474,189	-	-	474,189
Succession Planning Labor Pool		252,366	-	252,366	-	-	252,366
OPEB/PERS Pre-Funding		-	-	-	-	-	-
Total Other Operating Costs		726,555	-	726,555	-	-	726,555
Increase/(Decrease) in Required Reserves		-	-	-	-	-	-
Total General District Requirements		24,162,055	7,370,355	7,550,957	9,240,742	-	24,162,055
REQUIREMENTS BEFORE OFFSETS:		53,171,354	7,370,355	30,618,586	9,240,742	5,941,670	53,171,354
Revenue Offsets							
Property Taxes - MWD Portion of SWC GO Debt Service		-	-	-	-	-	-
Property Taxes - MWD GO Debt Service		109,069	-	-	109,069	-	109,069
Interest on Investments		178,884	56,258	52,091	70,535	-	178,884
Hydro-Power Revenue		-	-	-	-	-	-
CRA Power Revenue		-	-	-	-	-	-
Wadsworth Pumping Plant (DVL) Power Revenue		-	-	-	-	-	-
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)		-	-	-	-	-	-
Misc. allocated to supply (PVID Lease)		-	-	-	-	-	-
Property Taxes - SWC		-	-	-	-	-	-
Revenue Reserve used for Revenue Bonds - I&P		-	-	-	-	-	-
Annexation		-	-	-	-	-	-
Total Revenue Offsets		287,953	56,258	52,091	179,604	-	287,953
NET REVENUE REQUIREMENTS:		52,883,401	7,314,097	30,566,495	9,061,139	5,941,670	52,883,401

		Functionalization	Allocation Percentages					Total
			Fixed			Variable		
			Demand	Commodity	Standby	Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		340,393	-	340,393	-	-	-	340,393
Office of General Manager	Board of Directors	-	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-	-
Human Resources		593,244	-	593,244	-	-	-	593,244
Water Systems Operations	Office of the Manager	601,600	-	601,600	-	-	-	601,600
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	77,800	-	77,800	-	-	-	77,800
Water Systems Operations	Office of the Manager, Operations Support Services	120,504	-	120,504	-	-	-	120,504
Water Systems Operations	Operations Support Services	86,053	-	86,053	-	-	-	86,053
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	10,301,510	-	10,301,510	-	-	-	10,301,510
Water Systems Operations	Water Quality Section	2,274,647	-	2,274,647	-	-	-	2,274,647
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	127,882	-	127,882	-	-	-	127,882
Water Systems Operations	Environmental Health & Safety Section	980,658	-	980,658	-	-	-	980,658
Water Systems Operations	OSS, Fleet Services Unit	326,934	-	326,934	-	-	-	326,934
Water Systems Operations	OSS, Power Support Unit	245,251	-	245,251	-	-	-	245,251
Water Systems Operations	Office of the Manager, Operations & Planning Section	53,586	-	53,586	-	-	-	53,586
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-	-
Sustainability, Resilience & Inr		-	-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-	-
Engineering Services		2,080,155	-	2,080,155	-	-	-	2,080,155
Business Technology	Administrative Services	-	-	-	-	-	-	-
Business Technology	Information Technology	1,642,405	-	1,642,405	-	-	-	1,642,405
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	-	-	-	-	-	-	-
Water Resources Managemen	Office of the Group Manager	-	-	-	-	-	-	-
Ethics Office		-	-	-	-	-	-	-
Real Property		-	-	-	-	-	-	-
General Counsel		-	-	-	-	-	-	-
General Auditor		-	-	-	-	-	-	-
Total Departmental O&M	-	19,852,623	-	19,852,623	-	-	-	19,852,623

		Functionalization	Allocation Percentages					% Total
			Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		403,990	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Office of General Manager	Board of Directors	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Bay Delta Initiatives	Bay Delta Initiatives	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Legislative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Media Communications Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Manager, External Affairs/Special Projects	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Conservation & Community Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Human Resources		808,635	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager	780,399	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Treatment Section	203,673	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations Support Services	150,518	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Support Services	95,263	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Desert Region / C&D CRA	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	System Operations Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Power Operations and Planning	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Planning & Programs Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Jensen	-	0.0%	63.9%	0.0%	36.1%	0.0%	100.0%
Water Systems Operations	Treatment Diemer	17,516,554	0.0%	56.0%	0.0%	44.0%	0.0%	100.0%
Water Systems Operations	Treatment Mills	-	0.0%	78.3%	0.0%	21.7%	0.0%	100.0%
Water Systems Operations	Treatment Skinner	-	0.0%	64.9%	0.0%	35.1%	0.0%	100.0%
Water Systems Operations	Treatment Weymouth	-	0.0%	63.8%	0.0%	36.2%	0.0%	100.0%
Water Systems Operations	Water Quality Section	2,903,069	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Eastern Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Western Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Manufacturing Services Unit	139,242	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Environmental Health & Safety Section	1,259,375	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Fleet Services Unit	535,121	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Power Support Unit	271,708	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations & Planning Section	55,829	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Security Team & Security Management	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Sustainability, Resilience & Innovation		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Diversity, Equity & Inclusion		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Equal Employment Opportunity		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Office of the Chief Financial Officer		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Office of Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Engineering Services		3,129,253	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Administrative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Information Technology	2,529,718	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Planning & Development	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Implementation	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Office of the Group Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Ethics Office		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Real Property		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
General Counsel		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
General Auditor		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Departmental O&M		30,782,348	0.0%		0.0%	0.0%	0.0%	0.0%
GENERAL DISTRICT REQUIREMENTS								
State Water Contract*								
Supply - O&M		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Supply - Capital		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Power - O&M & Off-Aq Capital		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Power - Capital (less Off-Aq)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Transmission - Capital - Commodity, Demand, & Standby		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Transmission - O&M - Commodity only		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Supply		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Power		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Other		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total State Water Contract		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Colorado River Aqueduct Power Costs								
		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Supply Programs (cash funded portion)								
		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Demand Management (cash funded portion)								
Local Resources Program		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Future Supply Actions & Stormwater Pilot		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Conservation Program (cash funded portion)		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Demand Management Costs		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Capital Financing								
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
G.O. Bond Debt Service	18,922,077	31.4%	29.1%	39.4%	0.0%	0.0%	0.0%	100.0%
Debt Administration	131,513	31.4%	29.1%	39.4%	0.0%	0.0%	0.0%	100.0%
Bond Defeasance	186,379	31.4%	29.1%	39.4%	0.0%	0.0%	0.0%	100.0%
PAYGO	-	31.4%	29.1%	39.4%	0.0%	0.0%	0.0%	100.0%
Total Capital Financing Costs	9,018,000	31.4%	29.1%	39.4%	0.0%	0.0%	0.0%	100.0%
	28,257,968	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Other Operating Costs								
Operating Equipment	503,171	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Succession Planning Labor Pool	267,790	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%
OPEB/PERS Pre-Funding	-	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Total Other Operating Costs	770,962	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Increase/(Decrease) in Required Reserves								
	-	30.6%	31.0%	38.4%	0.0%	0.0%	0.0%	100.0%
Total General District Requirements								
	29,028,929	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
REQUIREMENTS BEFORE OFFSETS:								
	59,811,277	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Revenue Offsets								
Property Taxes - MWD Portion of SWC GO Debt Service	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Property Taxes - MWD GO Debt Service	131,513	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Interest on Investments	201,223	31.4%	29.1%	39.4%	0.0%	0.0%	0.0%	100.0%
Hydro-Power Revenue	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
CRA Power Revenue	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Wadsworth Pumping Plant (DVL) Power Revenue	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to supply (PVID Lease)	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Property Taxes - SWC	-	31.4%	29.1%	39.4%	0.0%	0.0%	0.0%	100.0%
Revenue Reserve used for Revenue Bonds - I&P	-	31.4%	29.1%	39.4%	0.0%	0.0%	0.0%	100.0%
Annexation	-	31.4%	29.1%	39.4%	0.0%	0.0%	0.0%	100.0%
Total Revenue Offsets	332,735	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
NET REVENUE REQUIREMENTS:								
-	59,478,542	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

	Functionalization	Allocation Percentages					Total
		Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M							
Group	Item						
Office of General Manager		403,990	-	403,990	-	-	403,990
Office of General Manager	Board of Directors	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-
Human Resources		808,635	-	808,635	-	-	808,635
Water Systems Operations	Office of the Manager	780,399	-	780,399	-	-	780,399
Water Systems Operations	Office of the Manager, Conveyance & Distribution S	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	203,673	-	203,673	-	-	203,673
Water Systems Operations	Office of the Manager, Operations Support Services	150,518	-	150,518	-	-	150,518
Water Systems Operations	Operations Support Services	95,263	-	95,263	-	-	95,263
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	17,516,554	-	9,809,881	7,706,673	-	17,516,554
Water Systems Operations	Treatment Mills	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	2,903,069	-	2,903,069	-	-	2,903,069
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	139,242	-	139,242	-	-	139,242
Water Systems Operations	Environmental Health & Safety Section	1,259,375	-	1,259,375	-	-	1,259,375
Water Systems Operations	OSS, Fleet Services Unit	535,121	-	535,121	-	-	535,121
Water Systems Operations	OSS, Power Support Unit	271,708	-	271,708	-	-	271,708
Water Systems Operations	Office of the Manager, Operations & Planning Secti	55,829	-	55,829	-	-	55,829
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-
Sustainability, Resilience & Inn		-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-
Engineering Services		3,129,253	-	3,129,253	-	-	3,129,253
Business Technology	Administrative Services	-	-	-	-	-	-
Business Technology	Information Technology	2,529,718	-	2,529,718	-	-	2,529,718
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	-	-	-	-	-	-
Water Resources Managemen	Office of the Group Manager	-	-	-	-	-	-
Ethics Office		-	-	-	-	-	-
Real Property		-	-	-	-	-	-
General Counsel		-	-	-	-	-	-
General Auditor		-	-	-	-	-	-
Total Departmental O&M	-	30,782,348	-	23,075,674	7,706,673	-	30,782,348
GENERAL DISTRICT REQUIREMENTS							
		-	-	-	-	-	-
State Water Contract*							
Supply - O&M		-	-	-	-	-	-
Supply - Capital		-	-	-	-	-	-
Power - O&M & Off-Aq Capital		-	-	-	-	-	-
Power - Capital (less Off-Aq)		-	-	-	-	-	-
Transmission - Capital - Commodity, Demand, & Standby		-	-	-	-	-	-
Transmission - O&M - Commodity only		-	-	-	-	-	-
Delta Conveyance - Supply		-	-	-	-	-	-
Delta Conveyance - Power		-	-	-	-	-	-
Delta Conveyance - Other		-	-	-	-	-	-
Total State Water Contract		-	-	-	-	-	-
Colorado River Aqueduct Power Costs							
		-	-	-	-	-	-
Supply Programs (cash funded portion)							
		-	-	-	-	-	-
Demand Management (cash funded portion)							
Local Resources Program		-	-	-	-	-	-
Future Supply Actions & Stormwater Pilot		-	-	-	-	-	-
Conservation Program (cash funded portion)		-	-	-	-	-	-
Total Demand Management Costs		-	-	-	-	-	-
Capital Financing							
Revenue Bond Debt Service net of BABs Interest Subsidy Payment	18,922,077	5,950,905	5,510,097	7,461,075	-	-	18,922,077
G.O. Bond Debt Service	131,513	41,360	38,296	51,856	-	-	131,513
Debt Administration	186,379	58,615	54,273	73,490	-	-	186,379
Bond Defeasance	-	-	-	-	-	-	-
PAYGO	9,018,000	2,836,119	2,626,036	3,555,845	-	-	9,018,000
Total Capital Financing Costs	28,257,968	8,886,999	8,228,702	11,142,267	-	-	28,257,968
Other Operating Costs							
Operating Equipment	503,171	-	503,171	-	-	-	503,171
Succession Planning Labor Pool	267,790	-	267,790	-	-	-	267,790
OPEB\PERS Pre-Funding	-	-	-	-	-	-	-
Total Other Operating Costs	770,962	-	770,962	-	-	-	770,962
Increase/(Decrease) in Required Reserves							
	-	-	-	-	-	-	-
Total General District Requirements	29,028,929	8,886,999	8,999,664	11,142,267	-	-	29,028,929
REQUIREMENTS BEFORE OFFSETS:	59,811,277	8,886,999	32,075,338	11,142,267	7,706,673	-	59,811,277
Revenue Offsets							
Property Taxes - MWD Portion of SWC GO Debt Service	-	-	-	-	-	-	-
Property Taxes - MWD GO Debt Service	131,513	-	-	131,513	-	-	131,513
Interest on Investments	201,223	63,284	58,596	79,343	-	-	201,223
Hydro-Power Revenue	-	-	-	-	-	-	-
CRA Power Revenue	-	-	-	-	-	-	-
Wadsworth Pumping Plant (DVL) Power Revenue	-	-	-	-	-	-	-
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)	-	-	-	-	-	-	-
Misc. allocated to supply (PVID Lease)	-	-	-	-	-	-	-
Property Taxes - SWC	-	-	-	-	-	-	-
Revenue Reserve used for Revenue Bonds - I&P	-	-	-	-	-	-	-
Annexation	-	-	-	-	-	-	-
Total Revenue Offsets	332,735	63,284	58,596	210,856	-	-	332,735
NET REVENUE REQUIREMENTS:	59,478,542	8,823,715	32,016,742	10,931,411	7,706,673	-	59,478,542

		Functionalization	Allocation Percentages					Total
			Fixed			Variable		
			Demand	Commodity	Standby	Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		361,198	-	361,198	-	-	-	361,198
Office of General Manager	Board of Directors	-	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-	-
Human Resources		629,503	-	629,503	-	-	-	629,503
Water Systems Operations	Office of the Manager	567,914	-	567,914	-	-	-	567,914
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	71,747	-	71,747	-	-	-	71,747
Water Systems Operations	Office of the Manager, Operations Support Services	113,757	-	113,757	-	-	-	113,757
Water Systems Operations	Operations Support Services	86,053	-	86,053	-	-	-	86,053
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	9,500,077	-	9,500,077	-	-	-	9,500,077
Water Systems Operations	Treatment Mills	-	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	2,274,647	-	2,274,647	-	-	-	2,274,647
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	127,882	-	127,882	-	-	-	127,882
Water Systems Operations	Environmental Health & Safety Section	980,658	-	980,658	-	-	-	980,658
Water Systems Operations	OSS, Fleet Services Unit	326,934	-	326,934	-	-	-	326,934
Water Systems Operations	OSS, Power Support Unit	245,251	-	245,251	-	-	-	245,251
Water Systems Operations	Office of the Manager, Operations & Planning Section	50,586	-	50,586	-	-	-	50,586
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-	-
Sustainability, Resilience & Inr		-	-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-	-
Engineering Services		2,508,202	-	2,508,202	-	-	-	2,508,202
Business Technology	Administrative Services	-	-	-	-	-	-	-
Business Technology	Information Technology	1,742,789	-	1,742,789	-	-	-	1,742,789
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	-	-	-	-	-	-	-
Water Resources Managemen	Office of the Group Manager	-	-	-	-	-	-	-
Ethics Office		-	-	-	-	-	-	-
Real Property		-	-	-	-	-	-	-
General Counsel		-	-	-	-	-	-	-
General Auditor		-	-	-	-	-	-	-
Total Departmental O&M	-	19,587,196	-	19,587,196	-	-	-	19,587,196

		Functionalization	Allocation Percentages					%
			Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		287,044	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Office of General Manager	Board of Directors	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Bay Delta Initiatives	Bay Delta Initiatives	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Legislative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Media Communications Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Manager, External Affairs/Special Projects	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Conservation & Community Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Human Resources		574,554	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager	752,356	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Treatment Section	193,264	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations Support Services	145,110	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Support Services	95,263	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Desert Region / C&D CRA	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	System Operations Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Power Operations and Planning	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Planning & Programs Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Jensen	-	0.0%	63.9%	0.0%	36.1%	0.0%	100.0%
Water Systems Operations	Treatment Diemer	-	0.0%	56.0%	0.0%	44.0%	0.0%	100.0%
Water Systems Operations	Treatment Mills	12,030,393	0.0%	78.3%	0.0%	21.7%	0.0%	100.0%
Water Systems Operations	Treatment Skinner	-	0.0%	64.9%	0.0%	35.1%	0.0%	100.0%
Water Systems Operations	Treatment Weymouth	-	0.0%	63.8%	0.0%	36.2%	0.0%	100.0%
Water Systems Operations	Water Quality Section	2,903,069	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Eastern Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Western Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Manufacturing Services Unit	139,242	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Environmental Health & Safety Section	1,259,375	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Fleet Services Unit	535,121	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Power Support Unit	271,708	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations & Planning Section	53,823	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Security Team & Security Management	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Sustainability, Resilience & Innovation		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Diversity, Equity & Inclusion		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Equal Employment Opportunity		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Office of the Chief Financial Officer		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Office of Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Engineering Services		833,843	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Administrative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Information Technology	1,797,424	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Planning & Development	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Implementation	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Office of the Group Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Ethics Office		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Real Property		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
General Counsel		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
General Auditor		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Departmental O&M		21,871,590	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
GENERAL DISTRICT REQUIREMENTS								
State Water Contract*								
Supply - O&M		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Supply - Capital		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Power - O&M & Off-Aq Capital		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Power - Capital (less Off-Aq)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Transmission - Capital - Commodity, Demand, & Standby		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Transmission - O&M - Commodity only		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Supply		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Power		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Other		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total State Water Contract		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Colorado River Aqueduct Power Costs		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Supply Programs (cash funded portion)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Demand Management (cash funded portion)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Local Resources Program		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Future Supply Actions & Stormwater Pilot		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Conservation Program (cash funded portion)		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Demand Management Costs		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Capital Financing		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		5,042,110	31.4%	29.1%	39.4%	0.0%	0.0%	100.0%
G.O. Bond Debt Service		35,044	31.4%	29.1%	39.4%	0.0%	0.0%	100.0%
Debt Administration		49,664	31.4%	29.1%	39.4%	0.0%	0.0%	100.0%
Bond Defeasance		-	31.4%	29.1%	39.4%	0.0%	0.0%	100.0%
PAYGO		2,403,000	31.4%	29.1%	39.4%	0.0%	0.0%	100.0%
Total Capital Financing Costs		7,529,818	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Other Operating Costs								
Operating Equipment		357,515	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Succession Planning Labor Pool		190,271	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
OPEB/PERS Pre-Funding		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Other Operating Costs		547,787	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Increase/(Decrease) in Required Reserves		-	29.3%	33.9%	36.8%	0.0%	0.0%	100.0%
Total General District Requirements		8,077,604	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
REQUIREMENTS BEFORE OFFSETS:		29,949,194	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Revenue Offsets								
Property Taxes - MWD Portion of SWC GO Debt Service		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Property Taxes - MWD GO Debt Service		35,044	0.0%	0.0%	100.0%	0.0%	0.0%	100.0%
Interest on Investments		100,758	31.4%	29.1%	39.4%	0.0%	0.0%	100.0%
Hydro-Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
CRA Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Wadsworth Pumping Plant (DVL) Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to supply (PVID Lease)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Property Taxes - SWC		-	31.4%	29.1%	39.4%	0.0%	0.0%	100.0%
Revenue Reserve used for Revenue Bonds - I&P		-	31.4%	29.1%	39.4%	0.0%	0.0%	100.0%
Annexation		-	31.4%	29.1%	39.4%	0.0%	0.0%	100.0%
Total Revenue Offsets		135,802	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
NET REVENUE REQUIREMENTS:	-	29,813,392	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

	Functionalization	Allocation Percentages					Total
		Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M							
Group	Item						
Office of General Manager		287,044	-	287,044	-	-	287,044
Office of General Manager	Board of Directors	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-
Human Resources		574,554	-	574,554	-	-	574,554
Water Systems Operations	Office of the Manager	752,356	-	752,356	-	-	752,356
Water Systems Operations	Office of the Manager, Conveyance & Distribution S	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	193,264	-	193,264	-	-	193,264
Water Systems Operations	Office of the Manager, Operations Support Services	145,110	-	145,110	-	-	145,110
Water Systems Operations	Operations Support Services	95,263	-	95,263	-	-	95,263
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	12,030,393	-	9,421,198	2,609,195	-	12,030,393
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	2,903,069	-	2,903,069	-	-	2,903,069
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	139,242	-	139,242	-	-	139,242
Water Systems Operations	Environmental Health & Safety Section	1,259,375	-	1,259,375	-	-	1,259,375
Water Systems Operations	OSS, Fleet Services Unit	535,121	-	535,121	-	-	535,121
Water Systems Operations	OSS, Power Support Unit	271,708	-	271,708	-	-	271,708
Water Systems Operations	Office of the Manager, Operations & Planning Secti	53,823	-	53,823	-	-	53,823
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-
Sustainability, Resilience & Inn		-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-
Engineering Services		833,843	-	833,843	-	-	833,843
Business Technology	Administrative Services	-	-	-	-	-	-
Business Technology	Information Technology	1,797,424	-	1,797,424	-	-	1,797,424
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	-	-	-	-	-	-
Water Resources Managemen	Office of the Group Manager	-	-	-	-	-	-
Ethics Office		-	-	-	-	-	-
Real Property		-	-	-	-	-	-
General Counsel		-	-	-	-	-	-
General Auditor		-	-	-	-	-	-
Total Departmental O&M		21,871,590	-	19,262,395	2,609,195	-	21,871,590
GENERAL DISTRICT REQUIREMENTS		-	-	-	-	-	-
State Water Contract*		-	-	-	-	-	-
Supply - O&M		-	-	-	-	-	-
Supply - Capital		-	-	-	-	-	-
Power - O&M & Off-Aq Capital		-	-	-	-	-	-
Power - Capital (less Off-Aq)		-	-	-	-	-	-
Transmission - Capital - Commodity, Demand, & Standby		-	-	-	-	-	-
Transmission - O&M - Commodity only		-	-	-	-	-	-
Delta Conveyance - Supply		-	-	-	-	-	-
Delta Conveyance - Power		-	-	-	-	-	-
Delta Conveyance - Other		-	-	-	-	-	-
Total State Water Contract		-	-	-	-	-	-
Colorado River Aqueduct Power Costs		-	-	-	-	-	-
Supply Programs (cash funded portion)		-	-	-	-	-	-
Demand Management (cash funded portion)		-	-	-	-	-	-
Local Resources Program		-	-	-	-	-	-
Future Supply Actions & Stormwater Pilot		-	-	-	-	-	-
Conservation Program (cash funded portion)		-	-	-	-	-	-
Total Demand Management Costs		-	-	-	-	-	-
Capital Financing		-	-	-	-	-	-
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		5,042,110	1,585,720	1,468,259	1,988,131	-	5,042,110
G.O. Bond Debt Service		35,044	11,021	10,205	13,818	-	35,044
Debt Administration		49,664	15,619	14,462	19,583	-	49,664
Bond Defeasance		-	-	-	-	-	-
PAYGO		2,403,000	755,732	699,752	947,516	-	2,403,000
Total Capital Financing Costs		7,529,818	2,368,092	2,192,678	2,969,047	-	7,529,818
Other Operating Costs		-	-	-	-	-	-
Operating Equipment		357,515	-	357,515	-	-	357,515
Succession Planning Labor Pool		190,271	-	190,271	-	-	190,271
OPEB/PERS Pre-Funding		-	-	-	-	-	-
Total Other Operating Costs		547,787	-	547,787	-	-	547,787
Increase/(Decrease) in Required Reserves		-	-	-	-	-	-
Total General District Requirements		8,077,604	2,368,092	2,740,465	2,969,047	-	8,077,604
REQUIREMENTS BEFORE OFFSETS:		29,949,194	2,368,092	22,002,860	2,969,047	2,609,195	29,949,194
Revenue Offsets		-	-	-	-	-	-
Property Taxes - MWD Portion of SWC GO Debt Service		-	-	-	-	-	-
Property Taxes - MWD GO Debt Service		35,044	-	-	35,044	-	35,044
Interest on Investments		100,758	31,688	29,341	39,729	-	100,758
Hydro-Power Revenue		-	-	-	-	-	-
CRA Power Revenue		-	-	-	-	-	-
Wadsworth Pumping Plant (DVL) Power Revenue		-	-	-	-	-	-
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)		-	-	-	-	-	-
Misc. allocated to supply (PVID Lease)		-	-	-	-	-	-
Property Taxes - SWC		-	-	-	-	-	-
Revenue Reserve used for Revenue Bonds - I&P		-	-	-	-	-	-
Annexation		-	-	-	-	-	-
Total Revenue Offsets		135,802	31,688	29,341	74,773	-	135,802
NET REVENUE REQUIREMENTS:		29,813,392	2,336,405	21,973,519	2,894,274	2,609,195	29,813,392

		Functionalization	Allocation Percentages					Total
			Fixed			Variable		
			Demand	Commodity	Standby	Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		256,639	-	256,639	-	-	-	256,639
Office of General Manager	Board of Directors	-	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-	-
Human Resources		447,277	-	447,277	-	-	-	447,277
Water Systems Operations	Office of the Manager	547,506	-	547,506	-	-	-	547,506
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	68,080	-	68,080	-	-	-	68,080
Water Systems Operations	Office of the Manager, Operations Support Services	109,669	-	109,669	-	-	-	109,669
Water Systems Operations	Operations Support Services	86,053	-	86,053	-	-	-	86,053
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	9,014,558	-	9,014,558	-	-	-	9,014,558
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	2,274,647	-	2,274,647	-	-	-	2,274,647
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	127,882	-	127,882	-	-	-	127,882
Water Systems Operations	Environmental Health & Safety Section	980,658	-	980,658	-	-	-	980,658
Water Systems Operations	OSS, Fleet Services Unit	326,934	-	326,934	-	-	-	326,934
Water Systems Operations	OSS, Power Support Unit	245,251	-	245,251	-	-	-	245,251
Water Systems Operations	Office of the Manager, Operations & Planning Section	48,768	-	48,768	-	-	-	48,768
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-	-
Sustainability, Resilience & Inr		-	-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-	-
Engineering Services		668,353	-	668,353	-	-	-	668,353
Business Technology	Administrative Services	-	-	-	-	-	-	-
Business Technology	Information Technology	1,238,293	-	1,238,293	-	-	-	1,238,293
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	-	-	-	-	-	-	-
Water Resources Managemen	Office of the Group Manager	-	-	-	-	-	-	-
Ethics Office		-	-	-	-	-	-	-
Real Property		-	-	-	-	-	-	-
General Counsel		-	-	-	-	-	-	-
General Auditor		-	-	-	-	-	-	-
Total Departmental O&M	-	16,440,569	-	16,440,569	-	-	-	16,440,569

		Functionalization	Allocation Percentages				Total
			Demand	Fixed Commodity	Standby	Variable Commodity	
Departmental O&M							
Group	Item						
Office of General Manager		344,281	0.0%	100.0%	0.0%	0.0%	100.0%
Office of General Manager	Board of Directors	-	0.0%	100.0%	0.0%	0.0%	100.0%
Bay Delta Initiatives	Bay Delta Initiatives	-	0.0%	100.0%	0.0%	0.0%	100.0%
External Affairs	Legislative Services	-	0.0%	100.0%	0.0%	0.0%	100.0%
External Affairs	Media Communications Services	-	0.0%	100.0%	0.0%	0.0%	100.0%
External Affairs	Manager, External Affairs/Special Projects	-	0.0%	100.0%	0.0%	0.0%	100.0%
External Affairs	Conservation & Community Services	-	0.0%	100.0%	0.0%	0.0%	100.0%
Human Resources		689,120	0.0%	100.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager	742,013	0.0%	100.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	0.0%	100.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Treatment Section	189,425	0.0%	100.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations Support Services	143,115	0.0%	100.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Support Services	95,263	0.0%	100.0%	0.0%	0.0%	100.0%
Water Systems Operations	Desert Region / C&D CRA	-	0.0%	100.0%	0.0%	0.0%	100.0%
Water Systems Operations	System Operations Unit	-	0.0%	100.0%	0.0%	0.0%	100.0%
Water Systems Operations	Power Operations and Planning	-	0.0%	100.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Planning & Programs Unit	-	0.0%	100.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Jensen	-	0.0%	63.9%	0.0%	36.1%	100.0%
Water Systems Operations	Treatment Diemer	-	0.0%	56.0%	0.0%	44.0%	100.0%
Water Systems Operations	Treatment Mills	-	0.0%	78.3%	0.0%	21.7%	100.0%
Water Systems Operations	Treatment Skinner	14,051,316	0.0%	64.9%	0.0%	35.1%	100.0%
Water Systems Operations	Treatment Weymouth	-	0.0%	63.8%	0.0%	36.2%	100.0%
Water Systems Operations	Water Quality Section	2,903,069	0.0%	100.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Eastern Unit	-	0.0%	100.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Western Unit	-	0.0%	100.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Manufacturing Services Unit	139,242	0.0%	100.0%	0.0%	0.0%	100.0%
Water Systems Operations	Environmental Health & Safety Section	1,259,375	0.0%	100.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Fleet Services Unit	535,121	0.0%	100.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Power Support Unit	271,708	0.0%	100.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations & Planning Section	53,083	0.0%	100.0%	0.0%	0.0%	100.0%
Water Systems Operations	Security Team & Security Management	-	0.0%	100.0%	0.0%	0.0%	100.0%
Sustainability, Resilience & Innovation		-	0.0%	100.0%	0.0%	0.0%	100.0%
Diversity, Equity & Inclusion		-	0.0%	100.0%	0.0%	0.0%	100.0%
Equal Employment Opportunity		-	0.0%	100.0%	0.0%	0.0%	100.0%
Office of the Chief Financial Officer		-	0.0%	100.0%	0.0%	0.0%	100.0%
Business Technology	Office of Manager	-	0.0%	100.0%	0.0%	0.0%	100.0%
Engineering Services		2,660,802	0.0%	100.0%	0.0%	0.0%	100.0%
Business Technology	Administrative Services	-	0.0%	100.0%	0.0%	0.0%	100.0%
Business Technology	Information Technology	2,155,829	0.0%	100.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Planning & Development	-	0.0%	100.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Implementation	-	0.0%	100.0%	0.0%	0.0%	100.0%
Water Resources Management	Office of the Group Manager	-	0.0%	100.0%	0.0%	0.0%	100.0%
Ethics Office		-	0.0%	100.0%	0.0%	0.0%	100.0%
Real Property		-	0.0%	100.0%	0.0%	0.0%	100.0%
General Counsel		-	0.0%	100.0%	0.0%	0.0%	100.0%
General Auditor		-	0.0%	100.0%	0.0%	0.0%	100.0%
Total Departmental O&M		26,232,762	0.0%	0.0%	0.0%	0.0%	0.0%
GENERAL DISTRICT REQUIREMENTS							
State Water Contract*							
Supply - O&M		-	0.0%	0.0%	0.0%	0.0%	0.0%
Supply - Capital		-	0.0%	0.0%	0.0%	0.0%	0.0%
Power - O&M & Off-Aq Capital		-	0.0%	0.0%	0.0%	0.0%	0.0%
Power - Capital (less Off-Aq)		-	0.0%	0.0%	0.0%	0.0%	0.0%
Transmission - Capital - Commodity, Demand, & Standby		-	0.0%	0.0%	0.0%	0.0%	0.0%
Transmission - O&M - Commodity only		-	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Supply		-	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Power		-	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Other		-	0.0%	0.0%	0.0%	0.0%	0.0%
Total State Water Contract		-	0.0%	0.0%	0.0%	0.0%	0.0%
Colorado River Aqueduct Power Costs							
		-	0.0%	0.0%	0.0%	0.0%	0.0%
Supply Programs (cash funded portion)							
		-	0.0%	0.0%	0.0%	0.0%	0.0%
Demand Management (cash funded portion)							
Local Resources Program		-	0.0%	0.0%	0.0%	0.0%	0.0%
Future Supply Actions & Stormwater Pilot		-	0.0%	100.0%	0.0%	0.0%	100.0%
Conservation Program (cash funded portion)		-	0.0%	100.0%	0.0%	0.0%	100.0%
Total Demand Management Costs		-	0.0%	0.0%	0.0%	0.0%	0.0%
Capital Financing							
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		-	0.0%	0.0%	0.0%	0.0%	0.0%
G.O. Bond Debt Service	16,089,431	31.4%	29.1%	39.4%	0.0%	0.0%	100.0%
	111,825	31.4%	29.1%	39.4%	0.0%	0.0%	100.0%
Debt Administration	158,478	31.4%	29.1%	39.4%	0.0%	0.0%	100.0%
Bond Defeasance	-	31.4%	29.1%	39.4%	0.0%	0.0%	100.0%
PAYGO	7,668,000	31.4%	29.1%	39.4%	0.0%	0.0%	100.0%
Total Capital Financing Costs	24,027,733	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Other Operating Costs							
Operating Equipment	428,803	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Succession Planning Labor Pool	228,211	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
OPEB/PERS Pre-Funding	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Other Operating Costs	657,015	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Increase/(Decrease) in Required Reserves							
	-	30.6%	31.0%	38.4%	0.0%	0.0%	100.0%
Total General District Requirements							
	24,684,748	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
REQUIREMENTS BEFORE OFFSETS:							
	50,917,509	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Revenue Offsets							
Property Taxes - MWD Portion of SWC GO Debt Service	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Property Taxes - MWD GO Debt Service	111,825	0.0%	0.0%	100.0%	0.0%	0.0%	100.0%
Interest on Investments	171,301	31.4%	29.1%	39.4%	0.0%	0.0%	100.0%
Hydro-Power Revenue	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
CRA Power Revenue	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Wadsworth Pumping Plant (DVL) Power Revenue	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to supply (PVID Lease)	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Property Taxes - SWC	-	31.4%	29.1%	39.4%	0.0%	0.0%	100.0%
Revenue Reserve used for Revenue Bonds - I&P	-	31.4%	29.1%	39.4%	0.0%	0.0%	100.0%
Annexation	-	31.4%	29.1%	39.4%	0.0%	0.0%	100.0%
Total Revenue Offsets	283,126	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
NET REVENUE REQUIREMENTS:							
-	50,634,383	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

	Functionalization	Allocation Percentages					Total
		Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M							
Group	Item						
Office of General Manager		344,281	-	344,281	-	-	344,281
Office of General Manager	Board of Directors	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-
Human Resources		689,120	-	689,120	-	-	689,120
Water Systems Operations	Office of the Manager	742,013	-	742,013	-	-	742,013
Water Systems Operations	Office of the Manager, Conveyance & Distribution S	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	189,425	-	189,425	-	-	189,425
Water Systems Operations	Office of the Manager, Operations Support Services	143,115	-	143,115	-	-	143,115
Water Systems Operations	Operations Support Services	95,263	-	95,263	-	-	95,263
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	14,051,316	-	9,118,635	4,932,681	-	14,051,316
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	2,903,069	-	2,903,069	-	-	2,903,069
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	139,242	-	139,242	-	-	139,242
Water Systems Operations	Environmental Health & Safety Section	1,259,375	-	1,259,375	-	-	1,259,375
Water Systems Operations	OSS, Fleet Services Unit	535,121	-	535,121	-	-	535,121
Water Systems Operations	OSS, Power Support Unit	271,708	-	271,708	-	-	271,708
Water Systems Operations	Office of the Manager, Operations & Planning Secti	53,083	-	53,083	-	-	53,083
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-
Sustainability, Resilience & Inn		-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-
Engineering Services		2,660,802	-	2,660,802	-	-	2,660,802
Business Technology	Administrative Services	-	-	-	-	-	-
Business Technology	Information Technology	2,155,829	-	2,155,829	-	-	2,155,829
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	-	-	-	-	-	-
Water Resources Managemen	Office of the Group Manager	-	-	-	-	-	-
Ethics Office		-	-	-	-	-	-
Real Property		-	-	-	-	-	-
General Counsel		-	-	-	-	-	-
General Auditor		-	-	-	-	-	-
Total Departmental O&M	-	26,232,762	-	21,300,080	4,932,681	-	26,232,762
GENERAL DISTRICT REQUIREMENTS							
		-	-	-	-	-	-
State Water Contract*							
Supply - O&M		-	-	-	-	-	-
Supply - Capital		-	-	-	-	-	-
Power - O&M & Off-Aq Capital		-	-	-	-	-	-
Power - Capital (less Off-Aq)		-	-	-	-	-	-
Transmission - Capital - Commodity, Demand, & Standby		-	-	-	-	-	-
Transmission - O&M - Commodity only		-	-	-	-	-	-
Delta Conveyance - Supply		-	-	-	-	-	-
Delta Conveyance - Power		-	-	-	-	-	-
Delta Conveyance - Other		-	-	-	-	-	-
Total State Water Contract		-	-	-	-	-	-
Colorado River Aqueduct Power Costs							
		-	-	-	-	-	-
Supply Programs (cash funded portion)							
		-	-	-	-	-	-
Demand Management (cash funded portion)							
Local Resources Program		-	-	-	-	-	-
Future Supply Actions & Stormwater Pilot		-	-	-	-	-	-
Conservation Program (cash funded portion)		-	-	-	-	-	-
Total Demand Management Costs		-	-	-	-	-	-
Capital Financing							
Revenue Bond Debt Service net of BABs Interest Subsidy Payment	16,089,431	5,060,051	4,685,232	6,344,148	-	-	16,089,431
G.O. Bond Debt Service	111,825	35,168	32,563	44,093	-	-	111,825
Debt Administration	158,478	49,840	46,149	62,489	-	-	158,478
Bond Defeasance	-	-	-	-	-	-	-
PAYGO	7,668,000	2,411,550	2,232,917	3,023,533	-	-	7,668,000
Total Capital Financing Costs	24,027,733	7,556,610	6,996,861	9,474,263	-	-	24,027,733
Other Operating Costs							
Operating Equipment	428,803	-	428,803	-	-	-	428,803
Succession Planning Labor Pool	228,211	-	228,211	-	-	-	228,211
OPEB/PERS Pre-Funding	-	-	-	-	-	-	-
Total Other Operating Costs	657,015	-	657,015	-	-	-	657,015
Increase/(Decrease) in Required Reserves							
	-	-	-	-	-	-	-
Total General District Requirements	24,684,748	7,556,610	7,653,875	9,474,263	-	-	24,684,748
REQUIREMENTS BEFORE OFFSETS:							
	50,917,509	7,556,610	28,953,956	9,474,263	4,932,681	-	50,917,509
Revenue Offsets							
Property Taxes - MWD Portion of SWC GO Debt Service	-	-	-	-	-	-	-
Property Taxes - MWD GO Debt Service	111,825	-	-	111,825	-	-	111,825
Interest on Investments	171,301	53,873	49,883	67,545	-	-	171,301
Hydro-Power Revenue	-	-	-	-	-	-	-
CRA Power Revenue	-	-	-	-	-	-	-
Wadsworth Pumping Plant (DVL) Power Revenue	-	-	-	-	-	-	-
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)	-	-	-	-	-	-	-
Misc. allocated to supply (PVID Lease)	-	-	-	-	-	-	-
Property Taxes - SWC	-	-	-	-	-	-	-
Revenue Reserve used for Revenue Bonds - I&P	-	-	-	-	-	-	-
Annexation	-	-	-	-	-	-	-
Total Revenue Offsets	283,126	53,873	49,883	179,370	-	-	283,126
NET REVENUE REQUIREMENTS:							
	50,634,383	7,502,736	28,904,073	9,294,893	4,932,681	-	50,634,383

		Functionalization	Allocation Percentages					Total
			Fixed			Variable		
			Demand	Commodity	Standby	Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		307,813	-	307,813	-	-	-	307,813
Office of General Manager	Board of Directors	-	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-	-
Human Resources		536,463	-	536,463	-	-	-	536,463
Water Systems Operations	Office of the Manager	539,979	-	539,979	-	-	-	539,979
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	66,728	-	66,728	-	-	-	66,728
Water Systems Operations	Office of the Manager, Operations Support Services	108,161	-	108,161	-	-	-	108,161
Water Systems Operations	Operations Support Services	86,053	-	86,053	-	-	-	86,053
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	8,835,488	-	8,835,488	-	-	-	8,835,488
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	2,274,647	-	2,274,647	-	-	-	2,274,647
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	127,882	-	127,882	-	-	-	127,882
Water Systems Operations	Environmental Health & Safety Section	980,658	-	980,658	-	-	-	980,658
Water Systems Operations	OSS, Fleet Services Unit	326,934	-	326,934	-	-	-	326,934
Water Systems Operations	OSS, Power Support Unit	245,251	-	245,251	-	-	-	245,251
Water Systems Operations	Office of the Manager, Operations & Planning Section	48,098	-	48,098	-	-	-	48,098
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-	-
Sustainability, Resilience & Inr		-	-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-	-
Engineering Services		2,132,722	-	2,132,722	-	-	-	2,132,722
Business Technology	Administrative Services	-	-	-	-	-	-	-
Business Technology	Information Technology	1,485,207	-	1,485,207	-	-	-	1,485,207
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	-	-	-	-	-	-	-
Water Resources Managemen	Office of the Group Manager	-	-	-	-	-	-	-
Ethics Office		-	-	-	-	-	-	-
Real Property		-	-	-	-	-	-	-
General Counsel		-	-	-	-	-	-	-
General Auditor		-	-	-	-	-	-	-
Total Departmental O&M		18,102,085	-	18,102,085	-	-	-	18,102,085

		Functionalization	Allocation Percentages					% Total
			Demand	Fixed Commodity	Standby	Variable Commodity	Other	
Departmental O&M								
Group	Item							
	Office of General Manager	1,506,409	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Office of General Manager Board of Directors	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Bay Delta Initiatives	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	External Affairs Legislative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	External Affairs Media Communications Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	External Affairs Manager, External Affairs/Special Projects	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	External Affairs Conservation & Community Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Human Resources	3,015,262	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations Office of the Manager	3,581,601	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations Office of the Manager, Conveyance & Distribution Section	352,938	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations Office of the Manager, Treatment Section	153,660	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations Office of the Manager, Operations Support Services	690,796	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations Operations Support Services	6,564,627	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations Desert Region / C&D CRA	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations System Operations Unit	8,919,628	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations Power Operations and Planning	1,218,643	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations Operations Planning & Programs Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations Treatment Jensen	2,503,082	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations Treatment Diemer	2,640,585	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations Treatment Mills	1,813,557	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations Treatment Skinner	2,118,208	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations Treatment Weymouth	2,474,888	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations Water Quality Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations C&D, Eastern Unit	16,173,011	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations C&D, Western Unit	15,647,634	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations OSS, Manufacturing Services Unit	6,500,552	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations Environmental Health & Safety Section	6,215,260	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations OSS, Fleet Services Unit	6,548,611	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations OSS, Power Support Unit	4,102,256	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations Office of the Manager, Operations & Planning Section	256,224	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations Security Team & Security Management	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Sustainability, Resilience & Innovation	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Diversity, Equity & Inclusion	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Equal Employment Opportunity	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Office of the Chief Financial Officer	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Business Technology Office of the Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Engineering Services	8,497,703	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Business Technology Administrative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Business Technology Information Technology	9,432,889	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Resources Management Resource Planning & Development	373,055	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Resources Management Resource Implementation	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Resources Management Office of the Group Manager	43,942	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Ethics Office	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Real Property	3,437,148	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	General Counsel	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	General Auditor	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Total Departmental O&M	114,782,168	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
GENERAL DISTRICT REQUIREMENTS								
State Water Contract*								
	Supply - O&M	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Supply - Capital	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Power - O&M & Off-Aq Capital	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Power - Capital (less Off-Aq)	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Transmission - Capital - Commodity, Demand, & Standby	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Transmission - O&M - Commodity only	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Delta Conveyance - Supply	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Delta Conveyance - Power	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Delta Conveyance - Other	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Total State Water Contract	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Colorado River Aqueduct Power Costs		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Supply Programs (cash funded portion)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Demand Management (cash funded portion)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Local Resources Program	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Future Supply Actions & Stormwater Pilot	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Conservation Program (cash funded portion)	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Total Demand Management Costs	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Capital Financing		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Revenue Bond Debt Service net of BABs Interest Subsidy Payment	51,384,203	33.5%	39.9%	26.7%	0.0%	0.0%	100.0%
	G.O. Bond Debt Service	1,477,547	33.5%	39.9%	26.7%	0.0%	0.0%	100.0%
	Debt Administration	506,124	33.5%	39.9%	26.7%	0.0%	0.0%	100.0%
	Bond Defeasance	-	33.5%	39.9%	26.7%	0.0%	0.0%	100.0%
	PAYGO	24,489,000	33.5%	39.9%	26.7%	0.0%	0.0%	100.0%
	Total Capital Financing Costs	77,856,873	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Other Operating Costs								
	Operating Equipment	1,876,241	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Succession Planning Labor Pool	998,544	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	OPEB/PERS Pre-Funding	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Total Other Operating Costs	2,874,785	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Increase/(Decrease) in Required Reserves		-	32.3%	42.0%	25.7%	0.0%	0.0%	100.0%
Total General District Requirements		80,731,659	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
REQUIREMENTS BEFORE OFFSETS:		195,513,826	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Revenue Offsets								
	Property Taxes - MWD Portion of SWC GO Debt Service	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Property Taxes - MWD GO Debt Service	1,477,547	33.5%	39.9%	26.7%	0.0%	0.0%	100.0%
	Interest on Investments	657,765	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Hydro-Power Revenue	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	CRA Power Revenue	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Wadsworth Pumping Plant (DVL) Power Revenue	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Misc. allocated to supply (PVID Lease)	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Property Taxes - SWC	-	33.5%	39.9%	26.7%	0.0%	0.0%	100.0%
	Revenue Reserve used for Revenue Bonds - I&P	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Annexation	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Total Revenue Offsets	2,135,312	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
NET REVENUE REQUIREMENTS:		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

	Functionalization	Allocation Percentages					Total
		Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M							
Group	Item						
Office of General Manager		1,506,409	-	1,506,409	-	-	1,506,409
Office of General Manager	Board of Directors	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-
Human Resources		3,015,262	-	3,015,262	-	-	3,015,262
Water Systems Operations	Office of the Manager	3,581,601	-	3,581,601	-	-	3,581,601
Water Systems Operations	Office of the Manager, Conveyance & Distribution S	352,938	-	352,938	-	-	352,938
Water Systems Operations	Office of the Manager, Treatment Section	153,660	-	153,660	-	-	153,660
Water Systems Operations	Office of the Manager, Operations Support Services	690,796	-	690,796	-	-	690,796
Water Systems Operations	Operations Support Services	6,564,627	-	6,564,627	-	-	6,564,627
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	8,919,628	-	8,919,628	-	-	8,919,628
Water Systems Operations	Power Operations and Planning	1,218,643	-	1,218,643	-	-	1,218,643
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	2,503,082	-	2,503,082	-	-	2,503,082
Water Systems Operations	Treatment Diemer	2,640,585	-	2,640,585	-	-	2,640,585
Water Systems Operations	Treatment Mills	1,813,557	-	1,813,557	-	-	1,813,557
Water Systems Operations	Treatment Skinner	2,118,208	-	2,118,208	-	-	2,118,208
Water Systems Operations	Treatment Weymouth	2,474,888	-	2,474,888	-	-	2,474,888
Water Systems Operations	Water Quality Section	-	-	-	-	-	-
Water Systems Operations	C&D, Eastern Unit	16,173,011	-	16,173,011	-	-	16,173,011
Water Systems Operations	C&D, Western Unit	15,647,634	-	15,647,634	-	-	15,647,634
Water Systems Operations	OSS, Manufacturing Services Unit	6,500,552	-	6,500,552	-	-	6,500,552
Water Systems Operations	Environmental Health & Safety Section	6,215,260	-	6,215,260	-	-	6,215,260
Water Systems Operations	OSS, Fleet Services Unit	6,548,611	-	6,548,611	-	-	6,548,611
Water Systems Operations	OSS, Power Support Unit	4,102,256	-	4,102,256	-	-	4,102,256
Water Systems Operations	Office of the Manager, Operations & Planning Secti	256,224	-	256,224	-	-	256,224
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-
Sustainability, Resilience & Inn		-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-
Engineering Services		8,497,703	-	8,497,703	-	-	8,497,703
Business Technology	Administrative Services	-	-	-	-	-	-
Business Technology	Information Technology	9,432,889	-	9,432,889	-	-	9,432,889
Water Resources Managemen	Resource Planning & Development	373,055	-	373,055	-	-	373,055
Water Resources Managemen	Resource Implementation	-	-	-	-	-	-
Water Resources Managemen	Office of the Group Manager	43,942	-	43,942	-	-	43,942
Ethics Office		-	-	-	-	-	-
Real Property		3,437,148	-	3,437,148	-	-	3,437,148
General Counsel		-	-	-	-	-	-
General Auditor		-	-	-	-	-	-
Total Departmental O&M		114,782,168	-	114,782,168	-	-	114,782,168
GENERAL DISTRICT REQUIREMENTS		-	-	-	-	-	-
State Water Contract*		-	-	-	-	-	-
Supply - O&M		-	-	-	-	-	-
Supply - Capital		-	-	-	-	-	-
Power - O&M & Off-Aq Capital		-	-	-	-	-	-
Power - Capital (less Off-Aq)		-	-	-	-	-	-
Transmission - Capital - Commodity, Demand, & Standby		-	-	-	-	-	-
Transmission - O&M - Commodity only		-	-	-	-	-	-
Delta Conveyance - Supply		-	-	-	-	-	-
Delta Conveyance - Power		-	-	-	-	-	-
Delta Conveyance - Other		-	-	-	-	-	-
Total State Water Contract		-	-	-	-	-	-
Colorado River Aqueduct Power Costs		-	-	-	-	-	-
Supply Programs (cash funded portion)		-	-	-	-	-	-
Demand Management (cash funded portion)		-	-	-	-	-	-
Local Resources Program		-	-	-	-	-	-
Future Supply Actions & Stormwater Pilot		-	-	-	-	-	-
Conservation Program (cash funded portion)		-	-	-	-	-	-
Total Demand Management Costs		-	-	-	-	-	-
Capital Financing		-	-	-	-	-	-
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		51,384,203	17,206,319	20,482,600	13,695,284	-	51,384,203
G.O. Bond Debt Service		1,477,547	494,766	588,975	393,806	-	1,477,547
Debt Administration		506,124	169,479	201,749	134,896	-	506,124
Bond Defeasance		-	-	-	-	-	-
PAYGO		24,489,000	8,200,293	9,761,724	6,526,983	-	24,489,000
Total Capital Financing Costs		77,856,873	26,070,857	31,035,048	20,750,969	-	77,856,873
Other Operating Costs		-	-	-	-	-	-
Operating Equipment		1,876,241	-	1,876,241	-	-	1,876,241
Succession Planning Labor Pool		998,544	-	998,544	-	-	998,544
OPEB/PERS Pre-Funding		-	-	-	-	-	-
Total Other Operating Costs		2,874,785	-	2,874,785	-	-	2,874,785
Increase/(Decrease) in Required Reserves		-	-	-	-	-	-
Total General District Requirements		80,731,659	26,070,857	33,909,833	20,750,969	-	80,731,659
REQUIREMENTS BEFORE OFFSETS:		195,513,826	26,070,857	148,692,001	20,750,969	-	195,513,826
Revenue Offsets		-	-	-	-	-	-
Property Taxes - MWD Portion of SWC GO Debt Service		-	-	-	-	-	-
Property Taxes - MWD GO Debt Service		1,477,547	494,766	588,975	393,806	-	1,477,547
Interest on Investments		657,765	-	657,765	-	-	657,765
Hydro-Power Revenue		-	-	-	-	-	-
CRA Power Revenue		-	-	-	-	-	-
Wadsworth Pumping Plant (DVL) Power Revenue		-	-	-	-	-	-
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)		-	-	-	-	-	-
Misc. allocated to supply (PVID Lease)		-	-	-	-	-	-
Property Taxes - SWC		-	-	-	-	-	-
Revenue Reserve used for Revenue Bonds - I&P		-	-	-	-	-	-
Annexation		-	-	-	-	-	-
Total Revenue Offsets		2,135,312	494,766	1,246,740	393,806	-	2,135,312
NET REVENUE REQUIREMENTS:		193,378,514	25,576,091	147,445,261	20,357,163	-	193,378,514

		Functionalization	Allocation Percentages					Total
			Fixed			Variable		
			Demand	Commodity	Standby	Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		1,346,845	-	1,346,845	-	-	-	1,346,845
Office of General Manager	Board of Directors	-	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-	-
Human Resources		2,347,309	-	2,347,309	-	-	-	2,347,309
Water Systems Operations	Office of the Manager	2,606,410	-	2,606,410	-	-	-	2,606,410
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	344,716	-	344,716	-	-	-	344,716
Water Systems Operations	Office of the Manager, Treatment Section	54,129	-	54,129	-	-	-	54,129
Water Systems Operations	Office of the Manager, Operations Support Services	522,081	-	522,081	-	-	-	522,081
Water Systems Operations	Operations Support Services	5,929,964	-	5,929,964	-	-	-	5,929,964
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	7,384,406	-	7,384,406	-	-	-	7,384,406
Water Systems Operations	Power Operations and Planning	1,043,730	-	1,043,730	-	-	-	1,043,730
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	1,491,380	-	1,491,380	-	-	-	1,491,380
Water Systems Operations	Treatment Diemer	1,432,117	-	1,432,117	-	-	-	1,432,117
Water Systems Operations	Treatment Mills	1,358,927	-	1,358,927	-	-	-	1,358,927
Water Systems Operations	Treatment Skinner	1,331,932	-	1,331,932	-	-	-	1,331,932
Water Systems Operations	Treatment Weymouth	1,552,932	-	1,552,932	-	-	-	1,552,932
Water Systems Operations	Water Quality Section	-	-	-	-	-	-	-
Water Systems Operations	C&D, Eastern Unit	11,279,919	-	11,279,919	-	-	-	11,279,919
Water Systems Operations	C&D, Western Unit	10,759,502	-	10,759,502	-	-	-	10,759,502
Water Systems Operations	OSS, Manufacturing Services Unit	5,970,190	-	5,970,190	-	-	-	5,970,190
Water Systems Operations	Environmental Health & Safety Section	4,839,739	-	4,839,739	-	-	-	4,839,739
Water Systems Operations	OSS, Fleet Services Unit	4,000,896	-	4,000,896	-	-	-	4,000,896
Water Systems Operations	OSS, Power Support Unit	3,702,811	-	3,702,811	-	-	-	3,702,811
Water Systems Operations	Office of the Manager, Operations & Planning Section	232,160	-	232,160	-	-	-	232,160
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-	-
Sustainability, Resilience & Inr		-	-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-	-
Equal Employment Opportuniti		-	-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-	-
Engineering Services		6,811,194	-	6,811,194	-	-	-	6,811,194
Business Technology	Administrative Services	-	-	-	-	-	-	-
Business Technology	Information Technology	6,498,565	-	6,498,565	-	-	-	6,498,565
Water Resources Managemen	Resource Planning & Development	312,330	-	312,330	-	-	-	312,330
Water Resources Managemen	Resource Implementation	-	-	-	-	-	-	-
Water Resources Managemen	Office of the Group Manager	42,955	-	42,955	-	-	-	42,955
Ethics Office		-	-	-	-	-	-	-
Real Property		1,446,998	-	1,446,998	-	-	-	1,446,998
General Counsel		-	-	-	-	-	-	-
General Auditor		-	-	-	-	-	-	-
Total Departmental O&M		-	-	-	-	-	-	-
		84,644,139	-	84,644,139	-	-	-	84,644,139

	Functionalization	Allocation Percentages					% Total	
		Fixed			Variable	Hydroelectric		
		Demand	Commodity	Standby	Commodity			
Departmental O&M								
Group	Item							
Office of General Manager		85,289	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Office of General Manager	Board of Directors	-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Bay Delta Initiatives	Bay Delta Initiatives	-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
External Affairs	Legislative Services	-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
External Affairs	Media Communications Services	-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
External Affairs	Manager, External Affairs/Special Projects	-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
External Affairs	Conservation & Community Services	-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Human Resources		170,717	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Water Systems Operations	Office of the Manager	228,630	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	12,077	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Water Systems Operations	Office of the Manager, Treatment Section	-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Water Systems Operations	Office of the Manager, Operations Support Services	44,097	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Water Systems Operations	Operations Support Services	116,026	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Water Systems Operations	Desert Region / C&D CRA	-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Water Systems Operations	System Operations Unit	-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Water Systems Operations	Power Operations and Planning	887,609	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Water Systems Operations	Operations Planning & Programs Unit	-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Water Systems Operations	Treatment Jensen	-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Water Systems Operations	Treatment Diemer	-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Water Systems Operations	Treatment Mills	-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Water Systems Operations	Treatment Skinner	-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Water Systems Operations	Treatment Weymouth	-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Water Systems Operations	Water Quality Section	-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Water Systems Operations	C&D, Eastern Unit	540,278	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Water Systems Operations	C&D, Western Unit	548,729	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Water Systems Operations	OSS, Manufacturing Services Unit	81,946	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Water Systems Operations	Environmental Health & Safety Section	48,655	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Water Systems Operations	OSS, Fleet Services Unit	-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Water Systems Operations	OSS, Power Support Unit	2,486,216	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Water Systems Operations	Office of the Manager, Operations & Planning Section	16,356	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Water Systems Operations	Security Team & Security Management	-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Sustainability, Resilience & Innovation		-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Diversity, Equity & Inclusion		-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Equal Employment Opportunity		-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Office of the Chief Financial Officer		-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Business Technology	Office of Manager	-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Engineering Services		697,992	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Business Technology	Administrative Services	-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Business Technology	Information Technology	534,067	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Water Resources Management	Resource Planning & Development	-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Water Resources Management	Resource Implementation	-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Water Resources Management	Office of the Group Manager	-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Ethics Office		-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Real Property		-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
General Counsel		-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
General Auditor		-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Total Departmental O&M		6,498,683	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
GENERAL DISTRICT REQUIREMENTS								
State Water Contract*								
Supply - O&M		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Supply - Capital		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Power - O&M & Off-Aq Capital		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Power - Capital (less Off-Aq)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Transmission - Capital - Commodity, Demand, & Standby		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Transmission - O&M - Commodity only		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Supply		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Power		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Other		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total State Water Contract		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Colorado River Aqueduct Power Costs								
		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Supply Programs (cash funded portion)								
		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Demand Management (cash funded portion)								
Local Resources Program		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Future Supply Actions & Stormwater Pilot		-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Conservation Program (cash funded portion)		-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Total Demand Management Costs		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Capital Financing								
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
G.O. Bond Debt Service	4,220,643	-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Debt Administration	41,572	-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Bond Defeasance	-	-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
PAYGO	2,011,500	-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Total Capital Financing Costs	6,273,715	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Other Operating Costs								
Operating Equipment	106,228	-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Succession Planning Labor Pool	56,535	-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
OPEB/PERS Pre-Funding	-	-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Total Other Operating Costs	162,763	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Increase/(Decrease) in Required Reserves								
		-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Total General District Requirements								
	6,436,479	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
REQUIREMENTS BEFORE OFFSETS:								
	12,935,162	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Revenue Offsets								
Property Taxes - MWD Portion of SWC GO Debt Service	-	-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Property Taxes - MWD GO Debt Service	-	-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Interest on Investments	43,518	-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Hydro-Power Revenue	12,611,274	-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
CRA Power Revenue	-	-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Wadsworth Pumping Plant (DVL) Power Revenue	-	-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)	-	-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Misc. allocated to supply (PVID Lease)	-	-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Property Taxes - SWC	-	-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Revenue Reserve used for Revenue Bonds - I&P	-	-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Annexation	-	-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Total Revenue Offsets	12,654,792	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
NET REVENUE REQUIREMENTS:								
-	280,370	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

	Functionalization	Allocation Percentages					Total
		Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M							
Group	Item						
Office of General Manager		85,289	-	-	-	85,289	85,289
Office of General Manager	Board of Directors	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-
Human Resources		170,717	-	-	-	170,717	170,717
Water Systems Operations	Office of the Manager	228,630	-	-	-	228,630	228,630
Water Systems Operations	Office of the Manager, Conveyance & Distribution S	12,077	-	-	-	12,077	12,077
Water Systems Operations	Office of the Manager, Treatment Section	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations Support Services	44,097	-	-	-	44,097	44,097
Water Systems Operations	Operations Support Services	116,026	-	-	-	116,026	116,026
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	887,609	-	-	-	887,609	887,609
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	-	-	-	-	-	-
Water Systems Operations	C&D, Eastern Unit	540,278	-	-	-	540,278	540,278
Water Systems Operations	C&D, Western Unit	548,729	-	-	-	548,729	548,729
Water Systems Operations	OSS, Manufacturing Services Unit	81,946	-	-	-	81,946	81,946
Water Systems Operations	Environmental Health & Safety Section	48,655	-	-	-	48,655	48,655
Water Systems Operations	OSS, Fleet Services Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Power Support Unit	2,486,216	-	-	-	2,486,216	2,486,216
Water Systems Operations	Office of the Manager, Operations & Planning Sect	16,356	-	-	-	16,356	16,356
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-
Sustainability, Resilience & Inr		-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-
Equal Employment Opportunit		-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-
Engineering Services		697,992	-	-	-	697,992	697,992
Business Technology	Administrative Services	-	-	-	-	-	-
Business Technology	Information Technology	534,067	-	-	-	534,067	534,067
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	-	-	-	-	-	-
Water Resources Managemen	Office of the Group Manager	-	-	-	-	-	-
Ethics Office		-	-	-	-	-	-
Real Property		-	-	-	-	-	-
General Counsel		-	-	-	-	-	-
General Auditor		-	-	-	-	-	-
Total Departmental O&M	-	6,498,683	-	-	-	6,498,683	6,498,683
GENERAL DISTRICT REQUIREMENTS		-	-	-	-	-	-
State Water Contract*		-	-	-	-	-	-
Supply - O&M		-	-	-	-	-	-
Supply - Capital		-	-	-	-	-	-
Power - O&M & Off-Aq Capital		-	-	-	-	-	-
Power - Capital (less Off-Aq)		-	-	-	-	-	-
Transmission - Capital - Commodity, Demand, & Standby		-	-	-	-	-	-
Transmission - O&M - Commodity only		-	-	-	-	-	-
Delta Conveyance - Supply		-	-	-	-	-	-
Delta Conveyance - Power		-	-	-	-	-	-
Delta Conveyance - Other		-	-	-	-	-	-
Total State Water Contract		-	-	-	-	-	-
Colorado River Aqueduct Power Costs		-	-	-	-	-	-
Supply Programs (cash funded portion)		-	-	-	-	-	-
Demand Management (cash funded portion)		-	-	-	-	-	-
Local Resources Program		-	-	-	-	-	-
Future Supply Actions & Stormwater Pilot		-	-	-	-	-	-
Conservation Program (cash funded portion)		-	-	-	-	-	-
Total Demand Management Costs		-	-	-	-	-	-
Capital Financing		-	-	-	-	-	-
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		4,220,643	-	-	-	4,220,643	4,220,643
G.O. Bond Debt Service		-	-	-	-	-	-
Debt Administration		41,572	-	-	-	41,572	41,572
Bond Defeasance		-	-	-	-	-	-
PAYGO		2,011,500	-	-	-	2,011,500	2,011,500
Total Capital Financing Costs		6,273,715	-	-	-	6,273,715	6,273,715
Other Operating Costs		-	-	-	-	-	-
Operating Equipment		106,228	-	-	-	106,228	106,228
Succession Planning Labor Pool		56,535	-	-	-	56,535	56,535
OPEB/PERS Pre-Funding		-	-	-	-	-	-
Total Other Operating Costs		162,763	-	-	-	162,763	162,763
Increase/(Decrease) in Required Reserves		-	-	-	-	-	-
Total General District Requirements		6,436,479	-	-	-	6,436,479	6,436,479
REQUIREMENTS BEFORE OFFSETS:		12,935,162	-	-	-	12,935,162	12,935,162
Revenue Offsets		-	-	-	-	-	-
Property Taxes - MWD Portion of SWC GO Debt Service		-	-	-	-	-	-
Property Taxes - MWD GO Debt Service		-	-	-	-	-	-
Interest on Investments		43,518	-	-	-	43,518	43,518
Hydro-Power Revenue		12,611,274	-	-	-	12,611,274	12,611,274
CRA Power Revenue		-	-	-	-	-	-
Wadsworth Pumping Plant (DVL) Power Revenue		-	-	-	-	-	-
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)		-	-	-	-	-	-
Misc. allocated to supply (PVID Lease)		-	-	-	-	-	-
Property Taxes - SWC		-	-	-	-	-	-
Revenue Reserve used for Revenue Bonds - I&P		-	-	-	-	-	-
Annexation		-	-	-	-	-	-
Total Revenue Offsets		12,654,792	-	-	-	12,654,792	12,654,792
NET REVENUE REQUIREMENTS:		280,370	-	-	-	280,370	280,370

		Functionalization	Allocation Percentages					Total	
			Fixed			Variable Commodity	Other		Hydroelectric
			Demand	Commodity	Standby				
Departmental O&M									
Group	Item								
	Office of General Manager	76,255	-	-	-	-	-	76,255	
	Office of General Manager								
	Bay Delta Initiatives								
	External Affairs								
	External Affairs								
	External Affairs								
	External Affairs								
	Human Resources	132,899	-	-	-	-	-	132,899	
	Water Systems Operations								
	Water Systems Operations								
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		Functionalization	Allocation Percentages					% Total
			Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		140,304	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Office of General Manager	Board of Directors	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Bay Delta Initiatives	Bay Delta Initiatives	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Legislative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Media Communications Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Manager, External Affairs/Special Projects	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Conservation & Community Services	2,732,349	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Human Resources		280,835	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Treatment Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations Support Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Support Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Desert Region / C&D CRA	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	System Operations Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Power Operations and Planning	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Planning & Programs Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Jensen	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Diemer	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Mills	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Skinner	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Weymouth	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Water Quality Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Eastern Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Western Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Manufacturing Services Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Environmental Health & Safety Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Fleet Services Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Power Support Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations & Planning Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Security Team & Security Management	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Sustainability, Resilience & Innovation		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Diversity, Equity & Inclusion		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Equal Employment Opportunity		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Office of the Chief Financial Officer		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Office of Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Engineering Services		93,690	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Administrative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Information Technology	878,558	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Planning & Development	279,791	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Implementation	5,593,244	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Office of the Group Manager	691,778	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Ethics Office		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Real Property		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
General Counsel		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
General Auditor		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Departmental O&M		10,690,548	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
GENERAL DISTRICT REQUIREMENTS								
State Water Contract*								
Supply - O&M		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Supply - Capital		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Power - O&M & Off-Aq Capital		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Power - Capital (less Off-Aq)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Transmission - Capital - Commodity, Demand, & Standby		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Transmission - O&M - Commodity only		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Supply		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Power		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Other		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total State Water Contract		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Colorado River Aqueduct Power Costs								
		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Supply Programs (cash funded portion)								
		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Demand Management (cash funded portion)								
Local Resources Program		22,175,417	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Future Supply Actions & Stormwater Pilot		3,639,900	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Conservation Program (cash funded portion)		25,000,000	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Demand Management Costs		50,815,317	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Capital Financing								
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		566,529	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
G.O. Bond Debt Service		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Debt Administration		5,580	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Bond Defeasance		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
PAYGO		270,000	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Capital Financing Costs		842,109	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%
Other Operating Costs								
Operating Equipment		174,749	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Succession Planning Labor Pool		93,002	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
OPEB/PERS Pre-Funding		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Other Operating Costs		267,751	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Increase/(Decrease) in Required Reserves								
		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total General District Requirements								
		51,925,178	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
REQUIREMENTS BEFORE OFFSETS:								
		62,615,726	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Revenue Offsets								
Property Taxes - MWD Portion of SWC GO Debt Service		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Property Taxes - MWD GO Debt Service		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Interest on Investments		210,658	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Hydro-Power Revenue		-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
CRA Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Wadsworth Pumping Plant (DVL) Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to supply (PVID Lease)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Property Taxes - SWC		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Revenue Reserve used for Revenue Bonds - I&P		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Annexation		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total Revenue Offsets		210,658	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
NET REVENUE REQUIREMENTS:								
-		62,405,068	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

	Functionalization	Allocation Percentages					Total
		Demand	Fixed Commodity	Standby	Variable Commodity	Other Hydroelectric	
Departmental O&M							
Group	Item						
Office of General Manager		140,304	-	140,304	-	-	140,304
Office of General Manager	Board of Directors	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-
External Affairs	Conservation & Community Services	2,732,349	-	2,732,349	-	-	2,732,349
Human Resources		280,835	-	280,835	-	-	280,835
Water Systems Operations	Office of the Manager	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Conveyance & Distribution S	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations Support Services	-	-	-	-	-	-
Water Systems Operations	Operations Support Services	-	-	-	-	-	-
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	-	-	-	-	-	-
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	-	-	-	-	-	-
Water Systems Operations	Environmental Health & Safety Section	-	-	-	-	-	-
Water Systems Operations	OSS, Fleet Services Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Power Support Unit	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations & Planning Sect	-	-	-	-	-	-
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-
Sustainability, Resilience & Inr		-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-
Engineering Services		93,690	-	93,690	-	-	93,690
Business Technology	Administrative Services	-	-	-	-	-	-
Business Technology	Information Technology	878,558	-	878,558	-	-	878,558
Water Resources Managemen	Resource Planning & Development	279,791	-	279,791	-	-	279,791
Water Resources Managemen	Resource Implementation	5,593,244	-	5,593,244	-	-	5,593,244
Water Resources Managemen	Office of the Group Manager	691,778	-	691,778	-	-	691,778
Ethics Office		-	-	-	-	-	-
Real Property		-	-	-	-	-	-
General Counsel		-	-	-	-	-	-
General Auditor		-	-	-	-	-	-
Total Departmental O&M	-	10,690,548	-	10,690,548	-	-	10,690,548
GENERAL DISTRICT REQUIREMENTS		-	-	-	-	-	-
State Water Contract*		-	-	-	-	-	-
Supply - O&M		-	-	-	-	-	-
Supply - Capital		-	-	-	-	-	-
Power - O&M & Off-Aq Capital		-	-	-	-	-	-
Power - Capital (less Off-Aq)		-	-	-	-	-	-
Transmission - Capital - Commodity, Demand, & Standby		-	-	-	-	-	-
Transmission - O&M - Commodity only		-	-	-	-	-	-
Delta Conveyance - Supply		-	-	-	-	-	-
Delta Conveyance - Power		-	-	-	-	-	-
Delta Conveyance - Other		-	-	-	-	-	-
Total State Water Contract		-	-	-	-	-	-
Colorado River Aqueduct Power Costs		-	-	-	-	-	-
Supply Programs (cash funded portion)		-	-	-	-	-	-
Demand Management (cash funded portion)		-	-	-	-	-	-
Local Resources Program		22,175,417	-	22,175,417	-	-	22,175,417
Future Supply Actions & Stormwater Pilot		3,639,900	-	3,639,900	-	-	3,639,900
Conservation Program (cash funded portion)		25,000,000	-	25,000,000	-	-	25,000,000
Total Demand Management Costs		50,815,317	-	50,815,317	-	-	50,815,317
Capital Financing		-	-	-	-	-	-
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		566,529	-	566,529	-	-	566,529
G.O. Bond Debt Service		-	-	-	-	-	-
Debt Administration		5,580	-	5,580	-	-	5,580
Bond Defeasance		-	-	-	-	-	-
PAYGO		270,000	-	270,000	-	-	270,000
Total Capital Financing Costs		842,109	-	842,109	-	-	842,109
Other Operating Costs		-	-	-	-	-	-
Operating Equipment		174,749	-	174,749	-	-	174,749
Succession Planning Labor Pool		93,002	-	93,002	-	-	93,002
OPEB/PERS Pre-Funding		-	-	-	-	-	-
Total Other Operating Costs		267,751	-	267,751	-	-	267,751
Increase/(Decrease) in Required Reserves		-	-	-	-	-	-
Total General District Requirements		51,925,178	-	51,925,178	-	-	51,925,178
REQUIREMENTS BEFORE OFFSETS:		62,615,726	-	62,615,726	-	-	62,615,726
Revenue Offsets		-	-	-	-	-	-
Property Taxes - MWD Portion of SWC GO Debt Service		-	-	-	-	-	-
Property Taxes - MWD GO Debt Service		-	-	-	-	-	-
Interest on Investments		210,658	-	210,658	-	-	210,658
Hydro-Power Revenue		-	-	-	-	-	-
CRA Power Revenue		-	-	-	-	-	-
Wadsworth Pumping Plant (DVL) Power Revenue		-	-	-	-	-	-
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)		-	-	-	-	-	-
Misc. allocated to supply (PVID Lease)		-	-	-	-	-	-
Property Taxes - SWC		-	-	-	-	-	-
Revenue Reserve used for Revenue Bonds - I&P		-	-	-	-	-	-
Annexation		-	-	-	-	-	-
Total Revenue Offsets		210,658	-	210,658	-	-	210,658
NET REVENUE REQUIREMENTS:		62,405,068	-	62,405,068	-	-	62,405,068

		Functionalization	Allocation Percentages					Total
			Fixed			Variable		
			Demand	Commodity	Standby	Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		125,442	-	125,442	-	-	-	125,442
Office of General Manager	Board of Directors	-	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-	-
External Affairs	Conservation & Community Services	1,883,133	-	1,883,133	-	-	-	1,883,133
Human Resources		218,623	-	218,623	-	-	-	218,623
Water Systems Operations	Office of the Manager	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations Support Services	-	-	-	-	-	-	-
Water Systems Operations	Operations Support Services	-	-	-	-	-	-	-
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	-	-	-	-	-	-	-
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	-	-	-	-	-	-	-
Water Systems Operations	Environmental Health & Safety Section	-	-	-	-	-	-	-
Water Systems Operations	OSS, Fleet Services Unit	-	-	-	-	-	-	-
Water Systems Operations	OSS, Power Support Unit	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations & Planning Section	-	-	-	-	-	-	-
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-	-
Sustainability, Resilience & Inr		-	-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-	-
Equal Employment Opportunit		-	-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-	-
Engineering Services		75,096	-	75,096	-	-	-	75,096
Business Technology	Administrative Services	-	-	-	-	-	-	-
Business Technology	Information Technology	605,261	-	605,261	-	-	-	605,261
Water Resources Managemen	Resource Planning & Development	234,247	-	234,247	-	-	-	234,247
Water Resources Managemen	Resource Implementation	3,644,540	-	3,644,540	-	-	-	3,644,540
Water Resources Managemen	Office of the Group Manager	676,246	-	676,246	-	-	-	676,246
Ethics Office		-	-	-	-	-	-	-
Real Property		-	-	-	-	-	-	-
General Counsel		-	-	-	-	-	-	-
General Auditor		-	-	-	-	-	-	-
Total Departmental O&M	-	7,462,590	-	7,462,590	-	-	-	7,462,590

		Functionalization	Allocation Percentages					% Total	
			Demand	Commodity	Standby	Variable Commodity	Other		Hydroelectric
Departmental O&M									
Group	Item								
Office of General Manager		2,130,493	0.0%	1.6%	0.0%	0.0%	0.0%	0.0%	1.6%
Office of General Manager	Board of Directors	2,032,494	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Bay Delta Initiatives	Bay Delta Initiatives	-	0.0%	1.8%	0.0%	0.0%	0.0%	0.0%	1.8%
External Affairs	Legislative Services	5,927,694	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
External Affairs	Media Communications Services	5,601,801	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
External Affairs	Manager, External Affairs/Special Projects	9,013,452	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
External Affairs	Conservation & Community Services	2,732,349	0.0%	0.6%	0.0%	0.0%	0.0%	0.0%	0.6%
Human Resources		4,264,440	0.0%	2.8%	0.0%	0.0%	0.0%	0.0%	2.9%
Water Systems Operations	Office of the Manager	713,159	0.0%	2.5%	0.0%	0.0%	0.0%	0.1%	2.6%
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	19,903	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.3%
Water Systems Operations	Office of the Manager, Treatment Section	-	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.1%
Water Systems Operations	Office of the Manager, Operations Support Services	137,549	0.0%	0.5%	0.0%	0.0%	0.0%	0.0%	0.5%
Water Systems Operations	Operations Support Services	274,798	0.0%	2.2%	0.0%	0.0%	0.0%	0.0%	2.3%
Water Systems Operations	Desert Region / C&D CRA	-	0.0%	8.9%	0.0%	0.0%	0.0%	0.0%	8.9%
Water Systems Operations	System Operations Unit	-	0.0%	2.5%	0.0%	0.0%	0.0%	0.0%	2.5%
Water Systems Operations	Power Operations and Planning	345,585	0.0%	0.7%	0.0%	0.0%	0.0%	0.3%	1.0%
Water Systems Operations	Operations Planning & Programs Unit	-	0.0%	0.7%	0.0%	0.0%	0.0%	0.0%	0.7%
Water Systems Operations	Treatment Jensen	-	0.0%	3.9%	0.0%	0.0%	0.0%	0.0%	3.9%
Water Systems Operations	Treatment Diemer	-	0.0%	3.7%	0.0%	0.0%	0.0%	0.0%	3.7%
Water Systems Operations	Treatment Mills	-	0.0%	3.5%	0.0%	0.0%	0.0%	0.0%	3.5%
Water Systems Operations	Treatment Skinner	-	0.0%	3.5%	0.0%	0.0%	0.0%	0.0%	3.5%
Water Systems Operations	Treatment Weymouth	-	0.0%	4.0%	0.0%	0.0%	0.0%	0.0%	4.0%
Water Systems Operations	Water Quality Section	-	0.0%	7.4%	0.0%	0.0%	0.0%	0.0%	7.4%
Water Systems Operations	C&D, Eastern Unit	874,835	0.0%	4.6%	0.0%	0.0%	0.0%	0.1%	4.7%
Water Systems Operations	C&D, Western Unit	920,095	0.0%	3.8%	0.0%	0.0%	0.0%	0.1%	3.9%
Water Systems Operations	OSS, Manufacturing Services Unit	553,876	0.0%	2.4%	0.0%	0.0%	0.0%	0.0%	2.4%
Water Systems Operations	Environmental Health & Safety Section	731,392	0.0%	3.9%	0.0%	0.0%	0.0%	0.0%	4.0%
Water Systems Operations	OSS, Fleet Services Unit	1,360,686	0.0%	2.3%	0.0%	0.0%	0.0%	0.0%	2.3%
Water Systems Operations	OSS, Power Support Unit	128,750	0.0%	1.9%	0.0%	0.0%	0.0%	0.8%	2.7%
Water Systems Operations	Office of the Manager, Operations & Planning Section	51,019	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.2%
Water Systems Operations	Security Team & Security Management	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Sustainability, Resilience & Innovation		9,831,427	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Diversity, Equity & Inclusion		1,371,646	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Equal Employment Opportunity		1,943,227	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Office of the Chief Financial Officer		28,405,697	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Business Technology	Office of Manager	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Engineering Services		2,834,129	0.0%	11.8%	0.0%	0.0%	0.0%	0.2%	12.0%
Business Technology	Administrative Services	32,211,003	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Business Technology	Information Technology	13,340,797	0.0%	7.8%	0.0%	0.0%	0.0%	0.1%	7.9%
Water Resources Management	Resource Planning & Development	-	0.0%	1.4%	0.0%	0.0%	0.0%	0.0%	1.4%
Water Resources Management	Resource Implementation	33,957	0.0%	3.6%	0.0%	0.0%	0.0%	0.0%	3.6%
Water Resources Management	Office of the Group Manager	4,000	0.0%	0.8%	0.0%	0.0%	0.0%	0.0%	0.8%
Ethics Office		2,662,039	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Real Property		11,449,683	0.0%	2.4%	0.0%	0.0%	0.0%	0.0%	2.4%
General Counsel		15,833,730	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
General Auditor		4,599,034	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total Departmental O&M		162,334,740	0.0%	98.2%	0.0%	0.0%	0.0%	1.8%	100.0%
GENERAL DISTRICT REQUIREMENTS									
State Water Contract*									
Supply - O&M	-	0.0%	8.4%	0.0%	0.0%	0.0%	0.0%	0.0%	8.4%
Supply - Capital	-	0.0%	6.1%	0.0%	0.0%	0.0%	0.0%	0.0%	6.1%
Power - O&M & Off-Aq Capital	-	0.0%	0.0%	0.0%	16.1%	0.0%	0.0%	0.0%	16.1%
Power - Capital (less Off-Aq)	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Transmission - Capital - Commodity, Demand, & Standby	-	0.4%	2.3%	2.0%	0.0%	0.0%	0.0%	0.0%	4.6%
Transmission - O&M - Commodity only	-	0.0%	14.7%	0.0%	0.0%	0.0%	0.0%	0.0%	14.7%
Delta Conveyance - Supply	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Power	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Other	-	0.2%	1.1%	1.0%	0.0%	0.0%	0.0%	0.0%	2.3%
Total State Water Contract	-	0.6%	32.5%	2.9%	16.1%	0.0%	0.0%	0.0%	52.1%
Colorado River Aqueduct Power Costs									
	-	0.0%	0.0%	0.0%	8.0%	0.0%	0.0%	8.0%	
Supply Programs (cash funded portion)									
	-	0.0%	5.1%	0.0%	0.0%	0.0%	0.0%	5.1%	
Demand Management (cash funded portion)									
Local Resources Program	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Future Supply Actions & Stormwater Pilot	-	0.0%	1.7%	0.0%	0.0%	0.0%	0.0%	1.7%	
Conservation Program (cash funded portion)	-	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.3%	
Total Demand Management Costs	-	0.0%	1.9%	0.0%	0.0%	0.0%	0.0%	1.9%	
	-	0.0%	3.9%	0.0%	0.0%	0.0%	0.0%	3.9%	
Capital Financing									
Revenue Bond Debt Service net of BABs Interest Subsidy Payment	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
G.O. Bond Debt Service	17,137,510	3.7%	8.6%	7.6%	0.0%	0.0%	0.3%	20.2%	
Debt Administration	-	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.1%	
Bond Defeasance	168,801	0.0%	0.1%	0.1%	0.0%	0.0%	0.0%	0.2%	
PAYGO	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total Capital Financing Costs	8,167,500	1.8%	4.1%	3.6%	0.0%	0.0%	0.2%	9.6%	
	25,473,811	5.6%	12.8%	11.3%	0.0%	0.0%	0.5%	30.2%	
Other Operating Costs									
Operating Equipment	2,653,541	0.0%	0.5%	0.0%	0.0%	0.0%	0.0%	0.5%	
Succession Planning Labor Pool	1,412,226	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.3%	
OPEB/PERS Pre-Funding	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total Other Operating Costs	4,065,767	0.0%	0.8%	0.0%	0.0%	0.0%	0.0%	0.8%	
Increase/(Decrease) in Required Reserves									
	5,500,000	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
Total General District Requirements									
	35,039,578	6.1%	55.1%	14.2%	24.1%	0.0%	0.5%	100.0%	
REQUIREMENTS BEFORE OFFSETS:									
	197,374,317	5.0%	62.9%	11.6%	19.7%	0.0%	0.7%	100.0%	
Revenue Offsets									
Property Taxes - MWD Portion of SWC GO Debt Service	-	5.0%	62.9%	11.6%	19.7%	0.0%	0.7%	100.0%	
Property Taxes - MWD GO Debt Service	-	5.0%	62.9%	11.6%	19.7%	0.0%	0.7%	100.0%	
Interest on Investments	664,025	5.0%	62.9%	11.6%	19.7%	0.0%	0.7%	100.0%	
Hydro-Power Revenue	-	5.0%	62.9%	11.6%	19.7%	0.0%	0.7%	100.0%	
CRA Power Revenue	-	5.0%	62.9%	11.6%	19.7%	0.0%	0.7%	100.0%	
Wadsworth Pumping Plant (DVL) Power Revenue	-	5.0%	62.9%	11.6%	19.7%	0.0%	0.7%	100.0%	
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)	52,991,971	5.0%	62.9%	11.6%	19.7%	0.0%	0.7%	100.0%	
Misc. allocated to supply (PVID Lease)	-	5.0%	62.9%	11.6%	19.7%	0.0%	0.7%	100.0%	
Property Taxes - SWC	-	5.0%	62.9%	11.6%	19.7%	0.0%	0.7%	100.0%	
Revenue Reserve used for Revenue Bonds - I&P	-	5.0%	62.9%	11.6%	19.7%	0.0%	0.7%	100.0%	
Annexation	-	5.0%	62.9%	11.6%	19.7%	0.0%	0.7%	100.0%	
Total Revenue Offsets	53,655,995	5.0%	62.9%	11.6%	19.7%	0.0%	0.7%	100.0%	
NET REVENUE REQUIREMENTS:									
	143,718,322	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	

	Functionalization	Allocation Percentages						Total
		Demand	Fixed Commodity	Standby	Variable Commodity	Other	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		-	2,625,456	-	-	-	42,034	2,667,489
Office of General Manager	Board of Directors	-	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	2,973,924	-	-	-	-	2,973,924
External Affairs	Legislative Services	-	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	1,038,026	-	-	-	-	1,038,026
Human Resources		-	4,575,699	-	-	-	73,257	4,648,956
Water Systems Operations	Office of the Manager	-	4,082,670	-	-	-	91,712	4,174,382
Water Systems Operations	Office of the Manager, Conveyance & Distribution S	-	438,315	-	-	-	6,502	444,817
Water Systems Operations	Office of the Manager, Treatment Section	-	227,766	-	-	-	-	227,766
Water Systems Operations	Office of the Manager, Operations Support Services	-	817,786	-	-	-	18,371	836,156
Water Systems Operations	Operations Support Services	-	3,606,248	-	-	-	57,773	3,664,021
Water Systems Operations	Desert Region / C&D CRA	-	14,426,408	-	-	-	-	14,426,408
Water Systems Operations	System Operations Unit	-	4,070,455	-	-	-	-	4,070,455
Water Systems Operations	Power Operations and Planning	-	1,135,199	-	-	-	419,045	1,554,244
Water Systems Operations	Operations Planning & Programs Unit	-	1,078,116	-	-	-	-	1,078,116
Water Systems Operations	Treatment Jensen	-	6,275,442	-	-	-	-	6,275,442
Water Systems Operations	Treatment Diemer	-	6,026,077	-	-	-	-	6,026,077
Water Systems Operations	Treatment Mills	-	5,718,103	-	-	-	-	5,718,103
Water Systems Operations	Treatment Skinner	-	5,604,515	-	-	-	-	5,604,515
Water Systems Operations	Treatment Weymouth	-	6,534,441	-	-	-	-	6,534,441
Water Systems Operations	Water Quality Section	-	12,056,130	-	-	-	-	12,056,130
Water Systems Operations	C&D, Eastern Unit	-	7,444,844	-	-	-	207,711	7,652,555
Water Systems Operations	C&D, Western Unit	-	6,152,421	-	-	-	207,984	6,360,405
Water Systems Operations	OSS, Manufacturing Services Unit	-	3,843,292	-	-	-	41,485	3,884,777
Water Systems Operations	Environmental Health & Safety Section	-	6,401,987	-	-	-	20,884	6,422,871
Water Systems Operations	OSS, Fleet Services Unit	-	3,707,581	-	-	-	-	3,707,581
Water Systems Operations	OSS, Power Support Unit	-	3,116,835	-	-	-	1,237,015	4,353,850
Water Systems Operations	Office of the Manager, Operations & Planning Secti	-	363,655	-	-	-	8,169	371,824
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-	-
Sustainability, Resilience & Inn		-	-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-	-
Engineering Services		-	19,136,707	-	-	-	308,389	19,445,096
Business Technology	Administrative Services	-	-	-	-	-	-	-
Business Technology	Information Technology	-	12,667,900	-	-	-	202,813	12,870,713
Water Resources Managemen	Resource Planning & Development	-	2,265,307	-	-	-	-	2,265,307
Water Resources Managemen	Resource Implementation	-	5,795,709	-	-	-	-	5,795,709
Water Resources Managemen	Office of the Group Manager	-	1,335,716	-	-	-	-	1,335,716
Ethics Office		-	-	-	-	-	-	-
Real Property		-	3,848,868	-	-	-	-	3,848,868
General Counsel		-	-	-	-	-	-	-
General Auditor		-	-	-	-	-	-	-
Total Departmental O&M		-	159,391,597	-	-	-	2,943,143	162,334,740
GENERAL DISTRICT REQUIREMENTS		-	-	-	-	-	-	-
State Water Contract*		-	-	-	-	-	-	-
Supply - O&M		-	2,927,677	-	-	-	-	2,927,677
Supply - Capital		-	2,138,615	-	-	-	-	2,138,615
Power - O&M & Off-Aq Capital		-	-	-	5,625,217	-	-	5,625,217
Power - Capital (less Off-Aq)		-	-	-	-	-	-	-
Transmission - Capital - Commodity, Demand, & Standby		134,047	788,513	686,146	-	-	-	1,608,706
Transmission - O&M - Commodity only		-	5,159,483	-	-	-	-	5,159,483
Delta Conveyance - Supply		-	-	-	-	-	-	-
Delta Conveyance - Power		-	-	-	-	-	-	-
Delta Conveyance - Other		66,463	390,957	340,202	-	-	-	797,622
Total State Water Contract		200,510	11,405,245	1,026,348	5,625,217	-	-	18,257,320
Colorado River Aqueduct Power Costs		-	-	-	2,814,465	-	-	2,814,465
Supply Programs (cash funded portion)		-	1,772,304	-	-	-	-	1,772,304
Demand Management (cash funded portion)		-	-	-	-	-	-	-
Local Resources Program		-	589,587	-	-	-	-	589,587
Future Supply Actions & Stormwater Pilot		-	96,776	-	-	-	-	96,776
Conservation Program (cash funded portion)		-	664,685	-	-	-	-	664,685
Total Demand Management Costs		-	1,351,048	-	-	-	-	1,351,048
Capital Financing		-	-	-	-	-	-	-
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		1,299,517	3,012,168	2,651,729	-	-	112,216	7,075,631
G.O. Bond Debt Service		17,262	19,462	15,620	-	-	-	52,344
Debt Administration		12,800	29,669	26,119	-	-	1,105	69,693
Bond Defeasance		-	-	-	-	-	-	-
PAYGO		619,332	1,435,558	1,263,778	-	-	53,481	3,372,148
Total Capital Financing Costs		1,948,911	4,496,857	3,957,246	-	-	166,802	10,569,816
Other Operating Costs		-	-	-	-	-	-	-
Operating Equipment		-	173,042	3,368	-	-	2,824	179,235
Succession Planning Labor Pool		-	92,094	1,793	-	-	1,503	95,390
OPEB/PERS Pre-Funding		-	-	-	-	-	-	-
Total Other Operating Costs		-	265,136	5,161	-	-	4,327	274,624
Increase/(Decrease) in Required Reserves		-	-	-	-	-	-	-
Total General District Requirements		-	2,149,421	19,290,591	4,988,755	8,439,682	171,129	35,039,578
REQUIREMENTS BEFORE OFFSETS:	197,374,317	2,149,421	178,682,187	4,988,755	8,439,682	-	3,114,272	197,374,317
Revenue Offsets								
Property Taxes - MWD Portion of SWC GO Debt Service		-	-	-	-	-	-	-
Property Taxes - MWD GO Debt Service		-	-	-	-	-	-	-
Interest on Investments	664,025	33,293	417,883	77,273	130,726	-	4,850	664,025
Hydro-Power Revenue		-	-	-	-	-	-	-
CRA Power Revenue		-	-	-	-	-	-	-
Wadsworth Pumping Plant (DVL) Power Revenue		-	-	-	-	-	-	-
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)	52,991,971	2,656,946	33,348,832	6,166,707	10,432,472	-	387,014	52,991,971
Misc. allocated to supply (PVID Lease)		-	-	-	-	-	-	-
Property Taxes - SWC		-	-	-	-	-	-	-
Revenue Reserve used for Revenue Bonds - I&P		-	-	-	-	-	-	-
Annexation		-	-	-	-	-	-	-
Total Revenue Offsets	53,655,995	2,690,239	33,766,715	6,243,980	10,563,198	-	391,864	53,655,995
NET REVENUE REQUIREMENTS:	143,718,322	(540,818)	144,915,472	(1,255,225)	(2,123,516)	-	2,722,409	143,718,322

		Total Costs to Be Allocated	A&G Cost Redistribution	Adjusted Costs	Allocation Categories					Total
					Fixed			Variable Commodity	Hydroelectric	
					Demand	Commodity	Standby			
Departmental O&M										
Group	Item									
Office of General Manager		2,130,493	5,949,532	8,080,025	-	7,952,702	-	-	127,323	8,080,025
Office of General Manager	Board of Directors	2,032,494	(2,032,494)	-	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	14,435,786	14,435,786	-	14,435,786	-	-	-	14,435,786
External Affairs	Legislative Services	5,927,694	(5,927,694)	-	-	-	-	-	-	-
External Affairs	Media Communications Services	5,601,801	(5,601,801)	-	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	9,013,452	(9,013,452)	-	-	-	-	-	-	-
External Affairs	Conservation & Community Services	2,732,349	1,038,026	3,770,375	-	3,770,375	-	-	-	3,770,375
Human Resources		4,264,440	11,218,365	15,482,805	-	15,238,832	-	-	243,974	15,482,805
Water Systems Operations	Office of the Manager	713,159	13,867,595	14,580,754	-	14,260,411	-	-	320,343	14,580,754
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	19,903	1,251,125	1,271,027	-	1,252,449	-	-	18,578	1,271,027
Water Systems Operations	Office of the Manager, Treatment Section	-	1,400,745	1,400,745	-	1,400,745	-	-	-	1,400,745
Water Systems Operations	Office of the Manager, Operations Support Services	137,549	2,705,721	2,843,271	-	2,780,803	-	-	62,467	2,843,271
Water Systems Operations	Operations Support Services	274,798	10,747,711	11,022,510	-	10,848,711	-	-	173,799	11,022,510
Water Systems Operations	Desert Region / C&D CRA	-	46,467,086	46,467,086	-	46,467,086	-	-	-	46,467,086
Water Systems Operations	System Operations Unit	-	12,990,082	12,990,082	-	12,990,082	-	-	-	12,990,082
Water Systems Operations	Power Operations and Planning	345,585	4,500,813	4,846,399	-	3,539,745	-	-	1,306,653	4,846,399
Water Systems Operations	Operations Planning & Programs Unit	-	3,101,946	3,101,946	-	3,101,946	-	-	-	3,101,946
Water Systems Operations	Treatment Jensen	-	25,382,941	25,382,941	-	19,386,569	5,996,372	-	-	25,382,941
Water Systems Operations	Treatment Diemer	-	26,183,216	26,183,216	-	18,476,543	7,706,673	-	-	26,183,216
Water Systems Operations	Treatment Mills	-	19,562,054	19,562,054	-	16,952,859	2,609,195	-	-	19,562,054
Water Systems Operations	Treatment Skinner	-	21,774,039	21,774,039	-	16,841,358	4,932,681	-	-	21,774,039
Water Systems Operations	Treatment Weymouth	-	25,426,714	25,426,714	-	19,485,043	5,941,670	-	-	25,426,714
Water Systems Operations	Water Quality Section	-	39,970,259	39,970,259	-	39,970,259	-	-	-	39,970,259
Water Systems Operations	C&D, Eastern Unit	874,835	26,682,805	27,557,639	-	26,809,650	-	-	747,989	27,557,639
Water Systems Operations	C&D, Western Unit	920,095	22,221,158	23,141,253	-	22,384,540	-	-	756,713	23,141,253
Water Systems Operations	OSS, Manufacturing Services Unit	553,876	11,004,531	11,558,406	-	11,434,975	-	-	123,431	11,558,406
Water Systems Operations	Environmental Health & Safety Section	731,392	20,655,188	21,386,580	-	21,317,041	-	-	69,539	21,386,580
Water Systems Operations	OSS, Fleet Services Unit	1,360,686	13,356,083	14,716,769	-	14,716,769	-	-	-	14,716,769
Water Systems Operations	OSS, Power Support Unit	128,750	12,975,692	13,104,442	-	9,381,211	3,723,231	-	-	13,104,442
Water Systems Operations	Office of the Manager, Operations & Planning Section	51,019	1,065,265	1,116,284	-	1,091,759	24,525	-	-	1,116,284
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-	-	-	-
Sustainability, Resilience & Innovation		9,831,427	(9,831,427)	-	-	-	-	-	-	-
Diversity, Equity & Inclusion		1,371,646	(1,371,646)	-	-	-	-	-	-	-
Equal Employment Opportunity		1,943,227	(1,943,227)	-	-	-	-	-	-	-
Office of the Chief Financial Officer		28,405,697	(28,405,697)	-	-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-	-	-	-
Engineering Services		2,834,129	60,621,946	63,456,075	-	62,449,694	-	-	1,006,382	63,456,075
Business Technology	Administrative Services	32,211,003	(32,211,003)	-	-	-	-	-	-	-
Business Technology	Information Technology	13,340,797	33,422,330	46,763,127	-	46,026,248	-	-	736,880	46,763,127
Water Resources Management	Resource Planning & Development	-	7,173,922	7,173,922	-	7,173,922	-	-	-	7,173,922
Water Resources Management	Resource Implementation	33,957	21,897,913	21,931,870	-	21,931,870	-	-	-	21,931,870
Water Resources Management	Office of the Group Manager	4,000	3,810,556	3,814,556	-	3,814,556	-	-	-	3,814,556
Ethics Office		2,662,039	(2,662,039)	-	-	-	-	-	-	-
Real Property		11,449,683	8,984,965	20,434,648	-	20,434,648	-	-	-	20,434,648
General Counsel		15,833,730	(15,833,730)	-	-	-	-	-	-	-
General Auditor		4,599,034	(4,599,034)	-	-	-	-	-	-	-
Total Departmental O&M		162,334,740	412,412,867	574,747,607	-	538,119,190	27,186,591	9,441,826	-	574,747,607
GENERAL DISTRICT REQUIREMENTS										
State Water Contract*										
Supply - O&M		110,115,149	2,927,677	113,042,826	-	113,042,826	-	-	-	113,042,826
Supply - Capital		80,437,139	2,138,615	82,575,754	-	82,575,754	-	-	-	82,575,754
Power - O&M & Off-Aq Capital		211,574,465	5,625,217	217,199,682	-	-	217,199,682	-	-	217,199,682
Power - Capital (less Off-Aq)		(4,981,305)	-	(4,981,305)	-	-	(4,981,305)	-	-	(4,981,305)
Transmission - Capital - Commodity, Demand, & Standby		60,506,317	1,608,706	62,115,023	5,175,802	30,445,896	26,493,324	-	-	62,115,023
Transmission - O&M - Commodity only		194,057,356	5,159,483	199,216,839	-	199,216,839	-	-	-	199,216,839
Delta Conveyance - Supply		-	-	-	-	-	-	-	-	-
Delta Conveyance - Power		-	-	-	-	-	-	-	-	-
Delta Conveyance - Other		-	-	-	-	-	-	-	-	-
Total State Water Contract		30,000,000	797,622	30,797,622	2,566,246	15,095,563	13,135,814	-	-	30,797,622
		681,709,121	18,257,320	699,966,441	7,742,048	440,376,878	39,629,139	212,218,377	-	699,966,441
Colorado River Aqueduct Power Costs										
		105,857,041	2,814,465	108,671,506	-	-	-	108,671,506	-	108,671,506
Supply Programs (cash funded portion)										
		66,659,522	1,772,304	68,431,826	-	68,431,826	-	-	-	68,431,826
Demand Management (cash funded portion)										
Local Resources Program		22,175,417	589,587	22,765,004	-	22,765,004	-	-	-	22,765,004
Future Supply Actions & Stormwater Pilot		3,639,900	96,776	3,736,676	-	3,736,676	-	-	-	3,736,676
Conservation Program (cash funded portion)		25,000,000	664,685	25,664,685	-	25,664,685	-	-	-	25,664,685
Total Demand Management Costs		50,815,317	1,351,048	52,166,365	-	52,166,365	-	-	-	52,166,365
Capital Financing										
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		283,264,623	(10,061,879)	273,202,744	50,176,691	116,305,190	102,388,004	-	4,332,859	273,202,744
G.O. Bond Debt Service		1,968,750	52,344	2,021,094	666,509	751,475	603,110	-	-	2,021,094
Debt Administration		2,790,098	(99,107)	2,690,990	494,230	1,145,582	1,008,501	-	42,678	2,690,990
Bond Deafasance		-	-	-	-	-	-	-	-	-
PAYGO		135,000,000	(4,795,352)	130,204,648	23,913,517	55,429,444	48,796,706	-	2,064,981	130,204,648
Total Capital Financing Costs		423,023,470	(14,903,994)	408,119,476	75,250,946	173,631,691	152,796,321	-	6,440,517	408,119,476
Other Operating Costs										
Operating Equipment		9,394,884	(2,474,306)	6,920,579	-	6,681,478	130,048	-	109,052	6,920,579
Succession Planning Labor Pool		5,000,000	(1,316,837)	3,683,163	-	3,555,913	69,212	-	58,038	3,683,163
OP&B/PER'S Pre-Funding		-	-	-	-	-	-	-	-	-
Total Other Operating Costs		14,394,884	(3,791,142)	10,603,742	-	10,237,391	199,260	-	167,091	10,603,742
Increase/(Decrease) in Required Reserves										
		5,500,000	(5,500,000)	-	-	-	-	-	-	-
Total General District Requirements										
		1,347,959,356	0	1,347,959,356	82,992,994	744,844,151	192,624,720	320,889,883	6,607,608	1,347,959,356
REQUIREMENTS BEFORE OFFSETS:										
		1,510,294,096	412,412,867	1,922,706,963	82,992,994	1,282,963,340	192,624,720	348,076,474	16,049,434	1,922,706,963
Revenue Offsets										
Property Taxes - MWD Portion of SWC GO Debt Service		-	-	-	-	-	-	-	-	-
Property Taxes - MWD GO Debt Service		564,249	-	564,249	47,017	276,569	240,664	-	-	564,249
Interest on Investments		1,968,750	-	1,968,750	494,766	588,975	885,009	-	-	1,968,750
Hydro-Power Revenue		6,468,546	(0)	6,468,546	640,455	3,419,768	1,138,382	1,221,574	-	6,468,546
CRA Power Revenue		12,611,274	-	12,611,274	-	-	-	-	12,611,274	12,611,274
Wadsworth Pumping Plant (DVL) Power Revenue		3,376,627	-	3,376,627	-	-	-	3,376,627	-	3,376,627
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)		679,733	-	679,733	-	-	-	-	679,733	679,733
Misc. allocated to supply (PVID Lease)		52,991,971	0	52,991,971	2,656,946	33,348,832	6,166,707	10,432,472	387,014	52,991,971
Property Taxes - SWC		5,930,280	-	5,930,280	-	5,930,280	-	-	-	5,930,280
Revenue Reserve used for Revenue Bonds - I&P		160,551,544	-	160,551,544	1,242,060	102,056,591	6,357,717	50,895,177	-	160,551,544
Annexation		-	-	-	-	-	-	-	-	-
Total Revenue Offsets		245,142,974	0	245,142,974	5,081,243	145,621,014	14,788,479	66,605,583	13,046,656	245,142,974
NET REVENUE REQUIREMENTS:										
		\$ 1,677,563,989	\$ 412,412,867	\$ 1,677,563,989	\$ 77,911,751	\$ 1,137,342,326	\$ 177,836,242	\$ 281,470,891	\$ 3,002,778	\$ 1,677,563,989

		Total to Be Allocated Excluding A&G and Negative Values	Line Item Costs by Allocation Category (w/o A&G)				Total Allocations	
			Fixed			Variable		Hydro-
			Demand	Commodity	Standby	Commodity	Electric	
Departmental O&M								
Group	Item							
Office of General Manager		4,839,220	-	4,762,965	-	-	76,255	4,839,220
Office of General Manager	Board of Directors	-	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	5,395,138	-	5,395,138	-	-	-	5,395,138
External Affairs	Legislative Services	-	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-	-
External Affairs	Conservation & Community Services	1,883,133	-	1,883,133	-	-	-	1,883,133
Human Resources		8,433,893	-	8,300,995	-	-	132,899	8,433,893
Water Systems Operations	Office of the Manager	7,572,946	-	7,406,567	-	-	166,379	7,572,946
Water Systems Operations	Office of the Manager, Conveyance & Treatment	806,964	-	795,168	-	-	11,795	806,964
Water Systems Operations	Office of the Manager, Treatment Services	413,201	-	413,201	-	-	-	413,201
Water Systems Operations	Office of the Manager, Operations Support Services	1,516,911	-	1,483,585	-	-	33,327	1,516,911
Water Systems Operations	Operations Support Services	6,647,076	-	6,542,268	-	-	104,809	6,647,076
Water Systems Operations	Desert Region / C&D CRA	26,171,637	-	26,171,637	-	-	-	26,171,637
Water Systems Operations	System Operations Unit	7,384,406	-	7,384,406	-	-	-	7,384,406
Water Systems Operations	Power Operations and Planning	2,819,628	-	2,059,419	-	-	760,209	2,819,628
Water Systems Operations	Operations Planning & Programs Unit	1,955,862	-	1,955,862	-	-	-	1,955,862
Water Systems Operations	Treatment Jensen	11,384,580	-	11,384,580	-	-	-	11,384,580
Water Systems Operations	Treatment Diemer	10,932,194	-	10,932,194	-	-	-	10,932,194
Water Systems Operations	Treatment Mills	10,373,485	-	10,373,485	-	-	-	10,373,485
Water Systems Operations	Treatment Skinner	10,167,420	-	10,167,420	-	-	-	10,167,420
Water Systems Operations	Treatment Weymouth	11,854,442	-	11,854,442	-	-	-	11,854,442
Water Systems Operations	Water Quality Section	21,871,602	-	21,871,602	-	-	-	21,871,602
Water Systems Operations	C&D, Eastern Unit	13,862,866	-	13,506,047	-	-	376,819	13,862,866
Water Systems Operations	C&D, Western Unit	11,538,714	-	11,161,402	-	-	377,313	11,538,714
Water Systems Operations	OSS, Manufacturing Services Unit	7,047,559	-	6,972,299	-	-	75,260	7,047,559
Water Systems Operations	Environmental Health & Safety Section	11,652,038	-	11,614,151	-	-	37,887	11,652,038
Water Systems Operations	OSS, Fleet Services Unit	6,726,100	-	6,726,100	-	-	-	6,726,100
Water Systems Operations	OSS, Power Support Unit	7,898,528	-	5,654,400	-	-	2,244,128	7,898,528
Water Systems Operations	Office of the Manager, Operations & Security Team & Security Management	674,544	-	659,724	-	-	14,820	674,544
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-	-
Sustainability, Resilience & Inclusion		-	-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-	-
Office of the Chief Financial Officer		-	-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-	-
Engineering Services		35,276,279	-	34,716,815	-	-	559,464	35,276,279
Business Technology	Administrative Services	-	-	-	-	-	-	-
Business Technology	Information Technology	23,349,376	-	22,981,443	-	-	367,933	23,349,376
Water Resources Management	Resource Planning & Development	4,109,602	-	4,109,602	-	-	-	4,109,602
Water Resources Management	Resource Implementation	10,514,273	-	10,514,273	-	-	-	10,514,273
Water Resources Management	Office of the Group Manager	2,423,186	-	2,423,186	-	-	-	2,423,186
Ethics Office		-	-	-	-	-	-	-
Real Property		6,982,416	-	6,982,416	-	-	-	6,982,416
General Counsel		-	-	-	-	-	-	-
General Auditor		-	-	-	-	-	-	-
Total Departmental O&M	-	294,499,220	-	289,159,923	-	-	5,339,296	294,499,220
GENERAL DISTRICT REQUIREMENTS								
State Water Contract*								
Supply - O&M		110,115,149	-	110,115,149	-	-	-	110,115,149
Supply - Capital		80,437,139	-	80,437,139	-	-	-	80,437,139
Power - O&M & Off-Aq Capital		211,574,465	-	-	-	211,574,465	-	211,574,465
Power - Capital (less Off-Aq)		-	-	-	-	-	-	-
Transmission - Capital - Commodity, Demand, & Standby		60,506,317	5,041,755	29,657,383	25,807,178	-	-	60,506,317
Transmission - O&M - Commodity only		194,057,356	-	194,057,356	-	-	-	194,057,356
Delta Conveyance - Supply		-	-	-	-	-	-	-
Delta Conveyance - Power		-	-	-	-	-	-	-
Delta Conveyance - Other		30,000,000	2,499,783	14,704,605	12,795,612	-	-	30,000,000
Total State Water Contract		686,690,426	7,541,538	428,971,633	38,602,790	211,574,465	-	686,690,426
Colorado River Aqueduct Power Costs		105,857,041	-	-	-	105,857,041	-	105,857,041
Supply Programs (cash funded portion)		66,659,522	-	66,659,522	-	-	-	66,659,522
Demand Management (cash funded portion)								
Local Resources Program		22,175,417	-	22,175,417	-	-	-	22,175,417
Future Supply Actions & Stormwater Pilot		3,639,900	-	3,639,900	-	-	-	3,639,900
Conservation Program (cash funded portion)		25,000,000	-	25,000,000	-	-	-	25,000,000
Total Demand Management Costs		50,815,317	-	50,815,317	-	-	-	50,815,317
Capital Financing								
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		266,127,113	48,877,173	113,293,022	99,736,275	-	4,220,643	266,127,113
G.O. Bond Debt Service		1,968,750	649,247	732,013	587,490	-	-	1,968,750
Debt Administration		2,621,297	481,430	1,115,913	982,382	-	41,572	2,621,297
Bond Defeasance		-	-	-	-	-	-	-
PAYGO		126,832,500	23,294,185	53,993,887	47,532,929	-	2,011,500	126,832,500
Total Capital Financing Costs		397,549,660	73,302,035	169,134,834	148,839,076	-	6,273,715	397,549,660
Other Operating Costs								
Operating Equipment		6,741,344	-	6,508,436	126,680	-	106,228	6,741,344
Succession Planning Labor Pool		3,587,774	-	3,463,819	67,420	-	56,535	3,587,774
OPEB/PERS Pre-Funding		-	-	-	-	-	-	-
Total Other Operating Costs		10,329,117	-	9,972,254	194,100	-	162,763	10,329,117
Increase/(Decrease) in Required Reserves		-	-	-	-	-	-	-
Total General District Requirements		1,317,901,083	80,843,573	725,553,560	187,635,966	317,431,506	6,436,479	1,317,901,083
REQUIREMENTS BEFORE OFFSETS:		1,612,400,303	80,843,573	1,014,713,484	187,635,966	317,431,506	11,775,775	1,612,400,303
Revenue Offsets								
Property Taxes - MWD Portion of SWC GO Debt Service		564,249	47,017	276,569	240,664	-	-	564,249
Property Taxes - MWD GO Debt Service		1,968,750	494,766	588,975	885,009	-	-	1,968,750
Interest on Investments		5,804,521	607,162	3,001,885	1,061,109	1,090,848	43,518	5,804,521
Hydro-Power Revenue		12,611,274	-	-	-	-	12,611,274	12,611,274
CRA Power Revenue		3,376,627	-	-	-	3,376,627	-	3,376,627
Wadsworth Pumping Plant (DVL) Power Revenue		679,733	-	-	-	679,733	-	679,733
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)		-	-	-	-	-	-	-
Misc. allocated to supply (PVID Lease)		5,930,280	-	5,930,280	-	-	-	5,930,280
Property Taxes - SWC		160,551,544	1,242,060	102,056,591	6,357,717	50,895,177	-	160,551,544
Revenue Reserve used for Revenue Bonds - I&P		-	-	-	-	-	-	-
Annexation		-	-	-	-	-	-	-
Total Revenue Offsets		191,486,979	2,391,004	111,854,299	8,544,499	56,042,385	12,654,792	191,486,979
NET REVENUE REQUIREMENTS:		\$ 1,420,913,324	\$ 78,452,569	\$ 902,859,185	\$ 179,091,467	\$ 261,389,121	\$ (879,017)	\$ 1,420,913,324

		A&G Line Item Allocators by Allocation Category						Total
		Demand	Fixed Commodity	Standby	Variable Commodity	Demand Management	Hydro-Electric	
Departmental O&M								
Group	Item							
Office of General Manager		0.00%	1.62%	0.00%	0.00%	0.00%	0.03%	1.64%
Office of General Manager	Board of Directors	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Bay Delta Initiatives	Bay Delta Initiatives	0.00%	1.83%	0.00%	0.00%	0.00%	0.00%	1.83%
External Affairs	Legislative Services	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
External Affairs	Media Communications Services	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
External Affairs	Manager, External Affairs/Special Projects	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
External Affairs	Conservation & Community Services	0.00%	0.64%	0.00%	0.00%	0.00%	0.00%	0.64%
Human Resources		0.00%	2.82%	0.00%	0.00%	0.00%	0.05%	2.86%
Water Systems Operations	Office of the Manager	0.00%	2.51%	0.00%	0.00%	0.00%	0.06%	2.57%
Water Systems Operations	Office of the Manager, Conveyance & Dis	0.00%	0.27%	0.00%	0.00%	0.00%	0.00%	0.27%
Water Systems Operations	Office of the Manager, Treatment Section	0.00%	0.14%	0.00%	0.00%	0.00%	0.00%	0.14%
Water Systems Operations	Office of the Manager, Operations Support	0.00%	0.50%	0.00%	0.00%	0.00%	0.01%	0.52%
Water Systems Operations	Operations Support Services	0.00%	2.22%	0.00%	0.00%	0.00%	0.04%	2.26%
Water Systems Operations	Desert Region / C&D CRA	0.00%	8.89%	0.00%	0.00%	0.00%	0.00%	8.89%
Water Systems Operations	System Operations Unit	0.00%	2.51%	0.00%	0.00%	0.00%	0.00%	2.51%
Water Systems Operations	Power Operations and Planning	0.00%	0.70%	0.00%	0.00%	0.00%	0.26%	0.96%
Water Systems Operations	Operations Planning & Programs Unit	0.00%	0.66%	0.00%	0.00%	0.00%	0.00%	0.66%
Water Systems Operations	Treatment Jensen	0.00%	3.87%	0.00%	0.00%	0.00%	0.00%	3.87%
Water Systems Operations	Treatment Diemer	0.00%	3.71%	0.00%	0.00%	0.00%	0.00%	3.71%
Water Systems Operations	Treatment Mills	0.00%	3.52%	0.00%	0.00%	0.00%	0.00%	3.52%
Water Systems Operations	Treatment Skinner	0.00%	3.45%	0.00%	0.00%	0.00%	0.00%	3.45%
Water Systems Operations	Treatment Weymouth	0.00%	4.03%	0.00%	0.00%	0.00%	0.00%	4.03%
Water Systems Operations	Water Quality Section	0.00%	7.43%	0.00%	0.00%	0.00%	0.00%	7.43%
Water Systems Operations	C&D, Eastern Unit	0.00%	4.59%	0.00%	0.00%	0.00%	0.13%	4.71%
Water Systems Operations	C&D, Western Unit	0.00%	3.79%	0.00%	0.00%	0.00%	0.13%	3.92%
Water Systems Operations	OSS, Manufacturing Services Unit	0.00%	2.37%	0.00%	0.00%	0.00%	0.03%	2.39%
Water Systems Operations	Environmental Health & Safety Section	0.00%	3.94%	0.00%	0.00%	0.00%	0.01%	3.96%
Water Systems Operations	OSS, Fleet Services Unit	0.00%	2.28%	0.00%	0.00%	0.00%	0.00%	2.28%
Water Systems Operations	OSS, Power Support Unit	0.00%	1.92%	0.00%	0.00%	0.00%	0.76%	2.68%
Water Systems Operations	Office of the Manager, Operations & Planr	0.00%	0.22%	0.00%	0.00%	0.00%	0.01%	0.23%
Water Systems Operations	Security Team & Security Management	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Sustainability, Resilience & Innovati	-	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Diversity, Equity & Inclusion	-	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Equal Employment Opportunity	-	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Office of the Chief Financial Officer		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Business Technology	Office of Manager	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Engineering Services		0.00%	11.79%	0.00%	0.00%	0.00%	0.19%	11.98%
Business Technology	Administrative Services	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Business Technology	Information Technology	0.00%	7.80%	0.00%	0.00%	0.00%	0.12%	7.93%
Water Resources Management	Resource Planning & Development	0.00%	1.40%	0.00%	0.00%	0.00%	0.00%	1.40%
Water Resources Management	Resource Implementation	0.00%	3.57%	0.00%	0.00%	0.00%	0.00%	3.57%
Water Resources Management	Office of the Group Manager	0.00%	0.82%	0.00%	0.00%	0.00%	0.00%	0.82%
Ethics Office		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Real Property		0.00%	2.37%	0.00%	0.00%	0.00%	0.00%	2.37%
General Counsel		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
General Auditor		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Total Departmental O&M	-	0.00%	98.19%	0.00%	0.00%	0.00%	1.81%	100.00%
GENERAL DISTRICT REQUIREMENTS								
State Water Contract*								
Supply - O&M		0.00%	8.36%	0.00%	0.00%	0.00%	0.00%	8.36%
Supply - Capital		0.00%	6.10%	0.00%	0.00%	0.00%	0.00%	6.10%
Power - O&M & Off-Aq Capital		0.00%	0.00%	0.00%	16.05%	0.00%	0.00%	16.05%
Power - Capital (less Off-Aq)		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Transmission - Capital - Commodity, Demand, & Standby		0.38%	2.25%	1.96%	0.00%	0.00%	0.00%	4.59%
Transmission - O&M - Commodity only		0.00%	14.72%	0.00%	0.00%	0.00%	0.00%	14.72%
Delta Conveyance - Supply		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Delta Conveyance - Power		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Delta Conveyance - Other		0.19%	1.12%	0.97%	0.00%	0.00%	0.00%	2.28%
Total State Water Contract		0.57%	32.55%	2.93%	16.05%	0.00%	0.00%	52.10%
Colorado River Aqueduct Power Costs		0.00%	0.00%	0.00%	8.03%	0.00%	0.00%	8.03%
Supply Programs (cash funded portion)		0.00%	5.06%	0.00%	0.00%	0.00%	0.00%	5.06%
Demand Management (cash funded portion)								
Local Resources Program		0.00%	1.68%	0.00%	0.00%	0.00%	0.00%	1.68%
Future Supply Actions & Stormwater Pilot		0.00%	0.28%	0.00%	0.00%	0.00%	0.00%	0.28%
Conservation Program (cash funded portion)		0.00%	1.90%	0.00%	0.00%	0.00%	0.00%	1.90%
Total Demand Management Costs		0.00%	3.86%	0.00%	0.00%	0.00%	0.00%	3.86%
Capital Financing								
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		3.71%	8.60%	7.57%	0.00%	0.00%	0.32%	20.19%
G.O. Bond Debt Service		0.05%	0.06%	0.04%	0.00%	0.00%	0.00%	0.15%
Debt Administration		0.04%	0.08%	0.07%	0.00%	0.00%	0.00%	0.20%
Bond Defeasance		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
PAYGO		1.77%	4.10%	3.61%	0.00%	0.00%	0.15%	9.62%
Total Capital Financing Costs		5.56%	12.83%	11.29%	0.00%	0.00%	0.48%	30.17%
Other Operating Costs		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Operating Equipment		0.00%	0.49%	0.01%	0.00%	0.00%	0.01%	0.51%
Succession Planning Labor Pool		0.00%	0.26%	0.01%	0.00%	0.00%	0.00%	0.27%
OPEB/PERS Pre-Funding		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Total Other Operating Costs		0.00%	0.76%	0.01%	0.00%	0.00%	0.01%	0.78%
Increase/(Decrease) in Required Reserves		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Total General District Requirements		6.13%	55.05%	14.24%	24.09%	0.00%	0.49%	100.00%
REQUIREMENTS BEFORE OFFSETS:		5.01%	62.93%	11.64%	19.69%	0.00%	0.73%	100.00%

Functionalization of A&G Costs
 Summary of Allocation Results before Inclusion of Administrative and General Costs
 Fiscal Year Ending 2023

Functional Categories	Functional Costs Allocated for FY 2023	Allocation Categories (Costs Exclude Administrative and General)					Total Allocated Excluding A&G
		Demand	Fixed Commodity	Standby	Variable Commodity	Hydro-Electric	
Source of Supply							
CRA	\$ 56,409,171.51	\$ -	\$ 56,409,172	\$ -	\$ -	\$ -	\$ 56,409,172
SWP	153,296,452	-	153,296,452	-	-	-	153,296,452
Other Supply	31,837,822	-	31,837,822	-	-	-	31,837,822
Subtotal: Source of Supply	241,543,445	-	241,543,445	-	-	-	241,543,445
Conveyance & Aqueduct							
CRA							
CRA Power	113,877,508	-	11,792,903	-	102,084,606	-	113,877,508
CRA All Other	66,517,700	1,072,429	59,955,843	5,489,429	-	-	66,517,700
SWP*	-	-	-	-	-	-	-
SWP Power	155,002,944	-	-	-	155,002,944	-	155,002,944
SWP All Other	250,301,773	6,164,258	212,584,590	31,552,924	-	-	250,301,773
Other Conveyance & Aqueduct	71,117,758	5,022,658	39,156,836	26,938,264	-	-	71,117,758
Subtotal: Conveyance & Aqueduct	656,817,683	12,259,346	323,490,171	63,980,617	257,087,549	-	656,817,683
Storage							
Storage Costs Other Than Power							
Emergency	55,588,134	-	7,749,864	47,838,270	-	-	55,588,134
Drought	52,864,152	-	52,864,152	-	-	-	52,864,152
Regulatory	27,062,362	7,684,107	13,262,129	6,116,127	-	-	27,062,362
Storage Power	(679,733)	-	-	-	(679,733)	-	(679,733)
Subtotal: Storage	134,834,915	7,684,107	73,876,145	53,954,397	(679,733)	-	134,834,915
Treatment							
Jensen	51,775,954	6,956,073	30,205,935	8,617,574	5,996,372	-	51,775,954
Weymouth	52,883,401	7,314,097	30,566,495	9,061,139	5,941,670	-	52,883,401
Diemer	59,478,542	8,823,715	32,016,742	10,931,411	7,706,673	-	59,478,542
Mills	29,813,392	2,336,405	21,973,519	2,894,274	2,609,195	-	29,813,392
Skinner	50,634,383	7,502,736	28,904,073	9,294,893	4,932,681	-	50,634,383
Subtotal: Treatment	244,585,672	32,933,026	143,666,764	40,799,291	27,186,591	-	244,585,672
Distribution	193,378,514	25,576,091	147,445,261	20,357,163	-	-	193,378,514
Demand Management	62,405,068	-	62,405,068	-	-	-	62,405,068
Hydro-Electric	280,370	-	-	-	-	280,370	280,370
Total Costs Allocated	\$ 1,533,845,667	\$ 78,452,569	\$ 992,426,854	\$ 179,091,467	\$ 283,594,407	\$ 280,370	\$ 1,533,845,667
A&G Costs to be Functionalized		\$ (540,818)	\$ 144,915,472	\$ (1,255,225,031)	\$ (2,123,516)	\$ 2,722,409	\$ 143,718,322

Percentages Used for Functionalization of A&G Costs

Allocation Categories				
Fixed			Variable Commodity	Hydro-Electric
Demand	Commodity	Standby		
0.0%	5.7%	0.0%	0.0%	0.0%
0.0%	15.4%	0.0%	0.0%	0.0%
0.0%	3.2%	0.0%	0.0%	0.0%
0.0%	24.3%	0.0%	0.0%	0.0%
0.0%	1.2%	0.0%	36.0%	0.0%
1.4%	6.0%	3.1%	0.0%	0.0%
0.0%	0.0%	0.0%	0.0%	0.0%
0.0%	0.0%	0.0%	54.7%	0.0%
7.9%	21.4%	17.6%	0.0%	0.0%
6.4%	3.9%	15.0%	0.0%	0.0%
15.6%	32.6%	35.7%	90.7%	0.0%
0.0%	0.8%	26.7%	0.0%	0.0%
0.0%	5.3%	0.0%	0.0%	0.0%
9.8%	1.3%	3.4%	0.0%	0.0%
0.0%	0.0%	0.0%	-0.2%	0.0%
9.8%	7.4%	30.1%	-0.2%	0.0%
8.9%	3.0%	4.8%	2.1%	0.0%
9.3%	3.1%	5.1%	2.1%	0.0%
11.2%	3.2%	6.1%	2.7%	0.0%
3.0%	2.2%	1.6%	0.9%	0.0%
9.6%	2.9%	5.2%	1.7%	0.0%
42.0%	14.5%	22.8%	9.6%	0.0%
32.6%	14.9%	11.4%	0.0%	0.0%
0.0%	6.3%	0.0%	0.0%	0.0%
0.0%	0.0%	0.0%	0.0%	100.0%
100.0%	100.0%	100.0%	100.0%	100.0%

Administrative and General Costs Redistributed Among Functional Categories

Administrative and General Costs by Allocation Categories						Total A&G Costs Allocated	Functional Categories
Fixed			Variable				
Demand	Commodity	Standby	Commodity	Hydro-Electric			
\$	-	\$ 8,236,941	\$ -	\$ -	\$ -	\$ 8,236,941	Source of Supply
-	-	22,384,549	-	-	-	22,384,549	CRA
-	-	4,649,001	-	-	-	4,649,001	SWP
-	-	35,270,491	-	-	-	35,270,491	Other Supply
							Subtotal: Source of Supply
							Conveyance & Aqueduct
-	-	1,722,015	-	(764,396)	-	957,620	CRA
(7,393)	-	8,754,831	(38,475)	-	-	8,708,963	
-	-	-	-	-	-	-	SWP*
-	-	-	-	(1,160,641)	-	(1,160,641)	
(42,494)	31,041,881	(221,150)	-	-	-	30,778,238	
(34,624)	5,717,733	(188,806)	-	-	-	5,494,302	Other Conveyance & Aqueduct
(84,511)	47,236,459	(448,430)	(1,925,036)	-	-	44,778,482	Subtotal: Conveyance & Aqueduct
							Storage
							Storage Costs Other Than Power
-	1,131,645	(335,291)	-	-	-	796,354	
-	7,719,293	-	-	-	-	7,719,293	
(52,971)	1,936,553	(42,867)	-	-	-	1,840,716	
-	-	-	5,090	-	-	5,090	Storage Power
(52,971)	10,787,492	(378,158)	5,090	-	-	10,361,452	Subtotal: Storage
							Treatment
(47,952)	4,410,710	(60,399)	(44,900)	-	-	4,257,459	Jensen
(50,420)	4,463,360	(63,508)	(44,490)	-	-	4,304,941	Weymouth
(60,827)	4,675,127	(76,617)	(57,707)	-	-	4,479,977	Diemer
(16,106)	3,208,602	(20,286)	(19,537)	-	-	3,152,673	Mills
(51,721)	4,220,611	(65,146)	(36,935)	-	-	4,066,808	Skinner
(227,026)	20,978,410	(285,956)	(203,569)	-	-	20,261,858	Subtotal: Treatment
(176,310)	21,530,151	(142,680)	-	-	-	21,211,160	Distribution
-	9,112,470	-	-	-	-	9,112,470	Demand Management
-	-	-	-	2,722,409	-	2,722,409	Hydro-Electric
\$ (540,818)	\$ 144,915,472	\$ (1,255,225)	\$ (2,123,516)	\$ 2,722,409	\$	143,718,322	Total Costs Allocated

Summary of Functionalization Percentages

Fiscal Year Ending 2023

	Source of Supply	Conveyance & Aqueduct	Storage	Water Quality	Treatment	Distribution	Demand Management	Hydro-Electric	Administrative & General	Total Allocated
Departmental Operations & Maintenance										
Office of General Manager	5%	12%	2%	0%	19%	16%	1%	1%	43%	100%
Water Systems Operations	5%	17%	1%	0%	40%	33%	0%	2%	2%	100%
Water Resources Management	70%	0%	0%	0%	0%	2%	28%	0%	0%	100%
Engineering Services	4%	22%	24%	0%	25%	18%	0%	1%	6%	100%
Bay Delta Initiatives	0%	100%	0%	0%	0%	0%	0%	0%	0%	100%
Business Technology	4%	9%	2%	0%	14%	12%	1%	1%	57%	100%
Real Property	6%	33%	8%	0%	0%	12%	0%	0%	41%	100%
Human Resources	7%	15%	3%	0%	24%	20%	2%	1%	28%	100%
Office of the Chief Financial Officer	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%
External Affairs	0%	0%	0%	0%	0%	0%	11%	0%	89%	100%
General Counsel	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%
General Auditor	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%
Ethics Office	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%
Sustainability, Resilience & Innovation	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%
Diversity, Equity & Inclusion	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%
Equal Employment Opportunity	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%
Total Departmental O&M	7%	15%	3%	0%	24%	20%	2%	1%	28%	100%
General District Requirements										
State Water Contract*	28%	72%	0%	0%	0%	0%	0%	0%	0%	100%
Colorado River Aqueduct Power Costs	0%	100%	0%	0%	0%	0%	0%	0%	0%	100%
Supply Programs (cash funded portion)	73%	0%	27%	0%	0%	0%	0%	0%	0%	100%
Demand Management (cash funded portion)	0%	0%	0%	0%	0%	0%	100%	0%	0%	100%
Capital Financing	4%	21%	24%	0%	25%	18%	0%	1%	6%	100%
Other Operating Costs	7%	15%	3%	0%	24%	20%	2%	1%	28%	100%
Increase/(Decrease) in Required Reserves	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%
Total General District Requirements	19%	51%	9%	0%	8%	6%	4%	0%	3%	100%
Revenue Offsets	22%	49%	0%	0%	1%	1%	0%	5%	22%	100%
Net Revenue Requirements	14%	39%	8%	0%	15%	12%	4%	0%	9%	100%

* Includes Delta Conveyance planning costs net of California WaterFix refund

Cost Allocation Summary (by budget line item)

Fiscal Year Ending 2023

	Allocation Categories						Total Allocated
	Fixed			Variable	Other	Hydro-Electric	
	Demand	Commodity	Standby	Commodity			
Departmental Operations & Maintenance							
Office of General Manager	\$ -	\$ 7,952,702	\$ -	\$ -	\$ -	\$ 127,323	\$ 8,080,025
Water Systems Operations	-	334,890,557	-	27,186,591	-	7,327,268	369,404,416
Water Resources Management	-	32,920,348	-	-	-	-	32,920,348
Engineering Services	-	62,449,694	-	-	-	1,006,382	63,456,075
Bay Delta Initiatives	-	14,435,786	-	-	-	-	14,435,786
Business Technology	-	46,026,248	-	-	-	736,880	46,763,127
Real Property	-	20,434,648	-	-	-	-	20,434,648
Human Resources	-	15,238,832	-	-	-	243,974	15,482,805
Office of the Chief Financial Officer	-	-	-	-	-	-	-
External Affairs	-	3,770,375	-	-	-	-	3,770,375
General Counsel	-	-	-	-	-	-	-
General Auditor	-	-	-	-	-	-	-
Ethics Office	-	-	-	-	-	-	-
Sustainability, Resilience & Innovation	-	-	-	-	-	-	-
Diversity, Equity & Inclusion	-	-	-	-	-	-	-
Equal Employment Opportunity	-	-	-	-	-	-	-
Total Departmental O&M (including Administrative and General)	-	538,119,190	-	27,186,591	-	9,441,826	574,747,607
General District Requirements							
State Water Contract*	7,742,048	440,376,878	39,629,139	212,218,377	-	-	699,966,441
Colorado River Aqueduct Power Costs	-	-	-	108,671,506	-	-	108,671,506
Supply Programs (cash funded portion)	-	68,431,826	-	-	-	-	68,431,826
Demand Management (cash funded portion)	-	52,166,365	-	-	-	-	52,166,365
Capital Financing	75,250,946	173,631,691	152,796,321	-	-	6,440,517	408,119,476
Other Operating Costs	-	10,237,391	199,260	-	-	167,091	10,603,742
Increase/(Decrease) in Required Reserves	-	-	-	-	Other	-	-
Total General District Requirements (including Administrative and General)	82,992,994	744,844,151	192,624,720	320,889,883	-	6,607,608	1,347,959,356
Revenue Offsets	(5,081,243)	(145,621,014)	(14,788,479)	(66,605,583)	-	(13,046,656)	(245,142,974)
Net Revenue Requirements	\$ 77,911,751	\$ 1,137,342,326	\$ 177,836,242	\$ 281,470,891	\$ -	\$ 3,002,778	\$ 1,677,563,989

* Includes Delta Conveyance planning costs net of California WaterFix refund

Fiscal Year Ending 2023	Supply			Conveyance & Aqueduct					Storage				Treatment	Distribution	Demand Mgt.	Hydro	Total
	CRA	SWC	Other	CRA power	CRA other	SWC power	SWC other	Other C&A	Emergency	Drought	Regulatory	Power					
Dept. Operations & Maintenance	9,172,010	15,915,229	13,761,085	3,453,729	52,336,638	-	23,095,346	7,999,272	7,749,864	5,924,522	4,103,459	-	136,930,314	114,782,168	10,690,548	6,498,683	412,412,867
General District Requirements																	
State Water Contract*	-	80,437,139	-	-	-	(4,981,305)	90,506,317	-	-	-	-	-	-	-	-	-	165,962,151
O&M	-	110,115,149	-	-	-	211,574,465	194,057,356	-	-	-	-	-	-	-	-	-	515,746,970
Colorado River Aqueduct Power	-	-	-	105,857,041	-	-	-	-	-	-	-	-	-	-	-	-	105,857,041
Supply Programs (cash funded portion)	47,197,861	-	1,250,000	-	-	-	-	-	-	18,211,661	-	-	-	-	-	-	66,659,522
Demand Management (cash funded portion)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	50,815,317
Capital Financing Program	-	-	16,589,556	8,252,673	13,094,802	-	6,400,032	63,158,208	47,831,816	28,758,037	22,947,482	-	105,544,356	77,856,873	842,109	6,273,715	397,549,660
Other Operating Costs	229,718	398,606	344,654	86,501	1,310,801	-	578,436	200,346	194,100	148,383	102,773	-	3,429,498	2,874,785	267,751	162,763	10,329,117
Revenue Offsets	(190,417)	(53,569,672)	(107,473)	(3,772,435)	(224,540)	(51,590,216)	(64,335,715)	(240,068)	(187,646)	(178,451)	(91,353)	(679,733)	(1,318,496)	(2,135,312)	(210,658)	(12,654,792)	(191,486,979)
Admin. & General	8,236,941	22,384,549	4,649,001	957,620	8,708,963	(1,160,641)	30,778,238	5,494,302	796,354	7,719,293	1,840,716	5,090	20,261,858	21,211,160	9,112,470	2,722,409	143,718,322
Net Revenue Requirement	64,646,113	175,681,001	36,486,823	114,835,128	75,226,664	153,842,303	281,080,010	76,612,060	56,384,488	60,583,445	28,903,077	(674,644)	264,847,530	214,589,674	71,517,538	3,002,778	1,677,563,989
* Includes Delta Conveyance planning costs net of California WaterFix refund																	

Fiscal Year Ending 2023	Supply			Conveyance & Aqueduct					Storage				Treatment	Distribution	Demand Mgt.	Hydro	Total
	CRA	SWC	Other	CRA power	CRA other	SWC power	SWC other	Other C&A	Emergency	Drought	Regulatory	Power					
Fixed Demand																	
engineering factors	-	-	-	0.0%	8.3%	0.0%	8.3%	8.3%	0.0%	0.0%	33.5%	0.0%	31.4%	33.5%	-	-	-
SWC Capital	-	-	-	-	-	-	7,541,538	-	-	-	-	-	-	-	-	-	7,541,538
Capital Financing	-	-	-	-	1,091,139	-	533,290	5,262,727	-	-	7,684,107	-	33,193,206	26,070,857	-	-	73,835,324
A&G less Offsets	-	-	-	-	(26,103)	-	(1,953,063)	(274,693)	-	-	(52,971)	-	(487,206)	(671,076)	-	-	(3,465,111)
Total fixed demand	-	-	-	-	1,065,036	-	6,121,765	4,988,034	-	-	7,631,136	-	32,706,000	25,399,780	-	-	77,911,751
Fixed Commodity																	
engineering factors	100%	100%	100%	100%	49.0%	0%	49.0%	49.0%	0%	100%	39.9%	0%	29.1%	39.9%	1	-	-
Capital Financing	-	-	16,589,556	8,252,673	6,418,463	-	3,136,988	30,957,217	-	28,758,037	9,147,249	-	30,734,450	31,035,048	842,109	-	165,871,800
SWC Capital*	-	80,437,139	-	-	-	-	44,361,989	-	-	-	-	-	-	-	-	-	124,799,128
SWC O&M	-	110,115,149	-	-	-	-	194,057,356	-	-	-	-	-	-	-	-	-	304,172,505
Dept. O&M	9,172,010	15,915,229	13,761,085	3,453,729	52,336,638	-	23,095,346	7,999,272	7,749,864	5,924,522	4,103,459	-	104,466,023	114,782,168	10,690,548	-	373,449,893
Supply Programs (cash funded portion)	47,197,861	-	1,250,000	-	-	-	-	-	-	18,211,661	-	-	-	-	-	-	66,659,522
Demand Management (cash funded portion)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	50,815,317
Other Operating Costs	229,718	398,606	344,654	86,501	1,310,801	-	578,436	200,346	194,100	148,383	102,773	-	3,429,498	2,874,785	267,751	-	10,166,354
A&G less Offsets	8,046,524	(31,185,123)	4,541,527	1,722,015	8,644,772	-	(21,603,654)	5,717,733	937,545	7,540,842	1,845,200	-	26,015,202	20,283,410	8,901,813	-	41,407,807
Total fixed commodity	64,646,113	175,681,001	36,486,823	13,514,918	68,710,673	-	243,626,471	44,874,568	8,881,509	60,583,445	15,198,682	-	164,645,174	168,975,411	71,517,538	-	1,137,342,326
Fixed Standby																	
engineering factors	-	-	-	0%	43%	0%	42.7%	42.7%	100%	0%	26.7%	0%	39.4%	26.7%	-	-	-
SWC Capital	-	-	-	-	-	-	38,602,790	-	-	-	-	-	-	-	-	-	38,602,790
Capital Financing	-	-	-	-	5,585,200	-	2,729,744	26,938,264	47,831,816	-	6,116,127	-	41,616,700	20,750,969	-	-	151,568,820
A&G less Offsets	-	-	-	-	(134,246)	-	(10,000,760)	(188,806)	(328,837)	-	(42,867)	-	(1,103,365)	(536,487)	-	-	(12,335,368)
Total fixed standby	-	-	-	-	5,450,954	-	31,331,774	26,749,458	47,502,979	-	6,073,260	-	40,513,335	20,214,482	-	-	177,836,242
Variable Commodity																	
SWC Power	-	-	-	-	-	206,593,160	-	-	-	-	-	-	-	-	-	-	206,593,160
CRA Power	-	-	-	105,857,041	-	-	-	-	-	-	-	-	-	-	-	-	105,857,041
Variable Treatment	-	-	-	-	-	-	-	-	-	-	-	-	32,464,291	-	-	-	32,464,291
A&G less Offsets	-	-	-	(4,536,831)	-	(52,750,857)	-	-	-	-	-	(674,644)	(5,481,269)	-	-	-	(63,443,600)
Total variable commodity	-	-	-	101,320,210	-	153,842,303	-	-	-	-	-	(674,644)	26,983,022	-	-	-	281,470,891
Hydroelectric																	
A&G less Offsets	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12,935,162	12,935,162
Total hydroelectric	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	(9,932,384)	(9,932,384)
Total Costs	64,646,113	175,681,001	36,486,823	114,835,128	75,226,664	153,842,303	281,080,010	76,612,060	56,384,488	60,583,445	28,903,077	(674,644)	264,847,530	214,589,674	71,517,538	3,002,778	1,677,563,989

4/12/2022 Board Meeting

		1	2	3	4	5	6	7
		Labor And Labor Additive	Outside Services	Utilities	Chemicals	Other O&M	O&M Capitalization (pre-rated)	Projected Total To Be functionalized
Departmental O&M								
Group		Item						
Office of General Manager		Office of General Manager	6,970,246	990,000	-	-	220,599	(294,202)
Board of Directors		Board of Directors	1,568,032	105,000	-	-	501,440	(79,055)
Bay Delta Initiatives		Bay Delta Initiatives	5,598,517	3,534,993	-	-	3,399,027	(452,228)
External Affairs		Legislative Services	4,072,615	1,240,500	5,250	-	1,018,566	(232,442)
External Affairs		Media Communications Services	5,118,433	351,599	-	-	544,255	(215,960)
External Affairs		Manager, External Affairs/Special Projects	6,740,503	377,195	-	-	2,235,073	(358,402)
External Affairs		Conservation & Community Services	3,894,896	1,154,500	-	-	951,960	(218,471)
Human Resources		Human Resources	12,249,264	1,875,692	-	-	1,999,739	(579,856)
Water Systems Operations		Office of the Manager	8,326,241	245,000	3,000,000	-	250,475	(423,242)
Water Systems Operations		Office of the Manager, Conveyance & Distribution Section	851,438	-	-	-	51,830	(32,753)
Water Systems Operations		Office of the Manager, Treatment Section	425,719	110,000	-	-	694,350	(43,753)
Water Systems Operations		Office of the Manager, Operations Support Services	1,669,880	329,500	6,500	-	275,150	(82,216)
Water Systems Operations		Operations Support Services	7,161,947	195,900	45,600	-	797,150	(297,084)
Water Systems Operations		Desert Region / C&D CRA	27,406,997	451,300	198,000	13,800	6,572,463	(1,249,750)
Water Systems Operations		System Operations Unit	7,895,927	69,700	66,580	-	1,685,788	(352,000)
Water Systems Operations		Power Operations and Planning	3,275,453	223,000	-	-	437,230	(142,568)
Water Systems Operations		Operations Planning & Programs Unit	2,047,897	-	-	-	146,085	(79,656)
Water Systems Operations		Treatment Jensen	11,879,342	342,000	1,998,206	5,688,524	949,400	(782,719)
Water Systems Operations		Treatment Diemer	11,414,591	223,600	3,217,571	6,663,578	551,585	(736,672)
Water Systems Operations		Treatment Mills	10,847,139	244,242	968,098	2,381,218	658,274	(552,017)
Water Systems Operations		Treatment Skinner	10,589,018	144,070	2,286,296	4,039,661	603,752	(626,019)
Water Systems Operations		Treatment Weymouth	12,351,990	113,000	1,739,769	5,900,353	551,832	(756,323)
Water Systems Operations		Water Quality Section	22,846,992	2,078,896	461,000	-	3,409,353	(1,040,031)
Water Systems Operations		C&D, Eastern Unit	15,068,623	2,757,700	1,963,099	-	2,423,989	(798,605)
Water Systems Operations		C&D, Western Unit	12,699,019	1,525,000	1,875,348	-	1,745,492	(635,168)
Water Systems Operations		CSS, Manufacturing Services Unit	7,906,426	226,750	255,350	-	541,375	(322,977)
Water Systems Operations		Environmental Health & Safety Section	12,704,354	1,355,984	1,400,000	-	1,495,704	(612,806)
Water Systems Operations		CSS, Fleet Services Unit	7,914,624	455,100	13,100	-	5,164,037	(485,784)
Water Systems Operations		CSS, Power Support Unit	8,336,757	319,000	60,000	-	850,474	(346,482)
Water Systems Operations		Office of the Manager, Operations & Planning Section	742,512	23,000	-	-	81,922	(30,692)
Water Systems Operations		Security Team & Security Management	-	-	-	-	-	-
Sustainability, Resilience & Innovation		Sustainability, Resilience & Innovation	6,291,957	2,930,000	-	-	334,574	(340,290)
Diversity, Equity & Inclusion		Diversity, Equity & Inclusion	1,037,572	400,000	-	-	42,540	(54,040)
Equal Employment Opportunity		Equal Employment Opportunity	1,692,893	400,000	-	-	18,820	(75,428)
Office of the Chief Financial Officer		Office of the Chief Financial Officer	13,622,537	1,640,600	-	-	10,789,506	(935,873)
Business Technology		Office of Manager	-	-	-	-	-	-
Engineering Services		Engineering Services	38,914,338	5,720,600	85,000	-	3,140,219	(1,734,648)
Business Technology		Administrative Services	19,347,106	12,542,350	-	-	2,696,556	(1,244,692)
Business Technology		Information Technology	33,623,620	6,013,854	-	-	12,788,305	(1,885,141)
Water Resources Management		Resource Planning & Development	4,294,502	790,000	-	-	446,265	(203,097)
Water Resources Management		Resource Implementation	10,964,019	1,577,600	-	-	5,114,001	(633,866)
Water Resources Management		Office of the Group Manager	2,531,403	75,000	-	-	77,349	(97,229)
Ethics Office		Ethics Office	2,486,982	270,369	-	-	80,460	(78,538)
Real Property		Real Property	12,329,947	9,146,070	1,742,000	-	6,683,090	(1,070,376)
General Counsel		General Counsel	13,540,273	2,180,000	-	-	569,000	(572,467)
General Auditor		General Auditor	4,256,013	550,000	-	-	104,500	(172,574)
Total Departmental O&M			415,508,552	65,300,765	21,186,766	24,667,134	83,733,522	(21,958,211)
GENERAL DISTRICT REQUIREMENTS								
State Water Contract*								
Supply - O&M		Supply - O&M	-	-	-	-	-	107,000,290
Supply - Capital		Supply - Capital	-	-	-	-	-	85,494,959
Power - O&M & Off-Ag Capital		Power - O&M & Off-Ag Capital	-	-	-	-	-	258,551,833
Power - Capital (less Off-Ag)		Power - Capital (less Off-Ag)	-	-	-	-	-	(3,654,765)
Transmission - Capital - Commodity, Demand, & Standby		Transmission - Capital - Commodity, Demand, & Standby	-	-	-	-	-	80,660,127
Transmission - O&M - Commodity only		Transmission - O&M - Commodity only	-	-	-	-	-	198,687,447
Delta Conveyance - Other		Delta Conveyance - Other	-	-	-	-	-	34,500,000
Total State Water Contract								761,239,991
Colorado River Aqueduct Power Costs								85,626,149
Supply Programs (cash funded portion)								64,100,985
Demand Management (cash funded portion)								
Local Resources Program		Local Resources Program	-	-	-	-	-	21,685,717
Future Supply Actions & Stormwater Pilot		Future Supply Actions & Stormwater Pilot	-	-	-	-	-	2,422,500
Conservation Program (cash funded portion)		Conservation Program (cash funded portion)	-	-	-	-	-	25,000,000
Total Demand Management Costs								49,108,217
Capital Financing								
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		Revenue Bond Debt Service net of BABs Interest Subsidy Payment	-	-	-	-	-	296,356,173
G.O. Bond Debt Service		G.O. Bond Debt Service	-	-	-	-	-	1,965,750
Debt Administration		Debt Administration	-	-	-	-	-	2,703,320
Bond Deleassance		Bond Deleassance	-	-	-	-	-	-
PAYGO		PAYGO	-	-	-	-	-	135,000,000
Total Capital Financing Costs								436,025,242
Other Operating Costs								
Operating Equipment		Operating Equipment	-	-	-	-	-	8,836,761
Succession Planning Labor Pool		Succession Planning Labor Pool	-	-	-	-	-	5,000,000
OPEB/PEPS Pre-Funding		OPEB/PEPS Pre-Funding	-	-	-	-	-	-
Total Other Operating Costs								13,836,761
Increase/(Decrease) in Required Reserves								7,100,000
Total General District Requirements								1,417,037,345
REQUIREMENTS BEFORE OFFSETS:								2,005,495,873
Revenue Offsets								
Property Taxes - MWD Portion of SWC GO Debt Service		Property Taxes - MWD Portion of SWC GO Debt Service	-	-	-	-	-	36,010
Property Taxes - MWD GO Debt Service		Property Taxes - MWD GO Debt Service	-	-	-	-	-	1,965,750
Interest on Investments		Interest on Investments	-	-	-	-	-	9,587,257
Hydro-Power Revenue		Hydro-Power Revenue	-	-	-	-	-	10,710,879
CRA Power Revenue		CRA Power Revenue	-	-	-	-	-	2,989,504
Wadsworth Pumping Plant (DVL) Power Revenue		Wadsworth Pumping Plant (DVL) Power Revenue	-	-	-	-	-	545,067
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)		Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)	-	-	-	-	-	37,575,443
Misc. allocated to supply (PVID Lease)		Misc. allocated to supply (PVID Lease)	-	-	-	-	-	6,048,886
Property Taxes - SWC		Property Taxes - SWC	-	-	-	-	-	166,313,250
Revenue Reserve used for Revenue Bonds - I&P		Revenue Reserve used for Revenue Bonds - I&P	-	-	-	-	-	-
Amortization		Amortization	-	-	-	-	-	-
Total Revenue Offsets								235,772,044
NET REVENUE REQUIREMENTS:								1,769,723,828

NET REVENUE REQUIREMENTS:

1407

1408

		Functionalization	Allocation Percentages					% Total
			Demand	Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		126,151	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Office of General Manager	Board of Directors	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Bay Delta Initiatives	Bay Delta Initiatives	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Legislative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Media Communications Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Manager, External Affairs/Special Projects	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Conservation & Community Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Human Resources		248,648	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager	211,237	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Treatment Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations Support Services	40,748	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Support Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Desert Region / C&D CRA	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	System Operations Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Power Operations and Planning	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Planning & Programs Unit	704,775	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Jensen	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Diemer	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Mills	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Skinner	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Weymouth	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Water Quality Section	3,728,598	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Eastern Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Western Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Manufacturing Services Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Environmental Health & Safety Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Fleet Services Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Power Support Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations & Planning Section	15,136	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Security Team & Security Management	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Sustainability, Resilience & Innovation		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Diversity, Equity & Inclusion		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Equal Employment Opportunity		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Office of the Chief Financial Officer		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Office of Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Engineering Services		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Administrative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Information Technology	808,425	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Planning & Development	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Implementation	2,568,583	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Office of the Group Manager	297,265	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Ethics Office		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Real Property		663,153	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
General Counsel		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
General Auditor		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Departmental O&M		9,412,719	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
GENERAL DISTRICT REQUIREMENTS								
State Water Contract*								
Supply - O&M		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Supply - Capital		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Power - O&M & Off-Aq Capital		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Power - Capital (less Off-Aq)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Transmission - Capital - Commodity, Demand, & Standby		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Transmission - O&M - Commodity only		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Supply		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Power		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Other		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total State Water Contract		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Colorado River Aqueduct Power Costs								
		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Supply Programs (cash funded portion)								
		51,129,998	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Demand Management (cash funded portion)								
Local Resources Program		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Future Supply Actions & Stormwater Pilot		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Conservation Program (cash funded portion)		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Demand Management Costs		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Capital Financing								
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
G.O. Bond Debt Service		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Debt Administration		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Bond Defeasance		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
PAYGO		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total Capital Financing Costs		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Other Operating Costs								
Operating Equipment		141,349	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Succession Planning Labor Pool		79,978	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
OPEB/PERS Pre-Funding		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Other Operating Costs		221,327	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Increase/(Decrease) in Required Reserves								
		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total General District Requirements								
		51,351,324	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
REQUIREMENTS BEFORE OFFSETS:								
		60,764,044	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Revenue Offsets								
Property Taxes - MWD Portion of SWC GO Debt Service		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Property Taxes - MWD GO Debt Service		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Interest on Investments		290,482	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Hydro-Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
CRA Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Wadsworth Pumping Plant (DVL) Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to supply (PVID Lease)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Property Taxes - SWC		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Revenue Reserve used for Revenue Bonds - I&P		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Annexation		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total Revenue Offsets		290,482	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
NET REVENUE REQUIREMENTS:								
		60,473,562	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

	Functionalization	Allocation Percentages					Total
		Demand	Fixed Commodity	Standby	Variable Commodity	Other	
Departmental O&M							
Group	Item						
Office of General Manager		126,151	-	126,151	-	-	126,151
Office of General Manager	Board of Directors	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-
Human Resources		248,648	-	248,648	-	-	248,648
Water Systems Operations	Office of the Manager	211,237	-	211,237	-	-	211,237
Water Systems Operations	Office of the Manager, Conveyance & Distribution S	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations Support Services	40,748	-	40,748	-	-	40,748
Water Systems Operations	Operations Support Services	-	-	-	-	-	-
Water Systems Operations	Desert Region / O&D CRA	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	704,775	-	704,775	-	-	704,775
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	3,728,598	-	3,728,598	-	-	3,728,598
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	-	-	-	-	-	-
Water Systems Operations	Environmental Health & Safety Section	-	-	-	-	-	-
Water Systems Operations	OSS, Fleet Services Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Power Support Unit	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations & Planning Secti	15,136	-	15,136	-	-	15,136
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-
Sustainability, Resilience & Innova		-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-
Office of the Chief Financial Office		-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-
Engineering Services		-	-	-	-	-	-
Business Technology	Administrative Services	-	-	-	-	-	-
Business Technology	Information Technology	808,425	-	808,425	-	-	808,425
Water Resources Management	Resource Planning & Development	-	-	-	-	-	-
Water Resources Management	Resource Implementation	2,568,583	-	2,568,583	-	-	2,568,583
Water Resources Management	Office of the Group Manager	297,265	-	297,265	-	-	297,265
Ethics Office		-	-	-	-	-	-
Real Property		663,153	-	663,153	-	-	663,153
General Counsel		-	-	-	-	-	-
General Auditor		-	-	-	-	-	-
Total Departmental O&M	-	9,412,719	-	9,412,719	-	-	9,412,719
GENERAL DISTRICT REQUIREMENTS							
State Water Contract*	-	-	-	-	-	-	-
Supply - O&M	-	-	-	-	-	-	-
Supply - Capital	-	-	-	-	-	-	-
Power - O&M & Off-Aq Capital	-	-	-	-	-	-	-
Power - Capital (less Off-Aq)	-	-	-	-	-	-	-
Transmission - Capital - Commodity, Demand, & Standby	-	-	-	-	-	-	-
Transmission - O&M - Commodity only	-	-	-	-	-	-	-
Delta Conveyance - Supply	-	-	-	-	-	-	-
Delta Conveyance - Power	-	-	-	-	-	-	-
Delta Conveyance - Other	-	-	-	-	-	-	-
Total State Water Contract	-	-	-	-	-	-	-
Colorado River Aqueduct Power Costs	-	-	-	-	-	-	-
Supply Programs (cash funded portion)	51,129,998	-	51,129,998	-	-	-	51,129,998
Demand Management (cash funded portion)	-	-	-	-	-	-	-
Local Resources Program	-	-	-	-	-	-	-
Future Supply Actions & Stormwater Pilot	-	-	-	-	-	-	-
Conservation Program (cash funded portion)	-	-	-	-	-	-	-
Total Demand Management Costs	-	-	-	-	-	-	-
Capital Financing							
Revenue Bond Debt Service net of BABs Interest Subsidy Payment	-	-	-	-	-	-	-
G.O. Bond Debt Service	-	-	-	-	-	-	-
Debt Administration	-	-	-	-	-	-	-
Bond Defeasance	-	-	-	-	-	-	-
PAYGO	-	-	-	-	-	-	-
Total Capital Financing Costs	-	-	-	-	-	-	-
Other Operating Costs							
Operating Equipment	141,349	-	141,349	-	-	-	141,349
Succession Planning Labor Pool	79,978	-	79,978	-	-	-	79,978
OPEB/PERS Pre-Funding	-	-	-	-	-	-	-
Total Other Operating Costs	221,327	-	221,327	-	-	-	221,327
Increase/(Decrease) in Required Reserves	-	-	-	-	-	-	-
Total General District Requirements	51,351,324	-	51,351,324	-	-	-	51,351,324
REQUIREMENTS BEFORE OFFSETS:	60,764,044	-	60,764,044	-	-	-	60,764,044
Revenue Offsets							
Property Taxes - MWD Portion of SWC GO Debt Service	-	-	-	-	-	-	-
Property Taxes - MWD GO Debt Service	-	-	-	-	-	-	-
Interest on Investments	290,482	-	290,482	-	-	-	290,482
Hydro-Power Revenue	-	-	-	-	-	-	-
CRA Power Revenue	-	-	-	-	-	-	-
Wadsworth Pumping Plant (DVL) Power Revenue	-	-	-	-	-	-	-
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)	-	-	-	-	-	-	-
Misc. allocated to supply (PVID Lease)	-	-	-	-	-	-	-
Property Taxes - SWC	-	-	-	-	-	-	-
Revenue Reserve used for Revenue Bonds - I&P	-	-	-	-	-	-	-
Annexation	-	-	-	-	-	-	-
Total Revenue Offsets	290,482	-	290,482	-	-	-	290,482
NET REVENUE REQUIREMENTS:	60,473,562	-	60,473,562	-	-	-	60,473,562

		Functionalization	Allocation Percentages					Total	
			Fixed			Variable Commodity	Other		Hydroelectric
			Demand	Commodity	Standby				
Departmental O&M									
Group	Item								
Office of General Manager		111,493	-	111,493	-	-	-	111,493	
Office of General Manager	Board of Directors	-	-	-	-	-	-	-	
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-	-	
External Affairs	Legislative Services	-	-	-	-	-	-	-	
External Affairs	Media Communications Services	-	-	-	-	-	-	-	
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-	-	
External Affairs	Conservation & Community Services	-	-	-	-	-	-	-	
Human Resources		195,934	-	195,934	-	-	-	195,934	
Water Systems Operations	Office of the Manager	154,302	-	154,302	-	-	-	154,302	
Water Systems Operations	Office of the Manager, Conveyance & Distribution Sec	-	-	-	-	-	-	-	
Water Systems Operations	Office of the Manager, Treatment Section	-	-	-	-	-	-	-	
Water Systems Operations	Office of the Manager, Operations Support Services	30,946	-	30,946	-	-	-	30,946	
Water Systems Operations	Operations Support Services	-	-	-	-	-	-	-	
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-	-	
Water Systems Operations	System Operations Unit	-	-	-	-	-	-	-	
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-	-	
Water Systems Operations	Operations Planning & Programs Unit	682,632	-	682,632	-	-	-	682,632	
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-	-	
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-	-	
Water Systems Operations	Treatment Mills	-	-	-	-	-	-	-	
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-	-	
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-	-	
Water Systems Operations	Water Quality Section	3,069,113	-	3,069,113	-	-	-	3,069,113	
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-	-	
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-	-	
Water Systems Operations	OSS, Manufacturing Services Unit	-	-	-	-	-	-	-	
Water Systems Operations	Environmental Health & Safety Section	-	-	-	-	-	-	-	
Water Systems Operations	OSS, Fleet Services Unit	-	-	-	-	-	-	-	
Water Systems Operations	OSS, Power Support Unit	-	-	-	-	-	-	-	
Water Systems Operations	Office of the Manager, Operations & Planning Section	13,760	-	13,760	-	-	-	13,760	
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-	-	
Sustainability, Resilience & Innovati		-	-	-	-	-	-	-	
Diversity, Equity & Inclusion		-	-	-	-	-	-	-	
Equal Employment Opportunity		-	-	-	-	-	-	-	
Office of the Chief Financial Officer		-	-	-	-	-	-	-	
Business Technology	Office of Manager	-	-	-	-	-	-	-	
Engineering Services		-	-	-	-	-	-	-	
Business Technology	Administrative Services	-	-	-	-	-	-	-	
Business Technology	Information Technology	537,828	-	537,828	-	-	-	537,828	
Water Resources Management	Resource Planning & Development	-	-	-	-	-	-	-	
Water Resources Management	Resource Implementation	1,654,470	-	1,654,470	-	-	-	1,654,470	
Water Resources Management	Office of the Group Manager	290,930	-	290,930	-	-	-	290,930	
Ethics Office		-	-	-	-	-	-	-	
Real Property		283,589	-	283,589	-	-	-	283,589	
General Counsel		-	-	-	-	-	-	-	
General Auditor		-	-	-	-	-	-	-	
Total Departmental O&M		7,024,998	-	7,024,998	-	-	-	7,024,998	

		Functionalization	Allocation Percentages					% Total
			Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		221,405	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Office of General Manager	Board of Directors	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Bay Delta Initiatives	Bay Delta Initiatives	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Legislative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Media Communications Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Manager, External Affairs/Special Projects	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Conservation & Community Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Human Resources		436,397	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager	211,237	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Treatment Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations Support Services	40,748	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Support Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Desert Region / C&D CRA	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	System Operations Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Power Operations and Planning	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Planning & Programs Unit	704,775	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Jensen	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Diemer	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Mills	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Skinner	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Weymouth	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Water Quality Section	3,728,598	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Eastern Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Western Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Manufacturing Services Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Environmental Health & Safety Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Fleet Services Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Power Support Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations & Planning Section	15,136	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Security Team & Security Management	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Sustainability, Resilience & Innovation		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Diversity, Equity & Inclusion		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Equal Employment Opportunity		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Office of the Chief Financial Officer		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Office of Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Engineering Services		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Administrative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Information Technology	1,418,850	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Planning & Development	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Implementation	7,724,472	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Office of the Group Manager	893,962	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Ethics Office		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Real Property		1,124,477	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
General Counsel		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
General Auditor		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Departmental O&M		16,520,056	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
GENERAL DISTRICT REQUIREMENTS								
State Water Contract*								
Supply - O&M		107,000,290	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Supply - Capital		85,494,959	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Power - O&M & Off-Aq Capital		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Power - Capital (less Off-Aq)		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Transmission - Capital - Commodity, Demand, & Standby		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Transmission - O&M - Commodity only		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Delta Conveyance - Supply		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Delta Conveyance - Power		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Delta Conveyance - Other		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total State Water Contract		192,495,249	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Colorado River Aqueduct Power Costs								
		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Supply Programs (cash funded portion)								
		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Demand Management (cash funded portion)								
Local Resources Program		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Future Supply Actions & Stormwater Pilot		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Conservation Program (cash funded portion)		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Demand Management Costs		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Capital Financing								
		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
G.O. Bond Debt Service		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Debt Administration		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Bond Defeasance		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
PAYGO		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total Capital Financing Costs		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Other Operating Costs								
Operating Equipment		248,078	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Succession Planning Labor Pool		140,367	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
OPEB/PERS Pre-Funding		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Other Operating Costs		388,445	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Increase/(Decrease) in Required Reserves								
		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total General District Requirements								
		192,883,694	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
REQUIREMENTS BEFORE OFFSETS:								
		209,403,750	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Revenue Offsets								
Property Taxes - MWD Portion of SWC GO Debt Service		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Property Taxes - MWD GO Debt Service		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Interest on Investments		1,001,053	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Hydro-Power Revenue		-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
CRA Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Wadsworth Pumping Plant (DVL) Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to supply (PVID Lease)		6,048,886	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Property Taxes - SWC		44,052,221	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Revenue Reserve used for Revenue Bonds - I&P		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Annexation		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total Revenue Offsets		51,102,159	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
NET REVENUE REQUIREMENTS:								
-		158,301,591	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

	Functionalization	Allocation Percentages					Total
		Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M							
Group	Item						
Office of General Manager		221,405	-	221,405	-	-	221,405
Office of General Manager	Board of Directors	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-
Human Resources		436,397	-	436,397	-	-	436,397
Water Systems Operations	Office of the Manager	211,237	-	211,237	-	-	211,237
Water Systems Operations	Office of the Manager, Conveyance & Distribution S	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations Support Services	40,748	-	40,748	-	-	40,748
Water Systems Operations	Operations Support Services	-	-	-	-	-	-
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	704,775	-	704,775	-	-	704,775
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	3,728,598	-	3,728,598	-	-	3,728,598
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	-	-	-	-	-	-
Water Systems Operations	Environmental Health & Safety Section	-	-	-	-	-	-
Water Systems Operations	OSS, Fleet Services Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Power Support Unit	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations & Planning Secti	15,136	-	15,136	-	-	15,136
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-
Sustainability, Resilience & Inn		-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-
Engineering Services		-	-	-	-	-	-
Business Technology	Administrative Services	-	-	-	-	-	-
Business Technology	Information Technology	1,418,850	-	1,418,850	-	-	1,418,850
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	7,724,472	-	7,724,472	-	-	7,724,472
Water Resources Managemen	Office of the Group Manager	893,962	-	893,962	-	-	893,962
Ethics Office		-	-	-	-	-	-
Real Property		1,124,477	-	1,124,477	-	-	1,124,477
General Counsel		-	-	-	-	-	-
General Auditor		-	-	-	-	-	-
Total Departmental O&M		16,520,056	-	16,520,056	-	-	16,520,056
GENERAL DISTRICT REQUIREMENTS		-	-	-	-	-	-
State Water Contract*		-	-	-	-	-	-
Supply - O&M		107,000,290	-	107,000,290	-	-	107,000,290
Supply - Capital		85,494,959	-	85,494,959	-	-	85,494,959
Power - O&M & Off-Aq Capital		-	-	-	-	-	-
Power - Capital (less Off-Aq)		-	-	-	-	-	-
Transmission - Capital - Commodity, Demand, & Standby		-	-	-	-	-	-
Transmission - O&M - Commodity only		-	-	-	-	-	-
Delta Conveyance - Supply		-	-	-	-	-	-
Delta Conveyance - Power		-	-	-	-	-	-
Delta Conveyance - Other		-	-	-	-	-	-
Total State Water Contract		192,495,249	-	192,495,249	-	-	192,495,249
Colorado River Aqueduct Power Costs		-	-	-	-	-	-
Supply Programs (cash funded portion)		-	-	-	-	-	-
Demand Management (cash funded portion)		-	-	-	-	-	-
Local Resources Program		-	-	-	-	-	-
Future Supply Actions & Stormwater Pilot		-	-	-	-	-	-
Conservation Program (cash funded portion)		-	-	-	-	-	-
Total Demand Management Costs		-	-	-	-	-	-
Capital Financing		-	-	-	-	-	-
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		-	-	-	-	-	-
G.O. Bond Debt Service		-	-	-	-	-	-
Debt Administration		-	-	-	-	-	-
Bond Defeasance		-	-	-	-	-	-
PAYGO		-	-	-	-	-	-
Total Capital Financing Costs		-	-	-	-	-	-
Other Operating Costs		-	-	-	-	-	-
Operating Equipment		248,078	-	248,078	-	-	248,078
Succession Planning Labor Pool		140,367	-	140,367	-	-	140,367
OPEB/PERS Pre-Funding		-	-	-	-	-	-
Total Other Operating Costs		388,445	-	388,445	-	-	388,445
Increase/(Decrease) in Required Reserves		-	-	-	-	-	-
Total General District Requirements		192,883,694	-	192,883,694	-	-	192,883,694
REQUIREMENTS BEFORE OFFSETS:		209,403,750	-	209,403,750	-	-	209,403,750
Revenue Offsets		-	-	-	-	-	-
Property Taxes - MWD Portion of SWC GO Debt Service		-	-	-	-	-	-
Property Taxes - MWD GO Debt Service		-	-	-	-	-	-
Interest on Investments		1,001,053	-	1,001,053	-	-	1,001,053
Hydro-Power Revenue		-	-	-	-	-	-
CRA Power Revenue		-	-	-	-	-	-
Wadsworth Pumping Plant (DVL) Power Revenue		-	-	-	-	-	-
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)		-	-	-	-	-	-
Misc. allocated to supply (PVID Lease)		6,048,886	-	6,048,886	-	-	6,048,886
Property Taxes - SWC		44,052,221	-	44,052,221	-	-	44,052,221
Revenue Reserve used for Revenue Bonds - I&P		-	-	-	-	-	-
Annexation		-	-	-	-	-	-
Total Revenue Offsets		51,102,159	-	51,102,159	-	-	51,102,159
NET REVENUE REQUIREMENTS:		158,301,591	-	158,301,591	-	-	158,301,591

	Functionalization	Allocation Percentages					Total
		Fixed			Variable		
		Demand	Commodity	Standby	Commodity	Hydroelectric	
Departmental O&M							
Group	Item						
Office of General Manager		195,679	-	195,679	-	-	195,679
Office of General Manager	Board of Directors	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-
Human Resources		343,879	-	343,879	-	-	343,879
Water Systems Operations	Office of the Manager	154,302	-	154,302	-	-	154,302
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations Support Services	30,946	-	30,946	-	-	30,946
Water Systems Operations	Operations Support Services	-	-	-	-	-	-
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	682,632	-	682,632	-	-	682,632
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	3,069,113	-	3,069,113	-	-	3,069,113
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	-	-	-	-	-	-
Water Systems Operations	Environmental Health & Safety Section	-	-	-	-	-	-
Water Systems Operations	OSS, Fleet Services Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Power Support Unit	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations & Planning Section	13,760	-	13,760	-	-	13,760
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-
Sustainability, Resilience & Inr		-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-
Engineering Services		-	-	-	-	-	-
Business Technology	Administrative Services	-	-	-	-	-	-
Business Technology	Information Technology	943,931	-	943,931	-	-	943,931
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	4,975,472	-	4,975,472	-	-	4,975,472
Water Resources Managemen	Office of the Group Manager	874,911	-	874,911	-	-	874,911
Ethics Office		-	-	-	-	-	-
Real Property		480,868	-	480,868	-	-	480,868
General Counsel		-	-	-	-	-	-
General Auditor		-	-	-	-	-	-
Total Departmental O&M	-	11,765,492	-	11,765,492	-	-	11,765,492

		Functionalization	Allocation Percentages					% Total
			Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		192,094	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Office of General Manager	Board of Directors	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Bay Delta Initiatives	Bay Delta Initiatives	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Legislative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Media Communications Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Manager, External Affairs/Special Projects	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Conservation & Community Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Human Resources		378,624	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager	211,237	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Treatment Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations Support Services	40,748	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Support Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Desert Region / C&D CRA	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	System Operations Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Power Operations and Planning	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Planning & Programs Unit	704,775	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Jensen	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Diemer	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Mills	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Skinner	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Weymouth	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Water Quality Section	3,728,598	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Eastern Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Western Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Manufacturing Services Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Environmental Health & Safety Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Fleet Services Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Power Support Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations & Planning Section	15,136	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Security Team & Security Management	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Sustainability, Resilience & Innovation		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Diversity, Equity & Inclusion		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Equal Employment Opportunity		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Office of the Chief Financial Officer		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Office of Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Engineering Services		1,835,795	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Administrative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Information Technology	1,231,012	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Planning & Development	4,619,090	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Implementation	754,064	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Office of the Group Manager	621,841	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Ethics Office		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Real Property		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
General Counsel		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
General Auditor		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Departmental O&M		14,333,014	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
GENERAL DISTRICT REQUIREMENTS								
State Water Contract*								
Supply - O&M		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Supply - Capital		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Power - O&M & Off-Aq Capital		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Power - Capital (less Off-Aq)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Transmission - Capital - Commodity, Demand, & Standby		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Transmission - O&M - Commodity only		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Supply		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Power		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Other		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total State Water Contract		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Colorado River Aqueduct Power Costs								
		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Supply Programs (cash funded portion)								
		1,250,000	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Demand Management (cash funded portion)								
Local Resources Program		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Future Supply Actions & Stormwater Pilot		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Conservation Program (cash funded portion)		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Demand Management Costs		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Capital Financing								
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		11,794,976	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%
G.O. Bond Debt Service		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Debt Administration		107,592	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Bond Defeasance		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
PAYGO		5,373,000	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Capital Financing Costs		17,275,568	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Other Operating Costs								
Operating Equipment		215,236	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Succession Planning Labor Pool		121,784	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
OPEB/PERS Pre-Funding		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Other Operating Costs		337,020	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Increase/(Decrease) in Required Reserves								
		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total General District Requirements								
		18,862,588	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
REQUIREMENTS BEFORE OFFSETS:								
		33,195,602	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Revenue Offsets								
Property Taxes - MWD Portion of SWC GO Debt Service		-	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Property Taxes - MWD GO Debt Service		-	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Interest on Investments		158,691	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Hydro-Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
CRA Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Wadsworth Pumping Plant (DVL) Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to supply (PVID Lease)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Property Taxes - SWC		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Revenue Reserve used for Revenue Bonds - I&P		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Annexation		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total Revenue Offsets		158,691	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
NET REVENUE REQUIREMENTS:								
	-	33,036,911	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

	Functionalization	Allocation Percentages					Total
		Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M							
Group	Item						
Office of General Manager		192,094	-	192,094	-	-	192,094
Office of General Manager	Board of Directors	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-
Human Resources		378,624	-	378,624	-	-	378,624
Water Systems Operations	Office of the Manager	211,237	-	211,237	-	-	211,237
Water Systems Operations	Office of the Manager, Conveyance & Distribution S	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations Support Services	40,748	-	40,748	-	-	40,748
Water Systems Operations	Operations Support Services	-	-	-	-	-	-
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	704,775	-	704,775	-	-	704,775
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	3,728,598	-	3,728,598	-	-	3,728,598
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	-	-	-	-	-	-
Water Systems Operations	Environmental Health & Safety Section	-	-	-	-	-	-
Water Systems Operations	OSS, Fleet Services Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Power Support Unit	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations & Planning Secti	15,136	-	15,136	-	-	15,136
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-
Sustainability, Resilience & Inn		-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-
Engineering Services		1,835,795	-	1,835,795	-	-	1,835,795
Business Technology	Administrative Services	-	-	-	-	-	-
Business Technology	Information Technology	1,231,012	-	1,231,012	-	-	1,231,012
Water Resources Managemen	Resource Planning & Development	4,619,090	-	4,619,090	-	-	4,619,090
Water Resources Managemen	Resource Implementation	754,064	-	754,064	-	-	754,064
Water Resources Managemen	Office of the Group Manager	621,841	-	621,841	-	-	621,841
Ethics Office		-	-	-	-	-	-
Real Property		-	-	-	-	-	-
General Counsel		-	-	-	-	-	-
General Auditor		-	-	-	-	-	-
Total Departmental O&M		14,333,014	-	14,333,014	-	-	14,333,014
GENERAL DISTRICT REQUIREMENTS		-	-	-	-	-	-
State Water Contract*		-	-	-	-	-	-
Supply - O&M		-	-	-	-	-	-
Supply - Capital		-	-	-	-	-	-
Power - O&M & Off-Aq Capital		-	-	-	-	-	-
Power - Capital (less Off-Aq)		-	-	-	-	-	-
Transmission - Capital - Commodity, Demand, & Standby		-	-	-	-	-	-
Transmission - O&M - Commodity only		-	-	-	-	-	-
Delta Conveyance - Supply		-	-	-	-	-	-
Delta Conveyance - Power		-	-	-	-	-	-
Delta Conveyance - Other		-	-	-	-	-	-
Total State Water Contract		-	-	-	-	-	-
Colorado River Aqueduct Power Costs		-	-	-	-	-	-
Supply Programs (cash funded portion)		1,250,000	-	1,250,000	-	-	1,250,000
Demand Management (cash funded portion)		-	-	-	-	-	-
Local Resources Program		-	-	-	-	-	-
Future Supply Actions & Stormwater Pilot		-	-	-	-	-	-
Conservation Program (cash funded portion)		-	-	-	-	-	-
Total Demand Management Costs		-	-	-	-	-	-
Capital Financing		-	-	-	-	-	-
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		11,794,976	-	11,794,976	-	-	11,794,976
G.O. Bond Debt Service		-	-	-	-	-	-
Debt Administration		107,592	-	107,592	-	-	107,592
Bond Defeasance		-	-	-	-	-	-
PAYGO		5,373,000	-	5,373,000	-	-	5,373,000
Total Capital Financing Costs		17,275,568	-	17,275,568	-	-	17,275,568
Other Operating Costs		-	-	-	-	-	-
Operating Equipment		215,236	-	215,236	-	-	215,236
Succession Planning Labor Pool		121,784	-	121,784	-	-	121,784
OPEB/PERS Pre-Funding		-	-	-	-	-	-
Total Other Operating Costs		337,020	-	337,020	-	-	337,020
Increase/(Decrease) in Required Reserves		-	-	-	-	-	-
Total General District Requirements		18,862,588	-	18,862,588	-	-	18,862,588
REQUIREMENTS BEFORE OFFSETS:		33,195,602	-	33,195,602	-	-	33,195,602
Revenue Offsets		-	-	-	-	-	-
Property Taxes - MWD Portion of SWC GO Debt Service		-	-	-	-	-	-
Property Taxes - MWD GO Debt Service		-	-	-	-	-	-
Interest on Investments		158,691	-	158,691	-	-	158,691
Hydro-Power Revenue		-	-	-	-	-	-
CRA Power Revenue		-	-	-	-	-	-
Wadsworth Pumping Plant (DVL) Power Revenue		-	-	-	-	-	-
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)		-	-	-	-	-	-
Misc. allocated to supply (PVID Lease)		-	-	-	-	-	-
Property Taxes - SWC		-	-	-	-	-	-
Revenue Reserve used for Revenue Bonds - I&P		-	-	-	-	-	-
Annexation		-	-	-	-	-	-
Total Revenue Offsets		158,691	-	158,691	-	-	158,691
NET REVENUE REQUIREMENTS:		33,036,911	-	33,036,911	-	-	33,036,911

		Functionalization	Allocation Percentages					Total
			Fixed			Variable		
			Demand	Commodity	Standby	Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		169,773	-	169,773	-	-	-	169,773
Office of General Manager	Board of Directors	-	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-	-
Human Resources		298,354	-	298,354	-	-	-	298,354
Water Systems Operations	Office of the Manager	154,302	-	154,302	-	-	-	154,302
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations Support Services	30,946	-	30,946	-	-	-	30,946
Water Systems Operations	Operations Support Services	-	-	-	-	-	-	-
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	682,632	-	682,632	-	-	-	682,632
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	3,069,113	-	3,069,113	-	-	-	3,069,113
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	-	-	-	-	-	-	-
Water Systems Operations	Environmental Health & Safety Section	-	-	-	-	-	-	-
Water Systems Operations	OSS, Fleet Services Unit	-	-	-	-	-	-	-
Water Systems Operations	OSS, Power Support Unit	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations & Planning Section	13,760	-	13,760	-	-	-	13,760
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-	-
Sustainability, Resilience & Inr		-	-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-	-
Engineering Services		1,548,791	-	1,548,791	-	-	-	1,548,791
Business Technology	Administrative Services	-	-	-	-	-	-	-
Business Technology	Information Technology	818,966	-	818,966	-	-	-	818,966
Water Resources Managemen	Resource Planning & Development	3,723,333	-	3,723,333	-	-	-	3,723,333
Water Resources Managemen	Resource Implementation	485,706	-	485,706	-	-	-	485,706
Water Resources Managemen	Office of the Group Manager	608,589	-	608,589	-	-	-	608,589
Ethics Office		-	-	-	-	-	-	-
Real Property		-	-	-	-	-	-	-
General Counsel		-	-	-	-	-	-	-
General Auditor		-	-	-	-	-	-	-
Total Departmental O&M		11,604,266	-	11,604,266	-	-	-	11,604,266

		Functionalization	Allocation Percentages					% Total
			Demand	Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
	Office of General Manager	48,230	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Office of General Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Bay Delta Initiatives	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	External Affairs	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	External Affairs	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	External Affairs	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	External Affairs	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Human Resources	95,062	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	102,601	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	19,792	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	1,236,556	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%					

		Functionalization	Allocation Percentages					Total
			Demand	Fixed		Variable Commodity	Hydroelectric	
				Commodity	Standby			
Departmental O&M								
Group	Item							
Office of General Manager		48,230	-	48,230	-	-	-	48,230
Office of General Manager	Board of Directors	-	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-	-
Human Resources		95,062	-	95,062	-	-	-	95,062
Water Systems Operations	Office of the Manager	102,601	-	102,601	-	-	-	102,601
Water Systems Operations	Office of the Manager, Conveyance & Distribution S	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations Support Services	19,792	-	19,792	-	-	-	19,792
Water Systems Operations	Operations Support Services	-	-	-	-	-	-	-
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	1,236,556	-	1,236,556	-	-	-	1,236,556
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	-	-	-	-	-	-	-
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	-	-	-	-	-	-	-
Water Systems Operations	Environmental Health & Safety Section	-	-	-	-	-	-	-
Water Systems Operations	OSS, Fleet Services Unit	-	-	-	-	-	-	-
Water Systems Operations	OSS, Power Support Unit	834,387	-	834,387	-	-	-	834,387
Water Systems Operations	Office of the Manager, Operations & Planning Secti	7,352	-	7,352	-	-	-	7,352
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-	-
Sustainability, Resilience & Inn		-	-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-	-
Engineering Services		945,573	-	945,573	-	-	-	945,573
Business Technology	Administrative Services	-	-	-	-	-	-	-
Business Technology	Information Technology	309,073	-	309,073	-	-	-	309,073
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	-	-	-	-	-	-	-
Water Resources Managemen	Office of the Group Manager	-	-	-	-	-	-	-
Ethics Office		-	-	-	-	-	-	-
Real Property		-	-	-	-	-	-	-
General Counsel		-	-	-	-	-	-	-
General Auditor		-	-	-	-	-	-	-
Total Departmental O&M	-	3,598,625	-	3,598,625	-	-	-	3,598,625
GENERAL DISTRICT REQUIREMENTS		-	-	-	-	-	-	-
State Water Contract*		-	-	-	-	-	-	-
Supply - O&M		-	-	-	-	-	-	-
Supply - Capital		-	-	-	-	-	-	-
Power - O&M & Off-Aq Capital		-	-	-	-	-	-	-
Power - Capital (less Off-Aq)		-	-	-	-	-	-	-
Transmission - Capital - Commodity, Demand, & Standby		-	-	-	-	-	-	-
Transmission - O&M - Commodity only		-	-	-	-	-	-	-
Delta Conveyance - Supply		-	-	-	-	-	-	-
Delta Conveyance - Power		-	-	-	-	-	-	-
Delta Conveyance - Other		-	-	-	-	-	-	-
Total State Water Contract		-	-	-	-	-	-	-
Colorado River Aqueduct Power Costs		85,626,149	-	-	-	85,626,149	-	85,626,149
Supply Programs (cash funded portion)		-	-	-	-	-	-	-
Demand Management (cash funded portion)		-	-	-	-	-	-	-
Local Resources Program		-	-	-	-	-	-	-
Future Supply Actions & Stormwater Pilot		-	-	-	-	-	-	-
Conservation Program (cash funded portion)		-	-	-	-	-	-	-
Total Demand Management Costs		-	-	-	-	-	-	-
Capital Financing		-	-	-	-	-	-	-
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		6,075,302	-	6,075,302	-	-	-	6,075,302
G.O. Bond Debt Service		-	-	-	-	-	-	-
Debt Administration		55,418	-	55,418	-	-	-	55,418
Bond Defeasance		-	-	-	-	-	-	-
PAYGO		2,767,500	-	2,767,500	-	-	-	2,767,500
Total Capital Financing Costs		8,898,220	-	8,898,220	-	-	-	8,898,220
Other Operating Costs		-	-	-	-	-	-	-
Operating Equipment		54,040	-	54,040	-	-	-	54,040
Succession Planning Labor Pool		30,577	-	30,577	-	-	-	30,577
OPEB/PERS Pre-Funding		-	-	-	-	-	-	-
Total Other Operating Costs		84,617	-	84,617	-	-	-	84,617
Increase/(Decrease) in Required Reserves		-	-	-	-	-	-	-
Total General District Requirements		94,608,985	-	8,982,836	-	85,626,149	-	94,608,985
REQUIREMENTS BEFORE OFFSETS:		98,207,610	-	12,581,461	-	85,626,149	-	98,207,610
Revenue Offsets								
Property Taxes - MWD Portion of SWC GO Debt Service		-	-	-	-	-	-	-
Property Taxes - MWD GO Debt Service		-	-	-	-	-	-	-
Interest on Investments		469,481	-	-	-	469,481	-	469,481
Hydro-Power Revenue		-	-	-	-	-	-	-
CRA Power Revenue		2,989,504	-	-	-	2,989,504	-	2,989,504
Wadsworth Pumping Plant (DVL) Power Revenue		-	-	-	-	-	-	-
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)		-	-	-	-	-	-	-
Misc. allocated to supply (PVID Lease)		-	-	-	-	-	-	-
Property Taxes - SWC		-	-	-	-	-	-	-
Revenue Reserve used for Revenue Bonds - I&P		-	-	-	-	-	-	-
Annexation		-	-	-	-	-	-	-
Total Revenue Offsets		3,458,985	-	-	-	3,458,985	-	3,458,985
NET REVENUE REQUIREMENTS:		94,748,625	-	12,581,461	-	82,167,164	-	94,748,625

		Functionalization	Allocation Percentages					Total
			Fixed			Variable		
			Demand	Commodity	Standby	Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		42,625	-	42,625	-	-	-	42,625
Office of General Manager	Board of Directors	-	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-	-
Human Resources		74,908	-	74,908	-	-	-	74,908
Water Systems Operations	Office of the Manager	74,947	-	74,947	-	-	-	74,947
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations Support Services	15,031	-	15,031	-	-	-	15,031
Water Systems Operations	Operations Support Services	-	-	-	-	-	-	-
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	1,067,798	-	1,067,798	-	-	-	1,067,798
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	-	-	-	-	-	-	-
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	-	-	-	-	-	-	-
Water Systems Operations	Environmental Health & Safety Section	-	-	-	-	-	-	-
Water Systems Operations	OSS, Fleet Services Unit	-	-	-	-	-	-	-
Water Systems Operations	OSS, Power Support Unit	754,477	-	754,477	-	-	-	754,477
Water Systems Operations	Office of the Manager, Operations & Planning Section	6,684	-	6,684	-	-	-	6,684
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-	-
Sustainability, Resilience & Inr		-	-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-	-
Engineering Services		797,744	-	797,744	-	-	-	797,744
Business Technology	Administrative Services	-	-	-	-	-	-	-
Business Technology	Information Technology	205,620	-	205,620	-	-	-	205,620
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	-	-	-	-	-	-	-
Water Resources Managemen	Office of the Group Manager	-	-	-	-	-	-	-
Ethics Office		-	-	-	-	-	-	-
Real Property		-	-	-	-	-	-	-
General Counsel		-	-	-	-	-	-	-
General Auditor		-	-	-	-	-	-	-
Total Departmental O&M	-	3,039,833	-	3,039,833	-	-	-	3,039,833

		Functionalization	Allocation Percentages					% Total
			Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
	Office of General Manager	731,451	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Office of General Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Bay Delta Initiatives	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	External Affairs	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	External Affairs	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	External Affairs	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	External Affairs	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Human Resources	1,441,715	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	1,816,103	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	444,355	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	350,334	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	208,653	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	33,392,810	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%

	Functionalization	Allocation Percentages					Total
		Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M							
Group	Item						
Office of General Manager		731,451	-	731,451	-	-	731,451
Office of General Manager	Board of Directors	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-
Human Resources		1,441,715	-	1,441,715	-	-	1,441,715
Water Systems Operations	Office of the Manager	1,816,103	-	1,816,103	-	-	1,816,103
Water Systems Operations	Office of the Manager, Conveyance & Distribution S	444,355	-	444,355	-	-	444,355
Water Systems Operations	Office of the Manager, Treatment Section	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations Support Services	350,334	-	350,334	-	-	350,334
Water Systems Operations	Operations Support Services	208,653	-	208,653	-	-	208,653
Water Systems Operations	Desert Region / C&D CRA	33,392,810	-	33,392,810	-	-	33,392,810
Water Systems Operations	System Operations Unit	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	-	-	-	-	-	-
Water Systems Operations	C&D, Eastern Unit	1,077,165	-	1,077,165	-	-	1,077,165
Water Systems Operations	C&D, Western Unit	340	-	340	-	-	340
Water Systems Operations	OSS, Manufacturing Services Unit	413,132	-	413,132	-	-	413,132
Water Systems Operations	Environmental Health & Safety Section	2,502,149	-	2,502,149	-	-	2,502,149
Water Systems Operations	OSS, Fleet Services Unit	1,884,713	-	1,884,713	-	-	1,884,713
Water Systems Operations	OSS, Power Support Unit	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations & Planning Secti	-	-	-	-	-	-
Water Systems Operations	Security Team & Security Management	130,130	-	130,130	-	-	130,130
Sustainability, Resilience & Inn		-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-
Engineering Services		1,402,215	-	1,402,215	-	-	1,402,215
Business Technology	Administrative Services	-	-	-	-	-	-
Business Technology	Information Technology	4,687,421	-	4,687,421	-	-	4,687,421
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	-	-	-	-	-	-
Water Resources Managemen	Office of the Group Manager	-	-	-	-	-	-
Ethics Office		-	-	-	-	-	-
Real Property		4,094,248	-	4,094,248	-	-	4,094,248
General Counsel		-	-	-	-	-	-
General Auditor		-	-	-	-	-	-
Total Departmental O&M		54,576,937	-	54,576,937	-	-	54,576,937
GENERAL DISTRICT REQUIREMENTS		-	-	-	-	-	-
State Water Contract*		-	-	-	-	-	-
Supply - O&M		-	-	-	-	-	-
Supply - Capital		-	-	-	-	-	-
Power - O&M & Off-Aq Capital		-	-	-	-	-	-
Power - Capital (less Off-Aq)		-	-	-	-	-	-
Transmission - Capital - Commodity, Demand, & Standby		-	-	-	-	-	-
Transmission - O&M - Commodity only		-	-	-	-	-	-
Delta Conveyance - Supply		-	-	-	-	-	-
Delta Conveyance - Power		-	-	-	-	-	-
Delta Conveyance - Other		-	-	-	-	-	-
Total State Water Contract		-	-	-	-	-	-
Colorado River Aqueduct Power Costs		-	-	-	-	-	-
Supply Programs (cash funded portion)		-	-	-	-	-	-
Demand Management (cash funded portion)		-	-	-	-	-	-
Local Resources Program		-	-	-	-	-	-
Future Supply Actions & Stormwater Pilot		-	-	-	-	-	-
Conservation Program (cash funded portion)		-	-	-	-	-	-
Total Demand Management Costs		-	-	-	-	-	-
Capital Financing		-	-	-	-	-	-
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		9,009,228	726,896	4,275,857	4,006,475	-	9,009,228
G.O. Bond Debt Service		-	-	-	-	-	-
Debt Administration		82,181	6,631	39,004	36,547	-	82,181
Bond Defeasance		-	-	-	-	-	-
PAYGO		4,104,000	331,125	1,947,794	1,825,082	-	4,104,000
Total Capital Financing Costs		13,195,409	1,064,651	6,262,654	5,868,103	-	13,195,409
Other Operating Costs		-	-	-	-	-	-
Operating Equipment		819,571	-	819,571	-	-	819,571
Succession Planning Labor Pool		463,728	-	463,728	-	-	463,728
OPEB/PERS Pre-Funding		-	-	-	-	-	-
Total Other Operating Costs		1,283,299	-	1,283,299	-	-	1,283,299
Increase/(Decrease) in Required Reserves		-	-	-	-	-	-
Total General District Requirements		14,478,707	1,064,651	7,545,953	5,868,103	-	14,478,707
REQUIREMENTS BEFORE OFFSETS:		69,055,644	1,064,651	62,122,889	5,868,103	-	69,055,644
Revenue Offsets		-	-	-	-	-	-
Property Taxes - MWD Portion of SWC GO Debt Service		-	-	-	-	-	-
Property Taxes - MWD GO Debt Service		-	-	-	-	-	-
Interest on Investments		330,120	26,635	156,678	146,807	-	330,120
Hydro-Power Revenue		-	-	-	-	-	-
CRA Power Revenue		-	-	-	-	-	-
Wadsworth Pumping Plant (DVL) Power Revenue		-	-	-	-	-	-
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)		-	-	-	-	-	-
Misc. allocated to supply (PVID Lease)		-	-	-	-	-	-
Property Taxes - SWC		-	-	-	-	-	-
Revenue Reserve used for Revenue Bonds - I&P		-	-	-	-	-	-
Annexation		-	-	-	-	-	-
Total Revenue Offsets		330,120	26,635	156,678	146,807	-	330,120
NET REVENUE REQUIREMENTS:		68,725,524	1,038,016	61,966,211	5,721,296	-	68,725,524

	Functionalization	Allocation Percentages					Total
		Fixed			Variable		
		Demand	Commodity	Standby	Commodity	Hydroelectric	
Departmental O&M							
Group	Item						
Office of General Manager		646,460	-	646,460	-	-	646,460
Office of General Manager	Board of Directors	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-
Human Resources		1,136,065	-	1,136,065	-	-	1,136,065
Water Systems Operations	Office of the Manager	1,326,608	-	1,326,608	-	-	1,326,608
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	434,637	-	434,637	-	-	434,637
Water Systems Operations	Office of the Manager, Treatment Section	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations Support Services	266,060	-	266,060	-	-	266,060
Water Systems Operations	Operations Support Services	189,075	-	189,075	-	-	189,075
Water Systems Operations	Desert Region / C&D CRA	27,406,997	-	27,406,997	-	-	27,406,997
Water Systems Operations	System Operations Unit	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	-	-	-	-	-	-
Water Systems Operations	C&D, Eastern Unit	757,952	-	757,952	-	-	757,952
Water Systems Operations	C&D, Western Unit	254	-	254	-	-	254
Water Systems Operations	OSS, Manufacturing Services Unit	379,508	-	379,508	-	-	379,508
Water Systems Operations	Environmental Health & Safety Section	1,945,037	-	1,945,037	-	-	1,945,037
Water Systems Operations	OSS, Fleet Services Unit	1,142,080	-	1,142,080	-	-	1,142,080
Water Systems Operations	OSS, Power Support Unit	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations & Planning Section	118,303	-	118,303	-	-	118,303
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-
Sustainability, Resilience & Inr		-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-
Engineering Services		1,182,996	-	1,182,996	-	-	1,182,996
Business Technology	Administrative Services	-	-	-	-	-	-
Business Technology	Information Technology	3,118,443	-	3,118,443	-	-	3,118,443
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	-	-	-	-	-	-
Water Resources Managemen	Office of the Group Manager	-	-	-	-	-	-
Ethics Office		-	-	-	-	-	-
Real Property		1,750,852	-	1,750,852	-	-	1,750,852
General Counsel		-	-	-	-	-	-
General Auditor		-	-	-	-	-	-
Total Departmental O&M	-	41,801,327	-	41,801,327	-	-	41,801,327

		Functionalization	Allocation Percentages					% Total
			Demand	Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Office of General Manager	Board of Directors	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Bay Delta Initiatives	Bay Delta Initiatives	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Legislative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Media Communications Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Manager, External Affairs/Special Projects	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Conservation & Community Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Human Resources		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Treatment Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations Support Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Support Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Desert Region / C&D CRA	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	System Operations Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Power Operations and Planning	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Planning & Programs Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Jensen	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Diemer	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Mills	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Skinner	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Weymouth	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Water Quality Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Eastern Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Western Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Manufacturing Services Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Environmental Health & Safety Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Fleet Services Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Power Support Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations & Planning Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Security Team & Security Management	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Sustainability, Resilience & Innovation		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Diversity, Equity & Inclusion		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Equal Employment Opportunity		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Office of the Chief Financial Officer		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Office of Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Engineering Services		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Administrative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Information Technology	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Planning & Development	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Implementation	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Office of the Group Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Ethics Office		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Real Property		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
General Counsel		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
General Auditor		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Departmental O&M		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
GENERAL DISTRICT REQUIREMENTS								
State Water Contract*								
Supply - O&M		-	0.0%	0.0%	0.0%	100.0%	0.0%	100.0%
Supply - Capital		-	0.0%	0.0%	0.0%	100.0%	0.0%	100.0%
Power - O&M & Off-Aq Capital	258,551,933	-	0.0%	0.0%	0.0%	100.0%	0.0%	100.0%
Power - Capital (less Off-Aq)	(3,654,765)	-	0.0%	0.0%	0.0%	100.0%	0.0%	100.0%
Transmission - Capital - Commodity, Demand, & Standby		-	0.0%	0.0%	0.0%	100.0%	0.0%	100.0%
Transmission - O&M - Commodity only		-	0.0%	0.0%	0.0%	100.0%	0.0%	100.0%
Delta Conveyance - Supply		-	0.0%	0.0%	0.0%	100.0%	0.0%	100.0%
Delta Conveyance - Power		-	0.0%	0.0%	0.0%	100.0%	0.0%	100.0%
Delta Conveyance - Other		-	0.0%	0.0%	0.0%	100.0%	0.0%	100.0%
Total State Water Contract	254,897,168	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Colorado River Aqueduct Power Costs			-	0.0%	0.0%	0.0%	0.0%	0.0%
Supply Programs (cash funded portion)			-	0.0%	0.0%	0.0%	0.0%	0.0%
Demand Management (cash funded portion)			-	0.0%	0.0%	0.0%	0.0%	0.0%
Local Resources Program		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Future Supply Actions & Stormwater Pilot		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Conservation Program (cash funded portion)		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Demand Management Costs		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Capital Financing			-	0.0%	0.0%	0.0%	0.0%	0.0%
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
G.O. Bond Debt Service		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Debt Administration		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Bond Defeasance		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
PAYGO		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total Capital Financing Costs		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Other Operating Costs								
Operating Equipment		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Succession Planning Labor Pool		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
OPEB/PERS Pre-Funding		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Other Operating Costs		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Increase/(Decrease) in Required Reserves			-	0.0%	0.0%	100.0%	0.0%	100.0%
Total General District Requirements			254,897,168	0.0%	0.0%	0.0%	0.0%	0.0%
REQUIREMENTS BEFORE OFFSETS:			254,897,168	0.0%	0.0%	0.0%	0.0%	0.0%
Revenue Offsets								
Property Taxes - MWD Portion of SWC GO Debt Service		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Property Taxes - MWD GO Debt Service		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Interest on Investments	1,218,534	-	0.0%	0.0%	0.0%	100.0%	0.0%	100.0%
Hydro-Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
CRA Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Wadsworth Pumping Plant (DVL) Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to supply (PVID Lease)		-	0.0%	0.0%	0.0%	100.0%	0.0%	100.0%
Property Taxes - SWC	58,332,797	-	0.0%	0.0%	0.0%	100.0%	0.0%	100.0%
Revenue Reserve used for Revenue Bonds - I&P		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Annexation		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total Revenue Offsets	59,551,331	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
NET REVENUE REQUIREMENTS:			-	195,345,837	0.0%	0.0%	0.0%	0.0%

	Functionalization	Allocation Percentages					Total
		Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M							
Group	Item						
Office of General Manager	Office of General Manager	-	-	-	-	-	-
Office of General Manager	Board of Directors	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-
Human Resources		-	-	-	-	-	-
Water Systems Operations	Office of the Manager	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Conveyance & Distribution S	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations Support Services	-	-	-	-	-	-
Water Systems Operations	Operations Support Services	-	-	-	-	-	-
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	-	-	-	-	-	-
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	-	-	-	-	-	-
Water Systems Operations	Environmental Health & Safety Section	-	-	-	-	-	-
Water Systems Operations	OSS, Fleet Services Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Power Support Unit	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations & Planning Secti	-	-	-	-	-	-
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-
Sustainability, Resilience & Inn		-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-
Engineering Services		-	-	-	-	-	-
Business Technology	Administrative Services	-	-	-	-	-	-
Business Technology	Information Technology	-	-	-	-	-	-
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	-	-	-	-	-	-
Water Resources Managemen	Office of the Group Manager	-	-	-	-	-	-
Ethics Office		-	-	-	-	-	-
Real Property		-	-	-	-	-	-
General Counsel		-	-	-	-	-	-
General Auditor		-	-	-	-	-	-
Total Departmental O&M	-	-	-	-	-	-	-
GENERAL DISTRICT REQUIREMENTS		-	-	-	-	-	-
State Water Contract*		-	-	-	-	-	-
Supply - O&M		-	-	-	-	-	-
Supply - Capital		-	-	-	-	-	-
Power - O&M & Off-Aq Capital	258,551,933	-	-	-	258,551,933	-	258,551,933
Power - Capital (less Off-Aq)	(3,654,765)	-	-	-	(3,654,765)	-	(3,654,765)
Transmission - Capital - Commodity, Demand, & Standby	-	-	-	-	-	-	-
Transmission - O&M - Commodity only	-	-	-	-	-	-	-
Delta Conveyance - Supply	-	-	-	-	-	-	-
Delta Conveyance - Power	-	-	-	-	-	-	-
Delta Conveyance - Other	-	-	-	-	-	-	-
Total State Water Contract	254,897,168	-	-	-	254,897,168	-	254,897,168
Colorado River Aqueduct Power Costs		-	-	-	-	-	-
Supply Programs (cash funded portion)		-	-	-	-	-	-
Demand Management (cash funded portion)		-	-	-	-	-	-
Local Resources Program		-	-	-	-	-	-
Future Supply Actions & Stormwater Pilot		-	-	-	-	-	-
Conservation Program (cash funded portion)		-	-	-	-	-	-
Total Demand Management Costs	-	-	-	-	-	-	-
Capital Financing		-	-	-	-	-	-
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		-	-	-	-	-	-
G.O. Bond Debt Service		-	-	-	-	-	-
Debt Administration		-	-	-	-	-	-
Bond Defeasance		-	-	-	-	-	-
PAYGO		-	-	-	-	-	-
Total Capital Financing Costs	-	-	-	-	-	-	-
Other Operating Costs		-	-	-	-	-	-
Operating Equipment		-	-	-	-	-	-
Succession Planning Labor Pool		-	-	-	-	-	-
OPEB/PERS Pre-Funding		-	-	-	-	-	-
Total Other Operating Costs	-	-	-	-	-	-	-
Increase/(Decrease) in Required Reserves		-	-	-	-	-	-
Total General District Requirements	254,897,168	-	-	-	254,897,168	-	254,897,168
REQUIREMENTS BEFORE OFFSETS:	254,897,168	-	-	-	254,897,168	-	254,897,168
Revenue Offsets		-	-	-	-	-	-
Property Taxes - MWD Portion of SWC GO Debt Service	-	-	-	-	-	-	-
Property Taxes - MWD GO Debt Service	-	-	-	-	-	-	-
Interest on Investments	1,218,534	-	-	-	1,218,534	-	1,218,534
Hydro-Power Revenue	-	-	-	-	-	-	-
CRA Power Revenue	-	-	-	-	-	-	-
Wadsworth Pumping Plant (DVL) Power Revenue	-	-	-	-	-	-	-
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)	-	-	-	-	-	-	-
Misc. allocated to supply (PVID Lease)	-	-	-	-	-	-	-
Property Taxes - SWC	58,332,797	-	-	-	58,332,797	-	58,332,797
Revenue Reserve used for Revenue Bonds - I&P	-	-	-	-	-	-	-
Annexation	-	-	-	-	-	-	-
Total Revenue Offsets	59,551,331	-	-	-	59,551,331	-	59,551,331
NET REVENUE REQUIREMENTS:	195,345,837	-	-	-	195,345,837	-	195,345,837

	Functionalization	Allocation Percentages					Total
		Fixed			Variable		
		Demand	Commodity	Standby	Commodity	Hydroelectric	
Departmental O&M							
Group	Item						
Office of General Manager		-	-	-	-	-	-
Office of General Manager	Board of Directors	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-
Human Resources		-	-	-	-	-	-
Water Systems Operations	Office of the Manager	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations Support Services	-	-	-	-	-	-
Water Systems Operations	Operations Support Services	-	-	-	-	-	-
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	-	-	-	-	-	-
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	-	-	-	-	-	-
Water Systems Operations	Environmental Health & Safety Section	-	-	-	-	-	-
Water Systems Operations	OSS, Fleet Services Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Power Support Unit	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations & Planning Section	-	-	-	-	-	-
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-
Sustainability, Resilience & Inr		-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-
Engineering Services		-	-	-	-	-	-
Business Technology	Administrative Services	-	-	-	-	-	-
Business Technology	Information Technology	-	-	-	-	-	-
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	-	-	-	-	-	-
Water Resources Managemen	Office of the Group Manager	-	-	-	-	-	-
Ethics Office		-	-	-	-	-	-
Real Property		-	-	-	-	-	-
General Counsel		-	-	-	-	-	-
General Auditor		-	-	-	-	-	-
Total Departmental O&M	-	-	-	-	-	-	-

		Functionalization	Allocation Percentages					% Total
			Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		323,238	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Office of General Manager	Board of Directors	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Bay Delta Initiatives	Bay Delta Initiatives	12,080,310	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Legislative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Media Communications Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Manager, External Affairs/Special Projects	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Conservation & Community Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Human Resources		637,113	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager	112,953	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	31,169	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Treatment Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations Support Services	21,789	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Support Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Desert Region / C&D CRA	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	System Operations Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Power Operations and Planning	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Planning & Programs Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Jensen	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Diemer	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Mills	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Skinner	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Weymouth	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Water Quality Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Eastern Unit	2,212,149	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Western Unit	561,320	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Manufacturing Services Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Environmental Health & Safety Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Fleet Services Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Power Support Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations & Planning Section	8,093	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Security Team & Security Management	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Sustainability, Resilience & Innovation		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Diversity, Equity & Inclusion		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Equal Employment Opportunity		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Office of the Chief Financial Officer		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Office of Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Engineering Services		696,495	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Administrative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Information Technology	2,071,433	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Planning & Development	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Implementation	51,065	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Office of the Group Manager	5,910	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Ethics Office		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Real Property		5,305,223	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
General Counsel		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
General Auditor		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Departmental O&M		24,118,260	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
GENERAL DISTRICT REQUIREMENTS								
State Water Contract*								
Supply - O&M		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Supply - Capital		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Power - O&M & Off-Aq Capital		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Power - Capital (less Off-Aq)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Transmission - Capital - Commodity, Demand, & Standby		80,660,127	8.1%	47.5%	44.5%	0.0%	0.0%	100.0%
Transmission - O&M - Commodity only		198,687,447	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Delta Conveyance - Supply		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Delta Conveyance - Power		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Delta Conveyance - Other		34,500,000	8.1%	47.5%	44.5%	0.0%	0.0%	100.0%
Total State Water Contract		313,847,574	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Colorado River Aqueduct Power Costs								
		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Supply Programs (cash funded portion)								
		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Demand Management (cash funded portion)								
Local Resources Program		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Future Supply Actions & Stormwater Pilot		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Conservation Program (cash funded portion)		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Demand Management Costs		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Capital Financing								
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		4,474,978	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
G.O. Bond Debt Service		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Debt Administration		40,820	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Bond Defeasance		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
PAYGO		2,038,500	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Capital Financing Costs		6,554,298	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Other Operating Costs								
Operating Equipment		362,179	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Succession Planning Labor Pool		204,927	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
OPEB/PERS Pre-Funding		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Other Operating Costs		567,106	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Increase/(Decrease) in Required Reserves								
		-	2.9%	81.1%	16.0%	0.0%	0.0%	100.0%
Total General District Requirements								
		320,968,979	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
REQUIREMENTS BEFORE OFFSETS:								
		345,087,239	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Revenue Offsets								
Property Taxes - MWD Portion of SWC GO Debt Service		36,010	8.1%	47.5%	44.5%	0.0%	0.0%	100.0%
Property Taxes - MWD GO Debt Service		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Interest on Investments		1,649,687	8.1%	47.5%	44.5%	0.0%	0.0%	100.0%
Hydro-Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
CRA Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Wadsworth Pumping Plant (DVL) Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to supply (PVID Lease)		-	2.7%	82.5%	14.8%	0.0%	0.0%	100.0%
Property Taxes - SWC		63,928,232	2.3%	84.8%	12.8%	0.0%	0.0%	100.0%
Revenue Reserve used for Revenue Bonds - I&P		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Annexation		-	8.1%	47.5%	44.5%	0.0%	0.0%	100.0%
Total Revenue Offsets		65,613,929	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
NET REVENUE REQUIREMENTS:								
	-	279,473,310	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

	Functionalization	Allocation Percentages					Total
		Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M							
Group	Item						
Office of General Manager		323,238	-	323,238	-	-	323,238
Office of General Manager	Board of Directors	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	12,080,310	-	12,080,310	-	-	12,080,310
External Affairs	Legislative Services	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-
Human Resources		637,113	-	637,113	-	-	637,113
Water Systems Operations	Office of the Manager	112,953	-	112,953	-	-	112,953
Water Systems Operations	Office of the Manager, Conveyance & Distribution S	31,169	-	31,169	-	-	31,169
Water Systems Operations	Office of the Manager, Treatment Section	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations Support Services	21,789	-	21,789	-	-	21,789
Water Systems Operations	Operations Support Services	-	-	-	-	-	-
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	-	-	-	-	-	-
Water Systems Operations	C&D, Eastern Unit	2,212,149	-	2,212,149	-	-	2,212,149
Water Systems Operations	C&D, Western Unit	561,320	-	561,320	-	-	561,320
Water Systems Operations	OSS, Manufacturing Services Unit	-	-	-	-	-	-
Water Systems Operations	Environmental Health & Safety Section	-	-	-	-	-	-
Water Systems Operations	OSS, Fleet Services Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Power Support Unit	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations & Planning Secti	8,093	-	8,093	-	-	8,093
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-
Sustainability, Resilience & Inn		-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-
Engineering Services		696,495	-	696,495	-	-	696,495
Business Technology	Administrative Services	-	-	-	-	-	-
Business Technology	Information Technology	2,071,433	-	2,071,433	-	-	2,071,433
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	51,065	-	51,065	-	-	51,065
Water Resources Managemen	Office of the Group Manager	5,910	-	5,910	-	-	5,910
Ethics Office		-	-	-	-	-	-
Real Property		5,305,223	-	5,305,223	-	-	5,305,223
General Counsel		-	-	-	-	-	-
General Auditor		-	-	-	-	-	-
Total Departmental O&M		24,118,260	-	24,118,260	-	-	24,118,260
GENERAL DISTRICT REQUIREMENTS		-	-	-	-	-	-
State Water Contract*		-	-	-	-	-	-
Supply - O&M		-	-	-	-	-	-
Supply - Capital		-	-	-	-	-	-
Power - O&M & Off-Aq Capital		-	-	-	-	-	-
Power - Capital (less Off-Aq)		-	-	-	-	-	-
Transmission - Capital - Commodity, Demand, & Standby		80,660,127	6,507,938	38,281,988	35,870,201	-	80,660,127
Transmission - O&M - Commodity only		198,687,447	-	198,687,447	-	-	198,687,447
Delta Conveyance - Supply		-	-	-	-	-	-
Delta Conveyance - Power		-	-	-	-	-	-
Delta Conveyance - Other		34,500,000	2,783,579	16,373,996	15,342,425	-	34,500,000
Total State Water Contract		313,847,574	9,291,517	253,343,431	51,212,626	-	313,847,574
Colorado River Aqueduct Power Costs		-	-	-	-	-	-
Supply Programs (cash funded portion)		-	-	-	-	-	-
Demand Management (cash funded portion)		-	-	-	-	-	-
Local Resources Program		-	-	-	-	-	-
Future Supply Actions & Stormwater Pilot		-	-	-	-	-	-
Conservation Program (cash funded portion)		-	-	-	-	-	-
Total Demand Management Costs		-	-	-	-	-	-
Capital Financing		-	-	-	-	-	-
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		4,474,978	-	4,474,978	-	-	4,474,978
G.O. Bond Debt Service		-	-	-	-	-	-
Debt Administration		40,820	-	40,820	-	-	40,820
Bond Defeasance		-	-	-	-	-	-
PAYGO		2,038,500	-	2,038,500	-	-	2,038,500
Total Capital Financing Costs		6,554,298	-	6,554,298	-	-	6,554,298
Other Operating Costs		-	-	-	-	-	-
Operating Equipment		362,179	-	362,179	-	-	362,179
Succession Planning Labor Pool		204,927	-	204,927	-	-	204,927
OPEB/PERS Pre-Funding		-	-	-	-	-	-
Total Other Operating Costs		567,106	-	567,106	-	-	567,106
Increase/(Decrease) in Required Reserves		-	-	-	-	-	-
Total General District Requirements		320,968,979	9,291,517	260,464,836	51,212,626	-	320,968,979
REQUIREMENTS BEFORE OFFSETS:		345,087,239	9,291,517	284,583,096	51,212,626	-	345,087,239
Revenue Offsets							
Property Taxes - MWD Portion of SWC GO Debt Service		36,010	2,905	17,091	16,014	-	36,010
Property Taxes - MWD GO Debt Service		-	-	-	-	-	-
Interest on Investments		1,649,687	133,102	782,955	733,629	-	1,649,687
Hydro-Power Revenue		-	-	-	-	-	-
CRA Power Revenue		-	-	-	-	-	-
Wadsworth Pumping Plant (DVL) Power Revenue		-	-	-	-	-	-
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)		-	-	-	-	-	-
Misc. allocated to supply (PVID Lease)		-	-	-	-	-	-
Property Taxes - SWC		63,928,232	1,489,331	54,230,065	8,208,836	-	63,928,232
Revenue Reserve used for Revenue Bonds - I&P		-	-	-	-	-	-
Annexation		-	-	-	-	-	-
Total Revenue Offsets		65,613,929	1,625,339	55,030,111	8,958,479	-	65,613,929
NET REVENUE REQUIREMENTS:		279,473,310	7,666,178	229,552,985	42,254,147	-	279,473,310

		Functionalization	Allocation Percentages					Total
			Fixed			Variable		
			Demand	Commodity	Standby	Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		285,679	-	285,679	-	-	-	285,679
Office of General Manager	Board of Directors	-	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	5,598,517	-	5,598,517	-	-	-	5,598,517
External Affairs	Legislative Services	-	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-	-
Human Resources		502,042	-	502,042	-	-	-	502,042
Water Systems Operations	Office of the Manager	82,509	-	82,509	-	-	-	82,509
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	30,488	-	30,488	-	-	-	30,488
Water Systems Operations	Office of the Manager, Treatment Section	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations Support Services	16,548	-	16,548	-	-	-	16,548
Water Systems Operations	Operations Support Services	-	-	-	-	-	-	-
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	-	-	-	-	-	-	-
Water Systems Operations	C&D, Eastern Unit	1,556,589	-	1,556,589	-	-	-	1,556,589
Water Systems Operations	C&D, Western Unit	419,068	-	419,068	-	-	-	419,068
Water Systems Operations	OSS, Manufacturing Services Unit	-	-	-	-	-	-	-
Water Systems Operations	Environmental Health & Safety Section	-	-	-	-	-	-	-
Water Systems Operations	OSS, Fleet Services Unit	-	-	-	-	-	-	-
Water Systems Operations	OSS, Power Support Unit	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations & Planning Section	7,358	-	7,358	-	-	-	7,358
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-	-
Sustainability, Resilience & Inr		-	-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-	-
Engineering Services		587,607	-	587,607	-	-	-	587,607
Business Technology	Administrative Services	-	-	-	-	-	-	-
Business Technology	Information Technology	1,378,080	-	1,378,080	-	-	-	1,378,080
Water Resources Management	Resource Planning & Development	-	-	-	-	-	-	-
Water Resources Management	Resource Implementation	32,892	-	32,892	-	-	-	32,892
Water Resources Management	Office of the Group Manager	5,784	-	5,784	-	-	-	5,784
Ethics Office		-	-	-	-	-	-	-
Real Property		2,268,710	-	2,268,710	-	-	-	2,268,710
General Counsel		-	-	-	-	-	-	-
General Auditor		-	-	-	-	-	-	-
Total Departmental O&M	-	12,771,870	-	12,771,870	-	-	-	12,771,870

		Functionalization	Allocation Percentages					Total
			Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		103,868	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Office of General Manager	Board of Directors	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Bay Delta Initiatives	Bay Delta Initiatives	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Legislative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Media Communications Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Manager, External Affairs/Special Projects	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Conservation & Community Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Human Resources		204,727	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Treatment Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations Support Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Support Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Desert Region / C&D CRA	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	System Operations Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Power Operations and Planning	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Planning & Programs Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Jensen	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Diemer	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Mills	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Skinner	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Weymouth	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Water Quality Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Eastern Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Western Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Manufacturing Services Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Environmental Health & Safety Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Fleet Services Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Power Support Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations & Planning Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Security Team & Security Management	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Sustainability, Resilience & Innovation		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Diversity, Equity & Inclusion		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Equal Employment Opportunity		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Office of the Chief Financial Officer		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Office of Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Engineering Services		6,775,837	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Administrative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Information Technology	665,625	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Planning & Development	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Implementation	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Office of the Group Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Ethics Office		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Real Property		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
General Counsel		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
General Auditor		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Departmental O&M		7,750,058	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
GENERAL DISTRICT REQUIREMENTS								
State Water Contract*								
Supply - O&M		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Supply - Capital		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Power - O&M & Off-Aq Capital		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Power - Capital (less Off-Aq)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Transmission - Capital - Commodity, Demand, & Standby		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Transmission - O&M - Commodity only		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Supply		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Power		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Other		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total State Water Contract		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Colorado River Aqueduct Power Costs								
		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Supply Programs (cash funded portion)								
		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Demand Management (cash funded portion)								
Local Resources Program		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Future Supply Actions & Stormwater Pilot		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Conservation Program (cash funded portion)		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Demand Management Costs		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Capital Financing								
		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		43,534,722	8.1%	47.5%	44.5%	0.0%	0.0%	100.0%
G.O. Bond Debt Service		-	8.1%	47.5%	44.5%	0.0%	0.0%	100.0%
Debt Administration		397,118	8.1%	47.5%	44.5%	0.0%	0.0%	100.0%
Bond Defeasance		-	8.1%	47.5%	44.5%	0.0%	0.0%	100.0%
PAYGO		19,831,500	8.1%	47.5%	44.5%	0.0%	0.0%	100.0%
Total Capital Financing Costs		63,763,339	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Other Operating Costs								
Operating Equipment		116,381	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Succession Planning Labor Pool		65,850	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
OPEB/PERS Pre-Funding		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Other Operating Costs		182,232	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Increase/(Decrease) in Required Reserves								
		-	8.0%	47.6%	44.3%	0.0%	0.0%	100.0%
Total General District Requirements								
		63,945,571	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
REQUIREMENTS BEFORE OFFSETS:								
		71,695,628	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Revenue Offsets								
Property Taxes - MWD Portion of SWC GO Debt Service		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Property Taxes - MWD GO Debt Service		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Interest on Investments		342,740	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Hydro-Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
CRA Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Wadsworth Pumping Plant (DVL) Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to supply (PVID Lease)		-	8.1%	47.5%	44.5%	0.0%	0.0%	100.0%
Property Taxes - SWC		-	8.1%	47.5%	44.5%	0.0%	0.0%	100.0%
Revenue Reserve used for Revenue Bonds - I&P		-	8.1%	47.5%	44.5%	0.0%	0.0%	100.0%
Annexation		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total Revenue Offsets		342,740	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
NET REVENUE REQUIREMENTS:								
-		71,352,888	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

	Functionalization	Allocation Percentages					Total
		Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M							
Group	Item						
Office of General Manager		103,868	-	103,868	-	-	103,868
Office of General Manager	Board of Directors	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-
Human Resources		204,727	-	204,727	-	-	204,727
Water Systems Operations	Office of the Manager	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Conveyance & Distribution S	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations Support Services	-	-	-	-	-	-
Water Systems Operations	Operations Support Services	-	-	-	-	-	-
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	-	-	-	-	-	-
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	-	-	-	-	-	-
Water Systems Operations	Environmental Health & Safety Section	-	-	-	-	-	-
Water Systems Operations	OSS, Fleet Services Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Power Support Unit	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations & Planning Secti	-	-	-	-	-	-
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-
Sustainability, Resilience & Inn		-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-
Engineering Services		6,775,837	-	6,775,837	-	-	6,775,837
Business Technology	Administrative Services	-	-	-	-	-	-
Business Technology	Information Technology	665,625	-	665,625	-	-	665,625
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	-	-	-	-	-	-
Water Resources Managemen	Office of the Group Manager	-	-	-	-	-	-
Ethics Office		-	-	-	-	-	-
Real Property		-	-	-	-	-	-
General Counsel		-	-	-	-	-	-
General Auditor		-	-	-	-	-	-
Total Departmental O&M		7,750,058	-	7,750,058	-	-	7,750,058
GENERAL DISTRICT REQUIREMENTS		-	-	-	-	-	-
State Water Contract*		-	-	-	-	-	-
Supply - O&M		-	-	-	-	-	-
Supply - Capital		-	-	-	-	-	-
Power - O&M & Off-Aq Capital		-	-	-	-	-	-
Power - Capital (less Off-Aq)		-	-	-	-	-	-
Transmission - Capital - Commodity, Demand, & Standby		-	-	-	-	-	-
Transmission - O&M - Commodity only		-	-	-	-	-	-
Delta Conveyance - Supply		-	-	-	-	-	-
Delta Conveyance - Power		-	-	-	-	-	-
Delta Conveyance - Other		-	-	-	-	-	-
Total State Water Contract		-	-	-	-	-	-
Colorado River Aqueduct Power Costs		-	-	-	-	-	-
Supply Programs (cash funded portion)		-	-	-	-	-	-
Demand Management (cash funded portion)		-	-	-	-	-	-
Local Resources Program		-	-	-	-	-	-
Future Supply Actions & Stormwater Pilot		-	-	-	-	-	-
Conservation Program (cash funded portion)		-	-	-	-	-	-
Total Demand Management Costs		-	-	-	-	-	-
Capital Financing		-	-	-	-	-	-
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		43,534,722	3,512,532	20,661,952	19,360,238	-	43,534,722
G.O. Bond Debt Service		-	-	-	-	-	-
Debt Administration		397,118	32,041	188,475	176,601	-	397,118
Bond Defeasance		-	-	-	-	-	-
PAYGO		19,831,500	1,600,074	9,412,200	8,819,226	-	19,831,500
Total Capital Financing Costs		63,763,339	5,144,647	30,262,628	28,356,065	-	63,763,339
Other Operating Costs		-	-	-	-	-	-
Operating Equipment		116,381	-	116,381	-	-	116,381
Succession Planning Labor Pool		65,850	-	65,850	-	-	65,850
OPEBVERS Pre-Funding		-	-	-	-	-	-
Total Other Operating Costs		182,232	-	182,232	-	-	182,232
Increase/(Decrease) in Required Reserves		-	-	-	-	-	-
Total General District Requirements		63,945,571	5,144,647	30,444,859	28,356,065	-	63,945,571
REQUIREMENTS BEFORE OFFSETS:		71,695,628	5,144,647	38,194,917	28,356,065	-	71,695,628
Revenue Offsets		-	-	-	-	-	-
Property Taxes - MWD Portion of SWC GO Debt Service		-	-	-	-	-	-
Property Taxes - MWD GO Debt Service		-	-	-	-	-	-
Interest on Investments		342,740	342,740	-	-	-	342,740
Hydro-Power Revenue		-	-	-	-	-	-
CRA Power Revenue		-	-	-	-	-	-
Wadsworth Pumping Plant (DVL) Power Revenue		-	-	-	-	-	-
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)		-	-	-	-	-	-
Misc. allocated to supply (PVID Lease)		-	-	-	-	-	-
Property Taxes - SWC		-	-	-	-	-	-
Revenue Reserve used for Revenue Bonds - I&P		-	-	-	-	-	-
Annexation		-	-	-	-	-	-
Total Revenue Offsets		342,740	342,740	-	-	-	342,740
NET REVENUE REQUIREMENTS:		71,352,888	4,801,906	38,194,917	28,356,065	-	71,352,888

	Functionalization	Allocation Percentages					Total
		Fixed			Variable		
		Demand	Commodity	Standby	Commodity	Hydroelectric	
Departmental O&M							
Group	Item						
Office of General Manager		91,799	-	91,799	-	-	91,799
Office of General Manager	Board of Directors	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-
Human Resources		161,324	-	161,324	-	-	161,324
Water Systems Operations	Office of the Manager	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations Support Services	-	-	-	-	-	-
Water Systems Operations	Operations Support Services	-	-	-	-	-	-
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	-	-	-	-	-	-
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	-	-	-	-	-	-
Water Systems Operations	Environmental Health & Safety Section	-	-	-	-	-	-
Water Systems Operations	OSS, Fleet Services Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Power Support Unit	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations & Planning Section	-	-	-	-	-	-
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-
Sustainability, Resilience & Inr		-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-
Engineering Services		5,716,516	-	5,716,516	-	-	5,716,516
Business Technology	Administrative Services	-	-	-	-	-	-
Business Technology	Information Technology	442,826	-	442,826	-	-	442,826
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	-	-	-	-	-	-
Water Resources Managemen	Office of the Group Manager	-	-	-	-	-	-
Ethics Office		-	-	-	-	-	-
Real Property		-	-	-	-	-	-
General Counsel		-	-	-	-	-	-
General Auditor		-	-	-	-	-	-
Total Departmental O&M	-	6,412,466	-	6,412,466	-	-	6,412,466

		Functionalization	Allocation Percentages					% Total
			Demand	Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		101,890	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Office of General Manager	Board of Directors	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Bay Delta Initiatives	Bay Delta Initiatives	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Legislative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Media Communications Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Manager, External Affairs/Special Projects	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Conservation & Community Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Human Resources		200,829	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager	33,017	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Treatment Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations Support Services	6,369	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Support Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Desert Region / C&D CRA	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	System Operations Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Power Operations and Planning	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Planning & Programs Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Jensen	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Diemer	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Mills	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Skinner	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Weymouth	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Water Quality Section	712,412	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Eastern Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Western Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Manufacturing Services Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Environmental Health & Safety Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Fleet Services Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Power Support Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations & Planning Section	2,366	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Security Team & Security Management	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Sustainability, Resilience & Innovation		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Diversity, Equity & Inclusion		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Equal Employment Opportunity		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Office of the Chief Financial Officer		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Office of Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Engineering Services		5,142,994	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Administrative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Information Technology	652,950	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Planning & Development	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Implementation	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Office of the Group Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Ethics Office		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Real Property		749,651	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
General Counsel		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
General Auditor		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Departmental O&M		7,602,478	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
GENERAL DISTRICT REQUIREMENTS								
State Water Contract*								
Supply - O&M		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Supply - Capital		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Power - O&M & Off-Aq Capital		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Power - Capital (less Off-Aq)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Transmission - Capital - Commodity, Demand, & Standby		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Transmission - O&M - Commodity only		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Supply		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Power		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Other		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total State Water Contract		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Colorado River Aqueduct Power Costs								
		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Supply Programs (cash funded portion)								
		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Demand Management (cash funded portion)								
Local Resources Program		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Future Supply Actions & Stormwater Pilot		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Conservation Program (cash funded portion)		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Demand Management Costs		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Capital Financing								
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
G.O. Bond Debt Service	33,043,713	-	0.0%	0.0%	100.0%	0.0%	0.0%	100.0%
Debt Administration	301,420	-	0.0%	0.0%	100.0%	0.0%	0.0%	100.0%
Bond Defeasance	-	-	0.0%	0.0%	100.0%	0.0%	0.0%	100.0%
PAYGO	15,052,500	-	0.0%	0.0%	100.0%	0.0%	0.0%	100.0%
Total Capital Financing Costs	48,397,633	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Other Operating Costs								
Operating Equipment	114,165	-	0.0%	0.0%	100.0%	0.0%	0.0%	100.0%
Succession Planning Labor Pool	64,597	-	0.0%	0.0%	100.0%	0.0%	0.0%	100.0%
OPEB/PERS Pre-Funding	-	-	0.0%	0.0%	100.0%	0.0%	0.0%	100.0%
Total Other Operating Costs	178,761	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Increase/(Decrease) in Required Reserves								
		-	0.0%	0.0%	100.0%	0.0%	0.0%	100.0%
Total General District Requirements								
		48,576,395	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
REQUIREMENTS BEFORE OFFSETS:								
		56,178,872	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Revenue Offsets								
Property Taxes - MWD Portion of SWC GO Debt Service		-	0.0%	0.0%	100.0%	0.0%	0.0%	100.0%
Property Taxes - MWD GO Debt Service		-	0.0%	0.0%	100.0%	0.0%	0.0%	100.0%
Interest on Investments	268,563	-	0.0%	0.0%	100.0%	0.0%	0.0%	100.0%
Hydro-Power Revenue	-	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
CRA Power Revenue	-	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Wadsworth Pumping Plant (DVL) Power Revenue	-	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)	-	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to supply (PVID Lease)	-	-	0.0%	0.0%	100.0%	0.0%	0.0%	100.0%
Property Taxes - SWC	-	-	0.0%	0.0%	100.0%	0.0%	0.0%	100.0%
Revenue Reserve used for Revenue Bonds - I&P	-	-	0.0%	0.0%	100.0%	0.0%	0.0%	100.0%
Annexation	-	-	0.0%	0.0%	100.0%	0.0%	0.0%	100.0%
Total Revenue Offsets	268,563	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
NET REVENUE REQUIREMENTS:								
-		55,910,310	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

	Functionalization	Allocation Percentages					Total
		Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M							
Group	Item						
Office of General Manager	Office of General Manager	101,890	-	101,890	-	-	101,890
Office of General Manager	Board of Directors	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-
Human Resources	Human Resources	200,829	-	200,829	-	-	200,829
Water Systems Operations	Office of the Manager	33,017	-	33,017	-	-	33,017
Water Systems Operations	Office of the Manager, Conveyance & Distribution S	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations Support Services	6,369	-	6,369	-	-	6,369
Water Systems Operations	Operations Support Services	-	-	-	-	-	-
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	712,412	-	712,412	-	-	712,412
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	-	-	-	-	-	-
Water Systems Operations	Environmental Health & Safety Section	-	-	-	-	-	-
Water Systems Operations	OSS, Fleet Services Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Power Support Unit	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations & Planning Secti	2,366	-	2,366	-	-	2,366
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-
Sustainability, Resilience & Inn	Sustainability, Resilience & Inn	-	-	-	-	-	-
Diversity, Equity & Inclusion	Diversity, Equity & Inclusion	-	-	-	-	-	-
Equal Employment Opportunity	Equal Employment Opportunity	-	-	-	-	-	-
Office of the Chief Financial O	Office of the Chief Financial O	-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-
Engineering Services	Engineering Services	5,142,994	-	5,142,994	-	-	5,142,994
Business Technology	Administrative Services	-	-	-	-	-	-
Business Technology	Information Technology	652,950	-	652,950	-	-	652,950
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	-	-	-	-	-	-
Water Resources Managemen	Office of the Group Manager	-	-	-	-	-	-
Ethics Office	Ethics Office	-	-	-	-	-	-
Real Property	Real Property	749,651	-	749,651	-	-	749,651
General Counsel	General Counsel	-	-	-	-	-	-
General Auditor	General Auditor	-	-	-	-	-	-
Total Departmental O&M	-	7,602,478	-	7,602,478	-	-	7,602,478
GENERAL DISTRICT REQUIREMENTS							
State Water Contract*							
Supply - O&M	Supply - O&M	-	-	-	-	-	-
Supply - Capital	Supply - Capital	-	-	-	-	-	-
Power - O&M & Off-Aq Capital	Power - O&M & Off-Aq Capital	-	-	-	-	-	-
Power - Capital (less Off-Aq)	Power - Capital (less Off-Aq)	-	-	-	-	-	-
Transmission - Capital - Commodity, Demand, & Standby	Transmission - Capital - Commodity, Demand, & Standby	-	-	-	-	-	-
Transmission - O&M - Commodity only	Transmission - O&M - Commodity only	-	-	-	-	-	-
Delta Conveyance - Supply	Delta Conveyance - Supply	-	-	-	-	-	-
Delta Conveyance - Power	Delta Conveyance - Power	-	-	-	-	-	-
Delta Conveyance - Other	Delta Conveyance - Other	-	-	-	-	-	-
Total State Water Contract							
Colorado River Aqueduct Power Costs							
Supply Programs (cash funded portion)							
Demand Management (cash funded portion)							
Local Resources Program	Local Resources Program	-	-	-	-	-	-
Future Supply Actions & Stormwater Pilot	Future Supply Actions & Stormwater Pilot	-	-	-	-	-	-
Conservation Program (cash funded portion)	Conservation Program (cash funded portion)	-	-	-	-	-	-
Total Demand Management Costs							
Capital Financing							
Revenue Bond Debt Service net of BABs Interest Subsidy Payment	Revenue Bond Debt Service net of BABs Interest Subsidy Payment	33,043,713	-	33,043,713	-	-	33,043,713
G.O. Bond Debt Service	G.O. Bond Debt Service	-	-	-	-	-	-
Debt Administration	Debt Administration	301,420	-	301,420	-	-	301,420
Bond Defeasance	Bond Defeasance	-	-	-	-	-	-
PAYGO	PAYGO	15,052,500	-	15,052,500	-	-	15,052,500
Total Capital Financing Costs		48,397,633	-	48,397,633	-	-	48,397,633
Other Operating Costs							
Operating Equipment	Operating Equipment	114,165	-	114,165	-	-	114,165
Succession Planning Labor Pool	Succession Planning Labor Pool	64,597	-	64,597	-	-	64,597
OPEB/PERS Pre-Funding	OPEB/PERS Pre-Funding	-	-	-	-	-	-
Total Other Operating Costs		178,761	-	178,761	-	-	178,761
Increase/(Decrease) in Required Reserves							
Total General District Requirements		48,576,395	-	48,576,395	-	-	48,576,395
REQUIREMENTS BEFORE OFFSETS:		56,178,872	-	7,602,478	48,576,395	-	56,178,872
Revenue Offsets							
Property Taxes - MWD Portion of SWC GO Debt Service	Property Taxes - MWD Portion of SWC GO Debt Service	-	-	-	-	-	-
Property Taxes - MWD GO Debt Service	Property Taxes - MWD GO Debt Service	-	-	-	-	-	-
Interest on Investments	Interest on Investments	268,563	-	268,563	-	-	268,563
Hydro-Power Revenue	Hydro-Power Revenue	-	-	-	-	-	-
CRA Power Revenue	CRA Power Revenue	-	-	-	-	-	-
Wadsworth Pumping Plant (DVL) Power Revenue	Wadsworth Pumping Plant (DVL) Power Revenue	-	-	-	-	-	-
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)	Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)	-	-	-	-	-	-
Misc. allocated to supply (PVID Lease)	Misc. allocated to supply (PVID Lease)	-	-	-	-	-	-
Property Taxes - SWC	Property Taxes - SWC	-	-	-	-	-	-
Revenue Reserve used for Revenue Bonds - I&P	Revenue Reserve used for Revenue Bonds - I&P	-	-	-	-	-	-
Annexation	Annexation	-	-	-	-	-	-
Total Revenue Offsets		268,563	-	268,563	-	-	268,563
NET REVENUE REQUIREMENTS:		55,910,310	-	7,602,478	48,307,832	-	55,910,310

	Functionalization	Allocation Percentages					Total
		Fixed			Variable		
		Demand	Commodity	Standby	Commodity	Hydroelectric	
Departmental O&M							
Group	Item						
Office of General Manager		90,051	-	90,051	-	-	90,051
Office of General Manager	Board of Directors	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-
Human Resources		158,252	-	158,252	-	-	158,252
Water Systems Operations	Office of the Manager	24,118	-	24,118	-	-	24,118
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations Support Services	4,837	-	4,837	-	-	4,837
Water Systems Operations	Operations Support Services	-	-	-	-	-	-
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	586,406	-	586,406	-	-	586,406
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	-	-	-	-	-	-
Water Systems Operations	Environmental Health & Safety Section	-	-	-	-	-	-
Water Systems Operations	OSS, Fleet Services Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Power Support Unit	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations & Planning Section	2,151	-	2,151	-	-	2,151
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-
Sustainability, Resilience & Inr		-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-
Engineering Services		4,338,949	-	4,338,949	-	-	4,338,949
Business Technology	Administrative Services	-	-	-	-	-	-
Business Technology	Information Technology	434,394	-	434,394	-	-	434,394
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	-	-	-	-	-	-
Water Resources Managemen	Office of the Group Manager	-	-	-	-	-	-
Ethics Office		-	-	-	-	-	-
Real Property		320,579	-	320,579	-	-	320,579
General Counsel		-	-	-	-	-	-
General Auditor		-	-	-	-	-	-
Total Departmental O&M	-	5,959,736	-	5,959,736	-	-	5,959,736

		Functionalization	Allocation Percentages					% Total
			Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		82,138	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Office of General Manager	Board of Directors	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Bay Delta Initiatives	Bay Delta Initiatives	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Legislative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Media Communications Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Manager, External Affairs/Special Projects	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Conservation & Community Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Human Resources		161,896	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager	33,017	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Treatment Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations Support Services	6,369	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Support Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Desert Region / C&D CRA	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	System Operations Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Power Operations and Planning	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Planning & Programs Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Jensen	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Diemer	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Mills	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Skinner	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Weymouth	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Water Quality Section	712,412	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Eastern Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Western Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Manufacturing Services Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Environmental Health & Safety Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Fleet Services Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Power Support Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations & Planning Section	2,366	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Security Team & Security Management	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Sustainability, Resilience & Innovation		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Diversity, Equity & Inclusion		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Equal Employment Opportunity		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Office of the Chief Financial Officer		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Office of Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Engineering Services		3,321,037	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Administrative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Information Technology	526,369	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Planning & Development	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Implementation	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Office of the Group Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Ethics Office		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Real Property		1,283,057	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
General Counsel		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
General Auditor		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Departmental O&M		6,128,659	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
GENERAL DISTRICT REQUIREMENTS								
State Water Contract*								
Supply - O&M		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Supply - Capital		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Power - O&M & Off-Aq Capital		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Power - Capital (less Off-Aq)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Transmission - Capital - Commodity, Demand, & Standby		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Transmission - O&M - Commodity only		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Supply		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Power		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Other		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total State Water Contract		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Colorado River Aqueduct Power Costs								
		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Supply Programs (cash funded portion)								
		11,720,987	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Demand Management (cash funded portion)								
Local Resources Program		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Future Supply Actions & Stormwater Pilot		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Conservation Program (cash funded portion)		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Demand Management Costs		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Capital Financing								
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
G.O. Bond Debt Service	21,337,644	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Debt Administration	194,639	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Bond Defeasance	-	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
PAYGO	9,720,000	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Capital Financing Costs	31,252,283	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Other Operating Costs								
Operating Equipment	92,033	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Succession Planning Labor Pool	52,074	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
OPEB/PERS Pre-Funding	-	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Other Operating Costs	144,107	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Increase/(Decrease) in Required Reserves								
	-	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total General District Requirements								
	43,117,378	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
REQUIREMENTS BEFORE OFFSETS:								
	49,246,037	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Revenue Offsets								
Property Taxes - MWD Portion of SWC GO Debt Service	-	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Property Taxes - MWD GO Debt Service	-	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Interest on Investments	235,420	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Hydro-Power Revenue	-	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
CRA Power Revenue	-	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Wadsworth Pumping Plant (DVL) Power Revenue	-	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)	-	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to supply (PVID Lease)	-	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Property Taxes - SWC	-	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Revenue Reserve used for Revenue Bonds - I&P	-	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Annexation	-	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Revenue Offsets	235,420	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
NET REVENUE REQUIREMENTS:								
-	49,010,617	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

	Functionalization	Allocation Percentages					Total
		Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M							
Group	Item						
Office of General Manager	Office of General Manager	82,138	-	82,138	-	-	82,138
Office of General Manager	Board of Directors	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-
Human Resources	Human Resources	161,896	-	161,896	-	-	161,896
Water Systems Operations	Office of the Manager	33,017	-	33,017	-	-	33,017
Water Systems Operations	Office of the Manager, Conveyance & Distribution S	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations Support Services	6,369	-	6,369	-	-	6,369
Water Systems Operations	Operations Support Services	-	-	-	-	-	-
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	712,412	-	712,412	-	-	712,412
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	-	-	-	-	-	-
Water Systems Operations	Environmental Health & Safety Section	-	-	-	-	-	-
Water Systems Operations	OSS, Fleet Services Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Power Support Unit	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations & Planning Secti	2,366	-	2,366	-	-	2,366
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-
Sustainability, Resilience & Inn	Sustainability, Resilience & Inn	-	-	-	-	-	-
Diversity, Equity & Inclusion	Diversity, Equity & Inclusion	-	-	-	-	-	-
Equal Employment Opportunity	Equal Employment Opportunity	-	-	-	-	-	-
Office of the Chief Financial O	Office of the Chief Financial O	-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-
Engineering Services	Engineering Services	3,321,037	-	3,321,037	-	-	3,321,037
Business Technology	Administrative Services	-	-	-	-	-	-
Business Technology	Information Technology	526,369	-	526,369	-	-	526,369
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	-	-	-	-	-	-
Water Resources Managemen	Office of the Group Manager	-	-	-	-	-	-
Ethics Office	Ethics Office	-	-	-	-	-	-
Real Property	Real Property	1,283,057	-	1,283,057	-	-	1,283,057
General Counsel	General Counsel	-	-	-	-	-	-
General Auditor	General Auditor	-	-	-	-	-	-
Total Departmental O&M	-	6,128,659	-	6,128,659	-	-	6,128,659
GENERAL DISTRICT REQUIREMENTS							
State Water Contract*							
Supply - O&M	Supply - O&M	-	-	-	-	-	-
Supply - Capital	Supply - Capital	-	-	-	-	-	-
Power - O&M & Off-Aq Capital	Power - O&M & Off-Aq Capital	-	-	-	-	-	-
Power - Capital (less Off-Aq)	Power - Capital (less Off-Aq)	-	-	-	-	-	-
Transmission - Capital - Commodity, Demand, & Standby	Transmission - Capital - Commodity, Demand, & Standby	-	-	-	-	-	-
Transmission - O&M - Commodity only	Transmission - O&M - Commodity only	-	-	-	-	-	-
Delta Conveyance - Supply	Delta Conveyance - Supply	-	-	-	-	-	-
Delta Conveyance - Power	Delta Conveyance - Power	-	-	-	-	-	-
Delta Conveyance - Other	Delta Conveyance - Other	-	-	-	-	-	-
Total State Water Contract							
Colorado River Aqueduct Power Costs							
Supply Programs (cash funded portion)		11,720,987	-	11,720,987	-	-	11,720,987
Demand Management (cash funded portion)							
Local Resources Program	Local Resources Program	-	-	-	-	-	-
Future Supply Actions & Stormwater Pilot	Future Supply Actions & Stormwater Pilot	-	-	-	-	-	-
Conservation Program (cash funded portion)	Conservation Program (cash funded portion)	-	-	-	-	-	-
Total Demand Management Costs							
Capital Financing							
Revenue Bond Debt Service net of BABs Interest Subsidy Payment	Revenue Bond Debt Service net of BABs Interest Subsidy Payment	21,337,644	-	21,337,644	-	-	21,337,644
G.O. Bond Debt Service	G.O. Bond Debt Service	-	-	-	-	-	-
Debt Administration	Debt Administration	194,639	-	194,639	-	-	194,639
Bond Defeasance	Bond Defeasance	-	-	-	-	-	-
PAYGO	PAYGO	9,720,000	-	9,720,000	-	-	9,720,000
Total Capital Financing Costs		31,252,283	-	31,252,283	-	-	31,252,283
Other Operating Costs							
Operating Equipment	Operating Equipment	92,033	-	92,033	-	-	92,033
Succession Planning Labor Pool	Succession Planning Labor Pool	52,074	-	52,074	-	-	52,074
OPEB/PERS Pre-Funding	OPEB/PERS Pre-Funding	-	-	-	-	-	-
Total Other Operating Costs		144,107	-	144,107	-	-	144,107
Increase/(Decrease) in Required Reserves							
Total General District Requirements		43,117,378	-	43,117,378	-	-	43,117,378
REQUIREMENTS BEFORE OFFSETS:		49,246,037	-	49,246,037	-	-	49,246,037
Revenue Offsets							
Property Taxes - MWD Portion of SWC GO Debt Service	Property Taxes - MWD Portion of SWC GO Debt Service	-	-	-	-	-	-
Property Taxes - MWD GO Debt Service	Property Taxes - MWD GO Debt Service	-	-	-	-	-	-
Interest on Investments	Interest on Investments	235,420	-	235,420	-	-	235,420
Hydro-Power Revenue	Hydro-Power Revenue	-	-	-	-	-	-
CRA Power Revenue	CRA Power Revenue	-	-	-	-	-	-
Wadsworth Pumping Plant (DVL) Power Revenue	Wadsworth Pumping Plant (DVL) Power Revenue	-	-	-	-	-	-
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)	Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)	-	-	-	-	-	-
Misc. allocated to supply (PVID Lease)	Misc. allocated to supply (PVID Lease)	-	-	-	-	-	-
Property Taxes - SWC	Property Taxes - SWC	-	-	-	-	-	-
Revenue Reserve used for Revenue Bonds - I&P	Revenue Reserve used for Revenue Bonds - I&P	-	-	-	-	-	-
Annexation	Annexation	-	-	-	-	-	-
Total Revenue Offsets		235,420	-	235,420	-	-	235,420
NET REVENUE REQUIREMENTS:		49,010,617	-	49,010,617	-	-	49,010,617

		Functionalization	Allocation Percentages					Total
			Fixed			Variable		
			Demand	Commodity	Standby	Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		72,593	-	72,593	-	-	-	72,593
Office of General Manager	Board of Directors	-	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-	-
Human Resources		127,573	-	127,573	-	-	-	127,573
Water Systems Operations	Office of the Manager	24,118	-	24,118	-	-	-	24,118
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations Support Services	4,837	-	4,837	-	-	-	4,837
Water Systems Operations	Operations Support Services	-	-	-	-	-	-	-
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	586,406	-	586,406	-	-	-	586,406
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	-	-	-	-	-	-	-
Water Systems Operations	Environmental Health & Safety Section	-	-	-	-	-	-	-
Water Systems Operations	OSS, Fleet Services Unit	-	-	-	-	-	-	-
Water Systems Operations	OSS, Power Support Unit	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations & Planning Section	2,151	-	2,151	-	-	-	2,151
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-	-
Sustainability, Resilience & Inr		-	-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-	-
Engineering Services		2,801,832	-	2,801,832	-	-	-	2,801,832
Business Technology	Administrative Services	-	-	-	-	-	-	-
Business Technology	Information Technology	350,182	-	350,182	-	-	-	350,182
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	-	-	-	-	-	-	-
Water Resources Managemen	Office of the Group Manager	-	-	-	-	-	-	-
Ethics Office		-	-	-	-	-	-	-
Real Property		548,683	-	548,683	-	-	-	548,683
General Counsel		-	-	-	-	-	-	-
General Auditor		-	-	-	-	-	-	-
Total Departmental O&M	-	4,518,376	-	4,518,376	-	-	-	4,518,376

		Functionalization	Allocation Percentages					Total
			Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		54,595	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Office of General Manager	Board of Directors	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Bay Delta Initiatives	Bay Delta Initiatives	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Legislative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Media Communications Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Manager, External Affairs/Special Projects	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Conservation & Community Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Human Resources		107,609	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager	33,017	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Treatment Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations Support Services	6,369	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Support Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Desert Region / C&D CRA	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	System Operations Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Power Operations and Planning	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Planning & Programs Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Jensen	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Diemer	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Mills	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Skinner	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Weymouth	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Water Quality Section	712,412	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Eastern Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Western Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Manufacturing Services Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Environmental Health & Safety Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Fleet Services Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Power Support Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations & Planning Section	2,366	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Security Team & Security Management	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Sustainability, Resilience & Innovation		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Diversity, Equity & Inclusion		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Equal Employment Opportunity		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Office of the Chief Financial Officer		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Office of Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Engineering Services		2,504,615	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Administrative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Information Technology	349,867	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Planning & Development	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Implementation	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Office of the Group Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Ethics Office		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Real Property		302,744	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
General Counsel		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
General Auditor		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Departmental O&M		4,073,593	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
GENERAL DISTRICT REQUIREMENTS								
State Water Contract*								
Supply - O&M		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Supply - Capital		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Power - O&M & Off-Aq Capital		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Power - Capital (less Off-Aq)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Transmission - Capital - Commodity, Demand, & Standby		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Transmission - O&M - Commodity only		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Supply		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Power		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Other		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total State Water Contract		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Colorado River Aqueduct Power Costs								
		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Supply Programs (cash funded portion)								
		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Demand Management (cash funded portion)								
Local Resources Program		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Future Supply Actions & Stormwater Pilot		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Conservation Program (cash funded portion)		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Demand Management Costs		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Capital Financing								
		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Revenue Bond Debt Service net of BABs Interest Subsidy Payment	16,092,140	-	34.7%	38.6%	26.7%	0.0%	0.0%	100.0%
G.O. Bond Debt Service	-	-	34.7%	38.6%	26.7%	0.0%	0.0%	100.0%
Debt Administration	146,790	-	34.7%	38.6%	26.7%	0.0%	0.0%	100.0%
Bond Defeasance	-	-	34.7%	38.6%	26.7%	0.0%	0.0%	100.0%
PAYGO	7,330,500	-	34.7%	38.6%	26.7%	0.0%	0.0%	100.0%
Total Capital Financing Costs	23,569,430	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Other Operating Costs								
Operating Equipment	61,172	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Succession Planning Labor Pool	34,612	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
OPEB/PERS Pre-Funding	-	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Other Operating Costs	95,785	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Increase/(Decrease) in Required Reserves								
		-	34.6%	38.8%	26.5%	0.0%	0.0%	100.0%
Total General District Requirements								
		23,665,215	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
REQUIREMENTS BEFORE OFFSETS:								
		27,738,808	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Revenue Offsets								
Property Taxes - MWD Portion of SWC GO Debt Service	-	-	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Property Taxes - MWD GO Debt Service	-	-	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Interest on Investments	132,605	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Hydro-Power Revenue	-	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
CRA Power Revenue	-	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Wadsworth Pumping Plant (DVL) Power Revenue	-	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)	-	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to supply (PVID Lease)	-	-	29.5%	47.8%	22.6%	0.0%	0.0%	100.0%
Property Taxes - SWC	-	-	34.7%	38.6%	26.7%	0.0%	0.0%	100.0%
Revenue Reserve used for Revenue Bonds - I&P	-	-	34.7%	38.6%	26.7%	0.0%	0.0%	100.0%
Annexation	-	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total Revenue Offsets	132,605	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
NET REVENUE REQUIREMENTS:								
-		27,606,203	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

	Functionalization	Allocation Percentages					Total
		Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M							
Group	Item						
Office of General Manager	Office of General Manager	54,595	-	54,595	-	-	54,595
Office of General Manager	Board of Directors	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-
Human Resources	Human Resources	107,609	-	107,609	-	-	107,609
Water Systems Operations	Office of the Manager	33,017	-	33,017	-	-	33,017
Water Systems Operations	Office of the Manager, Conveyance & Distribution S	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations Support Services	6,369	-	6,369	-	-	6,369
Water Systems Operations	Operations Support Services	-	-	-	-	-	-
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	712,412	-	712,412	-	-	712,412
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	-	-	-	-	-	-
Water Systems Operations	Environmental Health & Safety Section	-	-	-	-	-	-
Water Systems Operations	OSS, Fleet Services Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Power Support Unit	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations & Planning Secti	2,366	-	2,366	-	-	2,366
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-
Sustainability, Resilience & Inn	Sustainability, Resilience & Inn	-	-	-	-	-	-
Diversity, Equity & Inclusion	Diversity, Equity & Inclusion	-	-	-	-	-	-
Equal Employment Opportunity	Equal Employment Opportunity	-	-	-	-	-	-
Office of the Chief Financial O	Office of the Chief Financial O	-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-
Engineering Services	Engineering Services	2,504,615	-	2,504,615	-	-	2,504,615
Business Technology	Administrative Services	-	-	-	-	-	-
Business Technology	Information Technology	349,867	-	349,867	-	-	349,867
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	-	-	-	-	-	-
Water Resources Managemen	Office of the Group Manager	-	-	-	-	-	-
Ethics Office	Ethics Office	-	-	-	-	-	-
Real Property	Real Property	302,744	-	302,744	-	-	302,744
General Counsel	General Counsel	-	-	-	-	-	-
General Auditor	General Auditor	-	-	-	-	-	-
Total Departmental O&M	-	4,073,593	-	4,073,593	-	-	4,073,593
GENERAL DISTRICT REQUIREMENTS							
State Water Contract*							
Supply - O&M	Supply - O&M	-	-	-	-	-	-
Supply - Capital	Supply - Capital	-	-	-	-	-	-
Power - O&M & Off-Aq Capital	Power - O&M & Off-Aq Capital	-	-	-	-	-	-
Power - Capital (less Off-Aq)	Power - Capital (less Off-Aq)	-	-	-	-	-	-
Transmission - Capital - Commodity, Demand, & Standby	Transmission - Capital - Commodity, Demand, & Standby	-	-	-	-	-	-
Transmission - O&M - Commodity only	Transmission - O&M - Commodity only	-	-	-	-	-	-
Delta Conveyance - Supply	Delta Conveyance - Supply	-	-	-	-	-	-
Delta Conveyance - Power	Delta Conveyance - Power	-	-	-	-	-	-
Delta Conveyance - Other	Delta Conveyance - Other	-	-	-	-	-	-
Total State Water Contract							
Colorado River Aqueduct Power Costs							
Supply Programs (cash funded portion)							
Demand Management (cash funded portion)							
Local Resources Program	Local Resources Program	-	-	-	-	-	-
Future Supply Actions & Stormwater Pilot	Future Supply Actions & Stormwater Pilot	-	-	-	-	-	-
Conservation Program (cash funded portion)	Conservation Program (cash funded portion)	-	-	-	-	-	-
Total Demand Management Costs							
Capital Financing							
Revenue Bond Debt Service net of BABs Interest Subsidy Payment	Revenue Bond Debt Service net of BABs Interest Subsidy Payment	16,092,140	5,591,988	6,211,160	4,288,992	-	16,092,140
G.O. Bond Debt Service	G.O. Bond Debt Service	-	-	-	-	-	-
Debt Administration	Debt Administration	146,790	51,009	56,657	39,124	-	146,790
Bond Defeasance	Bond Defeasance	-	-	-	-	-	-
PAYGO	PAYGO	7,330,500	2,547,335	2,829,388	1,953,777	-	7,330,500
Total Capital Financing Costs		23,569,430	8,190,332	9,097,206	6,281,893	-	23,569,430
Other Operating Costs							
Operating Equipment	Operating Equipment	61,172	-	61,172	-	-	61,172
Succession Planning Labor Pool	Succession Planning Labor Pool	34,612	-	34,612	-	-	34,612
OPEB/PERS Pre-Funding	OPEB/PERS Pre-Funding	-	-	-	-	-	-
Total Other Operating Costs		95,785	-	95,785	-	-	95,785
Increase/(Decrease) in Required Reserves							
Total General District Requirements		23,665,215	8,190,332	9,192,990	6,281,893	-	23,665,215
REQUIREMENTS BEFORE OFFSETS:		27,738,808	8,190,332	13,266,583	6,281,893	-	27,738,808
Revenue Offsets							
Property Taxes - MWD Portion of SWC GO Debt Service	Property Taxes - MWD Portion of SWC GO Debt Service	-	-	-	-	-	-
Property Taxes - MWD GO Debt Service	Property Taxes - MWD GO Debt Service	-	-	-	-	-	-
Interest on Investments	Interest on Investments	132,605	-	132,605	-	-	132,605
Hydro-Power Revenue	Hydro-Power Revenue	-	-	-	-	-	-
CRA Power Revenue	CRA Power Revenue	-	-	-	-	-	-
Wadsworth Pumping Plant (DVL) Power Revenue	Wadsworth Pumping Plant (DVL) Power Revenue	-	-	-	-	-	-
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)	Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)	-	-	-	-	-	-
Misc. allocated to supply (PVID Lease)	Misc. allocated to supply (PVID Lease)	-	-	-	-	-	-
Property Taxes - SWC	Property Taxes - SWC	-	-	-	-	-	-
Revenue Reserve used for Revenue Bonds - I&P	Revenue Reserve used for Revenue Bonds - I&P	-	-	-	-	-	-
Annexation	Annexation	-	-	-	-	-	-
Total Revenue Offsets		132,605	-	132,605	-	-	132,605
NET REVENUE REQUIREMENTS:		27,606,203	8,190,332	13,133,978	6,281,893	-	27,606,203

		Functionalization	Allocation Percentages					Total
			Fixed			Variable		
			Demand	Commodity	Standby	Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		48,251	-	48,251	-	-	-	48,251
Office of General Manager	Board of Directors	-	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-	-
Human Resources		84,795	-	84,795	-	-	-	84,795
Water Systems Operations	Office of the Manager	24,118	-	24,118	-	-	-	24,118
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations Support Services	4,837	-	4,837	-	-	-	4,837
Water Systems Operations	Operations Support Services	-	-	-	-	-	-	-
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	586,406	-	586,406	-	-	-	586,406
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	-	-	-	-	-	-	-
Water Systems Operations	Environmental Health & Safety Section	-	-	-	-	-	-	-
Water Systems Operations	OSS, Fleet Services Unit	-	-	-	-	-	-	-
Water Systems Operations	OSS, Power Support Unit	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations & Planning Section	2,151	-	2,151	-	-	-	2,151
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-	-
Sustainability, Resilience & Inr		-	-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-	-
Engineering Services		2,113,049	-	2,113,049	-	-	-	2,113,049
Business Technology	Administrative Services	-	-	-	-	-	-	-
Business Technology	Information Technology	232,759	-	232,759	-	-	-	232,759
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	-	-	-	-	-	-	-
Water Resources Managemen	Office of the Group Manager	-	-	-	-	-	-	-
Ethics Office		-	-	-	-	-	-	-
Real Property		129,464	-	129,464	-	-	-	129,464
General Counsel		-	-	-	-	-	-	-
General Auditor		-	-	-	-	-	-	-
Total Departmental O&M	-	3,225,830	-	3,225,830	-	-	-	3,225,830

		Functionalization	Allocation Percentages					% Total
			Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Office of General Manager	Board of Directors	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Bay Delta Initiatives	Bay Delta Initiatives	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Legislative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Media Communications Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Manager, External Affairs/Special Projects	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Conservation & Community Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Human Resources		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Treatment Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations Support Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Support Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Desert Region / C&D CRA	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	System Operations Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Power Operations and Planning	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Planning & Programs Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Jensen	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Diemer	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Mills	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Skinner	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Weymouth	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Water Quality Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Eastern Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Western Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Manufacturing Services Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Environmental Health & Safety Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Fleet Services Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Power Support Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations & Planning Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Security Team & Security Management	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Sustainability, Resilience & Innovation		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Diversity, Equity & Inclusion		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Equal Employment Opportunity		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Office of the Chief Financial Officer		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Office of Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Engineering Services		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Administrative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Information Technology	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Planning & Development	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Implementation	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Office of the Group Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Ethics Office		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Real Property		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
General Counsel		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
General Auditor		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Departmental O&M		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
GENERAL DISTRICT REQUIREMENTS								
State Water Contract*								
Supply - O&M		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Supply - Capital		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Power - O&M & Off-Aq Capital		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Power - Capital (less Off-Aq)		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Transmission - Capital - Commodity, Demand, & Standby		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Transmission - O&M - Commodity only		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Supply		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Power		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Other		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total State Water Contract		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Colorado River Aqueduct Power Costs		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Supply Programs (cash funded portion)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Demand Management (cash funded portion)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Local Resources Program		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Future Supply Actions & Stormwater Pilot		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Conservation Program (cash funded portion)		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Demand Management Costs		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Capital Financing		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
G.O. Bond Debt Service		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Debt Administration		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Bond Defeasance		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
PAYGO		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total Capital Financing Costs		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Other Operating Costs								
Operating Equipment		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Succession Planning Labor Pool		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
OPEB/PERS Pre-Funding		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Other Operating Costs		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Increase/(Decrease) in Required Reserves		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total General District Requirements		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
REQUIREMENTS BEFORE OFFSETS:		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Revenue Offsets								
Property Taxes - MWD Portion of SWC GO Debt Service		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Property Taxes - MWD GO Debt Service		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Interest on Investments		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Hydro-Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
CRA Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Wadsworth Pumping Plant (DVL) Power Revenue	545,067	-	0.0%	0.0%	0.0%	100.0%	0.0%	100.0%
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to supply (PVID Lease)		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Property Taxes - SWC		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Revenue Reserve used for Revenue Bonds - I&P		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Annexation		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total Revenue Offsets	545,067	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
NET REVENUE REQUIREMENTS:		-	(545,067)	0.0%	0.0%	0.0%	0.0%	0.0%

	Functionalization	Allocation Percentages					Total
		Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M							
Group	Item						
Office of General Manager		-	-	-	-	-	-
Office of General Manager	Board of Directors	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-
Human Resources		-	-	-	-	-	-
Water Systems Operations	Office of the Manager	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Conveyance & Distribution S	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations Support Services	-	-	-	-	-	-
Water Systems Operations	Operations Support Services	-	-	-	-	-	-
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	-	-	-	-	-	-
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	-	-	-	-	-	-
Water Systems Operations	Environmental Health & Safety Section	-	-	-	-	-	-
Water Systems Operations	OSS, Fleet Services Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Power Support Unit	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations & Planning Secti	-	-	-	-	-	-
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-
Sustainability, Resilience & Inn		-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-
Engineering Services		-	-	-	-	-	-
Business Technology	Administrative Services	-	-	-	-	-	-
Business Technology	Information Technology	-	-	-	-	-	-
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	-	-	-	-	-	-
Water Resources Managemen	Office of the Group Manager	-	-	-	-	-	-
Ethics Office		-	-	-	-	-	-
Real Property		-	-	-	-	-	-
General Counsel		-	-	-	-	-	-
General Auditor		-	-	-	-	-	-
Total Departmental O&M	-	-	-	-	-	-	-
GENERAL DISTRICT REQUIREMENTS		-	-	-	-	-	-
State Water Contract*		-	-	-	-	-	-
Supply - O&M		-	-	-	-	-	-
Supply - Capital		-	-	-	-	-	-
Power - O&M & Off-Aq Capital		-	-	-	-	-	-
Power - Capital (less Off-Aq)		-	-	-	-	-	-
Transmission - Capital - Commodity, Demand, & Standby		-	-	-	-	-	-
Transmission - O&M - Commodity only		-	-	-	-	-	-
Delta Conveyance - Supply		-	-	-	-	-	-
Delta Conveyance - Power		-	-	-	-	-	-
Delta Conveyance - Other		-	-	-	-	-	-
Total State Water Contract		-	-	-	-	-	-
Colorado River Aqueduct Power Costs		-	-	-	-	-	-
Supply Programs (cash funded portion)		-	-	-	-	-	-
Demand Management (cash funded portion)		-	-	-	-	-	-
Local Resources Program		-	-	-	-	-	-
Future Supply Actions & Stormwater Pilot		-	-	-	-	-	-
Conservation Program (cash funded portion)		-	-	-	-	-	-
Total Demand Management Costs		-	-	-	-	-	-
Capital Financing		-	-	-	-	-	-
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		-	-	-	-	-	-
G.O. Bond Debt Service		-	-	-	-	-	-
Debt Administration		-	-	-	-	-	-
Bond Defeasance		-	-	-	-	-	-
PAYGO		-	-	-	-	-	-
Total Capital Financing Costs		-	-	-	-	-	-
Other Operating Costs		-	-	-	-	-	-
Operating Equipment		-	-	-	-	-	-
Succession Planning Labor Pool		-	-	-	-	-	-
OPEB/PERS Pre-Funding		-	-	-	-	-	-
Total Other Operating Costs		-	-	-	-	-	-
Increase/(Decrease) in Required Reserves		-	-	-	-	-	-
Total General District Requirements		-	-	-	-	-	-
REQUIREMENTS BEFORE OFFSETS:		-	-	-	-	-	-
Revenue Offsets		-	-	-	-	-	-
Property Taxes - MWD Portion of SWC GO Debt Service		-	-	-	-	-	-
Property Taxes - MWD GO Debt Service		-	-	-	-	-	-
Interest on Investments		-	-	-	-	-	-
Hydro-Power Revenue		-	-	-	-	-	-
CRA Power Revenue		-	-	-	-	-	-
Wadsworth Pumping Plant (DVL) Power Revenue	545,067	-	-	-	545,067	-	545,067
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)		-	-	-	-	-	-
Misc. allocated to supply (PVID Lease)		-	-	-	-	-	-
Property Taxes - SWC		-	-	-	-	-	-
Revenue Reserve used for Revenue Bonds - I&P		-	-	-	-	-	-
Annexation		-	-	-	-	-	-
Total Revenue Offsets	545,067	-	-	-	545,067	-	545,067
NET REVENUE REQUIREMENTS:	(545,067)	-	-	-	(545,067)	-	(545,067)

	Functionalization	Allocation Percentages					Total
		Fixed			Variable		
		Demand	Commodity	Standby	Commodity	Hydroelectric	
Departmental O&M							
Group	Item						
Office of General Manager		-	-	-	-	-	-
Office of General Manager	Board of Directors	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-
Human Resources		-	-	-	-	-	-
Water Systems Operations	Office of the Manager	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations Support Services	-	-	-	-	-	-
Water Systems Operations	Operations Support Services	-	-	-	-	-	-
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	-	-	-	-	-	-
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	-	-	-	-	-	-
Water Systems Operations	Environmental Health & Safety Section	-	-	-	-	-	-
Water Systems Operations	OSS, Fleet Services Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Power Support Unit	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations & Planning Section	-	-	-	-	-	-
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-
Sustainability, Resilience & Inr		-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-
Engineering Services		-	-	-	-	-	-
Business Technology	Administrative Services	-	-	-	-	-	-
Business Technology	Information Technology	-	-	-	-	-	-
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	-	-	-	-	-	-
Water Resources Managemen	Office of the Group Manager	-	-	-	-	-	-
Ethics Office		-	-	-	-	-	-
Real Property		-	-	-	-	-	-
General Counsel		-	-	-	-	-	-
General Auditor		-	-	-	-	-	-
Total Departmental O&M	-	-	-	-	-	-	-

		Functionalization	Allocation Percentages					% Total
			Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
	Office of General Manager	404,650	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Office of General Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Bay Delta Initiatives	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	External Affairs	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	External Affairs	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	External Affairs	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	External Affairs	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Human Resources	797,579	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	822,950	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	214,542	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	158,751	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	98,636	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	17,444,960	0.0%	63.1%	0.0%	36.9%	0.0%	100.0%
	Water Systems Operations	-	0.0%	55.3%	0.0%	44.7%	0.0%	100.0%
	Water Systems Operations	-	0.0%	77.8%	0.0%	22.2%	0.0%	100.0%
	Water Systems Operations	-	0.0%	64.2%	0.0%	35.8%	0.0%	100.0%
	Water Systems Operations	-	0.0%	63.1%	0.0%	36.9%	0.0%	100.0%
	Water Systems Operations	2,886,656	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	145,664	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	1,311,381	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	565,022	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	282,124	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	58,967	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Sustainability, Resilience & Innovation	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Diversity, Equity & Inclusion	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Equal Employment Opportunity	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Office of the Chief Financial Officer	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Business Technology	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Engineering Services	2,407,752	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Business Technology	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Business Technology	2,593,152	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Resources Management	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Resources Management	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Resources Management	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Ethics Office	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Real Property	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	General Counsel	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	General Auditor	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Total Departmental O&M	30,192,787	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
GENERAL DISTRICT REQUIREMENTS								
State Water Contract*								
	Supply - O&M	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Supply - Capital	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Power - O&M & Off-Aq Capital	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Power - Capital (less Off-Aq)	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Transmission - Capital - Commodity, Demand, & Standby	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Transmission - O&M - Commodity only	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Delta Conveyance - Supply	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Delta Conveyance - Power	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Delta Conveyance - Other	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Total State Water Contract	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Colorado River Aqueduct Power Costs								
		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Supply Programs (cash funded portion)								
		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Demand Management (cash funded portion)								
	Local Resources Program	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Future Supply Actions & Stormwater Pilot	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Conservation Program (cash funded portion)	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Total Demand Management Costs	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Capital Financing								
		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Revenue Bond Debt Service net of BABs Interest Subsidy Payment	15,469,792	31.8%	29.5%	38.7%	0.0%	0.0%	100.0%
	G.O. Bond Debt Service	102,612	31.8%	29.5%	38.7%	0.0%	0.0%	100.0%
	Debt Administration	141,113	31.8%	29.5%	38.7%	0.0%	0.0%	100.0%
	Bond Defeasance	-	31.8%	29.5%	38.7%	0.0%	0.0%	100.0%
	PAYGO	7,047,000	31.8%	29.5%	38.7%	0.0%	0.0%	100.0%
	Total Capital Financing Costs	22,760,518	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Other Operating Costs								
	Operating Equipment	453,399	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Succession Planning Labor Pool	256,541	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	OPEB/PERS Pre-Funding	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Total Other Operating Costs	709,940	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Increase/(Decrease) in Required Reserves								
		-	30.9%	31.6%	37.5%	0.0%	0.0%	100.0%
Total General District Requirements								
		23,470,458	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
REQUIREMENTS BEFORE OFFSETS:								
		53,663,245	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Revenue Offsets								
	Property Taxes - MWD Portion of SWC GO Debt Service	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Property Taxes - MWD GO Debt Service	102,612	0.0%	0.0%	100.0%	0.0%	0.0%	100.0%
	Interest on Investments	256,537	31.8%	29.5%	38.7%	0.0%	0.0%	100.0%
	Hydro-Power Revenue	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	CRA Power Revenue	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Wadsworth Pumping Plant (DVL) Power Revenue	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Misc. allocated to supply (PVID Lease)	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Property Taxes - SWC	-	31.8%	29.5%	38.7%	0.0%	0.0%	100.0%
	Revenue Reserve used for Revenue Bonds - I&P	-	31.8%	29.5%	38.7%	0.0%	0.0%	100.0%
	Annexation	-	31.8%	29.5%	38.7%	0.0%	0.0%	100.0%
	Total Revenue Offsets	359,149	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
NET REVENUE REQUIREMENTS:								
	-	53,304,096	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

	Functionalization	Allocation Percentages					Total
		Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M							
Group	Item						
Office of General Manager		404,650	-	404,650	-	-	404,650
Office of General Manager	Board of Directors	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-
Human Resources		797,579	-	797,579	-	-	797,579
Water Systems Operations	Office of the Manager	822,950	-	822,950	-	-	822,950
Water Systems Operations	Office of the Manager, Conveyance & Distribution S	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	214,542	-	214,542	-	-	214,542
Water Systems Operations	Office of the Manager, Operations Support Services	158,751	-	158,751	-	-	158,751
Water Systems Operations	Operations Support Services	98,636	-	98,636	-	-	98,636
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	17,444,960	-	11,015,864	-	6,429,096	17,444,960
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	2,886,656	-	2,886,656	-	-	2,886,656
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	145,664	-	145,664	-	-	145,664
Water Systems Operations	Environmental Health & Safety Section	1,311,381	-	1,311,381	-	-	1,311,381
Water Systems Operations	OSS, Fleet Services Unit	565,022	-	565,022	-	-	565,022
Water Systems Operations	OSS, Power Support Unit	282,124	-	282,124	-	-	282,124
Water Systems Operations	Office of the Manager, Operations & Planning Secti	58,967	-	58,967	-	-	58,967
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-
Sustainability, Resilience & Inn		-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-
Engineering Services		2,407,752	-	2,407,752	-	-	2,407,752
Business Technology	Administrative Services	-	-	-	-	-	-
Business Technology	Information Technology	2,593,152	-	2,593,152	-	-	2,593,152
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	-	-	-	-	-	-
Water Resources Managemen	Office of the Group Manager	-	-	-	-	-	-
Ethics Office		-	-	-	-	-	-
Real Property		-	-	-	-	-	-
General Counsel		-	-	-	-	-	-
General Auditor		-	-	-	-	-	-
Total Departmental O&M		30,192,787	-	23,763,691	-	6,429,096	30,192,787
GENERAL DISTRICT REQUIREMENTS		-	-	-	-	-	-
State Water Contract*		-	-	-	-	-	-
Supply - O&M		-	-	-	-	-	-
Supply - Capital		-	-	-	-	-	-
Power - O&M & Off-Aq Capital		-	-	-	-	-	-
Power - Capital (less Off-Aq)		-	-	-	-	-	-
Transmission - Capital - Commodity, Demand, & Standby		-	-	-	-	-	-
Transmission - O&M - Commodity only		-	-	-	-	-	-
Delta Conveyance - Supply		-	-	-	-	-	-
Delta Conveyance - Power		-	-	-	-	-	-
Delta Conveyance - Other		-	-	-	-	-	-
Total State Water Contract		-	-	-	-	-	-
Colorado River Aqueduct Power Costs		-	-	-	-	-	-
Supply Programs (cash funded portion)		-	-	-	-	-	-
Demand Management (cash funded portion)		-	-	-	-	-	-
Local Resources Program		-	-	-	-	-	-
Future Supply Actions & Stormwater Pilot		-	-	-	-	-	-
Conservation Program (cash funded portion)		-	-	-	-	-	-
Total Demand Management Costs		-	-	-	-	-	-
Capital Financing		-	-	-	-	-	-
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		15,469,792	4,926,323	4,561,411	5,982,058	-	15,469,792
G.O. Bond Debt Service		102,612	32,677	30,256	39,679	-	102,612
Debt Administration		141,113	44,937	41,609	54,568	-	141,113
Bond Defeasance		-	-	-	-	-	-
PAYGO		7,047,000	2,244,103	2,077,873	2,725,025	-	7,047,000
Total Capital Financing Costs		22,760,518	7,248,040	6,711,148	8,801,330	-	22,760,518
Other Operating Costs		-	-	-	-	-	-
Operating Equipment		453,399	-	453,399	-	-	453,399
Succession Planning Labor Pool		256,541	-	256,541	-	-	256,541
OPEB/PERS Pre-Funding		-	-	-	-	-	-
Total Other Operating Costs		709,940	-	709,940	-	-	709,940
Increase/(Decrease) in Required Reserves		-	-	-	-	-	-
Total General District Requirements		23,470,458	7,248,040	7,421,088	8,801,330	-	23,470,458
REQUIREMENTS BEFORE OFFSETS:		53,663,245	7,248,040	31,184,779	8,801,330	6,429,096	53,663,245
Revenue Offsets		-	-	-	-	-	-
Property Taxes - MWD Portion of SWC GO Debt Service		-	-	-	-	-	-
Property Taxes - MWD GO Debt Service		102,612	-	-	102,612	-	102,612
Interest on Investments		256,537	81,694	75,642	99,201	-	256,537
Hydro-Power Revenue		-	-	-	-	-	-
CRA Power Revenue		-	-	-	-	-	-
Wadsworth Pumping Plant (DVL) Power Revenue		-	-	-	-	-	-
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)		-	-	-	-	-	-
Misc. allocated to supply (PVID Lease)		-	-	-	-	-	-
Property Taxes - SWC		-	-	-	-	-	-
Revenue Reserve used for Revenue Bonds - I&P		-	-	-	-	-	-
Annexation		-	-	-	-	-	-
Total Revenue Offsets		359,149	81,694	75,642	201,813	-	359,149
NET REVENUE REQUIREMENTS:		53,304,096	7,166,346	31,109,137	8,599,517	6,429,096	53,304,096

		Functionalization	Allocation Percentages					Total
			Fixed			Variable		
			Demand	Commodity	Standby	Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		357,631	-	357,631	-	-	-	357,631
Office of General Manager	Board of Directors	-	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-	-
Human Resources		628,488	-	628,488	-	-	-	628,488
Water Systems Operations	Office of the Manager	601,140	-	601,140	-	-	-	601,140
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	76,990	-	76,990	-	-	-	76,990
Water Systems Operations	Office of the Manager, Operations Support Services	120,563	-	120,563	-	-	-	120,563
Water Systems Operations	Operations Support Services	89,381	-	89,381	-	-	-	89,381
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	10,323,149	-	10,323,149	-	-	-	10,323,149
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	2,376,087	-	2,376,087	-	-	-	2,376,087
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	133,808	-	133,808	-	-	-	133,808
Water Systems Operations	Environmental Health & Safety Section	1,019,397	-	1,019,397	-	-	-	1,019,397
Water Systems Operations	OSS, Fleet Services Unit	342,387	-	342,387	-	-	-	342,387
Water Systems Operations	OSS, Power Support Unit	255,105	-	255,105	-	-	-	255,105
Water Systems Operations	Office of the Manager, Operations & Planning Section	53,608	-	53,608	-	-	-	53,608
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-	-
Sustainability, Resilience & Inr		-	-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-	-
Engineering Services		2,031,328	-	2,031,328	-	-	-	2,031,328
Business Technology	Administrative Services	-	-	-	-	-	-	-
Business Technology	Information Technology	1,725,170	-	1,725,170	-	-	-	1,725,170
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	-	-	-	-	-	-	-
Water Resources Managemen	Office of the Group Manager	-	-	-	-	-	-	-
Ethics Office		-	-	-	-	-	-	-
Real Property		-	-	-	-	-	-	-
General Counsel		-	-	-	-	-	-	-
General Auditor		-	-	-	-	-	-	-
Total Departmental O&M	-	20,134,233	-	20,134,233	-	-	-	20,134,233

		Functionalization	Allocation Percentages					% Total
			Demand	Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		405,222	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Office of General Manager	Board of Directors	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Bay Delta Initiatives	Bay Delta Initiatives	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Legislative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Media Communications Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Manager, External Affairs/Special Projects	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Conservation & Community Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Human Resources		798,705	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager	846,248	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Treatment Section	223,078	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations Support Services	163,245	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Support Services	98,636	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Desert Region / C&D CRA	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	System Operations Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Power Operations and Planning	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Planning & Programs Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Jensen	-	0.0%	63.1%	0.0%	36.9%	0.0%	100.0%
Water Systems Operations	Treatment Diemer	-	0.0%	55.3%	0.0%	44.7%	0.0%	100.0%
Water Systems Operations	Treatment Mills	-	0.0%	77.8%	0.0%	22.2%	0.0%	100.0%
Water Systems Operations	Treatment Skinner	-	0.0%	64.2%	0.0%	35.8%	0.0%	100.0%
Water Systems Operations	Treatment Weymouth	17,319,710	0.0%	63.1%	0.0%	36.9%	0.0%	100.0%
Water Systems Operations	Water Quality Section	2,886,656	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Eastern Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Western Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Manufacturing Services Unit	145,664	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Environmental Health & Safety Section	1,311,381	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Fleet Services Unit	565,022	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Power Support Unit	282,124	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations & Planning Section	60,637	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Security Team & Security Management	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Sustainability, Resilience & Innovation		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Diversity, Equity & Inclusion		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Equal Employment Opportunity		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Office of the Chief Financial Officer		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Office of Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Engineering Services		2,532,290	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Administrative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Information Technology	2,596,815	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Planning & Development	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Implementation	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Office of the Group Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Ethics Office		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Real Property		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
General Counsel		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
General Auditor		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Departmental O&M		30,235,434	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
GENERAL DISTRICT REQUIREMENTS								
State Water Contract*								
Supply - O&M		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Supply - Capital		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Power - O&M & Off-Aq Capital		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Power - Capital (less Off-Aq)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Transmission - Capital - Commodity, Demand, & Standby		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Transmission - O&M - Commodity only		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Supply		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Power		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Other		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total State Water Contract		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Colorado River Aqueduct Power Costs								
		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Supply Programs (cash funded portion)								
		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Demand Management (cash funded portion)								
Local Resources Program		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Future Supply Actions & Stormwater Pilot		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Conservation Program (cash funded portion)		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Demand Management Costs		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Capital Financing								
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
G.O. Bond Debt Service		16,269,954	31.8%	29.5%	38.7%	0.0%	0.0%	100.0%
Debt Administration		107,920	31.8%	29.5%	38.7%	0.0%	0.0%	100.0%
Bond Defeasance		148,412	31.8%	29.5%	38.7%	0.0%	0.0%	100.0%
PAYGO		-	31.8%	29.5%	38.7%	0.0%	0.0%	100.0%
		7,411,500	31.8%	29.5%	38.7%	0.0%	0.0%	100.0%
Total Capital Financing Costs		23,937,786	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Other Operating Costs								
Operating Equipment		454,039	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Succession Planning Labor Pool		256,904	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
OPEB/PERS Pre-Funding		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Other Operating Costs		710,943	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Increase/(Decrease) in Required Reserves								
		-	30.9%	31.5%	37.6%	0.0%	0.0%	100.0%
Total General District Requirements								
		24,648,729	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
REQUIREMENTS BEFORE OFFSETS:								
		54,884,163	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Revenue Offsets								
Property Taxes - MWD Portion of SWC GO Debt Service		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Property Taxes - MWD GO Debt Service		107,920	0.0%	0.0%	100.0%	0.0%	0.0%	100.0%
Interest on Investments		262,373	31.8%	29.5%	38.7%	0.0%	0.0%	100.0%
Hydro-Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
CRA Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Wadsworth Pumping Plant (DVL) Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to supply (PVID Lease)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Property Taxes - SWC		-	31.8%	29.5%	38.7%	0.0%	0.0%	100.0%
Revenue Reserve used for Revenue Bonds - I&P		-	31.8%	29.5%	38.7%	0.0%	0.0%	100.0%
Annexation		-	31.8%	29.5%	38.7%	0.0%	0.0%	100.0%
Total Revenue Offsets		370,293	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
NET REVENUE REQUIREMENTS:								
-		54,513,870	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

	Functionalization	Allocation Percentages					Total
		Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M							
Group	Item						
Office of General Manager		405,222	-	405,222	-	-	405,222
Office of General Manager	Board of Directors	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-
Human Resources		798,705	-	798,705	-	-	798,705
Water Systems Operations	Office of the Manager	846,248	-	846,248	-	-	846,248
Water Systems Operations	Office of the Manager, Conveyance & Distribution S	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	223,078	-	223,078	-	-	223,078
Water Systems Operations	Office of the Manager, Operations Support Services	163,245	-	163,245	-	-	163,245
Water Systems Operations	Operations Support Services	98,636	-	98,636	-	-	98,636
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	17,319,710	-	10,923,178	6,396,532	-	17,319,710
Water Systems Operations	Water Quality Section	2,886,656	-	2,886,656	-	-	2,886,656
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	145,664	-	145,664	-	-	145,664
Water Systems Operations	Environmental Health & Safety Section	1,311,381	-	1,311,381	-	-	1,311,381
Water Systems Operations	OSS, Fleet Services Unit	565,022	-	565,022	-	-	565,022
Water Systems Operations	OSS, Power Support Unit	282,124	-	282,124	-	-	282,124
Water Systems Operations	Office of the Manager, Operations & Planning Secti	60,637	-	60,637	-	-	60,637
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-
Sustainability, Resilience & Inn		-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-
Engineering Services		2,532,290	-	2,532,290	-	-	2,532,290
Business Technology	Administrative Services	-	-	-	-	-	-
Business Technology	Information Technology	2,596,815	-	2,596,815	-	-	2,596,815
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	-	-	-	-	-	-
Water Resources Managemen	Office of the Group Manager	-	-	-	-	-	-
Ethics Office		-	-	-	-	-	-
Real Property		-	-	-	-	-	-
General Counsel		-	-	-	-	-	-
General Auditor		-	-	-	-	-	-
Total Departmental O&M		30,235,434	-	23,838,903	6,396,532	-	30,235,434
GENERAL DISTRICT REQUIREMENTS		-	-	-	-	-	-
State Water Contract*		-	-	-	-	-	-
Supply - O&M		-	-	-	-	-	-
Supply - Capital		-	-	-	-	-	-
Power - O&M & Off-Aq Capital		-	-	-	-	-	-
Power - Capital (less Off-Aq)		-	-	-	-	-	-
Transmission - Capital - Commodity, Demand, & Standby		-	-	-	-	-	-
Transmission - O&M - Commodity only		-	-	-	-	-	-
Delta Conveyance - Supply		-	-	-	-	-	-
Delta Conveyance - Power		-	-	-	-	-	-
Delta Conveyance - Other		-	-	-	-	-	-
Total State Water Contract		-	-	-	-	-	-
Colorado River Aqueduct Power Costs		-	-	-	-	-	-
Supply Programs (cash funded portion)		-	-	-	-	-	-
Demand Management (cash funded portion)		-	-	-	-	-	-
Local Resources Program		-	-	-	-	-	-
Future Supply Actions & Stormwater Pilot		-	-	-	-	-	-
Conservation Program (cash funded portion)		-	-	-	-	-	-
Total Demand Management Costs		-	-	-	-	-	-
Capital Financing		-	-	-	-	-	-
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		16,269,954	5,181,133	4,797,346	6,291,475	-	16,269,954
G.O. Bond Debt Service		107,920	34,367	31,821	41,732	-	107,920
Debt Administration		148,412	47,262	43,761	57,390	-	148,412
Bond Defeasance		-	-	-	-	-	-
PAYGO		7,411,500	2,360,177	2,185,349	2,865,974	-	7,411,500
Total Capital Financing Costs		23,937,786	7,622,938	7,058,276	9,256,571	-	23,937,786
Other Operating Costs		-	-	-	-	-	-
Operating Equipment		454,039	-	454,039	-	-	454,039
Succession Planning Labor Pool		256,904	-	256,904	-	-	256,904
OPEB/PERS Pre-Funding		-	-	-	-	-	-
Total Other Operating Costs		710,943	-	710,943	-	-	710,943
Increase/(Decrease) in Required Reserves		-	-	-	-	-	-
Total General District Requirements		24,648,729	7,622,938	7,769,219	9,256,571	-	24,648,729
REQUIREMENTS BEFORE OFFSETS:		54,884,163	7,622,938	31,608,122	9,256,571	6,396,532	54,884,163
Revenue Offsets		-	-	-	-	-	-
Property Taxes - MWD Portion of SWC GO Debt Service		-	-	-	-	-	-
Property Taxes - MWD GO Debt Service		107,920	-	-	107,920	-	107,920
Interest on Investments		262,373	83,552	77,363	101,458	-	262,373
Hydro-Power Revenue		-	-	-	-	-	-
CRA Power Revenue		-	-	-	-	-	-
Wadsworth Pumping Plant (DVL) Power Revenue		-	-	-	-	-	-
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)		-	-	-	-	-	-
Misc. allocated to supply (PVID Lease)		-	-	-	-	-	-
Property Taxes - SWC		-	-	-	-	-	-
Revenue Reserve used for Revenue Bonds - I&P		-	-	-	-	-	-
Annexation		-	-	-	-	-	-
Total Revenue Offsets		370,293	83,552	77,363	209,378	-	370,293
NET REVENUE REQUIREMENTS:		54,513,870	7,539,386	31,530,759	9,047,193	6,396,532	54,513,870

		Functionalization	Allocation Percentages					Total
			Fixed			Variable		
			Demand	Commodity	Standby	Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		358,136	-	358,136	-	-	-	358,136
Office of General Manager	Board of Directors	-	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-	-
Human Resources		629,376	-	629,376	-	-	-	629,376
Water Systems Operations	Office of the Manager	618,159	-	618,159	-	-	-	618,159
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	80,053	-	80,053	-	-	-	80,053
Water Systems Operations	Office of the Manager, Operations Support Services	-	-	123,976	-	-	-	123,976
Water Systems Operations	Operations Support Services	89,381	-	89,381	-	-	-	89,381
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	10,733,879	-	10,733,879	-	-	-	10,733,879
Water Systems Operations	Water Quality Section	2,376,087	-	2,376,087	-	-	-	2,376,087
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	133,808	-	133,808	-	-	-	133,808
Water Systems Operations	Environmental Health & Safety Section	1,019,397	-	1,019,397	-	-	-	1,019,397
Water Systems Operations	OSS, Fleet Services Unit	342,387	-	342,387	-	-	-	342,387
Water Systems Operations	OSS, Power Support Unit	255,105	-	255,105	-	-	-	255,105
Water Systems Operations	Office of the Manager, Operations & Planning Section	55,126	-	55,126	-	-	-	55,126
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-	-
Sustainability, Resilience & Inr		-	-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-	-
Engineering Services		2,136,397	-	2,136,397	-	-	-	2,136,397
Business Technology	Administrative Services	-	-	-	-	-	-	-
Business Technology	Information Technology	1,727,606	-	1,727,606	-	-	-	1,727,606
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	-	-	-	-	-	-	-
Water Resources Managemen	Office of the Group Manager	-	-	-	-	-	-	-
Ethics Office		-	-	-	-	-	-	-
Real Property		-	-	-	-	-	-	-
General Counsel		-	-	-	-	-	-	-
General Auditor		-	-	-	-	-	-	-
Total Departmental O&M	-	20,678,874	-	20,678,874	-	-	-	20,678,874

		Functionalization	Allocation Percentages					Total
			Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		430,887	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Office of General Manager	Board of Directors	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Bay Delta Initiatives	Bay Delta Initiatives	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Legislative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Media Communications Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Manager, External Affairs/Special Projects	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Conservation & Community Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Human Resources		849,293	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager	800,041	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Treatment Section	206,149	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations Support Services	154,331	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Support Services	98,636	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Desert Region / C&D CRA	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	System Operations Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Power Operations and Planning	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Planning & Programs Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Jensen	-	0.0%	63.1%	0.0%	36.9%	0.0%	100.0%
Water Systems Operations	Treatment Diemer	18,548,138	0.0%	55.3%	0.0%	44.7%	0.0%	100.0%
Water Systems Operations	Treatment Mills	-	0.0%	77.8%	0.0%	22.2%	0.0%	100.0%
Water Systems Operations	Treatment Skinner	-	0.0%	64.2%	0.0%	35.8%	0.0%	100.0%
Water Systems Operations	Treatment Weymouth	-	0.0%	61.4%	0.0%	38.6%	0.0%	100.0%
Water Systems Operations	Water Quality Section	2,886,656	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Eastern Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Western Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Manufacturing Services Unit	145,664	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Environmental Health & Safety Section	1,311,381	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Fleet Services Unit	565,022	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Power Support Unit	282,124	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations & Planning Section	57,326	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Security Team & Security Management	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Sustainability, Resilience & Innovation		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Diversity, Equity & Inclusion		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Equal Employment Opportunity		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Office of the Chief Financial Officer		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Office of Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Engineering Services		3,053,509	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Administrative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Information Technology	2,761,289	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Planning & Development	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Implementation	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Office of the Group Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Ethics Office		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Real Property		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
General Counsel		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
General Auditor		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Departmental O&M		32,150,447	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
GENERAL DISTRICT REQUIREMENTS								
State Water Contract*								
Supply - O&M		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Supply - Capital		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Power - O&M & Off-Aq Capital		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Power - Capital (less Off-Aq)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Transmission - Capital - Commodity, Demand, & Standby		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Transmission - O&M - Commodity only		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Supply		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Power		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Other		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total State Water Contract		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Colorado River Aqueduct Power Costs								
		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Supply Programs (cash funded portion)								
		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Demand Management (cash funded portion)								
Local Resources Program		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Future Supply Actions & Stormwater Pilot		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Conservation Program (cash funded portion)		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Demand Management Costs		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Capital Financing								
		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		19,618,779	31.8%	29.5%	38.7%	0.0%	0.0%	100.0%
G.O. Bond Debt Service		130,133	31.8%	29.5%	38.7%	0.0%	0.0%	100.0%
Debt Administration		178,960	31.8%	29.5%	38.7%	0.0%	0.0%	100.0%
Bond Defeasance		-	31.8%	29.5%	38.7%	0.0%	0.0%	100.0%
PAYGO		8,937,000	31.8%	29.5%	38.7%	0.0%	0.0%	100.0%
Total Capital Financing Costs		28,864,871	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Other Operating Costs								
Operating Equipment		482,797	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Succession Planning Labor Pool		273,175	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
OPEB/PERS Pre-Funding		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Other Operating Costs		755,972	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Increase/(Decrease) in Required Reserves								
		-	31.0%	31.3%	37.7%	0.0%	0.0%	100.0%
Total General District Requirements								
		29,620,843	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
REQUIREMENTS BEFORE OFFSETS:								
		61,771,290	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Revenue Offsets								
Property Taxes - MWD Portion of SWC GO Debt Service		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Property Taxes - MWD GO Debt Service		130,133	0.0%	0.0%	100.0%	0.0%	0.0%	100.0%
Interest on Investments		295,297	31.8%	29.5%	38.7%	0.0%	0.0%	100.0%
Hydro-Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
CRA Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Wadsworth Pumping Plant (DVL) Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to supply (PVID Lease)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Property Taxes - SWC		-	31.8%	29.5%	38.7%	0.0%	0.0%	100.0%
Revenue Reserve used for Revenue Bonds - I&P		-	31.8%	29.5%	38.7%	0.0%	0.0%	100.0%
Annexation		-	31.8%	29.5%	38.7%	0.0%	0.0%	100.0%
Total Revenue Offsets		425,430	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
NET REVENUE REQUIREMENTS:								
-		61,345,860	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

	Functionalization	Allocation Percentages					Total
		Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M							
Group	Item						
Office of General Manager		430,887	-	430,887	-	-	430,887
Office of General Manager	Board of Directors	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-
Human Resources		849,293	-	849,293	-	-	849,293
Water Systems Operations	Office of the Manager	800,041	-	800,041	-	-	800,041
Water Systems Operations	Office of the Manager, Conveyance & Distribution S	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	206,149	-	206,149	-	-	206,149
Water Systems Operations	Office of the Manager, Operations Support Services	154,331	-	154,331	-	-	154,331
Water Systems Operations	Operations Support Services	98,636	-	98,636	-	-	98,636
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	18,548,138	-	10,247,893	8,300,245	-	18,548,138
Water Systems Operations	Treatment Mills	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	2,886,656	-	2,886,656	-	-	2,886,656
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	145,664	-	145,664	-	-	145,664
Water Systems Operations	Environmental Health & Safety Section	1,311,381	-	1,311,381	-	-	1,311,381
Water Systems Operations	OSS, Fleet Services Unit	565,022	-	565,022	-	-	565,022
Water Systems Operations	OSS, Power Support Unit	282,124	-	282,124	-	-	282,124
Water Systems Operations	Office of the Manager, Operations & Planning Secti	57,326	-	57,326	-	-	57,326
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-
Sustainability, Resilience & Inn		-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-
Engineering Services		3,053,509	-	3,053,509	-	-	3,053,509
Business Technology	Administrative Services	-	-	-	-	-	-
Business Technology	Information Technology	2,761,289	-	2,761,289	-	-	2,761,289
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	-	-	-	-	-	-
Water Resources Managemen	Office of the Group Manager	-	-	-	-	-	-
Ethics Office		-	-	-	-	-	-
Real Property		-	-	-	-	-	-
General Counsel		-	-	-	-	-	-
General Auditor		-	-	-	-	-	-
Total Departmental O&M	-	32,150,447	-	23,850,202	8,300,245	-	32,150,447
GENERAL DISTRICT REQUIREMENTS							
		-	-	-	-	-	-
State Water Contract*							
Supply - O&M		-	-	-	-	-	-
Supply - Capital		-	-	-	-	-	-
Power - O&M & Off-Aq Capital		-	-	-	-	-	-
Power - Capital (less Off-Aq)		-	-	-	-	-	-
Transmission - Capital - Commodity, Demand, & Standby		-	-	-	-	-	-
Transmission - O&M - Commodity only		-	-	-	-	-	-
Delta Conveyance - Supply		-	-	-	-	-	-
Delta Conveyance - Power		-	-	-	-	-	-
Delta Conveyance - Other		-	-	-	-	-	-
Total State Water Contract		-	-	-	-	-	-
Colorado River Aqueduct Power Costs							
		-	-	-	-	-	-
Supply Programs (cash funded portion)							
		-	-	-	-	-	-
Demand Management (cash funded portion)							
Local Resources Program		-	-	-	-	-	-
Future Supply Actions & Stormwater Pilot		-	-	-	-	-	-
Conservation Program (cash funded portion)		-	-	-	-	-	-
Total Demand Management Costs		-	-	-	-	-	-
Capital Financing							
Revenue Bond Debt Service net of BABs Interest Subsidy Payment	19,618,779	6,247,560	5,784,777	7,586,442	-	-	19,618,779
G.O. Bond Debt Service	130,133	41,440	38,371	50,321	-	-	130,133
Debt Administration	178,960	56,989	52,768	69,202	-	-	178,960
Bond Defeasance	-	-	-	-	-	-	-
PAYGO	8,937,000	2,845,969	2,635,157	3,455,874	-	-	8,937,000
Total Capital Financing Costs	28,864,871	9,191,959	8,511,073	11,161,840	-	-	28,864,871
Other Operating Costs							
Operating Equipment	482,797	-	482,797	-	-	-	482,797
Succession Planning Labor Pool	273,175	-	273,175	-	-	-	273,175
OPEB/PERS Pre-Funding	-	-	-	-	-	-	-
Total Other Operating Costs	755,972	-	755,972	-	-	-	755,972
Increase/(Decrease) in Required Reserves							
	-	-	-	-	-	-	-
Total General District Requirements	29,620,843	9,191,959	9,267,045	11,161,840	-	-	29,620,843
REQUIREMENTS BEFORE OFFSETS:	61,771,290	9,191,959	33,117,246	11,161,840	8,300,245	-	61,771,290
Revenue Offsets							
Property Taxes - MWD Portion of SWC GO Debt Service	-	-	-	-	-	-	-
Property Taxes - MWD GO Debt Service	130,133	-	-	130,133	-	-	130,133
Interest on Investments	295,297	94,037	87,071	114,189	-	-	295,297
Hydro-Power Revenue	-	-	-	-	-	-	-
CRA Power Revenue	-	-	-	-	-	-	-
Wadsworth Pumping Plant (DVL) Power Revenue	-	-	-	-	-	-	-
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)	-	-	-	-	-	-	-
Misc. allocated to supply (PVID Lease)	-	-	-	-	-	-	-
Property Taxes - SWC	-	-	-	-	-	-	-
Revenue Reserve used for Revenue Bonds - I&P	-	-	-	-	-	-	-
Annexation	-	-	-	-	-	-	-
Total Revenue Offsets	425,430	94,037	87,071	244,322	-	-	425,430
NET REVENUE REQUIREMENTS:	61,345,860	9,097,922	33,030,175	10,917,518	8,300,245	-	61,345,860

		Functionalization	Allocation Percentages					Total
			Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		380,820	-	380,820	-	-	-	380,820
Office of General Manager	Board of Directors	-	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-	-
Human Resources		669,239	-	669,239	-	-	-	669,239
Water Systems Operations	Office of the Manager	584,406	-	584,406	-	-	-	584,406
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	73,978	-	73,978	-	-	-	73,978
Water Systems Operations	Office of the Manager, Operations Support Services	117,206	-	117,206	-	-	-	117,206
Water Systems Operations	Operations Support Services	89,381	-	89,381	-	-	-	89,381
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	9,919,279	-	9,919,279	-	-	-	9,919,279
Water Systems Operations	Treatment Mills	-	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	2,376,087	-	2,376,087	-	-	-	2,376,087
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	133,808	-	133,808	-	-	-	133,808
Water Systems Operations	Environmental Health & Safety Section	1,019,397	-	1,019,397	-	-	-	1,019,397
Water Systems Operations	OSS, Fleet Services Unit	342,387	-	342,387	-	-	-	342,387
Water Systems Operations	OSS, Power Support Unit	255,105	-	255,105	-	-	-	255,105
Water Systems Operations	Office of the Manager, Operations & Planning Section	52,116	-	52,116	-	-	-	52,116
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-	-
Sustainability, Resilience & Inr		-	-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-	-
Equal Employment Opportunit		-	-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-	-
Engineering Services		2,576,129	-	2,576,129	-	-	-	2,576,129
Business Technology	Administrative Services	-	-	-	-	-	-	-
Business Technology	Information Technology	1,837,027	-	1,837,027	-	-	-	1,837,027
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	-	-	-	-	-	-	-
Water Resources Managemen	Office of the Group Manager	-	-	-	-	-	-	-
Ethics Office		-	-	-	-	-	-	-
Real Property		-	-	-	-	-	-	-
General Counsel		-	-	-	-	-	-	-
General Auditor		-	-	-	-	-	-	-
Total Departmental O&M		-	20,426,366	20,426,366	-	-	-	20,426,366

		Functionalization	Allocation Percentages					% Total
			Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
	Office of General Manager	304,924	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Office of General Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Bay Delta Initiatives	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	External Affairs	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	External Affairs	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	External Affairs	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	External Affairs	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Human Resources	601,015	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	772,070	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	195,900	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	148,936	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	98,636	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Water Systems Operations	-	0.0%	100.0%	0.0%	0.0%</		

	Functionalization	Allocation Percentages					Total
		Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M							
Group	Item						
Office of General Manager		304,924	-	304,924	-	-	304,924
Office of General Manager	Board of Directors	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-
Human Resources		601,015	-	601,015	-	-	601,015
Water Systems Operations	Office of the Manager	772,070	-	772,070	-	-	772,070
Water Systems Operations	Office of the Manager, Conveyance & Distribution S	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	195,900	-	195,900	-	-	195,900
Water Systems Operations	Office of the Manager, Operations Support Services	148,936	-	148,936	-	-	148,936
Water Systems Operations	Operations Support Services	98,636	-	98,636	-	-	98,636
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	12,641,303	-	9,837,157	2,804,145	-	12,641,303
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	2,886,656	-	2,886,656	-	-	2,886,656
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	145,664	-	145,664	-	-	145,664
Water Systems Operations	Environmental Health & Safety Section	1,311,381	-	1,311,381	-	-	1,311,381
Water Systems Operations	OSS, Fleet Services Unit	565,022	-	565,022	-	-	565,022
Water Systems Operations	OSS, Power Support Unit	282,124	-	282,124	-	-	282,124
Water Systems Operations	Office of the Manager, Operations & Planning Secti	55,322	-	55,322	-	-	55,322
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-
Sustainability, Resilience & Inn		-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-
Engineering Services		788,746	-	788,746	-	-	788,746
Business Technology	Administrative Services	-	-	-	-	-	-
Business Technology	Information Technology	1,954,070	-	1,954,070	-	-	1,954,070
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	-	-	-	-	-	-
Water Resources Managemen	Office of the Group Manager	-	-	-	-	-	-
Ethics Office		-	-	-	-	-	-
Real Property		-	-	-	-	-	-
General Counsel		-	-	-	-	-	-
General Auditor		-	-	-	-	-	-
Total Departmental O&M	-	22,751,769	-	19,947,624	2,804,145	-	22,751,769
GENERAL DISTRICT REQUIREMENTS							
		-	-	-	-	-	-
State Water Contract*							
Supply - O&M		-	-	-	-	-	-
Supply - Capital		-	-	-	-	-	-
Power - O&M & Off-Aq Capital		-	-	-	-	-	-
Power - Capital (less Off-Aq)		-	-	-	-	-	-
Transmission - Capital - Commodity, Demand, & Standby		-	-	-	-	-	-
Transmission - O&M - Commodity only		-	-	-	-	-	-
Delta Conveyance - Supply		-	-	-	-	-	-
Delta Conveyance - Power		-	-	-	-	-	-
Delta Conveyance - Other		-	-	-	-	-	-
Total State Water Contract		-	-	-	-	-	-
Colorado River Aqueduct Power Costs							
		-	-	-	-	-	-
Supply Programs (cash funded portion)							
		-	-	-	-	-	-
Demand Management (cash funded portion)							
Local Resources Program		-	-	-	-	-	-
Future Supply Actions & Stormwater Pilot		-	-	-	-	-	-
Conservation Program (cash funded portion)		-	-	-	-	-	-
Total Demand Management Costs		-	-	-	-	-	-
Capital Financing							
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		-	-	-	-	-	-
G.O. Bond Debt Service	5,067,691	1,613,796	1,494,255	1,959,640	-	-	5,067,691
Debt Administration	33,614	10,704	9,911	12,998	-	-	33,614
Bond Defeasance	46,227	14,721	13,630	17,876	-	-	46,227
PAYGO	-	-	-	-	-	-	-
Total Capital Financing Costs	2,308,500	735,137	680,682	892,680	-	-	2,308,500
	7,456,032	2,374,358	2,198,480	2,883,194	-	-	7,456,032
Other Operating Costs							
Operating Equipment	-	-	-	-	-	-	-
Succession Planning Labor Pool	341,659	-	341,659	-	-	-	341,659
OPEB\PERS Pre-Funding	193,317	-	193,317	-	-	-	193,317
Total Other Operating Costs	-	-	-	-	-	-	-
	534,975	-	534,975	-	-	-	534,975
Increase/(Decrease) in Required Reserves							
	-	-	-	-	-	-	-
Total General District Requirements	7,991,007	2,374,358	2,733,455	2,883,194	-	-	7,991,007
REQUIREMENTS BEFORE OFFSETS:	30,742,776	2,374,358	22,681,079	2,883,194	2,804,145	-	30,742,776
Revenue Offsets							
Property Taxes - MWD Portion of SWC GO Debt Service	-	-	-	-	-	-	-
Property Taxes - MWD GO Debt Service	33,614	-	-	33,614	-	-	33,614
Interest on Investments	146,966	46,801	43,334	56,831	-	-	146,966
Hydro-Power Revenue	-	-	-	-	-	-	-
CRA Power Revenue	-	-	-	-	-	-	-
Wadsworth Pumping Plant (DVL) Power Revenue	-	-	-	-	-	-	-
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)	-	-	-	-	-	-	-
Misc. allocated to supply (PVID Lease)	-	-	-	-	-	-	-
Property Taxes - SWC	-	-	-	-	-	-	-
Revenue Reserve used for Revenue Bonds - I&P	-	-	-	-	-	-	-
Annexation	-	-	-	-	-	-	-
Total Revenue Offsets	180,580	46,801	43,334	90,445	-	-	180,580
NET REVENUE REQUIREMENTS:	30,562,197	2,327,557	22,637,745	2,792,749	2,804,145	-	30,562,197

		Functionalization	Allocation Percentages					Total
			Fixed			Variable		
			Demand	Commodity	Standby	Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		269,493	-	269,493	-	-	-	269,493
Office of General Manager	Board of Directors	-	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-	-
Human Resources		473,597	-	473,597	-	-	-	473,597
Water Systems Operations	Office of the Manager	563,974	-	563,974	-	-	-	563,974
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	70,300	-	70,300	-	-	-	70,300
Water Systems Operations	Office of the Manager, Operations Support Services	113,109	-	113,109	-	-	-	113,109
Water Systems Operations	Operations Support Services	89,381	-	89,381	-	-	-	89,381
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	9,426,164	-	9,426,164	-	-	-	9,426,164
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	2,376,087	-	2,376,087	-	-	-	2,376,087
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	133,808	-	133,808	-	-	-	133,808
Water Systems Operations	Environmental Health & Safety Section	1,019,397	-	1,019,397	-	-	-	1,019,397
Water Systems Operations	OSS, Fleet Services Unit	342,387	-	342,387	-	-	-	342,387
Water Systems Operations	OSS, Power Support Unit	255,105	-	255,105	-	-	-	255,105
Water Systems Operations	Office of the Manager, Operations & Planning Section	50,294	-	50,294	-	-	-	50,294
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-	-
Sustainability, Resilience & Inr		-	-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-	-
Engineering Services		665,435	-	665,435	-	-	-	665,435
Business Technology	Administrative Services	-	-	-	-	-	-	-
Business Technology	Information Technology	1,300,001	-	1,300,001	-	-	-	1,300,001
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	-	-	-	-	-	-	-
Water Resources Managemen	Office of the Group Manager	-	-	-	-	-	-	-
Ethics Office		-	-	-	-	-	-	-
Real Property		-	-	-	-	-	-	-
General Counsel		-	-	-	-	-	-	-
General Auditor		-	-	-	-	-	-	-
Total Departmental O&M	-	17,148,533	-	17,148,533	-	-	-	17,148,533

		Functionalization	Allocation Percentages					Total
			Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		364,641	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Office of General Manager	Board of Directors	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Bay Delta Initiatives	Bay Delta Initiatives	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Legislative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Media Communications Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Manager, External Affairs/Special Projects	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Conservation & Community Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Human Resources		718,720	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager	759,347	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Treatment Section	191,239	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations Support Services	146,481	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Support Services	98,636	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Desert Region / C&D CRA	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	System Operations Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Power Operations and Planning	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Planning & Programs Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Jensen	-	0.0%	63.1%	0.0%	36.9%	0.0%	100.0%
Water Systems Operations	Treatment Diemer	-	0.0%	55.3%	0.0%	44.7%	0.0%	100.0%
Water Systems Operations	Treatment Mills	-	0.0%	77.8%	0.0%	22.2%	0.0%	100.0%
Water Systems Operations	Treatment Skinner	14,804,960	0.0%	64.2%	0.0%	35.8%	0.0%	100.0%
Water Systems Operations	Treatment Weymouth	-	0.0%	61.0%	0.0%	39.0%	0.0%	100.0%
Water Systems Operations	Water Quality Section	2,886,656	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Eastern Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Western Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Manufacturing Services Unit	145,664	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Environmental Health & Safety Section	1,311,381	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Fleet Services Unit	565,022	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Power Support Unit	282,124	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations & Planning Section	54,410	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Security Team & Security Management	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Sustainability, Resilience & Innovation		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Diversity, Equity & Inclusion		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Equal Employment Opportunity		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Office of the Chief Financial Officer		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Office of Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Engineering Services		2,541,516	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Administrative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Information Technology	2,336,762	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Planning & Development	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Implementation	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Office of the Group Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Ethics Office		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Real Property		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
General Counsel		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
General Auditor		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Departmental O&M		27,207,559	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
GENERAL DISTRICT REQUIREMENTS								
State Water Contract*								
Supply - O&M		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Supply - Capital		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Power - O&M & Off-Aq Capital		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Power - Capital (less Off-Aq)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Transmission - Capital - Commodity, Demand, & Standby		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Transmission - O&M - Commodity only		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Supply		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Power		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Other		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total State Water Contract		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Colorado River Aqueduct Power Costs								
		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Supply Programs (cash funded portion)								
		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Demand Management (cash funded portion)								
Local Resources Program		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Future Supply Actions & Stormwater Pilot		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Conservation Program (cash funded portion)		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Demand Management Costs		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Capital Financing								
		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		16,329,225	31.8%	29.5%	38.7%	0.0%	0.0%	100.0%
G.O. Bond Debt Service		108,313	31.8%	29.5%	38.7%	0.0%	0.0%	100.0%
Debt Administration		148,953	31.8%	29.5%	38.7%	0.0%	0.0%	100.0%
Bond Defeasance		-	31.8%	29.5%	38.7%	0.0%	0.0%	100.0%
PAYGO		7,438,500	31.8%	29.5%	38.7%	0.0%	0.0%	100.0%
Total Capital Financing Costs		24,024,991	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Other Operating Costs								
Operating Equipment		408,570	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Succession Planning Labor Pool		231,177	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
OPEB/PERS Pre-Funding		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Other Operating Costs		639,747	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Increase/(Decrease) in Required Reserves								
		-	31.0%	31.3%	37.7%	0.0%	0.0%	100.0%
Total General District Requirements								
		24,664,738	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
REQUIREMENTS BEFORE OFFSETS:								
		51,872,297	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Revenue Offsets								
Property Taxes - MWD Portion of SWC GO Debt Service		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Property Taxes - MWD GO Debt Service		108,313	0.0%	0.0%	100.0%	0.0%	0.0%	100.0%
Interest on Investments		247,975	31.8%	29.5%	38.7%	0.0%	0.0%	100.0%
Hydro-Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
CRA Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Wadsworth Pumping Plant (DVL) Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to supply (PVID Lease)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Property Taxes - SWC		-	31.8%	29.5%	38.7%	0.0%	0.0%	100.0%
Revenue Reserve used for Revenue Bonds - I&P		-	31.8%	29.5%	38.7%	0.0%	0.0%	100.0%
Annexation		-	31.8%	29.5%	38.7%	0.0%	0.0%	100.0%
Total Revenue Offsets		356,288	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
NET REVENUE REQUIREMENTS:								
-		51,516,009	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

	Functionalization	Allocation Percentages					Total
		Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M							
Group	Item						
Office of General Manager		364,641	-	364,641	-	-	364,641
Office of General Manager	Board of Directors	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-
Human Resources		718,720	-	718,720	-	-	718,720
Water Systems Operations	Office of the Manager	759,347	-	759,347	-	-	759,347
Water Systems Operations	Office of the Manager, Conveyance & Distribution S	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	191,239	-	191,239	-	-	191,239
Water Systems Operations	Office of the Manager, Operations Support Services	146,481	-	146,481	-	-	146,481
Water Systems Operations	Operations Support Services	98,636	-	98,636	-	-	98,636
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	14,804,960	-	9,502,541	5,302,418	-	14,804,960
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	2,886,656	-	2,886,656	-	-	2,886,656
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	145,664	-	145,664	-	-	145,664
Water Systems Operations	Environmental Health & Safety Section	1,311,381	-	1,311,381	-	-	1,311,381
Water Systems Operations	OSS, Fleet Services Unit	565,022	-	565,022	-	-	565,022
Water Systems Operations	OSS, Power Support Unit	282,124	-	282,124	-	-	282,124
Water Systems Operations	Office of the Manager, Operations & Planning Secti	54,410	-	54,410	-	-	54,410
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-
Sustainability, Resilience & Inn		-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-
Engineering Services		2,541,516	-	2,541,516	-	-	2,541,516
Business Technology	Administrative Services	-	-	-	-	-	-
Business Technology	Information Technology	2,336,762	-	2,336,762	-	-	2,336,762
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	-	-	-	-	-	-
Water Resources Managemen	Office of the Group Manager	-	-	-	-	-	-
Ethics Office		-	-	-	-	-	-
Real Property		-	-	-	-	-	-
General Counsel		-	-	-	-	-	-
General Auditor		-	-	-	-	-	-
Total Departmental O&M		27,207,559	-	21,905,141	5,302,418	-	27,207,559
GENERAL DISTRICT REQUIREMENTS		-	-	-	-	-	-
State Water Contract*		-	-	-	-	-	-
Supply - O&M		-	-	-	-	-	-
Supply - Capital		-	-	-	-	-	-
Power - O&M & Off-Aq Capital		-	-	-	-	-	-
Power - Capital (less Off-Aq)		-	-	-	-	-	-
Transmission - Capital - Commodity, Demand, & Standby		-	-	-	-	-	-
Transmission - O&M - Commodity only		-	-	-	-	-	-
Delta Conveyance - Supply		-	-	-	-	-	-
Delta Conveyance - Power		-	-	-	-	-	-
Delta Conveyance - Other		-	-	-	-	-	-
Total State Water Contract		-	-	-	-	-	-
Colorado River Aqueduct Power Costs		-	-	-	-	-	-
Supply Programs (cash funded portion)		-	-	-	-	-	-
Demand Management (cash funded portion)		-	-	-	-	-	-
Local Resources Program		-	-	-	-	-	-
Future Supply Actions & Stormwater Pilot		-	-	-	-	-	-
Conservation Program (cash funded portion)		-	-	-	-	-	-
Total Demand Management Costs		-	-	-	-	-	-
Capital Financing		-	-	-	-	-	-
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		16,329,225	5,200,008	4,814,822	6,314,395	-	16,329,225
G.O. Bond Debt Service		108,313	34,492	31,937	41,884	-	108,313
Debt Administration		148,953	47,434	43,920	57,599	-	148,953
Bond Defeasance		-	-	-	-	-	-
PAYGO		7,438,500	2,368,775	2,193,310	2,876,415	-	7,438,500
Total Capital Financing Costs		24,024,991	7,650,709	7,083,990	9,290,293	-	24,024,991
Other Operating Costs		-	-	-	-	-	-
Operating Equipment		408,570	-	408,570	-	-	408,570
Succession Planning Labor Pool		231,177	-	231,177	-	-	231,177
OPEB/PERS Pre-Funding		-	-	-	-	-	-
Total Other Operating Costs		639,747	-	639,747	-	-	639,747
Increase/(Decrease) in Required Reserves		-	-	-	-	-	-
Total General District Requirements		24,664,738	7,650,709	7,723,736	9,290,293	-	24,664,738
REQUIREMENTS BEFORE OFFSETS:		51,872,297	7,650,709	29,628,877	9,290,293	5,302,418	51,872,297
Revenue Offsets		-	-	-	-	-	-
Property Taxes - MWD Portion of SWC GO Debt Service		-	-	-	-	-	-
Property Taxes - MWD GO Debt Service		108,313	-	-	108,313	-	108,313
Interest on Investments		247,975	78,967	73,118	95,890	-	247,975
Hydro-Power Revenue		-	-	-	-	-	-
CRA Power Revenue		-	-	-	-	-	-
Wadsworth Pumping Plant (DVL) Power Revenue		-	-	-	-	-	-
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)		-	-	-	-	-	-
Misc. allocated to supply (PVID Lease)		-	-	-	-	-	-
Property Taxes - SWC		-	-	-	-	-	-
Revenue Reserve used for Revenue Bonds - I&P		-	-	-	-	-	-
Annexation		-	-	-	-	-	-
Total Revenue Offsets		356,288	78,967	73,118	204,203	-	356,288
NET REVENUE REQUIREMENTS:		51,516,009	7,571,742	29,555,759	9,086,090	5,302,418	51,516,009

		Functionalization	Allocation Percentages					Total
			Fixed			Variable		
			Demand	Commodity	Standby	Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		322,271	-	322,271	-	-	-	322,271
Office of General Manager	Board of Directors	-	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-	-
Human Resources		566,348	-	566,348	-	-	-	566,348
Water Systems Operations	Office of the Manager	554,680	-	554,680	-	-	-	554,680
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	68,628	-	68,628	-	-	-	68,628
Water Systems Operations	Office of the Manager, Operations Support Services	111,245	-	111,245	-	-	-	111,245
Water Systems Operations	Operations Support Services	89,381	-	89,381	-	-	-	89,381
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	9,201,857	-	9,201,857	-	-	-	9,201,857
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	2,376,087	-	2,376,087	-	-	-	2,376,087
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	133,808	-	133,808	-	-	-	133,808
Water Systems Operations	Environmental Health & Safety Section	1,019,397	-	1,019,397	-	-	-	1,019,397
Water Systems Operations	OSS, Fleet Services Unit	342,387	-	342,387	-	-	-	342,387
Water Systems Operations	OSS, Power Support Unit	255,105	-	255,105	-	-	-	255,105
Water Systems Operations	Office of the Manager, Operations & Planning Section	49,465	-	49,465	-	-	-	49,465
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-	-
Sustainability, Resilience & Inr		-	-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-	-
Engineering Services		2,144,180	-	2,144,180	-	-	-	2,144,180
Business Technology	Administrative Services	-	-	-	-	-	-	-
Business Technology	Information Technology	1,554,598	-	1,554,598	-	-	-	1,554,598
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-	-
Water Resources Managemen	Resource Implementation	-	-	-	-	-	-	-
Water Resources Managemen	Office of the Group Manager	-	-	-	-	-	-	-
Ethics Office		-	-	-	-	-	-	-
Real Property		-	-	-	-	-	-	-
General Counsel		-	-	-	-	-	-	-
General Auditor		-	-	-	-	-	-	-
Total Departmental O&M	-	18,789,437	-	18,789,437	-	-	-	18,789,437

		Functionalization	Allocation Percentages						% Total	
			Demand	Fixed		Standby	Variable Commodity	Other		Hydroelectric
				Commodity						
Departmental O&M										
Group	Item									
Office of General Manager		1,582,168	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%		
Office of General Manager	Board of Directors	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%		
Bay Delta Initiatives	Bay Delta Initiatives	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%		
External Affairs	Legislative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%		
External Affairs	Media Communications Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%		
External Affairs	Manager, External Affairs/Special Projects	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%		
External Affairs	Conservation & Community Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%		
Human Resources		3,118,507	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%		
Water Systems Operations	Office of the Manager	3,666,120	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%		
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	362,137	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%		
Water Systems Operations	Office of the Manager, Treatment Section	155,407	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%		
Water Systems Operations	Office of the Manager, Operations Support Services	707,210	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%		
Water Systems Operations	Operations Support Services	6,797,038	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%		
Water Systems Operations	Desert Region / C&D CRA	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%		
Water Systems Operations	System Operations Unit	9,165,994	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%		
Water Systems Operations	Power Operations and Planning	1,270,694	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%		
Water Systems Operations	Operations Planning & Programs Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%		
Water Systems Operations	Treatment Jensen	2,629,793	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%		
Water Systems Operations	Treatment Diemer	2,796,094	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%		
Water Systems Operations	Treatment Mills	1,905,651	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%		
Water Systems Operations	Treatment Skinner	2,231,818	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%		
Water Systems Operations	Treatment Weymouth	2,610,911	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%		
Water Systems Operations	Water Quality Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%		
Water Systems Operations	C&D, Eastern Unit	16,667,143	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%		
Water Systems Operations	C&D, Western Unit	15,036,566	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%		
Water Systems Operations	OSS, Manufacturing Services Unit	6,800,330	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%		
Water Systems Operations	Environmental Health & Safety Section	6,471,922	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%		
Water Systems Operations	OSS, Fleet Services Unit	6,914,534	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%		
Water Systems Operations	OSS, Power Support Unit	4,259,524	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%		
Water Systems Operations	Office of the Manager, Operations & Planning Section	262,691	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%		
Water Systems Operations	Security Team & Security Management	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%		
Sustainability, Resilience & Innovation		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%		
Diversity, Equity & Inclusion		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%		
Equal Employment Opportunity		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%		
Office of the Chief Financial Officer		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%		
Business Technology	Office of Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%		
Engineering Services		8,514,769	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%		
Business Technology	Administrative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%		
Business Technology	Information Technology	10,139,142	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%		
Water Resources Management	Resource Planning & Development	404,903	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%		
Water Resources Management	Resource Implementation	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%		
Water Resources Management	Office of the Group Manager	46,860	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%		
Ethics Office		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%		
Real Property		3,534,893	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%		
General Counsel		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%		
General Auditor		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%		
Total Departmental O&M		118,052,820	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		
GENERAL DISTRICT REQUIREMENTS										
State Water Contract*										
Supply - O&M		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		
Supply - Capital		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		
Power - O&M & Off-Aq Capital		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		
Power - Capital (less Off-Aq)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		
Transmission - Capital - Commodity, Demand, & Standby		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		
Transmission - O&M - Commodity only		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		
Delta Conveyance - Supply		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		
Delta Conveyance - Power		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		
Delta Conveyance - Other		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		
Total State Water Contract		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		
Colorado River Aqueduct Power Costs										
		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		
Supply Programs (cash funded portion)										
		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		
Demand Management (cash funded portion)										
Local Resources Program		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		
Future Supply Actions & Stormwater Pilot		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%		
Conservation Program (cash funded portion)		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%		
Total Demand Management Costs		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		
Capital Financing										
		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		54,707,349	34.6%	38.9%	26.5%	0.0%	0.0%	100.0%		
G.O. Bond Debt Service		1,483,158	34.6%	38.9%	26.5%	0.0%	0.0%	100.0%		
Debt Administration		499,033	34.6%	38.9%	26.5%	0.0%	0.0%	100.0%		
Bond Defeasance		-	34.6%	38.9%	26.5%	0.0%	0.0%	100.0%		
PAYGO		24,921,000	34.6%	38.9%	26.5%	0.0%	0.0%	100.0%		
Total Capital Financing Costs		81,610,541	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		
Other Operating Costs										
Operating Equipment		1,772,775	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%		
Succession Planning Labor Pool		1,003,068	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%		
OPEB/PERS Pre-Funding		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%		
Total Other Operating Costs		2,775,843	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		
Increase/(Decrease) in Required Reserves										
		-	33.4%	40.9%	25.6%	0.0%	0.0%	100.0%		
Total General District Requirements										
		84,386,384	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		
REQUIREMENTS BEFORE OFFSETS:										
		202,439,204	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		
Revenue Offsets										
Property Taxes - MWD Portion of SWC GO Debt Service		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		
Property Taxes - MWD GO Debt Service		1,483,158	34.7%	38.6%	26.7%	0.0%	0.0%	100.0%		
Interest on Investments		967,759	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%		
Hydro-Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		
CRA Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		
Wadsworth Pumping Plant (DVL) Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		
Misc. allocated to supply (PVID Lease)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		
Property Taxes - SWC		-	34.7%	38.6%	26.7%	0.0%	0.0%	100.0%		
Revenue Reserve used for Revenue Bonds - I&P		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%		
Annexation		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%		
Total Revenue Offsets		2,450,917	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		
NET REVENUE REQUIREMENTS:										
		199,988,286	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		

	Functionalization	Allocation Percentages					Total
		Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M							
Group	Item						
Office of General Manager		1,582,168	-	1,582,168	-	-	1,582,168
Office of General Manager	Board of Directors	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-
Human Resources		3,118,507	-	3,118,507	-	-	3,118,507
Water Systems Operations	Office of the Manager	3,666,120	-	3,666,120	-	-	3,666,120
Water Systems Operations	Office of the Manager, Conveyance & Distribution S	362,137	-	362,137	-	-	362,137
Water Systems Operations	Office of the Manager, Treatment Section	155,407	-	155,407	-	-	155,407
Water Systems Operations	Office of the Manager, Operations Support Services	707,210	-	707,210	-	-	707,210
Water Systems Operations	Operations Support Services	6,797,038	-	6,797,038	-	-	6,797,038
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	9,165,994	-	9,165,994	-	-	9,165,994
Water Systems Operations	Power Operations and Planning	1,270,694	-	1,270,694	-	-	1,270,694
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	2,629,793	-	2,629,793	-	-	2,629,793
Water Systems Operations	Treatment Diemer	2,796,094	-	2,796,094	-	-	2,796,094
Water Systems Operations	Treatment Mills	1,905,651	-	1,905,651	-	-	1,905,651
Water Systems Operations	Treatment Skinner	2,231,818	-	2,231,818	-	-	2,231,818
Water Systems Operations	Treatment Weymouth	2,610,911	-	2,610,911	-	-	2,610,911
Water Systems Operations	Water Quality Section	-	-	-	-	-	-
Water Systems Operations	C&D, Eastern Unit	16,667,143	-	16,667,143	-	-	16,667,143
Water Systems Operations	C&D, Western Unit	15,036,566	-	15,036,566	-	-	15,036,566
Water Systems Operations	OSS, Manufacturing Services Unit	6,800,330	-	6,800,330	-	-	6,800,330
Water Systems Operations	Environmental Health & Safety Section	6,471,922	-	6,471,922	-	-	6,471,922
Water Systems Operations	OSS, Fleet Services Unit	6,914,534	-	6,914,534	-	-	6,914,534
Water Systems Operations	OSS, Power Support Unit	4,259,524	-	4,259,524	-	-	4,259,524
Water Systems Operations	Office of the Manager, Operations & Planning Secti	262,691	-	262,691	-	-	262,691
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-
Sustainability, Resilience & Inn		-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-
Engineering Services		8,514,769	-	8,514,769	-	-	8,514,769
Business Technology	Administrative Services	-	-	-	-	-	-
Business Technology	Information Technology	10,139,142	-	10,139,142	-	-	10,139,142
Water Resources Managemen	Resource Planning & Development	404,903	-	404,903	-	-	404,903
Water Resources Managemen	Resource Implementation	-	-	-	-	-	-
Water Resources Managemen	Office of the Group Manager	46,860	-	46,860	-	-	46,860
Ethics Office		-	-	-	-	-	-
Real Property		3,534,893	-	3,534,893	-	-	3,534,893
General Counsel		-	-	-	-	-	-
General Auditor		-	-	-	-	-	-
Total Departmental O&M	-	118,052,820	-	118,052,820	-	-	118,052,820
GENERAL DISTRICT REQUIREMENTS							
		-	-	-	-	-	-
State Water Contract*		-	-	-	-	-	-
Supply - O&M		-	-	-	-	-	-
Supply - Capital		-	-	-	-	-	-
Power - O&M & Off-Aq Capital		-	-	-	-	-	-
Power - Capital (less Off-Aq)		-	-	-	-	-	-
Transmission - Capital - Commodity, Demand, & Standby		-	-	-	-	-	-
Transmission - O&M - Commodity only		-	-	-	-	-	-
Delta Conveyance - Supply		-	-	-	-	-	-
Delta Conveyance - Power		-	-	-	-	-	-
Delta Conveyance - Other		-	-	-	-	-	-
Total State Water Contract		-	-	-	-	-	-
Colorado River Aqueduct Power Costs		-	-	-	-	-	-
Supply Programs (cash funded portion)		-	-	-	-	-	-
Demand Management (cash funded portion)		-	-	-	-	-	-
Local Resources Program		-	-	-	-	-	-
Future Supply Actions & Stormwater Pilot		-	-	-	-	-	-
Conservation Program (cash funded portion)		-	-	-	-	-	-
Total Demand Management Costs		-	-	-	-	-	-
Capital Financing		-	-	-	-	-	-
Revenue Bond Debt Service net of BABs Interest Subsidy Payment	54,707,349	18,904,255	21,303,743	14,499,351	-	-	54,707,349
G.O. Bond Debt Service	1,483,158	512,509	577,561	393,089	-	-	1,483,158
Debt Administration	499,033	172,442	194,330	132,261	-	-	499,033
Bond Defeasance	-	-	-	-	-	-	-
PAYGO	24,921,000	8,611,511	9,704,557	6,604,932	-	-	24,921,000
Total Capital Financing Costs	81,610,541	28,200,717	31,780,191	21,629,633	-	-	81,610,541
Other Operating Costs	-	-	-	-	-	-	-
Operating Equipment	1,772,775	-	1,772,775	-	-	-	1,772,775
Succession Planning Labor Pool	1,003,068	-	1,003,068	-	-	-	1,003,068
OPEB/PERS Pre-Funding	-	-	-	-	-	-	-
Total Other Operating Costs	2,775,843	-	2,775,843	-	-	-	2,775,843
Increase/(Decrease) in Required Reserves	-	-	-	-	-	-	-
Total General District Requirements	84,386,384	28,200,717	34,556,034	21,629,633	-	-	84,386,384
REQUIREMENTS BEFORE OFFSETS:	202,439,204	28,200,717	152,608,854	21,629,633	-	-	202,439,204
Revenue Offsets							
Property Taxes - MWD Portion of SWC GO Debt Service	-	-	-	-	-	-	-
Property Taxes - MWD GO Debt Service	1,483,158	515,395	572,462	395,302	-	-	1,483,158
Interest on Investments	967,759	-	967,759	-	-	-	967,759
Hydro-Power Revenue	-	-	-	-	-	-	-
CRA Power Revenue	-	-	-	-	-	-	-
Wadsworth Pumping Plant (DVL) Power Revenue	-	-	-	-	-	-	-
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)	-	-	-	-	-	-	-
Misc. allocated to supply (PVID Lease)	-	-	-	-	-	-	-
Property Taxes - SWC	-	-	-	-	-	-	-
Revenue Reserve used for Revenue Bonds - I&P	-	-	-	-	-	-	-
Annexation	-	-	-	-	-	-	-
Total Revenue Offsets	2,450,917	515,395	1,540,221	395,302	-	-	2,450,917
NET REVENUE REQUIREMENTS:	199,988,286	27,685,323	151,068,633	21,234,331	-	-	199,988,286

		Functionalization	Allocation Percentages					Total
			Fixed			Variable		
			Demand	Commodity	Standby	Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		1,398,327	-	1,398,327	-	-	-	1,398,327
Office of General Manager	Board of Directors		-		-	-	-	
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-	
External Affairs	Legislative Services	-	-	-	-	-	-	
External Affairs	Media Communications Services	-	-	-	-	-	-	
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-	
External Affairs	Conservation & Community Services	-	-	-	-	-	-	
Human Resources		2,457,370	-	2,457,370	-	-	-	2,457,370
Water Systems Operations	Office of the Manager	2,677,990	-	2,677,990	-	-	-	2,677,990
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	354,217	-	354,217	-	-	-	354,217
Water Systems Operations	Office of the Manager, Treatment Section	55,769	-	55,769	-	-	-	55,769
Water Systems Operations	Office of the Manager, Operations Support Services	537,088	-	537,088	-	-	-	537,088
Water Systems Operations	Operations Support Services	6,159,274	-	6,159,274	-	-	-	6,159,274
Water Systems Operations	Desert Region / C&D CRA		-		-	-	-	
Water Systems Operations	System Operations Unit	7,695,927	-	7,695,927	-	-	-	7,695,927
Water Systems Operations	Power Operations and Planning	1,097,277	-	1,097,277	-	-	-	1,097,277
Water Systems Operations	Operations Planning & Programs Unit		-		-	-	-	
Water Systems Operations	Treatment Jensen	1,556,194	-	1,556,194	-	-	-	1,556,194
Water Systems Operations	Treatment Diemer	1,495,311	-	1,495,311	-	-	-	1,495,311
Water Systems Operations	Treatment Mills	1,420,975	-	1,420,975	-	-	-	1,420,975
Water Systems Operations	Treatment Skinner	1,387,161	-	1,387,161	-	-	-	1,387,161
Water Systems Operations	Treatment Weymouth	1,618,111	-	1,618,111	-	-	-	1,618,111
Water Systems Operations	Water Quality Section		-		-	-	-	
Water Systems Operations	C&D, Eastern Unit	11,727,909	-	11,727,909	-	-	-	11,727,909
Water Systems Operations	C&D, Western Unit	11,225,932	-	11,225,932	-	-	-	11,225,932
Water Systems Operations	OSS, Manufacturing Services Unit	6,246,867	-	6,246,867	-	-	-	6,246,867
Water Systems Operations	Environmental Health & Safety Section	5,030,924	-	5,030,924	-	-	-	5,030,924
Water Systems Operations	OSS, Fleet Services Unit	4,190,002	-	4,190,002	-	-	-	4,190,002
Water Systems Operations	OSS, Power Support Unit	3,851,582	-	3,851,582	-	-	-	3,851,582
Water Systems Operations	Office of the Manager, Operations & Planning Section	238,816	-	238,816	-	-	-	238,816
Water Systems Operations	Security Team & Security Management		-		-	-	-	
Sustainability, Resilience & Inr		-	-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-	-
Business Technology	Office of Manager		-		-	-	-	
Engineering Services		7,183,587	-	7,183,587	-	-	-	7,183,587
Business Technology	Administrative Services		-		-	-	-	
Business Technology	Information Technology	6,745,357	-	6,745,357	-	-	-	6,745,357
Water Resources Managemen	Resource Planning & Development	326,382	-	326,382	-	-	-	326,382
Water Resources Managemen	Resource Implementation		-		-	-	-	
Water Resources Managemen	Office of the Group Manager	45,861	-	45,861	-	-	-	45,861
Ethics Office			-		-	-	-	
Real Property		1,511,652	-	1,511,652	-	-	-	1,511,652
General Counsel			-		-	-	-	
General Auditor			-		-	-	-	
Total Departmental O&M		88,235,861	-	88,235,861	-	-	-	88,235,861

	Functionalization	Allocation Percentages					% Total	
		Fixed			Variable	Hydroelectric		
		Demand	Commodity	Standby	Commodity			
Departmental O&M								
Group	Item							
Office of General Manager		89,008	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Office of General Manager	Board of Directors	-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Bay Delta Initiatives	Bay Delta Initiatives	-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
External Affairs	Legislative Services	-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
External Affairs	Media Communications Services	-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
External Affairs	Manager, External Affairs/Special Projects	-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
External Affairs	Conservation & Community Services	-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Human Resources		175,438	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Water Systems Operations	Office of the Manager	234,114	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	12,392	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Water Systems Operations	Office of the Manager, Treatment Section	-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Water Systems Operations	Office of the Manager, Operations Support Services	45,162	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Water Systems Operations	Operations Support Services	120,134	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Water Systems Operations	Desert Region / C&D CRA	-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Water Systems Operations	System Operations Unit	-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Water Systems Operations	Power Operations and Planning	925,520	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Water Systems Operations	Operations Planning & Programs Unit	-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Water Systems Operations	Treatment Jensen	-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Water Systems Operations	Treatment Diemer	-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Water Systems Operations	Treatment Mills	-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Water Systems Operations	Treatment Skinner	-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Water Systems Operations	Treatment Weymouth	-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Water Systems Operations	Water Quality Section	-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Water Systems Operations	C&D, Eastern Unit	556,785	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Water Systems Operations	C&D, Western Unit	527,300	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Water Systems Operations	OSS, Manufacturing Services Unit	85,725	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Water Systems Operations	Environmental Health & Safety Section	50,664	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Water Systems Operations	OSS, Fleet Services Unit	-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Water Systems Operations	OSS, Power Support Unit	2,581,530	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Water Systems Operations	Office of the Manager, Operations & Planning Section	16,775	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Water Systems Operations	Security Team & Security Management	-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Sustainability, Resilience & Innovation		-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Diversity, Equity & Inclusion		-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Equal Employment Opportunity		-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Office of the Chief Financial Officer		-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Business Technology	Office of Manager	-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Engineering Services		650,370	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Business Technology	Administrative Services	-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Business Technology	Information Technology	570,399	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Water Resources Management	Resource Planning & Development	-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Water Resources Management	Resource Implementation	-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Water Resources Management	Office of the Group Manager	-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Ethics Office		-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Real Property		-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
General Counsel		-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
General Auditor		-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Total Departmental O&M		6,641,317	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
GENERAL DISTRICT REQUIREMENTS								
State Water Contract*								
Supply - O&M		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Supply - Capital		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Power - O&M & Off-Aq Capital		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Power - Capital (less Off-Aq)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Transmission - Capital - Commodity, Demand, & Standby		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Transmission - O&M - Commodity only		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Supply		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Power		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Other		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total State Water Contract		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Colorado River Aqueduct Power Costs								
		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Supply Programs (cash funded portion)								
		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Demand Management (cash funded portion)								
Local Resources Program		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Future Supply Actions & Stormwater Pilot		-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Conservation Program (cash funded portion)		-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Total Demand Management Costs		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Capital Financing								
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
G.O. Bond Debt Service	4,178,622	-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Debt Administration	38,117	-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Bond Defeasance	-	-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
PAYGO	1,903,500	-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Total Capital Financing Costs	6,120,239	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Other Operating Costs								
Operating Equipment	99,731	-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Succession Planning Labor Pool	56,430	-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
OPEB/PERS Pre-Funding	-	-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Total Other Operating Costs	156,161	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Increase/(Decrease) in Required Reserves								
	-	-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Total General District Requirements								
	6,276,400	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
REQUIREMENTS BEFORE OFFSETS:								
	12,917,717	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Revenue Offsets								
Property Taxes - MWD Portion of SWC GO Debt Service	-	-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Property Taxes - MWD GO Debt Service	-	-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Interest on Investments	61,753	-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Hydro-Power Revenue	10,710,879	-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
CRA Power Revenue	-	-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Wadsworth Pumping Plant (DVL) Power Revenue	-	-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)	-	-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Misc. allocated to supply (PVID Lease)	-	-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Property Taxes - SWC	-	-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Revenue Reserve used for Revenue Bonds - I&P	-	-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Annexation	-	-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Total Revenue Offsets	10,772,632	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
NET REVENUE REQUIREMENTS:								
-	2,145,085	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

		Functionalization	Allocation Percentages					Total
			Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		89,008	-	-	-	-	89,008	89,008
Office of General Manager	Board of Directors	-	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	-	-	-	-	-
Human Resources		175,438	-	-	-	-	175,438	175,438
Water Systems Operations	Office of the Manager	234,114	-	-	-	-	234,114	234,114
Water Systems Operations	Office of the Manager, Conveyance & Distribution S	12,392	-	-	-	-	12,392	12,392
Water Systems Operations	Office of the Manager, Treatment Section	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations Support Services	45,162	-	-	-	-	45,162	45,162
Water Systems Operations	Operations Support Services	120,134	-	-	-	-	120,134	120,134
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	925,520	-	-	-	-	925,520	925,520
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	-	-	-	-	-	-	-
Water Systems Operations	C&D, Eastern Unit	556,785	-	-	-	-	556,785	556,785
Water Systems Operations	C&D, Western Unit	527,300	-	-	-	-	527,300	527,300
Water Systems Operations	OSS, Manufacturing Services Unit	85,725	-	-	-	-	85,725	85,725
Water Systems Operations	Environmental Health & Safety Section	50,664	-	-	-	-	50,664	50,664
Water Systems Operations	OSS, Fleet Services Unit	-	-	-	-	-	-	-
Water Systems Operations	OSS, Power Support Unit	2,581,530	-	-	-	-	2,581,530	2,581,530
Water Systems Operations	Office of the Manager, Operations & Planning Sect	16,775	-	-	-	-	16,775	16,775
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-	-
Sustainability, Resilience & Inr		-	-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-	-
Equal Employment Opportunit		-	-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-	-
Engineering Services		650,370	-	-	-	-	650,370	650,370
Business Technology	Administrative Services	-	-	-	-	-	-	-
Business Technology	Information Technology	570,399	-	-	-	-	570,399	570,399
Water Resources Management	Resource Planning & Development	-	-	-	-	-	-	-
Water Resources Management	Resource Implementation	-	-	-	-	-	-	-
Water Resources Management	Office of the Group Manager	-	-	-	-	-	-	-
Ethics Office		-	-	-	-	-	-	-
Real Property		-	-	-	-	-	-	-
General Counsel		-	-	-	-	-	-	-
General Auditor		-	-	-	-	-	-	-
Total Departmental O&M	-	6,641,317	-	-	-	-	6,641,317	6,641,317
GENERAL DISTRICT REQUIREMENTS		-	-	-	-	-	-	-
State Water Contract*		-	-	-	-	-	-	-
Supply - O&M		-	-	-	-	-	-	-
Supply - Capital		-	-	-	-	-	-	-
Power - O&M & Off-Aq Capital		-	-	-	-	-	-	-
Power - Capital (less Off-Aq)		-	-	-	-	-	-	-
Transmission - Capital - Commodity, Demand, & Standby		-	-	-	-	-	-	-
Transmission - O&M - Commodity only		-	-	-	-	-	-	-
Delta Conveyance - Supply		-	-	-	-	-	-	-
Delta Conveyance - Power		-	-	-	-	-	-	-
Delta Conveyance - Other		-	-	-	-	-	-	-
Total State Water Contract		-	-	-	-	-	-	-
Colorado River Aqueduct Power Costs		-	-	-	-	-	-	-
Supply Programs (cash funded portion)		-	-	-	-	-	-	-
Demand Management (cash funded portion)		-	-	-	-	-	-	-
Local Resources Program		-	-	-	-	-	-	-
Future Supply Actions & Stormwater Pilot		-	-	-	-	-	-	-
Conservation Program (cash funded portion)		-	-	-	-	-	-	-
Total Demand Management Costs		-	-	-	-	-	-	-
Capital Financing		-	-	-	-	-	-	-
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		4,178,622	-	-	-	-	4,178,622	4,178,622
G.O. Bond Debt Service		-	-	-	-	-	-	-
Debt Administration		38,117	-	-	-	-	38,117	38,117
Bond Defeasance		-	-	-	-	-	-	-
PAYGO		1,903,500	-	-	-	-	1,903,500	1,903,500
Total Capital Financing Costs		6,120,239	-	-	-	-	6,120,239	6,120,239
Other Operating Costs		-	-	-	-	-	-	-
Operating Equipment		99,731	-	-	-	-	99,731	99,731
Succession Planning Labor Pool		56,430	-	-	-	-	56,430	56,430
OPEB/PERS Pre-Funding		-	-	-	-	-	-	-
Total Other Operating Costs		156,161	-	-	-	-	156,161	156,161
Increase/(Decrease) in Required Reserves		-	-	-	-	-	-	-
Total General District Requirements		6,276,400	-	-	-	-	6,276,400	6,276,400
REQUIREMENTS BEFORE OFFSETS:		12,917,717	-	-	-	-	12,917,717	12,917,717
Revenue Offsets		-	-	-	-	-	-	-
Property Taxes - MWD Portion of SWC GO Debt Service		-	-	-	-	-	-	-
Property Taxes - MWD GO Debt Service		-	-	-	-	-	-	-
Interest on Investments		61,753	-	-	-	-	61,753	61,753
Hydro-Power Revenue		10,710,879	-	-	-	-	10,710,879	10,710,879
CRA Power Revenue		-	-	-	-	-	-	-
Wadsworth Pumping Plant (DVL) Power Revenue		-	-	-	-	-	-	-
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)		-	-	-	-	-	-	-
Misc. allocated to supply (PVID Lease)		-	-	-	-	-	-	-
Property Taxes - SWC		-	-	-	-	-	-	-
Revenue Reserve used for Revenue Bonds - I&P		-	-	-	-	-	-	-
Annexation		-	-	-	-	-	-	-
Total Revenue Offsets		10,772,632	-	-	-	-	10,772,632	10,772,632
NET REVENUE REQUIREMENTS:		2,145,085	-	-	-	-	2,145,085	2,145,085

		Functionalization	Allocation Percentages					Total	
			Fixed			Variable Commodity	Other		Hydroelectric
			Demand	Commodity	Standby				
Departmental O&M									
Group	Item								
Office of General Manager		78,666	-	-	-	-	78,666	78,666	
Office of General Manager	Board of Directors	-	-	-	-	-	-	-	
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-	-	
External Affairs	Legislative Services	-	-	-	-	-	-	-	
External Affairs	Media Communications Services	-	-	-	-	-	-	-	
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-	-	
External Affairs	Conservation & Community Services	-	-	-	-	-	-	-	
Human Resources		138,245	-	-	-	-	138,245	138,245	
Water Systems Operations	Office of the Manager	171,013	-	-	-	-	171,013	171,013	
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	12,121	-	-	-	-	12,121	12,121	
Water Systems Operations	Office of the Manager, Treatment Section	-	-	-	-	-	-	-	
Water Systems Operations	Office of the Manager, Operations Support Services	34,298	-	-	-	-	34,298	34,298	
Water Systems Operations	Operations Support Services	108,862	-	-	-	-	108,862	108,862	
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-	-	
Water Systems Operations	System Operations Unit	-	-	-	-	-	-	-	
Water Systems Operations	Power Operations and Planning	799,211	-	-	-	-	799,211	799,211	
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-	-	
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-	-	
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-	-	
Water Systems Operations	Treatment Mills	-	-	-	-	-	-	-	
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-	-	
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-	-	
Water Systems Operations	Water Quality Section	-	-	-	-	-	-	-	
Water Systems Operations	C&D, Eastern Unit	391,784	-	-	-	-	391,784	391,784	
Water Systems Operations	C&D, Western Unit	393,670	-	-	-	-	393,670	393,670	
Water Systems Operations	OSS, Manufacturing Services Unit	78,748	-	-	-	-	78,748	78,748	
Water Systems Operations	Environmental Health & Safety Section	39,383	-	-	-	-	39,383	39,383	
Water Systems Operations	OSS, Fleet Services Unit	-	-	-	-	-	-	-	
Water Systems Operations	OSS, Power Support Unit	2,334,292	-	-	-	-	2,334,292	2,334,292	
Water Systems Operations	Office of the Manager, Operations & Planning Section	15,251	-	-	-	-	15,251	15,251	
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-	-	
Sustainability, Resilience & Inr		-	-	-	-	-	-	-	
Diversity, Equity & Inclusion		-	-	-	-	-	-	-	
Equal Employment Opportunity		-	-	-	-	-	-	-	
Office of the Chief Financial O		-	-	-	-	-	-	-	
Business Technology	Office of Manager	-	-	-	-	-	-	-	
Engineering Services		548,692	-	-	-	-	548,692	548,692	
Business Technology	Administrative Services	-	-	-	-	-	-	-	
Business Technology	Information Technology	379,475	-	-	-	-	379,475	379,475	
Water Resources Managemen	Resource Planning & Development	-	-	-	-	-	-	-	
Water Resources Managemen	Resource Implementation	-	-	-	-	-	-	-	
Water Resources Managemen	Office of the Group Manager	-	-	-	-	-	-	-	
Ethics Office		-	-	-	-	-	-	-	
Real Property		-	-	-	-	-	-	-	
General Counsel		-	-	-	-	-	-	-	
General Auditor		-	-	-	-	-	-	-	
Total Departmental O&M	-	5,523,710	-	-	-	-	5,523,710	5,523,710	

		Functionalization	Allocation Percentages					% Total
			Demand	Fixed Commodity	Standby	Variable Commodity	Hydroelectric	
Departmental O&M								
Group	Item							
Office of General Manager		152,905	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Office of General Manager	Board of Directors	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Bay Delta Initiatives	Bay Delta Initiatives	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Legislative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Media Communications Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Manager, External Affairs/Special Projects	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Conservation & Community Services	2,891,442	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Human Resources		301,381	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Treatment Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations Support Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Support Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Desert Region / C&D CRA	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	System Operations Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Power Operations and Planning	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Operations Planning & Programs Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Jensen	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Diemer	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Mills	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Skinner	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Treatment Weymouth	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Water Quality Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Eastern Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	C&D, Western Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Manufacturing Services Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Environmental Health & Safety Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Fleet Services Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	OSS, Power Support Unit	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Office of the Manager, Operations & Planning Section	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Systems Operations	Security Team & Security Management	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Sustainability, Resilience & Innovation		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Diversity, Equity & Inclusion		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Equal Employment Opportunity		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Office of the Chief Financial Officer		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Office of Manager	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Engineering Services		175,277	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Administrative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Business Technology	Information Technology	979,873	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Planning & Development	303,677	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Resource Implementation	5,887,825	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Water Resources Management	Office of the Group Manager	716,549	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Ethics Office		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Real Property		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
General Counsel		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
General Auditor		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Departmental O&M		11,408,929	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
GENERAL DISTRICT REQUIREMENTS								
State Water Contract*								
Supply - O&M		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Supply - Capital		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Power - O&M & Off-Aq Capital		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Power - Capital (less Off-Aq)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Transmission - Capital - Commodity, Demand, & Standby		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Transmission - O&M - Commodity only		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Supply		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Power		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Other		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total State Water Contract		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Colorado River Aqueduct Power Costs								
		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Supply Programs (cash funded portion)								
		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Demand Management (cash funded portion)								
Local Resources Program		21,685,717	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Future Supply Actions & Stormwater Pilot		2,422,500	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Conservation Program (cash funded portion)		25,000,000	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Demand Management Costs		49,108,217	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Capital Financing								
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		1,126,153	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
G.O. Bond Debt Service		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Debt Administration		10,273	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Bond Defeasance		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
PAYGO		513,000	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Capital Financing Costs		1,649,426	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%
Other Operating Costs								
Operating Equipment		171,326	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Succession Planning Labor Pool		96,939	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
OPEB/PERS Pre-Funding		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total Other Operating Costs		268,265	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Increase/(Decrease) in Required Reserves								
		-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Total General District Requirements								
		51,025,907	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
REQUIREMENTS BEFORE OFFSETS:								
		62,434,836	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Revenue Offsets								
Property Taxes - MWD Portion of SWC GO Debt Service		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Property Taxes - MWD GO Debt Service		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Interest on Investments		298,469	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Hydro-Power Revenue		-	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
CRA Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Wadsworth Pumping Plant (DVL) Power Revenue		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc. allocated to supply (PVID Lease)		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Property Taxes - SWC		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Revenue Reserve used for Revenue Bonds - I&P		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Annexation		-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total Revenue Offsets		298,469	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
NET REVENUE REQUIREMENTS:								
		62,136,367	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

	Functionalization	Allocation Percentages					Total
		Demand	Fixed Commodity	Standby	Variable Commodity	Other	
Departmental O&M							
Group	Item						
Office of General Manager		152,905	-	152,905	-	-	152,905
Office of General Manager	Board of Directors	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-
External Affairs	Conservation & Community Services	2,891,442	-	2,891,442	-	-	2,891,442
Human Resources		301,381	-	301,381	-	-	301,381
Water Systems Operations	Office of the Manager	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Conveyance & Distribution S	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations Support Services	-	-	-	-	-	-
Water Systems Operations	Operations Support Services	-	-	-	-	-	-
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	-	-	-	-	-	-
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	-	-	-	-	-	-
Water Systems Operations	Environmental Health & Safety Section	-	-	-	-	-	-
Water Systems Operations	OSS, Fleet Services Unit	-	-	-	-	-	-
Water Systems Operations	OSS, Power Support Unit	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations & Planning Sect	-	-	-	-	-	-
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-
Sustainability, Resilience & Inr		-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-
Engineering Services		175,277	-	175,277	-	-	175,277
Business Technology	Administrative Services	-	-	-	-	-	-
Business Technology	Information Technology	979,873	-	979,873	-	-	979,873
Water Resources Managemen	Resource Planning & Development	303,677	-	303,677	-	-	303,677
Water Resources Managemen	Resource Implementation	5,887,825	-	5,887,825	-	-	5,887,825
Water Resources Managemen	Office of the Group Manager	716,549	-	716,549	-	-	716,549
Ethics Office		-	-	-	-	-	-
Real Property		-	-	-	-	-	-
General Counsel		-	-	-	-	-	-
General Auditor		-	-	-	-	-	-
Total Departmental O&M	-	11,408,929	-	11,408,929	-	-	11,408,929
GENERAL DISTRICT REQUIREMENTS							
		-	-	-	-	-	-
State Water Contract*		-	-	-	-	-	-
Supply - O&M		-	-	-	-	-	-
Supply - Capital		-	-	-	-	-	-
Power - O&M & Off-Aq Capital		-	-	-	-	-	-
Power - Capital (less Off-Aq)		-	-	-	-	-	-
Transmission - Capital - Commodity, Demand, & Standby		-	-	-	-	-	-
Transmission - O&M - Commodity only		-	-	-	-	-	-
Delta Conveyance - Supply		-	-	-	-	-	-
Delta Conveyance - Power		-	-	-	-	-	-
Delta Conveyance - Other		-	-	-	-	-	-
Total State Water Contract		-	-	-	-	-	-
		-	-	-	-	-	-
Colorado River Aqueduct Power Costs		-	-	-	-	-	-
		-	-	-	-	-	-
Supply Programs (cash funded portion)		-	-	-	-	-	-
		-	-	-	-	-	-
Demand Management (cash funded portion)		-	-	-	-	-	-
Local Resources Program		21,685,717	-	21,685,717	-	-	21,685,717
Future Supply Actions & Stormwater Pilot		2,422,500	-	2,422,500	-	-	2,422,500
Conservation Program (cash funded portion)		25,000,000	-	25,000,000	-	-	25,000,000
Total Demand Management Costs		49,108,217	-	49,108,217	-	-	49,108,217
		-	-	-	-	-	-
Capital Financing		-	-	-	-	-	-
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		1,126,153	-	1,126,153	-	-	1,126,153
G.O. Bond Debt Service		-	-	-	-	-	-
Debt Administration		10,273	-	10,273	-	-	10,273
Bond Defeasance		-	-	-	-	-	-
PAYGO		513,000	-	513,000	-	-	513,000
Total Capital Financing Costs		1,649,426	-	1,649,426	-	-	1,649,426
		-	-	-	-	-	-
Other Operating Costs		-	-	-	-	-	-
Operating Equipment		171,326	-	171,326	-	-	171,326
Succession Planning Labor Pool		96,939	-	96,939	-	-	96,939
OPEB/PERS Pre-Funding		-	-	-	-	-	-
Total Other Operating Costs		268,265	-	268,265	-	-	268,265
		-	-	-	-	-	-
Increase/(Decrease) in Required Reserves		-	-	-	-	-	-
		-	-	-	-	-	-
Total General District Requirements		51,025,907	-	51,025,907	-	-	51,025,907
		-	-	-	-	-	-
REQUIREMENTS BEFORE OFFSETS:		62,434,836	-	62,434,836	-	-	62,434,836
		-	-	-	-	-	-
Revenue Offsets							
Property Taxes - MWD Portion of SWC GO Debt Service		-	-	-	-	-	-
Property Taxes - MWD GO Debt Service		-	-	-	-	-	-
Interest on Investments		298,469	-	298,469	-	-	298,469
Hydro-Power Revenue		-	-	-	-	-	-
CRA Power Revenue		-	-	-	-	-	-
Wadsworth Pumping Plant (DVL) Power Revenue		-	-	-	-	-	-
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)		-	-	-	-	-	-
Misc. allocated to supply (PVID Lease)		-	-	-	-	-	-
Property Taxes - SWC		-	-	-	-	-	-
Revenue Reserve used for Revenue Bonds - I&P		-	-	-	-	-	-
Annexation		-	-	-	-	-	-
Total Revenue Offsets		298,469	-	298,469	-	-	298,469
		-	-	-	-	-	-
NET REVENUE REQUIREMENTS:		62,136,367	-	62,136,367	-	-	62,136,367

		Functionalization	Allocation Percentages					Total
			Fixed			Variable	Hydroelectric	
			Demand	Commodity	Standby	Commodity		
Departmental O&M								
Group	Item							
Office of General Manager		135,138	-	135,138	-	-	-	135,138
Office of General Manager	Board of Directors	-	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	-	-	-	-	-
External Affairs	Legislative Services	-	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-	-
External Affairs	Conservation & Community Services	1,947,448	-	1,947,448	-	-	-	1,947,448
Human Resources		237,487	-	237,487	-	-	-	237,487
Water Systems Operations	Office of the Manager	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Treatment Section	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations Support Services	-	-	-	-	-	-	-
Water Systems Operations	Operations Support Services	-	-	-	-	-	-	-
Water Systems Operations	Desert Region / C&D CRA	-	-	-	-	-	-	-
Water Systems Operations	System Operations Unit	-	-	-	-	-	-	-
Water Systems Operations	Power Operations and Planning	-	-	-	-	-	-	-
Water Systems Operations	Operations Planning & Programs Unit	-	-	-	-	-	-	-
Water Systems Operations	Treatment Jensen	-	-	-	-	-	-	-
Water Systems Operations	Treatment Diemer	-	-	-	-	-	-	-
Water Systems Operations	Treatment Mills	-	-	-	-	-	-	-
Water Systems Operations	Treatment Skinner	-	-	-	-	-	-	-
Water Systems Operations	Treatment Weymouth	-	-	-	-	-	-	-
Water Systems Operations	Water Quality Section	-	-	-	-	-	-	-
Water Systems Operations	C&D, Eastern Unit	-	-	-	-	-	-	-
Water Systems Operations	C&D, Western Unit	-	-	-	-	-	-	-
Water Systems Operations	OSS, Manufacturing Services Unit	-	-	-	-	-	-	-
Water Systems Operations	Environmental Health & Safety Section	-	-	-	-	-	-	-
Water Systems Operations	OSS, Fleet Services Unit	-	-	-	-	-	-	-
Water Systems Operations	OSS, Power Support Unit	-	-	-	-	-	-	-
Water Systems Operations	Office of the Manager, Operations & Planning Section	-	-	-	-	-	-	-
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-	-
Sustainability, Resilience & Inr		-	-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-	-
Engineering Services		147,874	-	147,874	-	-	-	147,874
Business Technology	Administrative Services	-	-	-	-	-	-	-
Business Technology	Information Technology	651,889	-	651,889	-	-	-	651,889
Water Resources Management	Resource Planning & Development	244,787	-	244,787	-	-	-	244,787
Water Resources Management	Resource Implementation	3,792,454	-	3,792,454	-	-	-	3,792,454
Water Resources Management	Office of the Group Manager	701,279	-	701,279	-	-	-	701,279
Ethics Office		-	-	-	-	-	-	-
Real Property		-	-	-	-	-	-	-
General Counsel		-	-	-	-	-	-	-
General Auditor		-	-	-	-	-	-	-
Total Departmental O&M	-	7,858,356	-	7,858,356	-	-	-	7,858,356

		Functionalization	Allocation Percentages					% Total
			Demand	Commodity	Standby	Variable Commodity	Other	
Departmental O&M								
Group	Item							
Office of General Manager		2,167,178	0.0%	1.6%	0.0%	0.0%	0.0%	1.6%
Office of General Manager	Board of Directors	2,095,417	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Bay Delta Initiatives	Bay Delta Initiatives	-	0.0%	1.8%	0.0%	0.0%	0.0%	1.8%
External Affairs	Legislative Services	6,104,479	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
External Affairs	Media Communications Services	5,798,327	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
External Affairs	Manager, External Affairs/Special Projects	8,994,370	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
External Affairs	Conservation & Community Services	2,891,442	0.0%	0.6%	0.0%	0.0%	0.0%	0.6%
Human Resources		4,271,581	0.0%	2.8%	0.0%	0.0%	0.0%	2.9%
Water Systems Operations	Office of the Manager	733,166	0.0%	2.5%	0.0%	0.0%	0.1%	2.5%
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	20,423	0.0%	0.3%	0.0%	0.0%	0.0%	0.3%
Water Systems Operations	Office of the Manager, Treatment Section	-	0.0%	0.1%	0.0%	0.0%	0.0%	0.1%
Water Systems Operations	Office of the Manager, Operations Support Services	141,431	0.0%	0.5%	0.0%	0.0%	0.0%	0.5%
Water Systems Operations	Operations Support Services	284,527	0.0%	2.2%	0.0%	0.0%	0.0%	2.2%
Water Systems Operations	Desert Region / C&D CRA	-	0.0%	8.9%	0.0%	0.0%	0.0%	8.9%
Water Systems Operations	System Operations Unit	-	0.0%	2.5%	0.0%	0.0%	0.0%	2.5%
Water Systems Operations	Power Operations and Planning	360,346	0.0%	0.7%	0.0%	0.0%	0.3%	1.0%
Water Systems Operations	Operations Planning & Programs Unit	-	0.0%	0.7%	0.0%	0.0%	0.0%	0.7%
Water Systems Operations	Treatment Jensen	-	0.0%	3.9%	0.0%	0.0%	0.0%	3.9%
Water Systems Operations	Treatment Diemer	-	0.0%	3.7%	0.0%	0.0%	0.0%	3.7%
Water Systems Operations	Treatment Mills	-	0.0%	3.5%	0.0%	0.0%	0.0%	3.5%
Water Systems Operations	Treatment Skinner	-	0.0%	3.5%	0.0%	0.0%	0.0%	3.5%
Water Systems Operations	Treatment Weymouth	-	0.0%	4.0%	0.0%	0.0%	0.0%	4.0%
Water Systems Operations	Water Quality Section	-	0.0%	7.4%	0.0%	0.0%	0.0%	7.4%
Water Systems Operations	C&D, Eastern Unit	901,563	0.0%	4.6%	0.0%	0.0%	0.1%	4.7%
Water Systems Operations	C&D, Western Unit	884,164	0.0%	3.8%	0.0%	0.0%	0.1%	3.9%
Water Systems Operations	OSS, Manufacturing Services Unit	579,418	0.0%	2.4%	0.0%	0.0%	0.0%	2.4%
Water Systems Operations	Environmental Health & Safety Section	761,595	0.0%	3.9%	0.0%	0.0%	0.0%	3.9%
Water Systems Operations	OSS, Fleet Services Unit	1,436,718	0.0%	2.3%	0.0%	0.0%	0.0%	2.3%
Water Systems Operations	OSS, Power Support Unit	133,686	0.0%	1.9%	0.0%	0.0%	0.8%	2.7%
Water Systems Operations	Office of the Manager, Operations & Planning Section	52,534	0.0%	0.2%	0.0%	0.0%	0.0%	0.2%
Water Systems Operations	Security Team & Security Management	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Sustainability, Resilience & Innovation		9,216,241	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Diversity, Equity & Inclusion		1,426,072	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Equal Employment Opportunity		2,036,286	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Office of the Chief Financial Officer		25,316,770	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Business Technology	Office of Manager	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Engineering Services		2,836,719	0.0%	11.7%	0.0%	0.0%	0.2%	11.9%
Business Technology	Administrative Services	33,341,320	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Business Technology	Information Technology	13,888,109	0.0%	7.8%	0.0%	0.0%	0.1%	7.9%
Water Resources Management	Resource Planning & Development	-	0.0%	1.4%	0.0%	0.0%	0.0%	1.4%
Water Resources Management	Resource Implementation	35,746	0.0%	3.6%	0.0%	0.0%	0.0%	3.6%
Water Resources Management	Office of the Group Manager	4,137	0.0%	0.8%	0.0%	0.0%	0.0%	0.8%
Ethics Office		2,759,274	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Real Property		11,775,287	0.0%	2.4%	0.0%	0.0%	0.0%	2.4%
General Counsel		15,716,806	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
General Auditor		4,737,939	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total Departmental O&M		161,703,068	0.0%	98.2%	0.0%	0.0%	1.8%	100.0%
GENERAL DISTRICT REQUIREMENTS								
State Water Contract*								
Supply - O&M	-	0.0%	7.7%	0.0%	0.0%	0.0%	0.0%	7.7%
Supply - Capital	-	0.0%	6.2%	0.0%	0.0%	0.0%	0.0%	6.2%
Power - O&M & Off-Aq Capital	-	0.0%	0.0%	0.0%	18.7%	0.0%	0.0%	18.7%
Power - Capital (less Off-Aq)	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Transmission - Capital - Commodity, Demand, & Standby	-	0.5%	2.8%	2.6%	0.0%	0.0%	0.0%	5.8%
Transmission - O&M - Commodity only	-	0.0%	14.4%	0.0%	0.0%	0.0%	0.0%	14.4%
Delta Conveyance - Supply	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Power	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Delta Conveyance - Other	-	0.2%	1.2%	1.1%	0.0%	0.0%	0.0%	2.5%
Total State Water Contract	-	0.7%	32.2%	3.7%	18.7%	0.0%	0.0%	55.3%
Colorado River Aqueduct Power Costs								
	-	0.0%	0.0%	0.0%	6.2%	0.0%	0.0%	6.2%
Supply Programs (cash funded portion)								
	-	0.0%	4.6%	0.0%	0.0%	0.0%	0.0%	4.6%
Demand Management (cash funded portion)								
Local Resources Program	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Future Supply Actions & Stormwater Pilot	-	0.0%	1.6%	0.0%	0.0%	0.0%	0.0%	1.6%
Conservation Program (cash funded portion)	-	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.2%
Total Demand Management Costs	-	0.0%	1.8%	0.0%	0.0%	0.0%	0.0%	1.8%
	-	0.0%	3.6%	0.0%	0.0%	0.0%	0.0%	3.6%
Capital Financing								
Revenue Bond Debt Service net of BABs Interest Subsidy Payment	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
G.O. Bond Debt Service	18,225,905	3.8%	8.6%	7.5%	0.0%	0.0%	0.3%	20.1%
Debt Administration	-	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.1%
Bond Defeasance	166,254	0.0%	0.1%	0.1%	0.0%	0.0%	0.0%	0.2%
PAYGO	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total Capital Financing Costs	8,302,500	1.7%	3.9%	3.4%	0.0%	0.0%	0.1%	9.2%
	26,694,659	5.5%	12.6%	11.0%	0.0%	0.0%	0.4%	29.6%
Other Operating Costs								
Operating Equipment	2,428,262	0.0%	0.4%	0.0%	0.0%	0.0%	0.0%	0.5%
Succession Planning Labor Pool	1,373,955	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.3%
OPEB/PERS Pre-Funding	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total Other Operating Costs	3,802,216	0.0%	0.7%	0.0%	0.0%	0.0%	0.0%	0.7%
Increase/(Decrease) in Required Reserves								
	7,100,000	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total General District Requirements								
	37,596,875	6.2%	53.7%	14.7%	24.9%	0.0%	0.5%	100.0%
REQUIREMENTS BEFORE OFFSETS:								
	199,299,943	5.1%	61.8%	12.0%	20.4%	0.0%	0.7%	100.0%
Revenue Offsets								
Property Taxes - MWD Portion of SWC GO Debt Service	-	5.1%	61.8%	12.0%	20.4%	0.0%	0.7%	100.0%
Property Taxes - MWD GO Debt Service	-	5.1%	61.8%	12.0%	20.4%	0.0%	0.7%	100.0%
Interest on Investments	952,752	5.1%	61.8%	12.0%	20.4%	0.0%	0.7%	100.0%
Hydro-Power Revenue	-	5.1%	61.8%	12.0%	20.4%	0.0%	0.7%	100.0%
CRA Power Revenue	-	5.1%	61.8%	12.0%	20.4%	0.0%	0.7%	100.0%
Wadsworth Pumping Plant (DVL) Power Revenue	-	5.1%	61.8%	12.0%	20.4%	0.0%	0.7%	100.0%
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)	37,575,443	5.1%	61.8%	12.0%	20.4%	0.0%	0.7%	100.0%
Misc. allocated to supply (PVID Lease)	-	5.1%	61.8%	12.0%	20.4%	0.0%	0.7%	100.0%
Property Taxes - SWC	-	5.1%	61.8%	12.0%	20.4%	0.0%	0.7%	100.0%
Revenue Reserve used for Revenue Bonds - I&P	-	5.1%	61.8%	12.0%	20.4%	0.0%	0.7%	100.0%
Annexation	-	5.1%	61.8%	12.0%	20.4%	0.0%	0.7%	100.0%
Total Revenue Offsets	38,528,195	5.1%	61.8%	12.0%	20.4%	0.0%	0.7%	100.0%
NET REVENUE REQUIREMENTS:								
	160,771,748	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

		Functionalization	Allocation Percentages						Total
			Demand	Fixed Commodity	Standby	Variable Commodity	Other	Hydroelectric	
Departmental O&M									
Group	Item								
Office of General Manager		-	-	2,621,762	-	-	-	41,446	2,663,208
Office of General Manager	Board of Directors	-	-	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	-	2,949,624	-	-	-	-	2,949,624
External Affairs	Legislative Services	-	-	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-	-	-
External Affairs	Conservation & Community Services	-	-	1,026,029	-	-	-	-	1,026,029
Human Resources		-	-	4,607,391	-	-	-	72,835	4,680,227
Water Systems Operations	Office of the Manager	-	-	4,014,486	-	-	-	90,100	4,104,586
Water Systems Operations	Office of the Manager, Conveyance & Distribution S	-	-	431,676	-	-	-	6,386	438,062
Water Systems Operations	Office of the Manager, Treatment Section	-	-	224,294	-	-	-	-	224,294
Water Systems Operations	Office of the Manager, Operations Support Services	-	-	805,131	-	-	-	18,070	823,201
Water Systems Operations	Operations Support Services	-	-	3,580,135	-	-	-	57,355	3,637,490
Water Systems Operations	Desert Region / C&D CRA	-	-	14,439,599	-	-	-	-	14,439,599
Water Systems Operations	System Operations Unit	-	-	4,054,662	-	-	-	-	4,054,662
Water Systems Operations	Power Operations and Planning	-	-	1,140,687	-	-	-	421,071	1,561,758
Water Systems Operations	Operations Planning & Programs Unit	-	-	1,078,951	-	-	-	-	1,078,951
Water Systems Operations	Treatment Jensen	-	-	6,258,728	-	-	-	-	6,258,728
Water Systems Operations	Treatment Diemer	-	-	6,013,870	-	-	-	-	6,013,870
Water Systems Operations	Treatment Mills	-	-	5,714,903	-	-	-	-	5,714,903
Water Systems Operations	Treatment Skinner	-	-	5,578,910	-	-	-	-	5,578,910
Water Systems Operations	Treatment Weymouth	-	-	6,507,746	-	-	-	-	6,507,746
Water Systems Operations	Water Quality Section	-	-	12,037,124	-	-	-	-	12,037,124
Water Systems Operations	C&D, Eastern Unit	-	-	7,398,379	-	-	-	206,415	7,604,794
Water Systems Operations	C&D, Western Unit	-	-	6,135,397	-	-	-	207,408	6,342,805
Water Systems Operations	OSS, Manufacturing Services Unit	-	-	3,843,650	-	-	-	41,489	3,885,139
Water Systems Operations	Environmental Health & Safety Section	-	-	6,360,731	-	-	-	20,750	6,381,480
Water Systems Operations	OSS, Fleet Services Unit	-	-	3,711,197	-	-	-	-	3,711,197
Water Systems Operations	OSS, Power Support Unit	-	-	3,098,760	-	-	-	1,229,841	4,328,600
Water Systems Operations	Office of the Manager, Operations & Planning Secti	-	-	358,001	-	-	-	8,035	366,036
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-	-	-
Sustainability, Resilience & Inn		-	-	-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-	-	-
Office of the Chief Financial O		-	-	-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-	-	-
Engineering Services		-	-	18,952,359	-	-	-	289,083	19,241,442
Business Technology	Administrative Services	-	-	-	-	-	-	-	-
Business Technology	Information Technology	-	-	12,647,060	-	-	-	199,929	12,846,990
Water Resources Managemen	Resource Planning & Development	-	-	2,262,593	-	-	-	-	2,262,593
Water Resources Managemen	Resource Implementation	-	-	5,764,352	-	-	-	-	5,764,352
Water Resources Managemen	Office of the Group Manager	-	-	1,331,557	-	-	-	-	1,331,557
Ethics Office		-	-	-	-	-	-	-	-
Real Property		-	-	3,843,112	-	-	-	-	3,843,112
General Counsel		-	-	-	-	-	-	-	-
General Auditor		-	-	-	-	-	-	-	-
Total Departmental O&M	-	-	-	158,792,856	-	-	-	2,910,211	161,703,068
GENERAL DISTRICT REQUIREMENTS		-	-	-	-	-	-	-	-
State Water Contract*		-	-	-	-	-	-	-	-
Supply - O&M		-	-	2,908,604	-	-	-	-	2,908,604
Supply - Capital		-	-	2,324,022	-	-	-	-	2,324,022
Power - O&M & Off-Aq Capital		-	-	-	-	7,028,254	-	-	7,028,254
Power - Capital (less Off-Aq)		-	-	-	-	-	-	-	-
Transmission - Capital - Commodity, Demand, & Standby		-	176,906	1,040,625	975,065	-	-	-	2,192,596
Transmission - O&M - Commodity only		-	-	5,400,949	-	-	-	-	5,400,949
Delta Conveyance - Supply		-	-	-	-	-	-	-	-
Delta Conveyance - Power		-	-	-	-	-	-	-	-
Delta Conveyance - Other		-	75,666	445,097	417,055	-	-	-	937,818
Total State Water Contract		-	252,573	12,119,297	1,392,120	7,028,254	-	-	20,792,243
Colorado River Aqueduct Power Costs		-	-	-	-	2,327,588	-	-	2,327,588
Supply Programs (cash funded portion)		-	-	1,742,466	-	-	-	-	1,742,466
Demand Management (cash funded portion)		-	-	-	-	-	-	-	-
Local Resources Program		-	-	589,486	-	-	-	-	589,486
Future Supply Actions & Stormwater Pilot		-	-	65,851	-	-	-	-	65,851
Conservation Program (cash funded portion)		-	-	679,579	-	-	-	-	679,579
Total Demand Management Costs		-	-	1,334,916	-	-	-	-	1,334,916
Capital Financing		-	-	-	-	-	-	-	-
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		-	1,410,927	3,227,030	2,808,910	-	-	113,588	7,560,455
G.O. Bond Debt Service		-	18,109	19,568	15,758	-	-	-	53,435
Debt Administration		-	12,870	29,437	25,622	-	-	1,036	68,965
Bond Defeasance		-	-	-	-	-	-	-	-
PAYGO		-	642,724	1,470,018	1,279,551	-	-	51,743	3,444,036
Total Capital Financing Costs		-	2,084,630	4,746,053	4,129,841	-	-	166,367	11,126,892
Other Operating Costs		-	-	-	-	-	-	-	-
Operating Equipment		-	-	168,389	3,103	-	-	2,711	174,203
Succession Planning Labor Pool		-	-	95,277	1,756	-	-	1,534	98,567
OPEB/PERS Pre-Funding		-	-	-	-	-	-	-	-
Total Other Operating Costs		-	-	263,666	4,859	-	-	4,245	272,770
Increase/(Decrease) in Required Reserves		-	-	-	-	-	-	-	-
Total General District Requirements		-	2,337,203	20,206,397	5,526,821	9,355,842	-	170,612	37,596,875
REQUIREMENTS BEFORE OFFSETS:		199,299,943	2,337,203	178,999,254	5,526,821	9,355,842	-	3,080,824	199,299,943
Revenue Offsets									
Property Taxes - MWD Portion of SWC GO Debt Service		-	-	-	-	-	-	-	-
Property Taxes - MWD GO Debt Service		-	-	-	-	-	-	-	-
Interest on Investments	952,752	48,471	588,975	114,621	194,032	-	6,652	952,752	
Hydro-Power Revenue		-	-	-	-	-	-	-	-
CRA Power Revenue		-	-	-	-	-	-	-	-
Wadsworth Pumping Plant (DVL) Power Revenue		-	-	-	-	-	-	-	-
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)	37,575,443	1,911,659	23,228,509	4,520,530	7,652,385	-	262,361	37,575,443	
Misc. allocated to supply (PVID Lease)		-	-	-	-	-	-	-	-
Property Taxes - SWC		-	-	-	-	-	-	-	-
Revenue Reserve used for Revenue Bonds - I&P		-	-	-	-	-	-	-	-
Annexation		-	-	-	-	-	-	-	-
Total Revenue Offsets	38,528,195	1,960,130	23,817,484	4,635,151	7,846,417	-	269,014	38,528,195	
NET REVENUE REQUIREMENTS:		160,771,748	377,073	155,181,770	891,670	1,509,425	-	2,811,810	160,771,748

		Total Costs to Be Allocated	A&G Cost Redistribution	Adjusted Costs	Allocation Categories					Total
					Fixed			Variable Commodity	Hydroelectric	
					Demand	Commodity	Standby			
Departmental O&M										
Group	Item									
Office of General Manager		2,167,178	6,215,495	8,382,673	-	8,252,219	-	-	130,454	8,382,673
Office of General Manager	Board of Directors	2,095,417	(2,095,417)	-	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	-	15,029,934	15,029,934	-	15,029,934	-	-	-	15,029,934
External Affairs	Legislative Services	6,104,479	(6,104,479)	-	-	-	-	-	-	-
External Affairs	Media Communications Services	5,798,327	(5,798,327)	-	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	8,994,370	(8,994,370)	-	-	-	-	-	-	-
External Affairs	Conservation & Community Services	2,891,442	1,026,029	3,917,471	-	3,917,471	-	-	-	3,917,471
Human Resources		4,271,581	11,681,904	15,953,484	-	15,705,211	-	-	-	15,953,484
Water Systems Operations	Office of the Manager	733,166	14,036,728	14,769,894	-	14,445,680	-	-	-	14,769,894
Water Systems Operations	Office of the Manager, Conveyance & Distribution Section	20,423	1,267,692	1,288,115	-	1,269,337	-	-	-	1,288,115
Water Systems Operations	Office of the Manager, Treatment Section	-	1,410,609	1,410,609	-	1,410,609	-	-	-	1,410,609
Water Systems Operations	Office of the Manager, Operations Support Services	141,431	2,739,153	2,880,584	-	2,817,352	-	-	63,232	2,880,584
Water Systems Operations	Operations Support Services	284,527	10,971,968	11,256,496	-	11,079,007	-	-	177,488	11,256,496
Water Systems Operations	Desert Region / C&D CRA	-	47,832,409	47,832,409	-	47,832,409	-	-	-	47,832,409
Water Systems Operations	System Operations Unit	-	13,220,656	13,220,656	-	13,220,656	-	-	-	13,220,656
Water Systems Operations	Power Operations and Planning	360,346	4,634,182	4,994,528	-	3,647,937	-	1,346,591	-	4,994,528
Water Systems Operations	Operations Planning & Programs Unit	-	3,193,277	3,193,277	-	3,193,277	-	-	-	3,193,277
Water Systems Operations	Treatment Jensen	-	26,333,481	26,333,481	-	19,904,385	6,429,096	-	-	26,333,481
Water Systems Operations	Treatment Diemer	-	27,358,103	27,358,103	-	19,057,858	8,300,245	-	-	27,358,103
Water Systems Operations	Treatment Mills	-	20,261,857	20,261,857	-	17,457,712	2,804,145	-	-	20,261,857
Water Systems Operations	Treatment Skinner	-	22,615,688	22,615,688	-	17,313,269	5,302,418	-	-	22,615,688
Water Systems Operations	Treatment Weymouth	-	26,438,367	26,438,367	-	20,041,835	6,396,532	-	-	26,438,367
Water Systems Operations	Water Quality Section	-	39,793,434	39,793,434	-	39,793,434	-	-	-	39,793,434
Water Systems Operations	C&D, Eastern Unit	901,563	27,216,473	28,118,036	-	27,354,836	-	-	763,200	28,118,036
Water Systems Operations	C&D, Western Unit	884,164	21,584,168	22,468,331	-	21,733,623	-	-	734,708	22,468,331
Water Systems Operations	OSS, Manufacturing Services Unit	579,418	11,333,226	11,912,644	-	11,785,430	-	-	127,214	11,912,644
Water Systems Operations	Environmental Health & Safety Section	761,595	21,201,527	21,963,122	-	21,891,708	-	-	71,414	21,963,122
Water Systems Operations	OSS, Fleet Services Unit	1,436,718	13,898,837	15,335,555	-	15,335,555	-	-	-	15,335,555
Water Systems Operations	OSS, Power Support Unit	133,686	13,280,977	13,414,663	-	9,603,293	-	3,811,371	13,414,663	13,414,663
Water Systems Operations	Office of the Manager, Operations & Planning Section	52,534	1,077,709	1,130,243	-	1,105,433	-	24,810	1,130,243	1,130,243
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-	-	-	-
Sustainability, Resilience & Innovation		9,216,241	(9,216,241)	-	-	-	-	-	-	-
Diversity, Equity & Inclusion		1,426,072	(1,426,072)	-	-	-	-	-	-	-
Equal Employment Opportunity		2,036,286	(2,036,286)	-	-	-	-	-	-	-
Office of the Chief Financial Officer		25,316,770	(25,316,770)	-	-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-	-	-	-
Engineering Services		2,836,719	59,693,514	62,530,233	-	61,590,780	-	-	939,453	62,530,233
Business Technology	Administrative Services	33,341,320	(33,341,320)	-	-	-	-	-	-	-
Business Technology	Information Technology	13,888,109	35,611,409	49,499,518	-	48,729,189	-	-	770,329	49,499,518
Water Resources Management	Resource Planning & Development	-	7,590,263	7,590,263	-	7,590,263	-	-	-	7,590,263
Water Resources Management	Resource Implementation	35,746	22,714,614	22,750,360	-	22,750,360	-	-	-	22,750,360
Water Resources Management	Office of the Group Manager	4,137	3,909,807	3,913,944	-	3,913,944	-	-	-	3,913,944
Ethics Office		2,759,274	(2,759,274)	-	-	-	-	-	-	-
Real Property		11,775,287	9,125,269	20,900,556	-	20,900,556	-	-	-	20,900,556
General Counsel		15,716,806	(15,716,806)	-	-	-	-	-	-	-
General Auditor		4,737,939	(4,737,939)	-	-	-	-	-	-	-
Total Departmental O&M		161,703,068	426,755,460	588,458,528	-	549,674,563	29,232,437	9,551,528	588,458,528	588,458,528
GENERAL DISTRICT REQUIREMENTS										
State Water Contract*										
Supply - O&M		107,000,290	2,908,604	109,908,894	-	109,908,894	-	-	-	109,908,894
Supply - Capital		85,494,959	2,324,022	87,818,980	-	87,818,980	-	-	-	87,818,980
Power - O&M & Off-Aq Capital		258,551,933	7,028,254	265,580,187	-	-	265,580,187	-	-	265,580,187
Power - Capital (less Off-Aq)		(3,654,765)	-	(3,654,765)	-	-	(3,654,765)	-	-	(3,654,765)
Transmission - Capital - Commodity, Demand, & Standby		80,660,127	2,192,596	82,852,722	6,684,844	39,322,612	36,845,266	-	-	82,852,722
Transmission - O&M - Commodity only		198,687,447	5,400,949	204,088,397	-	204,088,397	-	-	-	204,088,397
Delta Conveyance - Supply		-	-	-	-	-	-	-	-	-
Delta Conveyance - Power		-	-	-	-	-	-	-	-	-
Delta Conveyance - Other		-	-	-	-	-	-	-	-	-
Total State Water Contract		34,500,000	937,818	35,437,818	2,859,246	16,819,092	15,759,480	-	-	35,437,818
Colorado River Aqueduct Power Costs		85,626,149	2,327,588	87,953,736	9,544,090	457,957,976	52,604,746	261,925,422	-	782,032,234
Supply Programs (cash funded portion)		64,100,985	1,742,466	65,843,451	-	65,843,451	-	-	-	65,843,451
Demand Management (cash funded portion)										
Local Resources Program		21,685,717	589,486	22,275,203	-	22,275,203	-	-	-	22,275,203
Future Supply Actions & Stormwater Pilot		2,422,500	65,851	2,488,351	-	2,488,351	-	-	-	2,488,351
Conservation Program (cash funded portion)		25,000,000	679,579	25,679,579	-	25,679,579	-	-	-	25,679,579
Total Demand Management Costs		49,108,217	1,334,916	50,443,132	-	50,443,132	-	-	-	50,443,132
Capital Financing										
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		296,356,173	(10,665,450)	285,690,723	53,315,418	121,941,406	106,141,689	-	4,292,210	285,690,723
G.O. Bond Debt Service		1,965,750	53,435	2,019,185	684,298	739,425	595,461	-	-	2,019,185
Debt Administration		2,703,320	(97,289)	2,606,031	486,336	1,112,332	968,210	-	39,153	2,606,031
Bond Defeasance		-	-	-	-	-	-	-	-	-
PAYGO		135,000,000	(4,858,464)	130,141,536	24,286,929	55,548,328	48,351,036	1,955,243	-	130,141,536
Total Capital Financing Costs		436,025,242	(15,567,767)	420,457,475	78,772,981	179,341,492	156,056,396	6,286,606	-	420,457,475
Other Operating Costs										
Operating Equipment		8,836,761	(2,254,059)	6,582,702	-	6,362,992	117,268	-	102,442	6,582,702
Succession Planning Labor Pool		5,000,000	(1,275,387)	3,724,613	-	3,600,296	66,352	-	57,964	3,724,613
OPEB/PEPS Pre-Funding		-	-	-	-	-	-	-	-	-
Total Other Operating Costs		13,836,761	(3,529,446)	10,307,315	-	9,963,288	183,621	-	160,406	10,307,315
Increase/(Decrease) in Required Reserves		7,100,000	(7,100,000)	-	-	-	-	-	-	-
Total General District Requirements		1,417,037,345	(0)	1,417,037,345	88,317,071	763,549,340	208,844,763	349,879,158	6,447,012	1,417,037,345
REQUIREMENTS BEFORE OFFSETS:										
		1,578,740,413	426,755,460	2,005,495,873	88,317,071	1,313,223,904	208,844,763	379,111,595	15,998,540	2,005,495,873
Revenue Offsets										
Property Taxes - MWD Portion of SWC GO Debt Service		36,010	-	36,010	2,905	17,091	16,014	-	-	36,010
Property Taxes - MWD GO Debt Service		1,965,750	(0)	1,965,750	515,395	572,462	877,894	-	-	1,965,750
Interest on Investments		9,587,257	(0)	9,587,257	936,000	4,969,617	1,731,188	1,882,046	68,405	9,587,257
Hydro-Power Revenue		10,710,879	-	10,710,879	-	-	-	-	10,710,879	10,710,879
CRA Power Revenue		2,989,504	-	2,989,504	-	-	2,989,504	-	-	2,989,504
Wadsworth Pumping Plant (DVL) Power Revenue		545,067	-	545,067	-	-	545,067	-	-	545,067
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)		37,575,443	-	37,575,443	1,911,659	23,228,509	4,520,530	7,652,385	262,361	37,575,443
Misc. allocated to supply (PVID Lease)		6,048,886	-	6,048,886	-	6,048,886	-	-	-	6,048,886
Property Taxes - SWC		166,313,250	-	166,313,250	1,489,331	98,282,285	8,208,836	58,332,797	-	166,313,250
Revenue Reserve used for Revenue Bonds - I&P		-	-	-	-	-	-	-	-	-
Annexation		-	-	-	-	-	-	-	-	-
Total Revenue Offsets		235,772,044	(0)	235,772,044	4,855,290	133,118,849	15,354,462	71,401,799	11,041,645	235,772,044
NET REVENUE REQUIREMENTS:										
		\$ 1,769,723,828	\$ 426,755,460	\$ 1,769,723,828	\$ 83,461,781	\$ 1,180,105,055	\$ 193,490,301	\$ 307,709,796	\$ 4,956,895	\$ 1,769,723,828

		Total to Be Allocated Excluding A&G and Negative Values	Line Item Costs by Allocation Category (w/o A&G)					Total Allocations
			Fixed			Variable Commodity	Hydro- Electric	
			Demand	Commodity	Standby			
Departmental O&M								
Group	Item							
Office of General Manager		5,054,886	-	4,976,220	-	-	78,666	5,054,886
Office of General Manager	Board of Directors	-	-	-	-	-	-	-
Bay Delta Initiatives	Bay Delta Initiatives	5,598,517	-	5,598,517	-	-	-	5,598,517
External Affairs	Legislative Services	-	-	-	-	-	-	-
External Affairs	Media Communications Services	-	-	-	-	-	-	-
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-	-
External Affairs	Conservation & Community Services	1,947,448	-	1,947,448	-	-	-	1,947,448
Human Resources		8,883,277	-	8,745,032	-	-	138,245	8,883,277
Water Systems Operations	Office of the Manager	7,790,686	-	7,619,672	-	-	171,013	7,790,686
Water Systems Operations	Office of the Manager, Conveyance & Treatment	831,462	-	819,341	-	-	12,121	831,462
Water Systems Operations	Office of the Manager, Treatment Services	425,719	-	425,719	-	-	-	425,719
Water Systems Operations	Office of the Manager, Operations Support Services	1,562,471	-	1,528,174	-	-	34,298	1,562,471
Water Systems Operations	Operations Support Services	6,904,117	-	6,795,255	-	-	108,862	6,904,117
Water Systems Operations	Desert Region / C&D CRA	27,406,997	-	27,406,997	-	-	-	27,406,997
Water Systems Operations	System Operations Unit	7,695,927	-	7,695,927	-	-	-	7,695,927
Water Systems Operations	Power Operations and Planning	2,964,285	-	2,165,075	-	-	799,211	2,964,285
Water Systems Operations	Operations Planning & Programs Unit	2,047,897	-	2,047,897	-	-	-	2,047,897
Water Systems Operations	Treatment Jensen	11,879,342	-	11,879,342	-	-	-	11,879,342
Water Systems Operations	Treatment Diemer	11,414,591	-	11,414,591	-	-	-	11,414,591
Water Systems Operations	Treatment Mills	10,847,139	-	10,847,139	-	-	-	10,847,139
Water Systems Operations	Treatment Skinner	10,589,018	-	10,589,018	-	-	-	10,589,018
Water Systems Operations	Treatment Weymouth	12,351,990	-	12,351,990	-	-	-	12,351,990
Water Systems Operations	Water Quality Section	22,846,992	-	22,846,992	-	-	-	22,846,992
Water Systems Operations	C&D, Eastern Unit	14,434,234	-	14,042,450	-	-	391,784	14,434,234
Water Systems Operations	C&D, Western Unit	12,038,924	-	11,645,254	-	-	393,670	12,038,924
Water Systems Operations	OSS, Manufacturing Services Unit	7,374,165	-	7,295,417	-	-	78,748	7,374,165
Water Systems Operations	Environmental Health & Safety Section	12,112,331	-	12,072,948	-	-	39,383	12,112,331
Water Systems Operations	OSS, Fleet Services Unit	7,044,015	-	7,044,015	-	-	-	7,044,015
Water Systems Operations	OSS, Power Support Unit	8,215,874	-	5,881,582	-	-	2,334,292	8,215,874
Water Systems Operations	Office of the Manager, Operations & Security	694,752	-	679,502	-	-	15,251	694,752
Water Systems Operations	Security Team & Security Management	-	-	-	-	-	-	-
Sustainability, Resilience & Inclusion		-	-	-	-	-	-	-
Diversity, Equity & Inclusion		-	-	-	-	-	-	-
Equal Employment Opportunity		-	-	-	-	-	-	-
Office of the Chief Financial Officer		-	-	-	-	-	-	-
Business Technology	Office of Manager	-	-	-	-	-	-	-
Engineering Services		36,521,106	-	35,972,414	-	-	548,692	36,521,106
Business Technology	Administrative Services	-	-	-	-	-	-	-
Business Technology	Information Technology	24,384,154	-	24,004,679	-	-	379,475	24,384,154
Water Resources Management	Resource Planning & Development	4,294,502	-	4,294,502	-	-	-	4,294,502
Water Resources Management	Resource Implementation	10,940,994	-	10,940,994	-	-	-	10,940,994
Water Resources Management	Office of the Group Manager	2,527,354	-	2,527,354	-	-	-	2,527,354
Ethics Office		-	-	-	-	-	-	-
Real Property		7,294,397	-	7,294,397	-	-	-	7,294,397
General Counsel		-	-	-	-	-	-	-
General Auditor		-	-	-	-	-	-	-
Total Departmental O&M	-	306,919,563	-	301,395,854	-	-	5,523,710	306,919,563
GENERAL DISTRICT REQUIREMENTS								
State Water Contract*								
Supply - O&M		107,000,290	-	107,000,290	-	-	-	107,000,290
Supply - Capital		85,494,959	-	85,494,959	-	-	-	85,494,959
Power - O&M & Off-Aq Capital		258,551,933	-	-	-	258,551,933	-	258,551,933
Power - Capital (less Off-Aq)		-	-	-	-	-	-	-
Transmission - Capital - Commodity, Demand, & Standby		80,660,127	6,507,938	38,281,988	35,870,201	-	-	80,660,127
Transmission - O&M - Commodity only		198,687,447	-	198,687,447	-	-	-	198,687,447
Delta Conveyance - Supply		-	-	-	-	-	-	-
Delta Conveyance - Power		-	-	-	-	-	-	-
Delta Conveyance - Other		34,500,000	2,783,579	16,373,996	15,342,425	-	-	34,500,000
Total State Water Contract		764,894,756	9,291,517	445,838,680	51,212,626	258,551,933	-	764,894,756
Colorado River Aqueduct Power Costs		85,626,149	-	-	-	85,626,149	-	85,626,149
Supply Programs (cash funded portion)		64,100,985	-	64,100,985	-	-	-	64,100,985
Demand Management (cash funded portion)								
Local Resources Program		21,685,717	-	21,685,717	-	-	-	21,685,717
Future Supply Actions & Stormwater Pilot		2,422,500	-	2,422,500	-	-	-	2,422,500
Conservation Program (cash funded portion)		25,000,000	-	25,000,000	-	-	-	25,000,000
Total Demand Management Costs		49,108,217	-	49,108,217	-	-	-	49,108,217
Capital Financing								
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		278,130,268	51,904,491	118,714,376	103,332,779	-	4,178,622	278,130,268
G.O. Bond Debt Service		1,965,750	666,189	719,857	579,703	-	-	1,965,750
Debt Administration		2,537,065	473,466	1,082,896	942,587	-	38,117	2,537,065
Bond Defeasance		-	-	-	-	-	-	-
PAYGO		126,697,500	23,644,205	54,078,309	47,071,485	-	1,903,500	126,697,500
Total Capital Financing Costs		409,330,584	76,688,351	174,595,439	151,926,555	-	6,120,239	409,330,584
Other Operating Costs								
Operating Equipment		6,408,499	-	6,194,603	114,165	-	99,731	6,408,499
Succession Planning Labor Pool		3,626,045	-	3,505,019	64,597	-	56,430	3,626,045
OPEB/PERS Pre-Funding		-	-	-	-	-	-	-
Total Other Operating Costs		10,034,545	-	9,699,622	178,761	-	156,161	10,034,545
Increase/(Decrease) in Required Reserves		-	-	-	-	-	-	-
Total General District Requirements		1,383,095,235	85,979,868	743,342,943	203,317,942	344,178,081	6,276,400	1,383,095,235
REQUIREMENTS BEFORE OFFSETS:		1,690,014,798	85,979,868	1,044,738,797	203,317,942	344,178,081	11,800,109	1,690,014,798
Revenue Offsets								
Property Taxes - MWD Portion of SWC GO Debt Service		36,010	2,905	17,091	16,014	-	-	36,010
Property Taxes - MWD GO Debt Service		1,965,750	515,395	572,462	877,894	-	-	1,965,750
Interest on Investments		8,634,505	887,529	4,380,641	1,616,567	1,688,014	61,753	8,634,505
Hydro-Power Revenue		10,710,879	-	-	-	-	10,710,879	10,710,879
CRA Power Revenue		2,989,504	-	-	-	2,989,504	-	2,989,504
Wadsworth Pumping Plant (DVL) Power Revenue		545,067	-	-	-	545,067	-	545,067
Misc. allocated to A&G (RRWP, CVWD, Lease, Late Fees, etc.)		-	-	-	-	-	-	-
Misc. allocated to supply (PVID Lease)		6,048,886	-	6,048,886	-	-	-	6,048,886
Property Taxes - SWC		166,313,250	1,489,331	98,282,285	8,208,836	58,332,797	-	166,313,250
Revenue Reserve used for Revenue Bonds - I&P		-	-	-	-	-	-	-
Annexation		-	-	-	-	-	-	-
Total Revenue Offsets		197,243,849	2,895,160	109,301,365	10,719,311	63,555,382	10,772,632	197,243,849
NET REVENUE REQUIREMENTS:		\$ 1,492,770,948	\$ 83,084,708	\$ 935,437,432	\$ 192,598,631	\$ 280,622,699	\$ 1,027,478	\$ 1,492,770,948

		A&G Line Item Allocators by Allocation Category						Total
		Fixed			Variable	Demand	Hydro-Electric	
		Demand	Commodity	Standby	Commodity	Management		
Departmental O&M								
Group	Item							
Office of General Manager		0.00%	1.62%	0.00%	0.00%	0.00%	0.03%	1.65%
Office of General Manager	Board of Directors	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Bay Delta Initiatives	Bay Delta Initiatives	0.00%	1.82%	0.00%	0.00%	0.00%	0.00%	1.82%
External Affairs	Legislative Services	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
External Affairs	Media Communications Services	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
External Affairs	Manager, External Affairs/Special Projects	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
External Affairs	Conservation & Community Services	0.00%	0.63%	0.00%	0.00%	0.00%	0.00%	0.63%
Human Resources		0.00%	2.85%	0.00%	0.00%	0.00%	0.05%	2.89%
Water Systems Operations	Office of the Manager	0.00%	2.48%	0.00%	0.00%	0.00%	0.06%	2.54%
Water Systems Operations	Office of the Manager, Conveyance & Dis	0.00%	0.27%	0.00%	0.00%	0.00%	0.00%	0.27%
Water Systems Operations	Office of the Manager, Treatment Section	0.00%	0.14%	0.00%	0.00%	0.00%	0.00%	0.14%
Water Systems Operations	Office of the Manager, Operations Support	0.00%	0.50%	0.00%	0.00%	0.00%	0.01%	0.51%
Water Systems Operations	Operations Support Services	0.00%	2.21%	0.00%	0.00%	0.00%	0.04%	2.25%
Water Systems Operations	Desert Region / C&D CRA	0.00%	8.93%	0.00%	0.00%	0.00%	0.00%	8.93%
Water Systems Operations	System Operations Unit	0.00%	2.51%	0.00%	0.00%	0.00%	0.00%	2.51%
Water Systems Operations	Power Operations and Planning	0.00%	0.71%	0.00%	0.00%	0.00%	0.26%	0.97%
Water Systems Operations	Operations Planning & Programs Unit	0.00%	0.67%	0.00%	0.00%	0.00%	0.00%	0.67%
Water Systems Operations	Treatment Jensen	0.00%	3.87%	0.00%	0.00%	0.00%	0.00%	3.87%
Water Systems Operations	Treatment Diemer	0.00%	3.72%	0.00%	0.00%	0.00%	0.00%	3.72%
Water Systems Operations	Treatment Mills	0.00%	3.53%	0.00%	0.00%	0.00%	0.00%	3.53%
Water Systems Operations	Treatment Skinner	0.00%	3.45%	0.00%	0.00%	0.00%	0.00%	3.45%
Water Systems Operations	Treatment Weymouth	0.00%	4.02%	0.00%	0.00%	0.00%	0.00%	4.02%
Water Systems Operations	Water Quality Section	0.00%	7.44%	0.00%	0.00%	0.00%	0.00%	7.44%
Water Systems Operations	C&D, Eastern Unit	0.00%	4.58%	0.00%	0.00%	0.00%	0.13%	4.70%
Water Systems Operations	C&D, Western Unit	0.00%	3.79%	0.00%	0.00%	0.00%	0.13%	3.92%
Water Systems Operations	OSS, Manufacturing Services Unit	0.00%	2.38%	0.00%	0.00%	0.00%	0.03%	2.40%
Water Systems Operations	Environmental Health & Safety Section	0.00%	3.93%	0.00%	0.00%	0.00%	0.01%	3.95%
Water Systems Operations	OSS, Fleet Services Unit	0.00%	2.30%	0.00%	0.00%	0.00%	0.00%	2.30%
Water Systems Operations	OSS, Power Support Unit	0.00%	1.92%	0.00%	0.00%	0.00%	0.76%	2.68%
Water Systems Operations	Office of the Manager, Operations & Planr	0.00%	0.22%	0.00%	0.00%	0.00%	0.00%	0.23%
Water Systems Operations	Security Team & Security Management	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Sustainability, Resilience & Innovati	-	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Diversity, Equity & Inclusion	-	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Equal Employment Opportunity	-	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Office of the Chief Financial Officer		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Business Technology	Office of Manager	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Engineering Services		0.00%	11.72%	0.00%	0.00%	0.00%	0.18%	11.90%
Business Technology	Administrative Services	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Business Technology	Information Technology	0.00%	7.82%	0.00%	0.00%	0.00%	0.12%	7.94%
Water Resources Management	Resource Planning & Development	0.00%	1.40%	0.00%	0.00%	0.00%	0.00%	1.40%
Water Resources Management	Resource Implementation	0.00%	3.56%	0.00%	0.00%	0.00%	0.00%	3.56%
Water Resources Management	Office of the Group Manager	0.00%	0.82%	0.00%	0.00%	0.00%	0.00%	0.82%
Ethics Office		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Real Property		0.00%	2.38%	0.00%	0.00%	0.00%	0.00%	2.38%
General Counsel		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
General Auditor		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Total Departmental O&M	-	0.00%	98.20%	0.00%	0.00%	0.00%	1.80%	100.00%
GENERAL DISTRICT REQUIREMENTS								
State Water Contract*								
Supply - O&M		0.00%	7.74%	0.00%	0.00%	0.00%	0.00%	7.74%
Supply - Capital		0.00%	6.18%	0.00%	0.00%	0.00%	0.00%	6.18%
Power - O&M & Off-Aq Capital		0.00%	0.00%	0.00%	18.69%	0.00%	0.00%	18.69%
Power - Capital (less Off-Aq)		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Transmission - Capital - Commodity, Demand, & Standby		0.47%	2.77%	2.59%	0.00%	0.00%	0.00%	5.83%
Transmission - O&M - Commodity only		0.00%	14.37%	0.00%	0.00%	0.00%	0.00%	14.37%
Delta Conveyance - Supply		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Delta Conveyance - Power		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Delta Conveyance - Other		0.20%	1.18%	1.11%	0.00%	0.00%	0.00%	2.49%
Total State Water Contract		0.67%	32.23%	3.70%	18.69%	0.00%	0.00%	55.30%
Colorado River Aqueduct Power Costs		0.00%	0.00%	0.00%	6.19%	0.00%	0.00%	6.19%
Supply Programs (cash funded portion)		0.00%	4.63%	0.00%	0.00%	0.00%	0.00%	4.63%
Demand Management (cash funded portion)								
Local Resources Program		0.00%	1.57%	0.00%	0.00%	0.00%	0.00%	1.57%
Future Supply Actions & Stormwater Pilot		0.00%	0.18%	0.00%	0.00%	0.00%	0.00%	0.18%
Conservation Program (cash funded portion)		0.00%	1.81%	0.00%	0.00%	0.00%	0.00%	1.81%
Total Demand Management Costs		0.00%	3.55%	0.00%	0.00%	0.00%	0.00%	3.55%
Capital Financing								
Revenue Bond Debt Service net of BABs Interest Subsidy Payment		3.75%	8.58%	7.47%	0.00%	0.00%	0.30%	20.11%
G.O. Bond Debt Service		0.05%	0.05%	0.04%	0.00%	0.00%	0.00%	0.14%
Debt Administration		0.03%	0.08%	0.07%	0.00%	0.00%	0.00%	0.18%
Bond Defeasance		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
PAYGO		1.71%	3.91%	3.40%	0.00%	0.00%	0.14%	9.16%
Total Capital Financing Costs		5.54%	12.62%	10.98%	0.00%	0.00%	0.44%	29.60%
Other Operating Costs		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Operating Equipment		0.00%	0.45%	0.01%	0.00%	0.00%	0.01%	0.46%
Succession Planning Labor Pool		0.00%	0.25%	0.00%	0.00%	0.00%	0.00%	0.25%
OPEB/PERS Pre-Funding		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Total Other Operating Costs		0.00%	0.70%	0.01%	0.00%	0.00%	0.01%	0.73%
Increase/(Decrease) in Required Reserves		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Total General District Requirements		6.22%	53.74%	14.70%	24.88%	0.00%	0.45%	100.00%
REQUIREMENTS BEFORE OFFSETS:		5.09%	61.82%	12.03%	20.37%	0.00%	0.70%	100.00%

Functionalization of A&G Costs
 Summary of Allocation Results before Inclusion of Administrative and General Costs
 Fiscal Year Ending 2024

Functional Categories	Functional Costs Allocated for FY 2024	Allocation Categories (Costs Exclude Administrative and General)					Total Allocated Excluding A&G
		Demand	Fixed Commodity	Standby	Variable Commodity	Hydro-Electric	
Source of Supply							
CRA	\$ 60,473,561.62	\$ -	\$ 60,473,562	\$ -	\$ -	\$ -	\$ 60,473,562
SWP	158,301,591	-	158,301,591	-	-	-	158,301,591
Other Supply	33,036,911	-	33,036,911	-	-	-	33,036,911
Subtotal: Source of Supply	251,812,064	-	251,812,064	-	-	-	251,812,064
Conveyance & Aqueduct							
CRA							
CRA Power	94,748,625	-	12,581,461	-	82,167,164	-	94,748,625
CRA All Other	68,725,524	1,038,016	61,966,211	5,721,296	-	-	68,725,524
SWP*	-	-	-	-	-	-	-
SWP Power	195,345,837	-	-	-	195,345,837	-	195,345,837
SWP All Other	279,473,310	7,666,178	229,552,985	42,254,147	-	-	279,473,310
Other Conveyance & Aqueduct	71,352,888	4,801,906	38,194,917	28,356,065	-	-	71,352,888
Subtotal: Conveyance & Aqueduct	709,646,184	13,506,101	342,295,574	76,331,508	277,513,001	-	709,646,184
Storage							
Storage Costs Other Than Power							
Emergency	55,910,310	-	7,602,478	48,307,832	-	-	55,910,310
Drought	49,010,617	-	49,010,617	-	-	-	49,010,617
Regulatory	27,606,203	8,190,332	13,133,978	6,281,893	-	-	27,606,203
Storage Power	(545,067)	-	-	-	(545,067)	-	(545,067)
Subtotal: Storage	131,982,063	8,190,332	69,747,072	54,589,725	(545,067)	-	131,982,063
Treatment							
Jensen	53,304,096	7,166,346	31,109,137	8,599,517	6,429,096	-	53,304,096
Weymouth	54,513,870	7,539,386	31,530,759	9,047,193	6,396,532	-	54,513,870
Diemer	61,345,860	9,097,922	33,030,175	10,917,518	8,300,245	-	61,345,860
Mills	30,562,197	2,327,557	22,637,745	2,792,749	2,804,145	-	30,562,197
Skinner	51,516,009	7,571,742	29,555,759	9,086,090	5,302,418	-	51,516,009
Subtotal: Treatment	251,242,032	33,702,953	147,863,575	40,443,067	29,232,437	-	251,242,032
Distribution	199,988,286	27,685,323	151,068,633	21,234,331	-	-	199,988,286
Demand Management	62,136,367	-	62,136,367	-	-	-	62,136,367
Hydro-Electric	2,145,085	-	-	-	-	2,145,085	2,145,085
Total Costs Allocated	\$ 1,608,952,080	\$ 83,084,708	\$ 1,024,923,285	\$ 192,598,631	\$ 306,200,371	\$ 2,145,085	\$ 1,608,952,080
A&G Costs to be Functionalized		\$ 377,073	\$ 155,181,770	\$ 891,669,928	\$ 1,509,425	\$ 2,811,810	\$ 160,771,748

Percentages Used for Functionalization of A&G Costs

Allocation Categories				
Fixed			Variable Commodity	Hydro-Electric
Demand	Commodity	Standby		
0.0%	5.9%	0.0%	0.0%	0.0%
0.0%	15.4%	0.0%	0.0%	0.0%
0.0%	3.2%	0.0%	0.0%	0.0%
0.0%	24.6%	0.0%	0.0%	0.0%
0.0%	1.2%	0.0%	26.8%	0.0%
1.2%	6.0%	3.0%	0.0%	0.0%
0.0%	0.0%	0.0%	0.0%	0.0%
0.0%	0.0%	0.0%	63.8%	0.0%
9.2%	22.4%	21.9%	0.0%	0.0%
5.8%	3.7%	14.7%	0.0%	0.0%
16.3%	33.4%	39.6%	90.6%	0.0%
0.0%	0.7%	25.1%	0.0%	0.0%
0.0%	4.8%	0.0%	0.0%	0.0%
9.9%	1.3%	3.3%	0.0%	0.0%
0.0%	0.0%	0.0%	-0.2%	0.0%
9.9%	6.8%	28.3%	-0.2%	0.0%
8.6%	3.0%	4.5%	2.1%	0.0%
9.1%	3.1%	4.7%	2.1%	0.0%
11.0%	3.2%	5.7%	2.7%	0.0%
2.8%	2.2%	1.5%	0.9%	0.0%
9.1%	2.9%	4.7%	1.7%	0.0%
40.6%	14.4%	21.0%	9.5%	0.0%
33.3%	14.7%	11.0%	0.0%	0.0%
0.0%	6.1%	0.0%	0.0%	0.0%
0.0%	0.0%	0.0%	0.0%	100.0%
100.0%	100.0%	100.0%	100.0%	100.0%

Administrative and General Costs Redistributed Among Functional Categories

Administrative and General Costs by Allocation Categories						Total A&G Costs Allocated	Functional Categories				
Fixed			Variable								
Demand	Commodity	Standby	Commodity	Hydro-Electric							
\$	-	\$	9,156,192	\$	-	\$	-	\$	9,156,192	Source of Supply CRA SWP Other Supply Subtotal: Source of Supply	
			23,968,156		-		-		23,968,156		
			5,002,059		-		-		5,002,059		
			38,126,406		-		-		38,126,406		
										Conveyance & Aqueduct CRA SWP* Other Conveyance & Aqueduct Subtotal: Conveyance & Aqueduct	
			1,904,936		-		405,046		-		2,309,982
	4,711		9,382,191		26,488		-		-		9,413,390
			-		-		-		-		
			-		-		962,964		-	962,964	
	34,792		34,756,200		195,623		-		-	34,986,615	
	21,793		5,783,023		131,279		-		-	5,936,095	
	61,296		51,826,350		353,390		1,368,010		-	53,609,047	
										Storage Storage Costs Other Than Power Storage Power Subtotal: Storage	
			1,151,077		223,650		-		-		1,374,727
			7,420,608		-		-		-		7,420,608
	37,171		1,988,592		29,083		-		-		2,054,846
			-		-		(2,687)		-	(2,687)	
	37,171		10,560,277		252,733		(2,687)		-	10,847,494	
										Treatment Jensen Weymouth Diemer Mills Skinner Subtotal: Treatment	
	32,524		4,710,178		39,813		31,692		-		4,814,207
	34,217		4,774,015		41,886		31,532		-		4,881,649
	41,290		5,001,039		50,545		40,916		-		5,133,790
	10,563		3,427,540		12,930		13,823		-	3,464,856	
	34,364		4,474,984		42,066		26,138		-	4,577,552	
	152,958		22,387,755		187,238		144,102		-	22,872,054	
										Distribution Demand Management Hydro-Electric Total Costs Allocated	
	125,647		22,873,027		98,308		-		-		23,096,982
			9,407,954		-		-		-		9,407,954
			-		-		-	2,811,810	-		2,811,810
\$	377,073	\$	155,181,770	\$	891,670	\$	1,509,425	\$	2,811,810	\$	160,771,748

Summary of Functionalization Percentages

Fiscal Year Ending 2024

	Source of Supply	Conveyance & Aqueduct	Storage	Water Quality	Treatment	Distribution	Demand Management	Hydro-Electric	Administrative & General	Total Allocated
Departmental Operations & Maintenance										
Office of General Manager	5%	12%	2%	0%	19%	16%	2%	1%	43%	100%
Water Systems Operations	5%	17%	1%	0%	41%	32%	0%	2%	2%	100%
Water Resources Management	70%	0%	0%	0%	0%	2%	28%	0%	0%	100%
Engineering Services	4%	21%	24%	0%	25%	18%	0%	1%	6%	100%
Bay Delta Initiatives	0%	100%	0%	0%	0%	0%	0%	0%	0%	100%
Business Technology	4%	9%	2%	0%	15%	12%	1%	1%	56%	100%
Real Property	6%	33%	8%	0%	0%	12%	0%	0%	41%	100%
Human Resources	7%	15%	3%	0%	24%	20%	2%	1%	27%	100%
Office of the Chief Financial Officer	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%
External Affairs	0%	0%	0%	0%	0%	0%	11%	0%	89%	100%
General Counsel	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%
General Auditor	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%
Ethics Office	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%
Sustainability, Resilience & Innovation	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%
Diversity, Equity & Inclusion	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%
Equal Employment Opportunity	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%
Total Departmental O&M	7%	15%	3%	0%	24%	20%	2%	1%	27%	100%
General District Requirements										
State Water Contract*	25%	75%	0%	0%	0%	0%	0%	0%	0%	100%
Colorado River Aqueduct Power Costs	0%	100%	0%	0%	0%	0%	0%	0%	0%	100%
Supply Programs (cash funded portion)	82%	0%	18%	0%	0%	0%	0%	0%	0%	100%
Demand Management (cash funded portion)	0%	0%	0%	0%	0%	0%	100%	0%	0%	100%
Capital Financing	4%	21%	24%	0%	25%	19%	0%	1%	6%	100%
Other Operating Costs	7%	15%	3%	0%	24%	20%	2%	1%	27%	100%
Increase/(Decrease) in Required Reserves	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%
Total General District Requirements	19%	53%	8%	0%	8%	6%	4%	0%	3%	100%
Revenue Offsets	22%	55%	1%	0%	1%	1%	0%	5%	16%	100%
Net Revenue Requirements	14%	40%	7%	0%	14%	11%	4%	0%	9%	100%

* Includes Delta Conveyance planning costs net of California WaterFix refund

Cost Allocation Summary (by budget line item)

Fiscal Year Ending 2024

	Allocation Categories						Total Allocated
	Fixed			Variable	Other	Hydro-Electric	
	Demand	Commodity	Standby	Commodity			
Departmental Operations & Maintenance							
Office of General Manager	\$ -	\$ 8,252,219	\$ -	\$ -	\$ -	\$ 130,454	\$ 8,382,673
Water Systems Operations	-	341,294,636	-	29,232,437	-	7,463,019	377,990,092
Water Resources Management	-	34,254,567	-	-	-	-	34,254,567
Engineering Services	-	61,590,780	-	-	-	939,453	62,530,233
Bay Delta Initiatives	-	15,029,934	-	-	-	-	15,029,934
Business Technology	-	48,729,189	-	-	-	770,329	49,499,518
Real Property	-	20,900,556	-	-	-	-	20,900,556
Human Resources	-	15,705,211	-	-	-	248,274	15,953,484
Office of the Chief Financial Officer	-	-	-	-	-	-	-
External Affairs	-	3,917,471	-	-	-	-	3,917,471
General Counsel	-	-	-	-	-	-	-
General Auditor	-	-	-	-	-	-	-
Ethics Office	-	-	-	-	-	-	-
Sustainability, Resilience & Innovation	-	-	-	-	-	-	-
Diversity, Equity & Inclusion	-	-	-	-	-	-	-
Equal Employment Opportunity	-	-	-	-	-	-	-
Total Departmental O&M (including Administrative and General)	-	549,674,563	-	29,232,437	-	9,551,528	588,458,528
General District Requirements							
State Water Contract*	9,544,090	457,957,976	52,604,746	261,925,422	-	-	782,032,234
Colorado River Aqueduct Power Costs	-	-	-	87,953,736	-	-	87,953,736
Supply Programs (cash funded portion)	-	65,843,451	-	-	-	-	65,843,451
Demand Management (cash funded portion)	-	50,443,132	-	-	-	-	50,443,132
Capital Financing	78,772,981	179,341,492	156,056,396	-	-	6,286,606	420,457,475
Other Operating Costs	-	9,963,288	183,621	-	-	160,406	10,307,315
Increase/(Decrease) in Required Reserves	-	-	-	-	Other	-	-
Total General District Requirements (including Administrative and General)	88,317,071	763,549,340	208,844,763	349,879,158	-	6,447,012	1,417,037,345
Revenue Offsets	(4,855,290)	(133,118,849)	(15,354,462)	(71,401,799)	-	(11,041,645)	(235,772,044)
Net Revenue Requirements	\$ 83,461,781	\$ 1,180,105,055	\$ 193,490,301	\$ 307,709,796	\$ -	\$ 4,956,895	\$ 1,769,723,828

* Includes Delta Conveyance planning costs net of California WaterFix refund

Fiscal Year Ending 2024	Supply			Conveyance & Aqueduct					Storage				Treatment	Distribution	Demand Mgt.	Hydro	Total
	CRA	SWC	Other	CRA power	CRA other	SWC power	SWC other	Other C&A	Emergency	Drought	Regulatory	Power					
Dept. Operations & Maintenance	9,412,719	16,520,056	14,333,014	3,598,625	54,576,937	-	24,118,260	7,750,058	7,602,478	6,128,659	4,073,593	-	142,537,997	118,052,820	11,408,929	6,641,317	426,755,460
General District Requirements																	
State Water Contract*	-	85,494,959	-	-	-	(3,654,765)	115,160,127	-	-	-	-	-	-	-	-	-	197,000,320
Capital	-	107,000,290	-	-	-	258,551,933	198,687,447	-	-	-	-	-	-	-	-	-	564,239,670
O&M	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	85,626,149
Colorado River Aqueduct Power	-	-	-	85,626,149	-	-	-	-	-	-	-	-	-	-	-	-	64,100,985
Supply Programs (cash funded portion)	51,129,998	-	1,250,000	-	-	-	-	-	-	11,720,987	-	-	-	-	-	-	49,108,217
Demand Management (cash funded portion)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Capital Financing Program	-	-	17,275,568	8,898,220	13,195,409	-	6,554,298	63,763,339	48,397,633	31,252,283	23,569,430	-	107,044,197	81,610,541	1,649,426	6,120,239	409,330,584
Other Operating Costs	221,327	388,445	337,020	84,617	1,283,299	-	567,106	182,232	178,761	144,107	95,785	-	3,351,577	2,775,843	268,265	156,161	10,034,545
Revenue Offsets	(290,482)	(51,102,159)	(158,691)	(3,458,985)	(330,120)	(59,551,331)	(65,613,929)	(342,740)	(268,563)	(235,420)	(132,605)	(545,067)	(1,691,739)	(2,450,917)	(298,469)	(10,772,632)	(197,243,849)
Admin. & General	9,156,192	23,988,156	5,002,059	2,309,982	9,413,390	962,964	34,986,615	5,936,095	1,374,727	7,420,608	2,054,846	(2,687)	22,872,054	23,096,982	9,407,954	2,811,810	160,771,748
Net Revenue Requirement	69,629,754	182,269,747	38,038,969	97,058,607	78,138,914	196,308,801	314,459,925	77,288,983	57,285,037	56,431,225	29,661,049	(547,754)	274,114,085	223,085,269	71,544,321	4,956,895	1,769,723,828
* Includes Delta Conveyance planning costs net of California WaterFix refund																	

Fiscal Year Ending 2024	Supply			Conveyance & Aqueduct					Storage				Treatment	Distribution	Demand Mgt.	Hydro	Total
	CRA	SWC	Other	CRA power	CRA other	SWC power	SWC other	Other C&A	Emergency	Drought	Regulatory	Power					
Fixed Demand																	
engineering factors	-	-	-	0.0%	8.1%	0.0%	8.1%	8.1%	0.0%	0.0%	34.7%	0.0%	31.8%	34.7%	-	-	-
SWC Capital	-	-	-	-	-	-	9,291,517	-	-	-	-	-	-	-	-	-	9,291,517
Capital Financing	-	-	-	-	1,064,651	-	528,823	5,144,647	-	-	8,190,332	-	34,088,003	28,359,507	-	-	77,375,964
A&G less Offsets	-	-	-	-	(21,924)	-	(2,119,370)	(320,947)	-	-	37,171	-	(232,093)	(548,537)	-	-	(3,205,700)
Total fixed demand	-	-	-	-	1,042,727	-	7,700,971	4,823,699	-	-	8,227,503	-	33,855,911	27,810,970	-	-	83,461,781
Fixed Commodity																	
engineering factors	100%	100%	100%	100%	47.5%	0%	47.5%	47.5%	0%	100%	38.6%	0%	29.5%	38.6%	1	-	-
Capital Financing	-	-	17,275,568	8,898,220	6,262,654	-	3,110,726	30,262,628	-	31,252,283	9,097,206	-	31,562,966	31,499,610	1,649,426	-	170,871,287
SWC Capital*	-	85,494,959	-	-	-	-	54,655,984	-	-	-	-	-	-	-	-	-	140,150,942
SWC O&M	-	107,000,290	-	-	-	-	198,687,447	-	-	-	-	-	-	-	-	-	305,687,738
Dept. O&M	9,412,719	16,520,056	14,333,014	3,598,625	54,576,937	-	24,118,260	7,750,058	7,602,478	6,128,659	4,073,593	-	107,654,724	118,052,820	11,408,929	-	385,230,870
Supply Programs (cash funded portion)	51,129,998	-	1,250,000	-	-	-	-	-	-	11,720,987	-	-	-	-	-	-	64,100,985
Demand Management (cash funded portion)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	49,108,217
Other Operating Costs	221,327	388,445	337,020	84,617	1,283,299	-	567,106	182,232	178,761	144,107	95,785	-	3,351,577	2,775,843	268,265	-	9,878,384
A&G less Offsets	8,865,710	(27,134,003)	4,843,367	1,904,936	9,225,514	-	(16,830,339)	5,783,023	972,316	7,185,188	1,855,987	-	27,682,063	21,613,386	9,109,485	-	55,076,633
Total fixed commodity	69,629,754	182,269,747	38,038,969	14,486,397	71,348,403	-	264,309,185	43,977,939	8,753,555	56,431,225	15,122,570	-	170,251,330	173,941,660	71,544,321	-	1,180,105,055
Fixed Standby																	
engineering factors	-	-	-	0%	44%	0%	44.5%	44.5%	100%	0%	26.7%	0%	38.7%	26.7%	-	-	-
SWC Capital	-	-	-	-	-	-	51,212,626	-	-	-	-	-	-	-	-	-	51,212,626
Capital Financing	-	-	-	-	5,868,103	-	2,914,749	28,356,065	48,397,633	-	6,281,893	-	41,393,227	21,751,423	-	-	154,963,094
A&G less Offsets	-	-	-	-	(120,319)	-	(11,677,605)	131,279	133,849	-	29,083	-	(762,922)	(418,784)	-	-	(12,685,419)
Total fixed standby	-	-	-	-	5,747,784	-	42,449,770	28,487,345	48,531,482	-	6,310,976	-	40,630,305	21,332,639	-	-	193,490,301
Variable Commodity																	
SWC Power	-	-	-	-	-	254,897,168	-	-	-	-	-	-	-	-	-	-	254,897,168
CRA Power	-	-	-	85,626,149	-	-	-	-	-	-	-	-	-	-	-	-	85,626,149
Variable Treatment	-	-	-	-	-	-	-	-	-	-	-	-	34,883,273	-	-	-	34,883,273
A&G less Offsets	-	-	-	(3,053,939)	-	(58,588,367)	-	-	-	-	-	(547,754)	(5,506,734)	-	-	-	(67,696,793)
Total variable commodity	-	-	-	82,572,210	-	196,308,801	-	-	-	-	-	(547,754)	29,376,539	-	-	-	307,709,796
Hydroelectric																	
A&G less Offsets	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12,917,717	12,917,717
Total hydroelectric	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	(7,960,822)	(7,960,822)
Total Costs	69,629,754	182,269,747	38,038,969	97,058,607	78,138,914	196,308,801	314,459,925	77,288,983	57,285,037	56,431,225	29,661,049	(547,754)	274,114,085	223,085,269	71,544,321	4,956,895	1,769,723,828

Option 1**THE METROPOLITAN WATER DISTRICT
OF SOUTHERN CALIFORNIA****RESOLUTION ____**

**RESOLUTION OF THE BOARD OF DIRECTORS
OF THE METROPOLITAN WATER DISTRICT OF
SOUTHERN CALIFORNIA
FIXING AND ADOPTING WATER RATES
TO BE EFFECTIVE JANUARY 1, 2023 AND 2024**

The Board of Directors of The Metropolitan Water District of Southern California (the “Board”) hereby finds that:

1. The Board of Directors (“Board”) of The Metropolitan Water District of Southern California (“Metropolitan”), pursuant to Sections 133 and 134 of the Metropolitan Water District Act (the “Act”), is authorized to fix such rate or rates for water that, so far as practicable, will result in revenue which, together with revenue from any water standby or availability service charge or assessment, will pay the operating expenses of Metropolitan, provide for repairs and maintenance, provide for payment of the purchase price or other charges for property or services or other rights acquired by Metropolitan, and provide for the payment of the interest and principal of its bonded debt; and

2. On March 12, 2002, the Board adopted Resolution 8805, “Resolution Of The Board Of Directors Of The Metropolitan Water District Of Southern California Fixing And Adopting Rates And Charges For Fiscal Year 2002/03 And To Direct Further Actions In Connection Therewith”, adopting a new structure for Metropolitan’s water rates and charges in order to enhance Metropolitan’s fiscal stability and ability to ensure the region’s long-term water supply while reasonably and fairly allocating the cost of providing service to its member agencies; and

3. The rate structure adopted by Resolution 8805 was the product of a three-year process that included a strategic planning process commenced by the Board in July 1998, discussions with member agencies, retail agencies and other stakeholders and numerous meetings of Metropolitan’s Board, Audit, Budget and Finance Committee, Budget, Finance and Investment Committee and Subcommittee on Rate Structure Implementation; and

4. Development of the rate structure adopted by Resolution 8805 included Strategic Plan Policy Principles adopted by the Board on December 14, 1999 to provide a framework for the development of a revised rate structure; a Composite Rate Structure Framework adopted by

the Board on April 11, 2000 (the “Rate Structure Framework”); a Rate Structure Action Plan adopted by the Board on December 12, 2000; and study of (i) a detailed rate design proposal presented in December 2000 (the “December 2000 Proposal”) developed from the Rate Structure Framework and (ii) an alternative rate structure proposal presented in September 2001 (the “Proposal”) that addressed concerns which were raised about the December 2000 Proposal; and

5. By Resolution 8774, “Resolution Of The Board Of Directors Of The Metropolitan Water District Of Southern California To Approve Rate Structure Proposal And To Direct Further Actions In Connection Therewith,” adopted October 16, 2001, the Board approved the Proposal, which unbundled water rates and charges to reflect the different functions undertaken by Metropolitan to provide its services, and determined that the Proposal (i) was consistent with the Board's Strategic Plan Policy Principles, (ii) addressed issues raised during the consideration of the December 2000 Proposal, (iii) furthered Metropolitan's strategic objectives of ensuring the region's long term water supply reliability through encouragement of sound and efficient water resources management, water conservation, and accommodating a water transfer market, and (iv) enhanced the fiscal stability of Metropolitan; and

6. By Resolution 8774, the Board directed the General Manager to (i) prepare a report on the Proposal describing each of the rates and charges and the cost of service process used to develop the rates and charges and (ii) utilize the Proposal as the basis for determining Metropolitan's revenue requirements and recommending rates to become effective January 1, 2003, in accordance with Metropolitan's annual rate-setting procedure under the Administrative Code; and

7. On January 7, 2002, the General Manager presented to the Budget, Finance and Investment Committee (formerly the Audit, Budget and Finance Committee and today, the Finance and Insurance Committee) a detailed report describing each of the rates and charges and the supporting cost of service process, dated December 2001 (the “2001 Cost of Service Report”), that (i) described the rate structure process and design; (ii) identified revenue requirements; (iii) showed the costs of major functions that Metropolitan undertakes to provide its services to its member agencies, (iv) classified these service function costs based on the use of and benefit from the Metropolitan system to create a logical nexus between the costs and the revenues required from each of the rates and charges; and (iv) set forth the rates and charges necessary to defray such costs; and

8. By Resolution 8805 the Board found and determined that the cost of service process reasonably and fairly: (i) identified revenue requirements; (ii) allocated costs to the functions that Metropolitan undertakes to provide its services to its member agencies; (iii) classified service function costs based upon use of and benefit from Metropolitan's system, and (iv) allocated costs to rates and charges based upon customary water industry standards; and

9. By Resolution 8805 the Board found and determined that the water rates and charges were supported by the cost of service process and that such rates and charges reasonably and fairly allocated the costs of providing service of Metropolitan's water system to its member agencies and third-party transporters of water, if any; and

10. The Board received the Final Report on Rates and Charges, dated June 28, 2002, that (i) described the rate structure process and design; (ii) identified revenue requirements; (iii) showed the costs of major service functions that Metropolitan undertakes, (iv) classified these service function costs based on the use of and benefit of the Metropolitan system to create a logical nexus between the costs and the revenues required from each of the rates and charges; and (iv) set forth the rates and charges necessary to defray such costs; and

11. Metropolitan's water rates approved by the Board thereafter have utilized the unbundled water rate elements in the rate structure approved by Resolution 8774 and implemented by Resolution 8805; and

12. The cost of service process supporting Metropolitan's water rates approved by the Board on March 11, 2003 and in following years is consistent with the cost of service process described in the 2001 Cost of Service Report. Raftelis Financial Consultants, Inc. ("RFC"), the firm engaged in 1998 to perform a comprehensive cost of service study and assist in the development of the rate structure, confirmed to the Board in a report dated April 6, 2010, that the fiscal year 2010/11 cost of service report presented to the Board in January 2010 was accurate and consistent with the 2001 Cost of Service Report and that the fiscal year 2010/11 cost of service report and rate methodology was consistent with water industry best practices and complies with cost of service and rate guidelines in the American Water Works Association's Manual M-1, *Principles of Water Rates, Fees and Charges*; and

13. In *San Diego County Water Authority v. Metropolitan Water District of Southern California, et al.*, San Francisco Superior Court Case Nos. CPF-10-510830 and CPF-12-512466 (the "2010 and 2012 Cases," collectively), the San Diego County Water Authority challenged Metropolitan's water rates adopted on April 13, 2010 and April 10, 2012; and

14. On June 21, 2017, the Court of Appeal entered a decision in the 2010 and 2012 Cases in *San Diego County Water Authority v. Metropolitan Water District of Southern California, et al.*, 12 Cal.App.5th 1124, holding that Metropolitan may recover its State Water Project transportation costs through its transportation rates and that based on the administrative record before it the rates in CYs 2011 through 2014 did not support Metropolitan's Water Stewardship Rate allocation to its transportation rates, and on September 27, 2017, the California Supreme Court denied SDCWA's Petition for Review, making the decision final; and

15. On September 21, 2021, the Court of Appeal issued a new appellate decision in which it interpreted its 2017 appellate decision. The Court of Appeal clarified that its 2017 decision regarding the Water Stewardship Rate was not limited to 2011-2014, and that it prohibits the inclusion of the Water Stewardship Rate in transportation rates charged under Metropolitan's wheeling rate and in the price term of the SDCWA-MWD Exchange Agreement from 2015 forward. On November 23, 2021, Metropolitan's Board approved an action directing staff to recover 100 percent of demand management costs from Metropolitan's supply rate elements in the future rate and charge proposals.

16. San Diego County Water Authority has filed lawsuits also challenging Metropolitan's water rates adopted on April 8, 2014, April 12, 2016, and April 10, 2018, each

also titled *San Diego County Water Authority v. Metropolitan Water District of Southern California, et al.*, pending in the San Francisco Superior Court under Case Nos. CPF-14-514004, CPF-16-515282, and CPF-18-516389, and a consolidated trial is scheduled for those cases on May 16, 2022; and

17. Pursuant to Resolution 8329, adopted by the Board on July 9, 1991, Resolution 9199, adopted by the Board on March 8, 2016, and Resolution 9201, adopted by the Board on March 8, 2016, and as each is thereafter amended and supplemented, proceeds of the rates and other revenues from the sale or availability of water are pledged to the payment of Metropolitan's outstanding revenue bonds, subordinate revenue bonds, short-term certificates and to the payment of revenue bonds, subordinate revenue bonds and short-term certificates to be issued pursuant to Resolution 8329, Resolution 9199, and Resolution 9201; and

18. On February 4, 2022, the General Manager and Chief Financial Officer provided to the Board and the public a board letter describing the proposed biennial budget for fiscal years 2022/23 and 2023/24, identifying key assumptions, addressing key circumstances such as current state water supply conditions, and continued maintenance of the current ad valorem tax rate, incorporating a ten-year financial forecast; determining anticipated total revenues and revenues anticipated to be derived from water transactions and firm revenue sources required during fiscal years 2022/23 and 2023/24, identifying revenue requirements for that period and recommending rates and charges consistent with cost of service principles to be effective January 1, 2023 and January 1, 2024, and explaining that costs and revenues may be at variance with forecasts and variations will be addressed, for example by contributions to, or withdrawals from, financial reserves maintained for this purpose; and

19. The recommended rates were developed using the same unbundled water rate elements in the rate structure approved by Resolution 8774 and implemented by Resolution 8805, as detailed in the FYs 2022/23 and 2023/24 Cost of Service Report for Proposed Water Rates and Charges (the "2022 Cost of Service Report") provided to the Board and the public on February 4, 2024; and

20. The detailed proposed departmental and non-departmental biennial budget for fiscal years 2022/23 and 2023/24 (the "Proposed Biennial Budget") was distributed to the Board and the public on February 4, 2022; and

21. On February 4, 2022, the capital investment plan (CIP) appendix to the detailed Proposed Biennial Budget for fiscal years 2022/23 and 2023/24 was also provided to the Board and the public, providing detailed information on proposed capital projects and capital improvement costs; and

22. Board workshops and discussions regarding the Proposed Biennial Budget and future water rates and charges were held on February 8, 2022 and March 7, 2022 at the regularly scheduled Finance and Insurance Committee meetings, and on March 22, 2022 at a special meeting of the Finance and Insurance Committee; and

23. The Board conducted a public hearing at its regular meeting on March 8, 2022, at which interested parties were given the opportunity to present their views regarding the proposed water rates and charges; and

24. Notice of the public hearing was published prior to the hearing in various newspapers of general circulation within Metropolitan's service area; and

25. Metropolitan received written comments regarding the proposed water rates and charges, which, together with Metropolitan's responses, have been provided to the Board and the public; and

26. Before the April 2022 Board meeting, the General Manager and Chief Financial Officer provided to the Board and the public a board letter describing modifications to the Proposed Biennial Budget for fiscal years 2022/23 and 2023/24 with additional alternatives to the budget recommendations made in February 2022 pursuant to Board and public feedback; alternatives to the determination of total revenues and of revenues to be derived from water transactions and firm revenue sources required during fiscal years 2022/23 and 2023/24, and alternatives to the proposed rates to be effective January 1, 2023 and January 1, 2024, and charges to be effective January 1, 2023; and

27. Each of the meetings of the Board were conducted in accordance with the Brown Act (commencing at Section 54950 of the Government Code), for which due notice was provided and at which quorums were present and acting throughout; and

28. All board letters, reports, presentations and other documents referred to in this Resolution may be viewed by Board members and the public on Metropolitan's web page at the Budget & Finance page of Metropolitan's website, <http://www.mwdh2o.com>, or in the office of the Board Executive Secretary;

NOW, THEREFORE, the Board of Directors of The Metropolitan Water District of Southern California does hereby resolve, determine and order as follows:

Section 1. That the Board of Directors of The Metropolitan Water District of Southern California hereby fixes and adopts the following water rates, to be effective on January 1, 2023 and January 1, 2024 as shown in the table below, in order to enhance Metropolitan's fiscal stability and ability to ensure the region's long-term water supply while reasonably and fairly allocating the cost of providing service to its member agencies and other potential users of Metropolitan's system:

Table 1. Rates and Charges

Tier 1 Supply Rate (\$/AF)	\$329	\$355
Tier 2 Supply Rate (\$/AF)	\$532	\$540
System Access Rate (\$/AF)	\$381	\$412
System Power Rate (\$/AF)	\$169	\$190
Treatment Surcharge (\$/AF)	\$367	\$373
Full Service Untreated Volumetric Cost (\$/AF)		
Tier 1	\$879	\$957
Tier 2	\$1,082	\$1,142
Full Service Treated Volumetric Cost (\$/AF)		
Tier 1	\$1,246	\$1,330
Tier 2	\$1,449	\$1,515
Readiness-to-Serve Charge (\$M)	\$157	\$175
Capacity Charge (\$/cfs)	\$10,800	\$11,800

Section 2. The Board finds and determines that the rates specified in Section 1 utilize the unbundled water rate and charge elements of the rate structure approved by Resolution 8774 and implemented by Resolution 8805, with the exception of the removal of the Water Stewardship Rate element and recovery of demand management costs from the supply rate elements, and that the cost of service process supporting the rates and charges specified in Section 1 is the cost of service process described in the 2022 Cost of Service report. The adopted rates and charges and cost of service reports will be on file at the Budget & Finance page of www.mwdh2o.com and available for review by interested parties at Metropolitan's headquarters.

Section 3. The Board finds and determines that the cost of service process reasonably, fairly and proportionately: (i) identifies revenue requirements; (iii) shows the costs of major service functions that Metropolitan undertakes, (iii) assigns costs to the service functions; (iv) allocates service function costs based upon use of and benefit from Metropolitan's system, and (v) distributes costs to rates and charges based upon customary water industry standards. Accordingly, the Board finds that the cost of service process supports the rates and charges by creating a logical nexus between the costs and the revenues required and the rates and charges necessary to defray Metropolitan's costs of providing its services and for use of its water system.

Section 4. The Board finds and determines that the rates specified in Section 1 are fixed by the Board pursuant to Sections 133 and 134 of the Act, and, so far as practicable, will result in revenue which, together with revenue from water standby or availability service charges or assessments, will pay the operating expenses of Metropolitan, provide for repairs and

maintenance, provide for payment of the purchase price or other charges for property or services or other rights acquired by Metropolitan, and provide for the payment of the interest and principal of its bonded debt. Actual revenues and expenses may vary from budgeted amounts for a variety of reasons, and Administrative Code Section 5202(e) contemplates variation in actuals to budget and provides policy guidance to the Board, and the Board finds and determines that Metropolitan's financial obligations may include liabilities and future commitments, such as retiree obligations and debt service, that are not reflected in the budget but that can be addressed in a fiscally prudent manner to reduce future obligations and keep future rate increases reasonable within the policy guidance provided by Administrative Code Section 5202(e).

Section 5. The Board finds and determines that the rates specified in Section 1, together with other revenues from Metropolitan's charges, ad valorem property taxes, and other miscellaneous revenue, do not exceed the reasonable and necessary cost of providing Metropolitan's water services for which the rates and charges are made, or of conferring the benefit provided, and is fairly apportioned to each member agency as specified in Section 6 below.

Section 6. The Board finds and determines that the respective per-acre-foot rates and charges specified in Section 1 are paid for the corresponding products or services and use of Metropolitan's water system, that Metropolitan provides such products or services directly to the member agencies or other users of Metropolitan's system that pay such rates and charges, and that such products or services are not provided to those not charged.

Section 7. The Board finds and determines that each of the rates specified in Section 1 are set for Metropolitan's services and are not levied for separate general revenue purposes.

Section 8. The General Manager and the General Counsel are hereby authorized to do all things necessary and desirable to accomplish the purposes of this Resolution, including, without limitation, the commencement or defense of litigation.

Section 9. If any provision of this Resolution is held invalid, that invalidity shall not affect other provisions of this Resolution which can be given effect without the invalid portion or application, and to that end the provisions of this Resolution are severable.

Section 10. That the Board Executive Secretary is hereby directed to transmit a certified copy of this Resolution to the presiding officer of the governing body of each member agency.

I HEREBY CERTIFY that the foregoing is a full, true and correct copy of a Resolution adopted by the Board of Directors of The Metropolitan Water District of Southern California, at its meeting held on April 12, 2022.

Secretary of the Board of Directors
of The Metropolitan Water District
of Southern California

Option 1**THE METROPOLITAN WATER DISTRICT
OF SOUTHERN CALIFORNIA****RESOLUTION ____**

**RESOLUTION OF THE BOARD OF DIRECTORS
OF THE METROPOLITAN WATER DISTRICT OF
SOUTHERN CALIFORNIA
FIXING AND ADOPTING
A READINESS-TO-SERVE CHARGE EFFECTIVE JANUARY 1, 2023**

The Board of Directors of The Metropolitan Water District of Southern California (the “Board”) hereby finds that:

1. Pursuant to Resolution 8774, the Board of The Metropolitan Water District of Southern California (“Metropolitan”) approved a rate structure proposal at its meeting on October 16, 2001, described in Board Letter 9-6, including a Readiness-To-Serve (“RTS”) Charge; and
2. Providing firm revenue sources is a goal of such rate structure; and
3. The amount of revenue to be raised by the RTS Charge shall be as determined by the Board and allocation of the RTS Charge among member public agencies (“member agencies”) shall be in accordance with the method established by the Board; and
4. The RTS Charge is a charge fixed and adopted by Metropolitan and charged to its member agencies, and is not a fee or charge imposed upon real property or upon persons as an incident of property ownership; and
5. Metropolitan has legal authority to fix and adopt such RTS Charge as a water rate pursuant to Sections 133 and 134 of the Metropolitan Water District Act (the “Act”), and to fix it as an availability of service charge pursuant to Section 134.5 of the Act; and
6. Under authority of Sections 133 and 134 of the Act, the Board has the authority to fix the rate or rates for water as will result in revenue which, together with other revenues, will pay Metropolitan’s operating expenses and provide for payment of other costs, including payment of the interest and principal of Metropolitan’s non-tax funded bonded debt; and
7. The RTS Charge recovers the capital expenditures for infrastructure projects needed to provide emergency storage capacity and available capacity needed to maintain reliable deliveries during outages and service interruptions and during periods of hydrologic variability; and
8. Pursuant to Resolution 8329, adopted by the Board on July 9, 1991, Resolution 9199, adopted by the Board on March 8, 2016, and Resolution 9201, adopted by the Board on March 8, 2016, and as each is thereafter amended and supplemented, proceeds of the RTS Charge and other revenues from the sale or availability of water are pledged to the payment of Metropolitan’s outstanding revenue bonds, subordinate

revenue bonds, short-term certificates and to the payment of revenue bonds, subordinate revenue bonds and short-term certificates to be issued pursuant to Resolution 8329, Resolution 9199, and Resolution 9201; and

9. Under authority of Section 134.5 of the Act, an RTS Charge levied as an availability of service charge may be collected from the member agencies within Metropolitan, or may continue to be collected as a standby charge against individual parcels within Metropolitan's service area; and

10. Certain member agencies of Metropolitan have opted in prior fiscal years to provide collection of all or a portion of their RTS Charge obligation through a Metropolitan water standby charge ("Standby Charge") levied on parcels within those member agencies; and

11. Under authority of Section 134.5 of the Act, the Standby Charge may continue to be levied on each acre of land or each parcel of land less than an acre within Metropolitan to which water is made available for any purpose by Metropolitan, whether the water is actually used or not; and

12. Metropolitan is willing to comply with the requests of member agencies opting to have Metropolitan continue to levy the Standby Charge within their respective territories, on the terms and subject to the conditions contained herein; and

13. On April 12, 2022, the Board considered the rates and charges presented by the General Manager, approved the biennial budget for fiscal years 2022/23 and 2023/24, adopted recommended water rates for calendar years 2023 and 2024 and charges for calendar year 2023, and received information and documents that have been made available at <https://www.mwdh2o.com/who-we-are/budget-finance/>; and

14. In approving the Proposed Biennial Budget and adopting the rates and charges on April 12, 2022, the Board determined the amount of revenue to be raised by the RTS Charge in calendar year 2023 to be \$157,000,000, based on information and documents available at <https://www.mwdh2o.com/who-we-are/budget-finance/>; and

15. Written notice of intention of Metropolitan's Board to consider and take action at its regular meeting of April 12, 2022, to adopt Metropolitan's RTS Charge for calendar year 2023 was given to each of Metropolitan's member agencies; and

16. The RTS Charge for calendar year 2023 applicable to each member agency is reflected in the Engineer's Report dated April 2022 and its method of its calculation and the specific data used in its determination are as specified in the cost of service report; and

17. Each of the meetings of the Board were conducted in accordance with the Brown Act (commencing at Section 54950 of the Government Code), for which due notice was provided and at which quorums were present and acting throughout;

NOW, THEREFORE, the Board does hereby resolve, determine and order as follows:

Section 1. That the Board hereby fixes and adopts an RTS Charge for the period from January 1, 2023 through December 31, 2023.

Section 2. That said RTS Charge shall be in an amount sufficient to provide for payment of debt service not paid from *ad valorem* property taxes, and other appropriately allocated costs, for capital expenditures for infrastructure projects needed to provide emergency storage capacity and available capacity needed to maintain reliable deliveries during outages and service interruptions and during periods of hydrologic variability.

Section 3. That such RTS Charge for January 1, 2023 through and including December 31, 2023 shall be in the amounts specified in Section 4, which shall be determined on a historic basis for each acre-foot of water, excluding water sales of reclaimed water under the Local Projects Program and Local Resources Program, groundwater under the Groundwater Recovery Program and Local Resources Program, groundwater under the Groundwater Recovery Program, and deliveries under Replenishment and Interim Agricultural Water, included in Metropolitan's average water deliveries to its member agencies for the applicable ten-year period identified in Section 4. The aggregate RTS Charge for the period from January 1, 2023 through and including December 31, 2023 shall also be as specified in Section 4.

Section 4. That the RTS Charge for January 1, 2023 through and including December 31, 2023 shall be allocated among the member agencies in proportion to the average of applicable deliveries through Metropolitan's system (in acre-feet) to each member agency during the ten-year period ending June 30, 2021. The allocation of the RTS Charge among member agencies is based on deliveries data recorded by Metropolitan and shall be conclusive in the absence of manifest error, but may be corrected by Metropolitan to reflect any errors discovered by Metropolitan.

The amount of the RTS Charge to be charged to each member agency effective January 1, 2023, is as set forth in Schedule 1, which is based on deliveries data prepared by Metropolitan and may be corrected as agreed to by the impacted member agencies:

Schedule 1

Calendar Year 2023 RTS Charge			
Member Agency	Rolling Ten-Year Average Firm Deliveries (Acre-Feet) FY2011/12 - FY2020/21	RTS Share	12 months @ \$157 million per year (1/23-12/23)
Anaheim	19,376.9	1.37%	\$ 2,143,981
Beverly Hills	10,308.7	0.73%	1,140,619
Burbank	13,354.6	0.94%	1,477,636
Calleguas MWD	96,573.4	6.81%	10,685,484
Central Basin MWD	34,311.0	2.42%	3,796,383
Compton	340.2	0.02%	37,642
Eastern MWD	97,570.2	6.88%	10,795,776
Foothill MWD	8,306.1	0.59%	919,039
Fullerton	7,280.1	0.51%	805,516
Glendale	16,256.7	1.15%	1,798,743
Inland Empire Utilities Agency	55,761.7	3.93%	6,169,822
Las Virgenes MWD	20,715.7	1.46%	2,292,114
Long Beach	29,251.8	2.06%	3,236,602
Los Angeles	273,537.0	19.28%	30,265,841
Municipal Water District of Orange County	195,277.4	13.76%	21,606,710
Pasadena	18,954.2	1.34%	2,097,211
San Diego County Water Authority	214,362.4	15.11%	23,718,394
San Fernando	29.7	0.00%	3,286
San Marino	974.0	0.07%	107,769
Santa Ana	9,606.6	0.68%	1,062,934
Santa Monica	4,607.4	0.32%	509,791
Three Valleys MWD	63,736.2	4.49%	7,052,171
Torrance	15,549.0	1.10%	1,720,438
Upper San Gabriel Valley MWD	30,096.0	2.12%	3,330,009
West Basin MWD	113,660.3	8.01%	12,576,085
Western MWD	69,139.3	4.87%	7,650,004
MWD Total	1,418,936.6	100.00%	\$ 157,000,000

Totals may not foot due to rounding

The General Manager shall establish and make available to member public agencies procedures for administration of the RTS Charge, including filing and consideration of applications for reconsideration of their respective RTS Charge. The General Manager shall review any applications for reconsideration submitted in a timely manner. The General Manager shall also establish reasonable procedures for the filing of appeals from his determination.

Section 5. That the RTS Charge specified in Schedule 1, together with other revenues from Metropolitan's water rates, other charges, ad valorem property taxes, and other miscellaneous revenue, does not exceed the reasonable and necessary cost of providing Metropolitan's water services for which the rates and

charges are made, or of conferring the benefit provided, and is fairly apportioned to each member agency as specified in Section 6 below.

Section 6. That water conveyed through Metropolitan's system for the purposes of water transfers, exchanges or other similar arrangements shall be included in the calculation of a member agency's rolling ten-year average firm demands used to allocate the RTS Charge.

Section 7. That the RTS Charge and the amount applicable to each member agency, the method of its calculation, and the specific data used in its determination are as specified in the adopted rates and charges to be effective January 1, 2023, which forms the basis of the RTS Charge, and the corresponding 2022 Cost of Service Report. The adopted rates and charges and cost of service reports are on file and available for review by interested parties at Metropolitan's headquarters.

Section 8. That except as provided in Section 10 below with respect to any RTS Charge collected by means of the Standby Charge, the RTS Charge shall be due monthly, quarterly or semiannually as agreed upon by Metropolitan and the member agency.

Section 9. That such RTS Charge may, at the request of any member agency which elected to utilize the Standby Charge as a mechanism for collecting the RTS Charge obligation in fiscal year 1993/94, be collected by continuing the Standby Charge at rates not to exceed rates levied in fiscal year 1996/97 upon land within Metropolitan's (and such member agency's) service area to which water is made available by Metropolitan for any purpose, whether such water is used or not.

Section 10. That the Standby Charge shall be collected on the tax rolls, together with the *ad valorem* property taxes which are levied by Metropolitan for the payment of pre-1978 voter-approved indebtedness. Any amounts so collected shall be applied as a credit against the applicable member agency's RTS Charge obligation. After such member agency's RTS Charge allocation is fully satisfied, any additional collections shall be credited to other outstanding obligations of such member agency to Metropolitan that funds the capital costs or maintenance and operation expenses for Metropolitan's water system, or future RTS Charge obligations of such agency. Notwithstanding the provisions of Sections 8 and 9 above, any member agency requesting to have all or a portion of its RTS Charge obligation collected through Standby Charge levies within its territory as provided herein shall pay any portion not collected through net Standby Charge collections to Metropolitan, as provided in Administrative Code Section 4507.

Section 11. That notice is hereby given to the public and to each member agency of The Metropolitan Water District of Southern California of the intention of Metropolitan's Board to consider and take action at its regular meeting to be held May 10, 2022 (or such other date as the Board shall hold its regular meeting in such month), on the General Manager's recommendation to continue the Standby Charge for fiscal year 2022/23 under authority of Section 134.5 of the Act on land within Metropolitan at rates not to exceed rates, per acre of land, or per parcel of land less than an acre, levied in fiscal year 1996/97 upon land within Metropolitan's (and such member agency's) service area. Such Standby Charge will be continued as a means of collecting the RTS Charge.

Section 12. That no failure to collect, and no delay in collecting, any Standby Charge shall excuse or delay payment of any portion of the RTS Charge when due.

Section 13. That the RTS Charge is fixed and adopted by Metropolitan as a rate or charge on its member agencies, and is not a fee or charge imposed upon real property or upon persons as incidents of property ownership, and the Standby Charge is collected within the respective territories of electing member agencies as a mechanism for payment of the RTS Charge. In the event that the Standby Charge, or any portion thereof, is determined to be an unauthorized or invalid fee, charge or assessment by a final judgment in any proceeding at

law or in equity, which judgment is not subject to appeal, or if the collection of the Standby Charge shall be permanently enjoined and appeals of such injunction have been declined or exhausted, or if Metropolitan shall determine to rescind or revoke the Standby Charge, then no further Standby Charge shall be collected within any member agency and each member agency which has requested continuation of the Standby Charge as a means of collecting its RTS Charge obligation shall pay such RTS Charge obligation in full, as if continuation of such Standby Charge had never been sought.

Section 14. That the General Manager and the General Counsel are hereby authorized to do all things necessary and desirable to accomplish the purposes of this Resolution, including, without limitation, the commencement or defense of litigation.

Section 15. That if any provision of this Resolution or the application to any member agency, property or person whatsoever is held invalid, that invalidity shall not affect other provisions or applications of this Resolution which can be given effect without the invalid portion or application, and to that end the provisions of this Resolution are severable.

Section 16. That the General Manager is hereby authorized and directed to take all necessary action to satisfy relevant statutes requiring notice by mailing or by publication.

Section 17. That the Board Executive Secretary is hereby directed to transmit a certified copy of this Resolution to the presiding officer of the governing body of each member agency.

I HEREBY CERTIFY that the foregoing is a full, true and correct copy of a Resolution adopted by the Board of Directors of The Metropolitan Water District of Southern California, at its meeting held on April 12, 2022.

Secretary of the Board of Directors
of The Metropolitan Water District
of Southern California

**THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA
ENGINEER'S REPORT**

**PROGRAM TO SET A READINESS-TO-SERVE CHARGE EFFECTIVE JANUARY 1, 2023,
INCLUDING LOCAL OPTION TO CONTINUE COLLECTING A STANDBY CHARGE,
DURING FISCAL YEAR 2022/23**

April 2022

BACKGROUND

The Metropolitan Water District of Southern California is a public agency with a primary purpose to provide imported wholesale water service for domestic and municipal uses to its 26 member public agencies. Approximately 19 million people reside within Metropolitan's service area, which covers approximately 5,200 square miles and includes portions of the six counties of Los Angeles, Orange, Riverside, San Bernardino, San Diego and Ventura. Metropolitan historically provided between 40 and 60 percent of the water used within its service area. To supply Southern California with reliable and safe water, Metropolitan imports water from the Colorado River and Northern California to supplement its member agencies' local supplies, and helps its member agencies develop increased water conservation, recycling, storage and other local resource programs.

REPORT PURPOSES

As part of its role as a regional imported water supplier, Metropolitan builds capital facilities and implements water management programs that ensure the delivery of reliable high-quality water supplies throughout its service area. The purpose of this report is to: (1) identify and describe those facilities and programs that will be financed in part by Metropolitan's Readiness-to-Serve (RTS) Charge, and (2) describe the method and basis for levying Metropolitan's Standby Charge for those agencies electing to continue to collect a portion of their RTS obligation through Metropolitan's Standby Charge in fiscal year 2022/23. **Because the Standby Charge is levied and collected on a fiscal year basis the calculations in this report also are for the fiscal year, even though the RTS Charge is levied on a calendar year basis.** The RTS Charge for calendar year 2022 was adopted by Metropolitan's Board on April 13, 2021 and the RTS Charge for 2023 will be considered by the Board on April 12, 2022. The Board will consider the continuation of the Standby Charge for fiscal year 2022/23 on May 10, 2022.

Metropolitan collects the RTS Charge from its member agencies to recover a portion of the capital costs including debt service on bonds issued to finance capital facilities needed to meet demands on Metropolitan's system for emergency storage and available capacity to meet outages and hydrologic variability. The Standby Charge is collected from parcels of land within Metropolitan's member agencies that have elected to collect all or a portion of their RTS obligation through the Standby Charge, as a method of recovering the costs of special benefits conferred on parcels within their service area. The RTS Charge will partially pay for the facilities and programs described in this report, namely, the amount attributable to the portions providing emergency storage and available capacity to meet outages and hydrologic variability. The Standby Charge, when collected, will be utilized solely for capital payments and debt service on the capital facilities funded by the RTS Charge, as identified in this report.

The budgeted total RTS revenue for fiscal year 2022/23 is \$148.5 million, of which \$44.0 million is estimated to be collected via the Standby Charge. The Standby Charge is collected on property tax bill.

METROPOLITAN'S RESPONSE TO FLUCTUATING WATER DEMANDS AND AVAILABILITY OF WATER SOURCES

Metropolitan's member agencies have widely differing imported water supply needs and the availability of imported water supply from various sources also varies widely. Some agencies have no local water resources and rely on Metropolitan for 100 percent of their annual water needs. Other agencies have adequate local surface supplies and storage and/or groundwater basins that provide them with the majority of their water supplies during wet and average years. However, during dry periods and/or based on a variety of other factors, these agencies rely on Metropolitan to make up any shortfalls in local water supplies. Similar coordination challenges arise in managing water available from Metropolitan's various water supply sources.

To respond to fluctuating demands for water, Metropolitan and its member agencies collectively examined the available local and imported resource options in order to develop a least-cost plan that meets the reliability and quality needs of the region. The product of this intensive effort was an Integrated Resources Plan (IRP) for achieving a reliable and affordable water supply for Southern California. The major objective of the IRP was to develop a comprehensive water resources plan that ensures (1) reliability, (2) affordability, (3) water quality, (4) diversity of supply, and (5) adaptability for the region, while recognizing the environmental, institutional, and political constraints to resource development. As these constraints change over time, the IRP is periodically revisited and updated by Metropolitan and the member agencies to reflect current conditions. To meet the water supply needs of the region, Metropolitan continues to identify and develop additional water supplies to maintain the reliability of the imported water supply and delivery system to its member agencies.

CAPITAL FACILITIES — CONVEYANCE AND DISTRIBUTION

Metropolitan's total water system has been built over time to meet the widely differing needs of its member agencies and the various sources of water available to Metropolitan. To meet those needs, Metropolitan's water delivery system is comprised of three basic conveyance and delivery components that form one integrated water system:

- State Water Project (SWP);
- Colorado River Aqueduct (CRA); and
- Distribution System

The system draws on diverse supply sources, transports water across a large part of the State and distributes water in six counties, where member agencies or their retail sub-agencies serve an estimated 19 million people. The CRA and the California Aqueduct of the SWP convey imported water into the Metropolitan service area. This water is then delivered to Metropolitan's member agencies via a regional network of canals, pipelines, and appurtenant facilities, which constitute the Distribution System. Supply, treatment, and storage facilities augment the Distribution System. The system is an interconnected regional conveyance and distribution system with the ability to deliver supplies from each of the SWP, the CRA, and its storage portfolio throughout its vast and diverse service area to almost every member agency. This flexibility derives from the capital facilities and provides local and system-wide benefits to all member agencies, as the facilities directly contribute to the reliable delivery of water supplies throughout Metropolitan's service area.

As the 2007 Integrated Area Study (IAS) emphasized, regional system flexibility is a key component of overall reliability.¹ Today, system flexibility continues to be essential to the availability of Metropolitan's services.² Metropolitan must maintain operational flexibility—the ability to respond to short-term changes in regional water supply, water quality, treatment requirements, and member agency demands. Metropolitan must maintain delivery flexibility—the ability to maintain partial to full water supply deliveries during planned and unplanned facility outages. Metropolitan is also required by state statute to serve as large an area as is determined to be reasonable and practical with SWP water; and where a blend of water sources is served, to have the objective to the extent determined to be reasonable and practical, that at least 50 percent of the blend be SWP water. (MWD Act, Sec. 136.)

Operational flexibility has been achieved by creating an interconnected regional delivery network integrating the SWP and the CRA conveyance systems with the Distribution System. This integrated network allows Metropolitan to incorporate supply from the SWP and the CRA with a diverse portfolio of geographically dispersed storage programs, including the Central Valley groundwater storage programs, carryover storage in San Luis Reservoir, flexible storage capacity in Castaic Lake and Lake Perris, Lake Mead storage, the Desert Water Agency/Coachella Valley Water District Advanced Delivery account, in-basin surface storage in Diamond Valley Lake and Lake Mathews, and in-basin groundwater Conjunctive Use Programs. This integrated, regional network also allows Metropolitan to move supplies throughout the system in response to service demands, supply availability and operational needs.

Therefore, each of Metropolitan's integrated conveyance, distribution and storage assets contributes to regional system reliability. It is fair and reasonable for member agencies and all property owners within the service area to share the cost of developing and maintaining these assets because they all benefit from regional system reliability.

State Water Project Description and Benefits

One of Metropolitan's two major sources of water is the SWP.³ The SWP is the largest state-built, multipurpose, user-financed water project in the country. It was designed and built primarily to deliver water, but also provides flood control, generates power for pumping, is used for recreation, and enhances habitat for fish and wildlife.

The SWP consists of a complex system of dams, reservoirs, power plants, pumping plants, canals and aqueducts to deliver water. See Figure 1. SWP water consists of water from rainfall and snowmelt runoff that is captured and stored in SWP conservation facilities and then delivered through SWP transportation facilities to water agencies and districts located throughout the Upper Feather River, Bay Area, Central Valley, Central Coast, and Southern California. In addition to the delivery of SWP water, the SWP is also used to convey transfers of SWP water and non-SWP water. Metropolitan receives water from the SWP through the California Aqueduct, which is 444 miles long, and at four delivery points near the northern and eastern boundaries of Metropolitan's service area.

¹ 2007 Integrated Area Study, Report No. 1317, pg. 2-10.

² 2022 Annual Operating Plan, pg. 6-10

³ For historical and current information regarding the SWP, refer to Bulletin 132, published periodically by DWR since 1963. The most recently published Bulletin is Bulletin 132-18 dated January 2021 and titled "Management of the California State Water Project. Appendices to the Bulletin are also updated separately. Both are available at: <https://water.ca.gov/Programs/State-Water-Project/Management/Bulletin-132>.

Figure 1. Facilities of the State Water Project

The SWP is managed and operated by the Department of Water Resources (DWR). All water supply-related capital expenditures and operations, maintenance, power and replacement (OMP&R) costs associated with the SWP conservation and transportation facilities are paid for by 29 agencies and districts, known collectively as the State Water Contractors (Contractors). The Contractors are participants in the SWP through long-term contracts for the delivery of SWP water and use of the SWP transportation facilities.

In 1960, Metropolitan signed the first water supply contract (as amended, the State Water Contract) with DWR. In addition to SWP water, Metropolitan also obtains water from water transfers, groundwater banking and exchange programs delivered through the California Aqueduct.

Since 1960, the SWP system has been extended, improved, and refurbished. All such costs are payable by the Contractors. California WaterFix was a comprehensive science-based solution proposed by the state to modernize critical water delivery infrastructure of the SWP. On October 10, 2017, Metropolitan's Board voted to support financing for the California WaterFix project. However, the state terminated the project in April 2019. Consistent with the Governor's Executive Order N-10-19, the state then announced a new single tunnel Delta conveyance project, which was notably included as part of the Governor's 2020 Water Resilience Portfolio. In 2019, DWR initiated planning and environmental review for a single tunnel Delta Conveyance Project (DCP) to protect the future reliability of access to SWP supplies. In December 2020, the Metropolitan Board authorized the General Manager to execute agreements for (a) funding a share of up to 60.2 percent for planning and pre-construction costs for the DCP, and (b) an amendment to the Joint Powers Agreement for the Delta Conveyance Design and Construction Joint Powers Authority. A Delta conveyance project will contribute to the improvement of capital facilities needed to meet demands on Metropolitan's system for emergency storage and available capacity to meet outages and hydrologic variability. Metropolitan's biennial budget for fiscal years 2022/23 and 2023/24 includes Metropolitan's planned contribution of \$99.0 million for DWR's planning costs of a new Delta conveyance project.

All Metropolitan member agencies benefit from the SWP system and its supplies, which can be distributed to all member agencies. Metropolitan's member agencies distribute that water to parcels as retail water providers or as wholesale water providers to retail agencies. In this way, the SWP water that Metropolitan delivers to its member agencies contributes to water available to existing and future end users throughout Metropolitan's service area. The cost of the net capital payments for the SWP less the portion covered by property taxes in fiscal year 2022/23 is \$60.7 million, as shown in Table 1. Real property throughout Metropolitan's service area benefits from the availability of the SWP facilities and its integration into Metropolitan's system and therefore all such costs may be attributed to such parcels. However, Metropolitan's Standby Charge collects only \$44.0 million of the total \$312.9 million system costs, representing 14% of the total system costs.

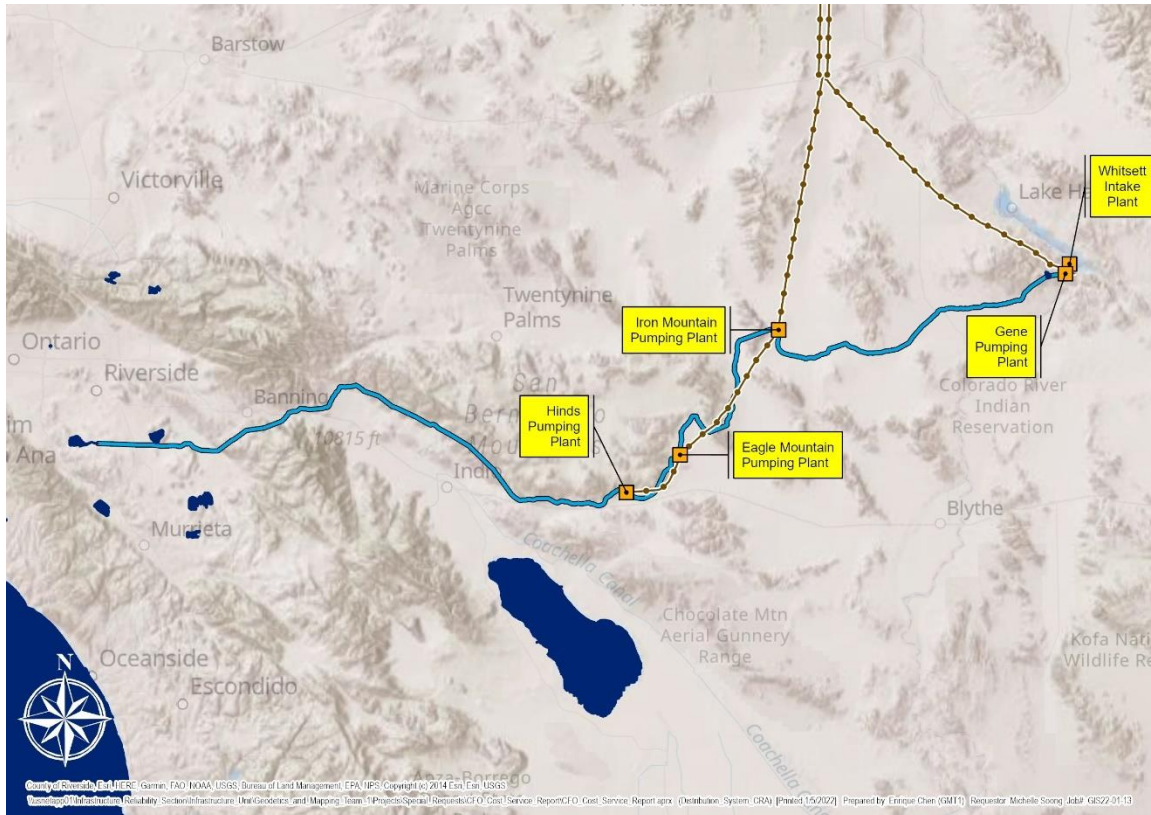
Colorado River Aqueduct Description and Benefits

Metropolitan's other major source of water is the CRA. Metropolitan was established to obtain an allotment of Colorado River water, and its first mission was to construct and operate the CRA. The CRA consists of five pumping plants, 450 miles of high voltage power lines, one electric substation, four regulating reservoirs, and 242 miles of aqueducts, siphons, canals, conduits and pipelines terminating at Lake Mathews in Riverside County. See Figure 2. Metropolitan owns, operates, and manages the Colorado River Aqueduct. Metropolitan is responsible for operating, maintaining, rehabilitating, and repairing the CRA, and is responsible for obtaining and scheduling energy resources adequate to power pumps at the CRA's five pumping stations.

Metropolitan incurs capital and operations and maintenance expenditures to support the CRA activities. The direct costs of the CRA activities include labor, materials and supplies, as well as outside services to provide repair and maintenance, and professional services. The CRA activities benefit from Water System Operations support services and management supervision, as well as Administrative and General activities of Metropolitan. Metropolitan finances past, current and future capital improvements on the CRA, and capitalizes those

improvements as assets. The costs of Metropolitan's capital financing activities are apportioned to cost functions, such as the CRA Conveyance and Aqueduct function. The capital cost of the Colorado River Aqueduct and Inland Feeder in fiscal year 2022/23 is \$76.3 million, and is included in the Non-SWP Conveyance System line item in Table 1. Real property throughout Metropolitan's service area benefits from the availability of the CRA facilities and its integration into Metropolitan's system and therefore all such costs may be attributed to such parcels. However, Metropolitan's Standby Charge collects only \$44.0 million of the total \$312.9 million system costs, representing 14% of the total system costs.

Figure 2. Colorado River Aqueduct



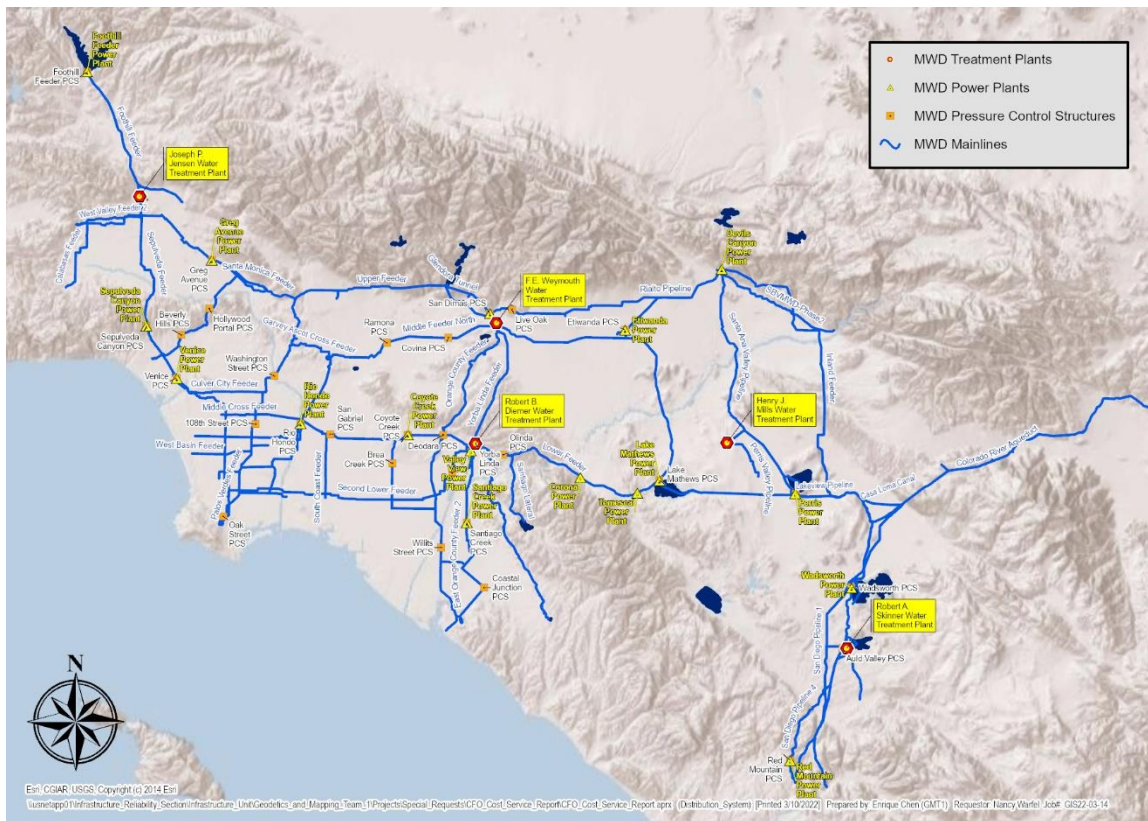
Metropolitan's Conveyance and Distribution System Benefits

For purposes of this report, components of the conveyance system are considered to include only those major trunk facilities that transport water from primary supply sources to either regional storage facilities or feeder lines linked to the primary conveyance facilities. See Figure 3. For a list of Metropolitan's conveyance facilities within its service area, see Table 3. All other water transport facilities, including pipelines, feeders, laterals, canals and aqueducts, are considered to be distribution facilities. Distribution facilities can be further identified in that they generally have at least one connection to a member agency's local distribution system. For a list of Metropolitan's distribution facilities, see Table 3.

All water transport facilities not specifically identified as part of the regional conveyance system are considered to be distribution facilities (Distribution System). While conveyance and aqueduct system components are regional in nature and generally do not link directly to local agency distribution systems, Distribution System facilities do ultimately connect to local agency systems. As a result, these facilities rely on conveyance and aqueduct facilities

to import water from regional supply sources. The Distribution System is a complex network of facilities which routes water from the CRA and SWP to the member agencies. Beginning at the terminal delivery points of the CRA and SWP, Metropolitan's Distribution System includes approximately 775 miles of pipelines, feeders, and canals. Distribution System operations are coordinated from the Operations Control Center in Eagle Rock. The control center plans, schedules, and balances daily water operations in response to member agency demands and the operational limits of the system as a whole. Metropolitan's storage and treatment facilities augment the Distribution System. Metropolitan operates and maintains separate untreated and treated distribution facilities.

Figure 3. Metropolitan's Distribution and Storage Facilities



Metropolitan has an ongoing commitment, through physical system improvements and the maintenance and rehabilitation of existing facilities, to maintain the reliable delivery of water throughout the entire service area. System improvement projects include additional conveyance and distribution facilities to maintain the dependable delivery of water supplies, provide alternative system delivery capacity, and enhance system operations. Conveyance and distribution system improvement benefits also include projects to upgrade obsolete facilities or equipment, or to rehabilitate or replace facilities or equipment. These projects are needed to enhance system operations, comply with new regulations, and maintain a reliable distribution system. A list of conveyance and distribution system facilities is provided in Table 3 along with the fiscal year 2022/23 estimated conveyance and distribution system benefits. The capital cost of the Distribution System in fiscal year 2022/23 is \$76.4 million, and is included in the Distribution System line item in Table 1. Real property throughout Metropolitan's service area benefits from the availability of the Distribution System and its integration into Metropolitan's system and therefore all such costs may be attributed to such parcels. However, Metropolitan's Standby Charge collects only \$44.0 million of the total \$312.9 million system costs, representing 14% of the total system costs.

CAPITAL FACILITIES – WATER STORAGE

System Storage Benefits

The Metropolitan system, for purposes of meeting demands during times of shortage, regulating system flows, and ensuring system reliability in the event of a system outage, provides over 1,000,000 acre-feet of system storage capacity. Diamond Valley Lake provides 810,000 acre-feet of that storage capacity, effectively doubling Southern California's previous surface water storage capacity. Other existing imported water storage available to the region consists of Metropolitan's raw water reservoirs, a share of the SWP's raw water reservoirs in and near the service area, and the portion of the groundwater basins used for conjunctive-use storage.

Water stored in system storage during above average supply conditions (surplus) provides a reserve against shortages when supply sources are limited or disrupted. Water storage also preserves Metropolitan's capability to deliver water during scheduled maintenance periods, when conveyance facilities must be removed from service for rehabilitation, repair, or maintenance. The benefits of these capital facilities are both local and system-wide, as the facilities directly contribute to the reliable delivery of water supplies throughout Metropolitan's service area. The capital costs of water storage in fiscal year 2022/23 is \$99.5 and, as shown in Table 1. Real property throughout Metropolitan's service area benefits from the availability of the storage capacity throughout the service area and its integration into Metropolitan's system and therefore all such costs may be attributed to such parcels. However, Metropolitan's Standby Charge collects only \$44.0 million of the total \$312.9 million system costs, representing 14% of the total system costs.

METROPOLITAN'S REVENUE

Metropolitan's major capital facilities are financed largely from the proceeds of revenue bond issues, which are repaid over future years. The principal source of revenue for repayment of these bonds is water sales to its member agencies, which is currently Metropolitan's largest source of revenue. In addition, *ad valorem* property taxes provide an additional limited revenue source, which is used to pay pre-1978 voter-approved indebtedness. However, the use of water rates as a primary source of revenue has placed an increasing burden on member agencies and their ratepayers, which would more equitably continue to be paid in part by assessments on land that in part derives its value from the availability of water through an integrated and reliable water system.

Readiness-To-Serve

In December 1993, Metropolitan's Board approved a revenue structure that included additional charges to establish a commitment to Metropolitan's capital improvement program and provide revenue stability. This revenue structure included the RTS Charge, which in 1995 certain member agencies opted to pay in part pursuant to the collection of a standby charge. In October 2001, the Board adopted the current unbundled rate structure, and maintained the RTS Charge.

As noted above, Metropolitan levies the RTS Charge on its member agencies to recover capital costs, including a portion of the debt service on bonds issued to finance capital facilities needed to meet existing demands on Metropolitan's system for emergency storage and available capacity.

The estimated fiscal year 2022/23 RTS Charge for each member agency is shown in Table 4.

Standby Charge Option

Metropolitan's Standby Charge is authorized by the State Legislature and has been levied by Metropolitan since fiscal year 1992/93. The Standby Charge recognizes that there are economic benefits to lands that have access to a water supply, whether or not such lands are using it, which excludes lands permanently committed to open space and maintained in their natural state that are not now and will not in the future be supplied water and lands that the

General Manager, in his discretion, finds do not now and cannot reasonably be expected to derive a benefit from the projects to which the proceeds of the Standby Charge will be applied. Utilization of the Standby Charge transfers some of the burden of maintaining Metropolitan's capital infrastructure from water rates and *ad valorem* taxes to all the benefiting properties within the service area. A fraction of the value of this benefit and of the cost of providing it can be effectively recovered, in part, through the levying of a standby charge. The projects to be supported in part by the Standby Charge are capital projects that provide both local and Metropolitan-wide benefit to current landowners as well as existing water users.

Although a standby charge could have been set to recover all Conveyance, Distribution, and Storage costs as detailed in Table 1, Metropolitan's continued Standby Charge only collects about 14% of those costs. For fiscal year 2022/23, the amount to be recovered by the RTS Charge is estimated to be \$148.5 million and of that only \$44.0 million is estimated to be recovered by the Standby Charge.

The Standby Charge for each acre or parcel of less than an acre varies from member agency to member agency, as permitted under the legislation establishing Metropolitan's Standby Charge. The water Standby Charge for each member agency is continued at amounts not to exceed the rates in place since fiscal year 1996/97 and is shown in Table 5, which consists of composite rates by member agencies, not to exceed \$15.00. The composite rates consisted in part of a uniform component of \$5 applicable throughout Metropolitan, and in part of a variable component, not exceeding \$10 in any member public agency, reflecting the allocation of historical water deliveries by the member agencies as of fiscal year 1993/94 when the composite rates were initially established. Metropolitan will continue Standby Charges only within the service areas of the member agencies that have requested that the Standby Charge be utilized for purposes of meeting their outstanding RTS obligation. Although rates may not exceed the amounts in place in fiscal year 1996/97, some rates may be lower.

The Standby Charge is proposed to be collected from: (1) parcels on which water standby charges have been levied in fiscal year 1993/94 and annually thereafter and (2) parcels annexed to Metropolitan and to an electing member agency after January 1997. Table 6 lists parcels annexed, or to be annexed, to Metropolitan and to electing member agencies during fiscal year 2020/21, such parcels being subject to the Standby Charge upon annexation.

The estimated costs of Metropolitan's wholesale water system, which could be paid by a Standby Charge, are approximately \$312.9 million for fiscal year 2022/23, as shown in Table 1. An average total Standby Charge of about \$72.26 per acre of land or per parcel of land less than one acre would be necessary to pay for the total potential program benefits. Benefits in this amount will accrue to each acre of property and parcel within Metropolitan's service area, as Metropolitan delivers water to member agencies that contributes to water available to these properties, via that member agency or a retail sub-agency. Because Metropolitan's water deliveries to member agencies contributes to water available only to properties located within Metropolitan's service area boundaries (except for certain contractual deliveries as permitted under Section 131 of the Metropolitan Water District Act), any benefit received by the public at large or by properties outside of the area is merely incidental.

Table 5 shows that the distribution of Standby Charge revenues from the various member agency service areas would provide net revenue flow of approximately \$44.0 million for fiscal year 2022/23. Metropolitan will use other revenue sources, such as water sales revenues, RTS Charge revenues (except to the extent collected through standby charges, as described above), interest income, and revenue from sales of hydroelectric power, to pay for the remaining program costs. Additionally, the actual Standby Charge proposed to be continued ranges from \$2.49 to \$15 per acre of land or per parcel of land less than one acre. Thus, the benefits of Metropolitan's investments in water conveyance, storage, and distribution far exceed the recommended Standby Charge.

Equity

The RTS Charge is a firm revenue source. The revenues to be collected through this charge will not vary with sales in the current year. This charge is levied on Metropolitan's member agencies and is not a fee or charge upon real property or upon persons as an incident of property ownership. It ensures that agencies that only occasionally purchase water from Metropolitan but receive the reliability benefits of Metropolitan's system pay an equitable share of the costs to provide that reliability. Within member agencies that elect to pay the RTS Charge through Metropolitan's standby charges, the Standby Charge results in a lower RTS Charge than would otherwise be necessary due to the amount of revenue collected from lands which benefit from the availability of Metropolitan's water system. With the Standby Charge, these properties are now contributing a more appropriate share of the cost of importing water to Southern California.

Metropolitan's water system increases the availability and reliable delivery of water throughout Metropolitan's service area. A reliable system benefits existing end users and land uses through retail water service provided by Metropolitan member agencies or by water retailers that purchase water from a Metropolitan member agency, and through the replenishment of groundwater basins and reservoir storage as reserves against shortages due to droughts, natural emergencies, or scheduled facility shutdowns for maintenance. The benefits of reliable water resources from the SWP, CRA, Storage, and system improvements accrue to more than 250 cities and communities within Metropolitan's six-county service area. Metropolitan's regional water system is interconnected, so water supplies from the SWP and CRA can be used throughout most of the service area and therefore benefit water users and properties system-wide.

A major advantage of a firm revenue source, such as an RTS charge, is that it contributes to revenue stability during times of drought or low water sales. It affords Metropolitan additional security, when borrowing funds, that a portion of the revenue stream will be unaffected by drought or by rainfall. This security will help maintain Metropolitan's historically high credit rating, which results in lower interest expense to Metropolitan, and therefore, lower overall cost to its member agencies.

SUMMARY

The foregoing and the attached tables describe the current costs of Metropolitan's system and benefits provided by the projects listed as mainstays to the water system for Metropolitan's service area. Benefits are provided to member agencies, their retail sub-agencies, water users and property owners. The projects represented by this report provide both local benefits as well as benefits throughout the entire service area. It is recommended, for calendar year 2023, that the Metropolitan Board of Directors adopt the RTS Charge as set forth in Table 4 with an option for local agencies to request that a Standby Charge be collected for fiscal year 2022/23 from lands within Metropolitan's service area as a credit against such member agency's RTS Charge, up to the Standby Charge amounts collected by Metropolitan within the applicable member agency for fiscal year 1996/97. The maximum Standby Charge would not exceed \$15 per acre of land or per parcel of less than one acre. The costs of the system described in this Engineer's Report exceeds the recommended Standby Charge by at least \$268 million. A preliminary listing of all parcels subject to the proposed 2022/23 Standby Charge and the amounts proposed to be continued for each is available in the office of the Chief Financial Officer. A final listing is available upon receipt of final information from each county.

Prepared Under the Supervision of:



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Assistant General Manager/
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TABLE 1
ESTIMATED COSTS OF
WATER SYSTEM INFRASTRUCTURE
BENEFITING REAL PROPERTY WITHIN METROPOLITAN'S SERVICE AREA

	Estimated Program Costs for FY2022/23	Dollars Per Parcel of 1 Acre or Less
Capital Payments for Water System Infrastructure		
Net Capital Payments to State Water Project (SWP) (less portion paid by property taxes)	\$ 60,722,840	\$14.02
Non Tax Supported Capital Costs for Non-SWP Conveyance System ¹	\$ 76,253,010	\$17.61
Non Tax Supported Capital Costs for Distribution System ²	\$ 76,379,326	\$17.64
Non Tax Supported Capital Costs for Water Storage ³	\$ 99,537,336	\$22.99
Total Capital Payments	\$ 312,892,512	\$72.26
Estimated Standby Charge Revenues	\$ 44,002,818	\$10.16
Percent Collected by Standby Charge	14%	
Total Remaining Costs Not Paid by Standby Charge	\$ 268,889,693	\$62.10

Notes:

[1] Non-SWP Conveyance include the Colorado River Aqueduct and Inland Feeder.

[2] Distribution facilities include the pipelines, laterals, feeders and canals that distribute water throughout the service area.

[3] System storage includes Diamond Valley Lake, Lake Mathews, Lake Skinner and several other smaller surface reservoirs which provide storage for operational purposes.

Totals may not foot due to rounding

TABLE 2	
WATER RECYCLING, GROUNDWATER RECOVERY AND CONSERVATION PROJECTS	
Project Name	FISCAL YEAR 2022/23 Payment
Water Recycling Projects	\$7,706,314
Alamitos Barrier Reclaimed Water Project	
Anaheim Water Recycling Demonstration Project	
Burbank Recycled Water System Expansion Phase II Project	
CBMWD Recycled Water System Expansion Phase I	
Development of Non-Domestic Water System in Ladera Ranch and Talega Valley	
Direct Reuse Project Phase IIA	
Dry Weather Runoff Reclamation Facility	
Eastern Recycled Water Pipeline Reach 16 Project	
El Toro Phase II Recycled Water Distribution System Expansion Project	
El Toro Recycled Water System Expansion	
Elsinore Valley Recycled Water Program	
EMWD Recycled Water System Expansion Project	
Escondido Regional Reclaimed Water Project	
Glendale Verdugo-Scholl and Brand Park Project	
Griffith Park South Water Recycling Project	
Groundwater Reliability Improvement Program Recycled Water Project	
Hansen Area Water Recycling Phase I Project	
Hansen Dam Golf Course Water Recycling Project	
Harbor Water Recycling Project	
Lake Mission Viejo Advanced Purification WTF	
Leo J. Vander Lans Water Treatment Facility Expansion Project	
Long Beach Reclaimed Water Master Plan Phase I System Expansion	
Los Angeles Taylor Yard Park Water Recycling Project	
Michelson/Los Alisos Water Reclamation Plant Upgrades and Distribution System Expansion Project	
North Atwater Area Water Recycling Project	
North City Water Reclamation Project	
North Hollywood Area Water Recycling Project	
Otay Recycled Water System	
Oxnard Advanced Water Purification Facility Project	

TABLE 2 (Continued)	
WATER RECYCLING, GROUNDWATER RECOVERY AND CONSERVATION PROJECTS	
Project Name	FISCAL YEAR 2022/23 Payment
Water Recycling Projects (continued)	
Padre Dam MWD Reclaimed Water System Phase I	
Rowland Water District Portion of the City of Industry Regional Recycled Water Project	
San Clemente Recycled Water System Expansion Project	
San Elijo Water Reclamation System	
Santa Maria Water Reclamation Project	
Sepulveda Basin Sports Complex Water Recycling Project	
Sepulveda Basin Water Recycling Project - Phase 4	
Terminal Island Recycled Water Expansion Project	
USGVMWD Portion of the City of Industry Regional Recycled Water Project	
Van Nuys Area Water Recycling Project	
Walnut Valley Water District Portion of the City of Industry Regional Recycled Water Project	
West Basin Water Recycling Program Phase V Project	
Westside Area Water Recycling Project	

TABLE 2 (Continued)	
WATER RECYCLING, GROUNDWATER RECOVERY AND CONSERVATION PROJECTS	
Project Name	FISCAL YEAR 2022/23 Payment
Groundwater Recovery Projects	\$11,469,103
Beverly Hills Desalter Project	
Cal Poly Pomona Water Treatment Plant	
Capistrano Beach Desalter Project	
Chino Basin Desalination Program / IEUA	
Chino Basin Desalination Program / Western	
Colored Water Treatment Facility Project	
Irvine Desalter Project	
IRWD Wells 21 & 22 Desalter Project	
Madrona Desalination Facility (Goldsworthy Desalter) Project	
Menifee Basin Desalter Project	
North Pleasant Valley Regional Desalter	
Perris II Brackish Groundwater Desalter	
Pomona Well #37-Harrison Well Groundwater Treatment Project	
Round Mountain Water Treatment Plant	
San Juan Basin Desalter Project	
Temescal Basin Desalting Facility Project	
On-site Retrofit Program	\$3,000,000
Future Supply Actions	\$3,639,900
Conservation Projects	\$25,000,000
Regionwide Residential	
Regionwide Commercial	
Member Agency Administered/MWD Funded	
Water Incentive Savings Program	
Landscape Training Classes	
Landscape Irrigation Surveys	
Pilot programs/Studies	
Inspections	
Landscape Transformation Program (Turf Removal)	
Disadvantaged Communities Program	
Total Demand Management Programs	\$50,815,317

TABLE 3 CONVEYANCE, DISTRIBUTION, AND STORAGE SYSTEM COSTS	
Description	
Storage Facilities	
ALAMEDA CORRIDOR, PIPELINE RELOCATION, PROTECTION	
CAPITAL PROGRAM FOR PROJECTS COSTING LESS THAN \$250,000-LIVE OAK	
CAPITAL PROGRAM FOR PROJECTS COSTING LESS THAN \$250,000-MORRIS DAM	
CHINO BASIN GROUNDWATER SERVICE CONNECTION CB-15T	
CHLORINATION AND PH CONTROL FACILITIES- ORANGE COUNTY & GARVEY (50/50)	
CLEARING OF LAKE MATHEWS RESERVOIR AREA	
CONVERSION OF DEFORMATION SURVEY MONITORING AT COPPER BASIN	
COPPER BASIN AND GENE WASH DAM, INSTALL SEEPAGE ALARM (50/50)	
COPPER BASIN RESERVOIR SUPERVISORY CONTROL	
COPPER BASIN SEWER SYSTEM	
CORONA DEL MAR RESERVOIR- REPLENISHMENT	
CORONA DEL MAR RESERVOIR- CHLORINATION STATION	
CRANE - LAKE MATHEWS OUTLET TOWER (ORG CONST)	
DAM MONITORING SYSTEM UPGRADES - Lake Mathews	
DAM MONITORING SYSTEM UPGRADES - LAKE SKINNER	
DAM SEISMIC ASSESSMENT - PHASE 3	
DAM SEISMIC UPGRADES - PHASE 3	
DIAMOND VALLEY LAKE DAM MONITORING SYSTEM UPGRADE	
DIAMOND VALLEY LAKE DAM MONITORING SYSTEM UPGRADES - STAGE 3	
DIAMOND VALLEY LAKE DAM MONITORING SYSTEM UPGRADES - STAGES 1 & 2	
DIAMOND VALLEY LAKE INLET/OUTLET TOWER FISH SCREEN REPLACEMENT - CONSTRUCTION	
DIAMOND VALLEY LAKE MONITORING SYSTEM UPGRADES	
DIAMOND VALLEY LAKE, CAL PLAZA CHARGES	
DIAMOND VALLEY LAKE, CONSULTANT COSTS	
DIAMOND VALLEY LAKE, DAM DEFORMATION MONITORING	
DIAMOND VALLEY LAKE, EAST DAM SUMP PUMP ELECTRICAL STUDY	
DIAMOND VALLEY LAKE, GENERAL CONSTRUCTION MGMT, 2000-2001	
DIAMOND VALLEY LAKE, INUNDATION MAPS	
DIAMOND VALLEY LAKE, UNDERGROUND TANK CLOSURE	
DIAMOND VALLEY RECREATION, EAST MARINA	
DIAMOND VALLEY RECREATION, FISHERY	
DIAMOND VALLEY RECREATION, MUSEUM FOUNDATION REHABILITATION	
DIAMOND VALLEY RECREATION, SEARL PARKWAY IMPROVEMENTS, PHASE I	
DIAMOND VALLEY TRAILS PROGRAM, TRAILS	
DISTRICT DESIGN AND INSPECTION - MORRIS DAM	
DISTRICT RESERV. AQUEOUS AMMONIA FEED SYSTEM	
DISTRICT RESERVOIR - LONGTERM CHEMICAL FAC CONTAINMENT	
DOMESTIC WATER SUPPLY - LAKE MATHEWS (ORG CONST)	
DOMESTIC WATER SYSTEM-PALOS VERDES RESERVOIR (INTERIM CONST)	
DVL - SEARL PARKWAY EXTENSION - PHASE 2	
DVL - SEARL PARKWAY LANDSCAPING	
DVL EAST DAM ELECTRICAL UPGRADES	
DVL EAST DAM POWER LINE REALIGNMENT	
DVL INLET/OUTLET FISH SCREEN REHABILITATION	
DVL RECREATION - ALTERNATE ACCESS ROAD	
DVL RECREATION, COMMUNITY PARK AND REGIONAL AQUATIC FACILITY	
DVL SECURITY ENHANCEMENT	
DVL CONSTRUCTION	
DVL CONSTRUCTION CLAIMS SUPPORT	
DVL CONSTRUCTION MANAGEMENT SERVICE	
DVL CONSTRUCTION SUPERVISION	
DVL CONSTRUCTION, WEST DAM FOUNDATION	
DVL DEDICATION CEREMONY	
DVL DISTURBED	
DVL DOMENIGONI PARK	
DVL EAST DAM	
DVL EAST DAM EMBANKMENT	
DVL EAST DAM FENCING	
DVL EAST DAM INLET OUTLET TOWER CONSTRUCTION	
DVL EAST DAM LANDSCAPE SCREENING	
DVL EAST DAM NORTH RIM REMEDIATION	
DVL EAST DAM P-1 FACILITIES	
DVL EAST DAM SITE COMPLETION	
DVL EAST DAM STATE STREET IMPROVEMENTS	
DVL EAST DAM VERTICAL SLEEVE VALVE	
DVL EAST MARINA, PHASE 2	
DVL EXCAVATION	
DVL FIXED CONE, SPHERE	
DVL GENERAL	
DVL GRADING OF CONT	
DVL INSTALL NEW WATERLINE	
DVL MISC SMALL CONS	
DVL NORTH HIGH WATER ROAD	
DVL P-1 PUMPING FACILITY	
DVL PROCUREMENT	
DVL SCOTT ROAD EXTENSION	
DVL SOUTH HIGH WATER ROAD & QUARRY	
DVL SPILLWAY	
DVL START UP	
DVL VALLEY-WIDE SITE ROUGH GRADING	
DVL WORK PACKAGE	
DVL WORK PACKAGE 1	
DVL WORK PACKAGE 10, INLET OUTLET WORK	
DVL WORK PACKAGE 11, FOREBAY	
DVL WORK PACKAGE 12, TUNNEL	
DVL WORK PACKAGE 13, P-1 PUMP OPERATIONS FACILITY	
DVL WORK PACKAGE 14, PC-1	
DVL WORK PACKAGE 15, SITE CLEARING	
DVL WORK PACKAGE 16, GROUNDWATER MONITORING	
DVL WORK PACKAGE 17, FIELD OFFICE	
DVL WORK PACKAGE 18, TEMPORARY VISITOR CENTER	
DVL WORK PACKAGE 19, PERMANENT VISITOR CENTER	
DVL WORK PACKAGE 2, EASTSIDE PIPELINE	
DVL WORK PACKAGE 20, EAST DAM EXCAVATION, FOUNDATION	
DVL WORK PACKAGE 21, WEST DAM EXCAVATION, FOUNDATION	
DVL WORK PACKAGE 23, WEST RECREATION AREA	

TABLE 3 CONVEYANCE, DISTRIBUTION, AND STORAGE SYSTEM COSTS	
Description	
Storage Facilities	
DVL WORK PACKAGE 24, EAST RECREATION AREA	
DVL WORK PACKAGE 25, EXCAVATION	
DVL WORK PACKAGE 26, ELECTRICAL TRANSMISSION LINES	
DVL WORK PACKAGE 27, MAJOR EQUIPMENT P-1	
DVL WORK PACKAGE 28, MAJOR EQUIPMENT, GATES	
DVL WORK PACKAGE 29, MAJOR EQUIPMENT, PC-1	
DVL WORK PACKAGE 30, INSTRUMENTATION AND CONTROL SYSTEMS	
DVL WORK PACKAGE 31, GEOGRAPHICAL INFO	
DVL WORK PACKAGE 32, PERMIT	
DVL WORK PACKAGE 33, MAJOR EQUIPMENT, VALVES	
DVL WORK PACKAGE 34, EMERGENCY RELEASE	
DVL WORK PACKAGE 35	
DVL WORK PACKAGE 36, TRANSMISSION LINE TO PC-1	
DVL WORK PACKAGE 38, RUNOFF EROSION	
DVL WORK PACKAGE 39, SADDLE DAM FOUNDATION	
DVL WORK PACKAGE 4, NEWPORT ROAD RELOCATION	
DVL WORK PACKAGE 40	
DVL WORK PACKAGE 42, GEOTECHNICAL	
DVL WORK PACKAGE 43, MOBILIZATION	
DVL WORK PACKAGE 44, SITE DEVELOPMENT	
DVL WORK PACKAGE 47, HAZARDOUS MATERIAL	
DVL WORK PACKAGE 48, GENERAL ADMIN	
DVL WORK PACKAGE 49	
DVL WORK PACKAGE 5, SALT CREEK FLOOD CONTROL	
DVL WORK PACKAGE 52, HISTORY ARCHEOLOGY INVENTORY	
DVL WORK PACKAGE 53, PREHISTORIC ARCHEOLOGY	
DVL WORK PACKAGE 54, PLANTS, WILDLIFE	
DVL WORK PACKAGE 55, AIR QUALITY, NOISE	
DVL WORK PACKAGE 6, SURFACE WATER MITIGATION	
DVL WORK PACKAGE 7, DESIGN WEST DAM ACCESS	
DVL WORK PACKAGE 8, DESIGN EAST DAM ACCESS	
DVL WORK PACKAGE 9, SADDLE DAM	
DVL WORKING INVENTORY, 80,000 ACRE FEET (10% OF CAPACITY)	
EAST DAM TUNNELS	
EAST MARINA BOAT RAMP EXTENSION	
ELECTRICAL SERVICE - LAKE MATHEWS (ORG CONST)	
ELECTRICAL SYSTEM - LAKE MATHEWS (ORG CONST)	
FIRST SAN DIEGO AQUEDUCT - REPLACE PIPELINE SECTION BOTH BARRELS	
FLOATING BOAT HOUSE - LAKE MATHEW	
FLOOD RELEASE VALVE, MORRIS DAM & WATER SUPPLY SYSTEM,PV RESER.	
FOOTBRIDGE - LAKE MATHEWS (ORG CONST)	
FOOTHILL FEEDER- LIVE OAK RESERVOIR- CLAIMS	
FOOTHILL FEEDER- LIVE OAK RESERVOIR- RESIDENCE	
GARVEY RESERVOIR OPERATION & MAINTENANCE CENTER	
GARVEY RESERVOIR OPERATION & MAINTENANCE CENTER (RETIREMENT)	
GARVEY RESERVOIR - JUNCTION STRUCTURE,REPLACE VALVE # 1	
GARVEY RESERVOIR COVER AND LINER REPLACEMENT PROJECT	
GARVEY RESERVOIR DRAINAGE & EROSION CONTROL IMPROVEMENTS	
GARVEY RESERVOIR- EMERGENCY GENERATOR	
GARVEY RESERVOIR- FLOATING COVER	
GARVEY RESERVOIR HYPOCHLORITE FEED SYSTEM	
GARVEY RESERVOIR- JUNCTION STRUCTURE, REPLACE VALVE #1	
GARVEY RESERVOIR- JUNCTION STRUCTURE, REPLACE VALVE #1 - INTEREST	
GARVEY RESERVOIR- JUNCTION STRUCTURE, REPLACE VALVES # 4 & 5	
GARVEY RESERVOIR- MODIFY DESILTING BASINS	
GARVEY RESERVOIR REPAIR	
GARVEY RESERVOIR, LOWER ACCESS ROAD, PAVING & DRAINS	
GARVEY RESERVOIR, REPLACE VALVE # 4 & 5	
GARVEY RESERVOIR, TWO VALVES AT JUNCTION STRUCTURE	
GARVEY RESERVOIR: CONT. 565, SPEC.412	
GARVEY RESERVOIR: TWO COTTAGES WITH GARAGES	
GARVEY RESERVOIR-HYPOCHLORINATION	
GARVEY RESERVOIR-HYPOCHLORINE STATION	
GARVEY RESERVOIR-INLET AND OUTLET CONDUIT SYSTEM MODIFICATION	
GARVEY RESERVOIR-JUNCTION STRUCTURE REPLACE TWO VALVES	
GARVEY RSVR REPLACE VENTURI THROAT SECTION	
HEADWORKS OF DISTRIBUTION SYSTEM LAKE MATHEWS	
HEADWORKS: ADDITIONAL VALVES	
HEADWORKS: MOTOR OPERATED SLIDE GATES	
HOUSE AND GARAGE AT CORONA DEL MAR RESERVOIR	
HOUSE AND GARAGE AT ORANGE COUNTY RESERVOIR	
HOUSE AT PALOS VERDES RESERVOIR	
HOWELL-BUNGER VALVE OPERATOR, LAKE MATHEWS, 5 VALVES 1939	
HOWELL-BUNGER VALVE OPERATOR, LAKE MATHEWS, 5 VALVES 1955	
JENSEN FINISHED WATER RESERVOIR NO. 1 COVER REHABILITATION	
JENSEN FINISHED WATER RESERVOIR NO. 2 FLOATING COVER IMPROVEMENT	
JENSEN FLUORIDE TANK REPLACEMENT	
JENSEN FWR # 2 FLOATING COVER REPLACEMENT	
JENSEN FWR NO. 2 FLOATING COVER REPLACEMENT	
JENSEN, REPAIR COVER OVER RESERVOIR 1	
LAKE MATHEWS - REPLACE STANDBY GENERATOR	
LAKE MATHEWS - ELECTRICAL SYSTEM IMPROVEMENT	

TABLE 3
CONVEYANCE, DISTRIBUTION, AND STORAGE SYSTEM COSTS

Description**Storage Facilities**

LAKE MATHEWS ABOVEGROUND STORAGE TANK REPLACEMENT
 LAKE MATHEWS BUILDING
 LAKE MATHEWS BUILDINGS 8 & 15, RENOVATION OF ASSEMBLY AREA AND ADMIN. BLDG.
 LAKE MATHEWS- CARPENTER AND VEHICLE MAINTENANCE BUILDING
 LAKE MATHEWS- CHLORINATION FACILITIES
 LAKE MATHEWS CHLORINATION FACILITY- REPLACE CHLORINATION EQPMT.
 LAKE MATHEWS CNTRL TOWER-REPL. 45 30-INCH GATE/BUTTERFLY VALVES
 LAKE MATHEWS CONTROL TOWER - REPLACE 45 10-INCH GATE VALVE
 LAKE MATHEWS DAM SAFETY INSTRUMENTATION UPGRADES
 LAKE MATHEWS DAM SPILLWAY ASSESSMENT
 LAKE MATHEWS DIKE
 LAKE MATHEWS DISCHARGE FACILITY UPGRADES
 LAKE MATHEWS DIVERSION TUNNEL
 LAKE MATHEWS DIVERSION TUNNEL WALKWAY REPAIR
 LAKE MATHEWS- DOCK AND BOAT SHELTER
 LAKE MATHEWS DOMESTIC FACILITIES
 LAKE MATHEWS- DOMESTIC WATER SYSTEM
 LAKE MATHEWS ELECTRICAL RELIABILITY
 LAKE MATHEWS- ELECTRICAL SYSTEM IMPROVEMENT
 LAKE MATHEWS- EMERGENCY GENERATOR
 LAKE MATHEWS ENLARGEMENT (SPEC NO. 505)
 LAKE MATHEWS FOREBAY LINING AND TOWER REPAIRS
 LAKE MATHEWS FOREBAY OUTLET STRCTR-REPL CONCRETE BLOCK BLDG
 LAKE MATHEWS FOREBAY OUTLET, CONCRETE BLDG
 LAKE MATHEWS FOREBAY PRESSURE CONTROL STRUCTURE AND BYPASS
 LAKE MATHEWS FOREBAY- REPLACE FOOTBRIDGE
 LAKE MATHEWS FOREBAY WALKWAY REPAIRS
 LAKE MATHEWS FOREBAY, HEADWORK FACILITY AND EQUIPMENT UPGRADE
 LAKE MATHEWS HEADWORKS-INSTALL AIR MTRS,3 HOWELL BNGR VALVE OP.
 LAKE MATHEWS- HOUSE AND GARAGE
 LAKE MATHEWS IO TOWER EMERGENCY GENERATOR
 LAKE MATHEWS- IMPROVE MAIN SUBSTATION
 LAKE MATHEWS- IMPROVEMENT OF DOMESTIC WATER & FIRE PROT. SYSTEM
 LAKE MATHEWS -LUMBER STORAGE BUILDING
 LAKE MATHEWS -LUMBER STORAGE BUILDING - INTEREST
 LAKE MATHEWS LUMBER STORAGE ROOF COVER
 LAKE MATHEWS MAIN DAM AND SPILLWAY
 LAKE MATHEWS MAIN DAM SUB DRAIN SYSTEM
 LAKE MATHEWS MAINTENANCE BUILDING
 LAKE MATHEWS MAINTN.FACILITIES-REPLACE 75 KVA TRANSFORMER.SERV.
 LAKE MATHEWS- MODIFY CHLORINATION
 LAKE MATHEWS- MODIFY CHLORINE STORAGE TANK FOUNDATIONS
 LAKE MATHEWS- MODIFY ELECTRICAL SERVICE
 LAKE MATHEWS MULTIPLE SPECIES RESERVE, MANAGER'S OFFICE AND RESIDENCE
 LAKE MATHEWS OFFICE BLDG MODIFICATIONS-AMERICANS W/ DISABILITY
 LAKE MATHEWS OFFICE TRAILER MODIFICATIONS-AMERICANS W/ DISABILITY
 LAKE MATHEWS -OPERATOR RESIDENCE
 LAKE MATHEWS OULET TOWER
 LAKE MATHEWS OUTLET FACILITIES
 LAKE MATHEWS OUTLET TOWER NO. 2 VALVE REHABILITATION
 LAKE MATHEWS OUTLET TOWER- REPLACE CRANES
 LAKE MATHEWS OUTLET TOWER-REPLACE GATE VALVES
 LAKE MATHEWS OUTLET TOWER-REPLACE GATE VALVES (RETIREMENT)
 LAKE MATHEWS OUTLET TUNNEL
 LAKE MATHEWS- PREFABRICATED AIRCRAFT HANGER
 LAKE MATHEWS- PREFABRICATED AIRCRAFT HANGER - INTEREST
 LAKE MATHEWS- PROPANE STORAGE TANK
 LAKE MATHEWS- PROPANE STORAGE TANK - INTEREST
 LAKE MATHEWS- REPLACE HOWELL-BUNGER VALVE OPERATORS
 LAKE MATHEWS- REPLACE VALVES
 LAKE MATHEWS RESERVOIR-RELOCATE SOUTHERLY SECURITY FENCE
 LAKE MATHEWS RESERVOIR-RELOCATE SOUTHERLY SECURITY FENCE - INTEREST
 LAKE MATHEWS- SEEPAGE ALARMS
 LAKE MATHEWS- SEEPAGE ALARMS - INTEREST
 LAKE MATHEWS SODIUM HYPOCHLORITE TANK REPLACEMENT
 LAKE MATHEWS SODIUM HYPOCLORITE INJECTION SYSTEM
 LAKE MATHEWS- SPRAY PAINT BOOTH
 LAKE MATHEWS WASTEWATER SYSTEM REPLACEMENT
 LAKE MATHEWS WATERSHED, DRAINAGE
 LAKE MATHEWS WATERSHED, DRAINAGE WATER QUALITY MGMT PLAN (CAJALCO CREEK DAM)
 LAKE MATHEWS. HAZEL ROAD
 LAKE MATHEWS. REPLACE CHLORINATION EQUIPMENT
 LAKE MATHEWS.DIKE #1- INSTALL PIEZOMETERS, STAS.55+00 & 85+50
 LAKE MATHEWS: VALVES AND FITTINGS IN HEADWORKS
 LAKE MATHEWS-CONST. CONCR.TRAFFIC BARR. WALL TO PROTECT HQ FACIL.
 LAKE MATTHEWS FIRE WATER LINE
 LAKE PERRIS POLLUTION PREVENTION AND SOURCE WATER PROTECTION (CAPITAL PORTION)
 LAKE SKINNER - AERATION SYSTEM
 LAKE SKINNER - CHLORINATION SYSTEM OUTLET TOWER BYPASS PPLN
 LAKE SKINNER - CHLORINATION SYSTEM OUTLET TOWER BYPASS PPLN - INTEREST
 LAKE SKINNER - INSTALL OUTLET CONDUIT FLOWMETER
 LAKE SKINNER (AULD VALLEY RESERVOIR)- CLAIMS
 LAKE SKINNER AERATOR AIR COMPRESSORS REPLACEMENT
 LAKE SKINNER- EQUIPMENT YARD SECURITY
 LAKE SKINNER- EQUIPMENT YARD SECURITY - INTEREST
 LAKE SKINNER FACILITIES
 LAKE SKINNER FACILITIES - EMPLOYEE HOUSING
 LAKE SKINNER FACILITIES - FENCING
 LAKE SKINNER FACILITIES - LANDSCAPING
 LAKE SKINNER FACILITIES - RELOCATE BENTON ROAD
 LAKE SKINNER OUTLET CONDUIT REPAIR
 LAKE SKINNER OUTLET TOWER SEISMIC ASSESSMENT
 LAKE SKINNER- PROPANE STORAGE TANK
 LAKE SKINNER- PROPANE STORAGE TANK - INTEREST
 LIVE OAK RESERVOIR & RESERVOIR BYPASS SCHEDULE 264A
 LIVE OAK RESERVOIR REHABILITATION

TABLE 3 CONVEYANCE, DISTRIBUTION, AND STORAGE SYSTEM COSTS	
Description	
Storage Facilities	
LIVE OAK RESERVOIR SURFACE REPAIR	
MAINTENANCE FACILITIES, 75KVA TRANSFORMER SERVICE-LAKE MATHEWS (ORG CONST)	
MILLS FINISHED WATER RESERVOIR REHABILITATION	
MINOR CAPITAL PROJECTS FOR FY 1989/90 - LAKE MATHEWS	
MINOR CAPITAL PROJECTS FOR FY 1989/90 - PALOS VERDES RESERVOIR	
MINOR CAPITAL PROJECTS-LAKE SKINNER, INLET CANAL ELECTRIC FISH BARRIER	
MINOR CAPITAL PROJECTS-LIVE OAK RESERVOIR, DESILT BASIN IMPROVEMENTS	
MODIFICATION OF THE LAKE MATHEWS SERVICE WATER SYSTEM	
MORRIS DAM COTTAGE	
MORRIS DAM- ENLARGMT. OF SPILLWAY FACLT. & UPPER FDR. VALVE MODF	
MORRIS DAM ROAD IMPROVEMENT	
MORRIS DAM, SEISMIC STABILITY REANALYSIS	
MORRIS DAM-REPLACE EMERGENCY POWER SYSTEM	
MORRIS RESERVOIR- CAPITAL OBLIGATION PAID	
MORRIS RESERVOIR- INTEREST OBLIGATION PAID	
O.C. RESERVOIR - IMPROVE DOMESTIC SYSTEM	
ORANGE COUNTY RESERVOIR -- JUNCTION STRUCTURE, REPLACE VALVE # 1	
ORANGE COUNTY RESERVOIR (SPEC NO. 341)	
ORANGE COUNTY RESERVOIR CHLORINATION STATION	
ORANGE COUNTY RESERVOIR- EMBANKMENT AND SPILLWAY	
ORANGE COUNTY RESERVOIR- EMERGENCY GENERATOR	
ORANGE COUNTY RESERVOIR- FLOATING COVER	
ORANGE COUNTY RESERVOIR- HOUSE	
ORANGE COUNTY RESERVOIR- MODIFY DOMESTIC WATER SYSTEM	
ORANGE COUNTY RESERVOIR- REPLACE RESIDENCE NO. 95D	
ORANGE COUNTY RESERVOIR-MODIFY ELEC. CONTROL CENTER	
ORANGE COUNTY RESERVOIR-REPLACE CHLORINATION EQUIPMENT	
ORANGE COUNTY RESERVOIR-REPLACE CHLORINATION SYSTEM	
P V RESERVOIR-REPLACE CHLORINATION SYSTEM	
PALOS VERDES CHLORINATION STATION AND COTTAGE	
PALOS VERDES RESERVOIR	
PALOS VERDES RESERVOIR - INLET/OUTLET TOWER	
PALOS VERDES RESERVOIR- BY PASS PIPELINES	
PALOS VERDES RESERVOIR COVER AND LINER REPLACEMENT	
PALOS VERDES RESERVOIR COVER REPLACEMENT	
PALOS VERDES RESERVOIR- FENCING AROUND	
PALOS VERDES RESERVOIR- REPLACE DOMESTIC WATER SYSTEM PIPING	
PALOS VERDES RESERVOIR SODIUM HYPOCHLORITE FEED SYSTEM UPGRADE	
PALOS VERDES RESERVOIR, BYPASS PIPELINE RELIEF STRUCTURE MODIFN.	
PALOS VERDES RESERVOIR, COVERING	
PALOS VERDES RESERVOIR, REPLACE ACCESS AND PERIMETER ROADS	
PALOS VERDES RESERVOIR: INCREASING ELEVATION OF SPILLWAY CREST	
PALOS VERDES RESERVOIR-INSTALL VALVE & CHLORINATION NOZZLE, INLT. TWR	
PALOS VERDES RESERVOIR-REPLACE CHLORINATION SYSTEM	
PAMO RESERVOIR- WATER STORAGE FEASIBILITY STUDY	
PAMO RESERVOIR- WATER STORAGE FEASIBILITY STUDY- INTEREST	
PV RESERVOIR GROUNDWATER MANAGEMENT	
PVR FACILITY SEWER CONNECTION	
RECORD DRAWING RESTORATION PROGRAM, CRA	
REPAIRS TO AZUSA CONDUIT	
REPLACEMENT OF A 30 INCH GATE VALVE P.V.R.	
RESIDENCE # 95-D, ORANGE COUNTY RESERVOIR	
RESIDENCE 45-D - CORONA DEL MAR RESERVOIR	
RESIDENCE 80-D - ORANGE COUNTY RESERVOIR	
RESIDENCE 90-D - LAKE MATHEW	
RESIDENCE 91-D - SAN JACINTO RESERVOIR	
RESIDENCE 93-D - SAN JACINTO RESERVOIR	
ROADS AT LAKE MATHEWS ABOVE FLOODLINE	
SAN DIEGO ACQUEDUCT: COTTAGE AT SAN JACINTO RESERVOIR	
SAN JACINTO RESERVOIR - SAN DIEGO AQUEDUCT	
SECOND OUTLET, PALOS VERDES RESERVOIR (SPEC NO. 597)	
SEEPAGE CONTROL AT LAKE MATHEWS	
SKINNER DAM SAFETY INSTRUMENTATION UPGRADES	
SKINNER DAM SPILLWAY ASSESSMENT	
SKINNER FINISHED WATER RESERVOIR SLIDE GATES REHABILITATION	
TEMPORARY EMPLOYEE LABOR SETTLEMENT	
VALVE - GENE RESERVOIR (REPLACED 201)	
VALVE STRUCTURE MODIFICATIONS-UPPER FDR, SAN GABRIEL CROSSING (INTERIM CONST)	
WADSWORTH PUMP PLANT CONDUIT PROTECTION	
WADSWORTH PUMP PLANT, PUMP MOTOR CONVERSION	
WADSWORTH PUMPING PLANT FIRE PROTECTION SYSTEM UPGRADES	
WADSWORTH/DVL CONTROL & PROTECTION SYSTEM UPGRADE - CONSTRUCTION & STARTUP	
WATER QUALITY PROJECT UPSTREAM	
WATER SUPPLY SYSTEM, OPERATING TOWER, LAKE MATHEWS	
WEYMOUTH FINISHED WATER RESERVOIR GATE REPLACEMENT	
Sub-total Storage facilities costs	99,537,336

<p style="text-align: center;">TABLE 3 CONVEYANCE, DISTRIBUTION, AND STORAGE SYSTEM COSTS</p>
<p>Description <u>Conveyance and Aqueduct Facilities</u> 2.4 KV STANDBY DIESEL ENGINE GENERATOR REPLACEMENT - GENE 2.4 KV STANDBY DIESEL ENGINE GENERATOR REPLACEMENT - INTAKE 2.4 KV STANDBY DIESEL ENGINE GENERATOR REPLACEMENT - IRON ACCESS STRUCTURE, TRANSITION STRUCTURE AND MANHOLE COVER REPLACEMENT ALL PUMPING PLANTS - 230 KV & 69 KV DISCONNECTS REPLACEMENT ALL PUMPING PLANTS - BRIDGE CRANES ALL PUMPING PLANTS - TRANSFORMER BANK BRIDGE ALLEN MCCOLLOCH PIPELINE - CORROSION INTERFERENCE MITIGATION ALLEN MCCOLLOCH PIPELINE - RIGHT OF WAY ALLEN MCCOLLOCH PIPELINE - UPDATE / MODIFY ALL BOYLE ENGINEERING DRAWINGS AMP VALVE & SERVICE CONNECTION VAULT REPAIR AQUEDUCT & PUMPING PLANT ISOLATION / ACCESS FIXTURES - STUDY AQUEDUCT & PUMPING PLANT ISOLATION GATES ARROWHEAD EAST TUNNEL CONSTRUCTION ARROWHEAD TDS REDUCTION ARROWHEAD TUNNELS CLAIMS COST ARROWHEAD TUNNELS CONNECTOR ROAD ARROWHEAD TUNNELS CONSTRUCTION ARROWHEAD TUNNELS ENGINEERING ARROWHEAD TUNNELS RE-DESIGN ARROWHEAD WEST TUNNEL CONSTRUCTION AULD VALLEY CONTROL STRUCTURE AREA FACILITIES UPGRADE STUDY AUXILIARY POWER SYSTEM REHABILITATION / UPGRADES STUDY AUXILIARY POWER SYSTEM REHABILITATION/UPGRADES BACHELOR MOUNTAIN COMMUNICATION SITE ACQUISITION BACHELOR MOUNTAIN TELECOM SITE IMPROVEMENTS BANK TRANSFORMERS REPLACEMENT STUDY BLACK METAL MOUNTAIN - COMMUNICATIONS FACILITY UPGRADE BLACK METAL MOUNTAIN 2.4KV ELECTRICAL POWER UPGRADE BOX SPRINGS FEEDER REHAB PHASE III BUDGET ADJUSTMENT CABAZON RADIAL GATE FACILITY IMPROVEMENTS CAJALCO CREEK MITIGATION FLOWS CAST-IRON BLOW OFF REPLACEMENT - PHASE 4 CATHODIC PROTECTION STUDY - DESIGN AND CONSTRUCTION CCRP - BLOW-OFF VALVES PHASE 4 PROJECT CCRP - CONTINGENCY CCRP - EMERGENCY REPAIR CCRP - HEADGATE OPERATORS & CIRCUIT BREAKERS REHAB. CCRP - PART 1 & 2 CCRP - SAND TRAP CLEANING EQUIPMENT & TRAVELING CRANE STUDY CCRP - TRANSITION & MAN-WAY ACCESS COVER REPLACEMENT - STUDY & DESIGN CCRP - TUNNELS STUDY CEPSRP - 230 KV SYSTEM SYNCHRONIZERS CEPSRP - ALL PUMPING PLANTS - CONTINGENCY & OTHER CREDITS CEPSRP - ALL PUMPING PLANTS - REPLACE 6.9 KV TRANSFORMER BUSHINGS CEPSRP - ALL PUMPING PLANTS - REPLACE 230KV, 69 KV & 6.9 KV LIGHTENING ARRESTERS CEPSRP - ALL PUMPING PLANTS - REPLACE 230KV TRANSFORMER PROTECTION CEPSRP - SWITCHYARDS & HEAD GATES REHABILITATION CEPSRP - ALL PUMPING PLANTS - IRON MOUNTAIN - 230KV BREAKER SWITCH. INST. COLORADO RIVER AQUEDUCT - PUMPING COLORADO RIVER AQUEDUCT - SIPHONS AND RESERVOIR OUTLETS REFURBISHMENT COLORADO RIVER AQUEDUCT CONVEYANCE RELIABILITY, PHASE II REPAIRS AND INSTRUMENTATION CONTROL SYSTEM DRAWING UPGRADE STUDY (PHASE 1) - STUDY COPPER BASIN AND GENE DAM OUTLET WORKS REHABILITATION (STUDY & DESIGN) COPPER BASIN AND GENE WASH RESERVOIRS DISCHARGE VALVE REHABILITATION COPPER BASIN INTERIM CHLORINATION SYSTEM COPPER BASIN OUTLET GATES RELIABILITY COPPER BASIN OUTLET REHABILITATION COPPER BASIN OUTLET, AND COPPER BASIN & GENE WASH DAM SLUICWAYS REHABILITATION COPPER BASIN POWER & PHONE LINES REPLACEMENT COPPER BASIN RESERVOIR OUTLET STRUCTURE REHABILITATION PROJECT COPPER BASIN RESERVOIRS DISCHARGE VALVE REHABILITATION & METER REPLACEMENT COPPER SULFATE STORAGE AT LAKE SKINNER AND LAKE MATHEWS CORROSION CONTROL OZONE MATERIAL TEST FACILITY COST OF LAND AND RIGHT OF WAY CRA - ACCESS STRUCTURE, TRANSITION STRUCTURE AND MANHOLE COVER REPLACEMENT CRA - AQUEDUCT AND PUMPING PLANT ISOLATION GATES CRA - AQUEDUCT RESERVOIR AND DISCHARGE LINE ISOLATION GATES CRA - AUXILIARY POWER SYSTEM REHAB CRA - BANK TRANSFORMERS REPLACEMENT STUDY CRA - BLOW-OFF VALVES PHASE 4 CRA - CIRCULATING WATER SYSTEM STRAINER REPLACEMENT CRA - CONTROL SYSTEM IMPLEMENTATION PHASE CLOSE OUT CRA - CONVEYANCE RELIABILITY PROGRAM PART 1 & PART 2 CRA - COPPER BASIN OUTLET, AND COPPER BASIN & GENE WASH SLUICWAYS REHABILITATION CRA - COPPER BASIN POWER & PHONE LINES REPLACEMENT CRA - CUT & COVER FORNAT WASH EXPOSURE STUDY CRA - DANBYTOWER FOOTER REPLACEMENT CRA - DELIVERY LINE NO. 1 SUPPORTS REHAB - FIVE PUMPING PLANTS CRA - DELIVERY LINES 2&3 SUPPORTS REHAB - GENE & INTAKE CRA - DELIVERY LINES 2&3 SUPPORTS REHAB - IRON, EAGLE, & HINDS CRA - DESERT PUMP PLANT OIL CONTAINMENT CRA - DESERT SEWER SYSTEM REHABILITATION PROJECT CRA - DESERT WATER TANK ACCESS & SAFETY IMPROVEMENTS CRA - DISCHARGE CONTAINMENT PROGRAM - INVESTIGATION CRA - DISCHARGE LINE ISOLATION GATES CRA - DWCV-4 VALVE REPLACEMENT CRA - EAGLE MOUNTAIN SAND TRAPS INFLOW STUDY</p>

TABLE 3
CONVEYANCE, DISTRIBUTION, AND STORAGE SYSTEM COSTS

Description**Conveyance and Aqueduct Facilities**

CRA - ELECTRICAL/ POWER SYST REL. PROG. - IRON MTN - 230KV BREAKER SWITC. INST.
 CRA - GENE PUMPING PLANT MAIN TRANSFORMER AREA
 CRA - HINDS PUMP UNIT NO. 8 REFURBISHMENT
 CRA - INTAKE PUMPING PLANT - COOLING AND REJECT WATER DISCHARGE TO LAKE HAVASU
 CRA - INTAKE PUMPING PLANT AUTOMATION PROGRAMMING
 CRA - INVESTIGATION OF SIPHONS AND RESERVOIR OUTLETS
 CRA - IRON MOUNTAIN RESERVOIR AND CANAL LINER REPAIRS
 CRA - IRON MTN. TUNNEL REHABILITATION
 CRA - LAKEVIEW SIPHON FIRST BARREL - REPAIR DETERIORATED JOINTS
 CRA - MAIN PUMP MOTOR EXCITERS
 CRA - MAIN PUMP STUDY
 CRA - MOUNTAIN SIPHONS SEISMIC VULNERABILITY STUDY
 CRA - PUMPING PLANT RELIABILITY PROGRAM CONTINGENCY
 CRA - PUMPING PLANTS VULNERABILITY ASSESSMENT
 CRA - PUMPING WELL CONVERSION
 CRA - QUAGGA MUSSEL BARRIERS
 CRA - REAL PROPERTY - BOUNDARY SURVEYS
 CRA - RELIABILITY PROGRAM 230 KV & 69 KV DISCONNECTS REPLACEMENT STUDY (5 PLANTS)
 CRA - RELIABILITY PROGRAM INVESTIGATION
 CRA - RELIABILITY PROGRAM PHASE 6 (AQUEDUCT PHASE 6 REHAB.) - SPEC 1568
 CRA - RELIABILITY PHASE II CONTINGENCY
 CRA - SAND TRAP CLEANING EQUIPMENT AND TRAVELING CRANE
 CRA - SERVICE CONNECTION DWCV-2T VALVES REPLACEMENT AND STRUCTURE CONSTRUCTION
 CRA - SERVICE CONNECTION DWCV-4 A, B, C, & D PLUG VALVES REPLACEMENT
 CRA - SIPHONS, TRANSITIONS, CANALS, AND TUNNELS REHABILITATION AND IMPROVEMENTS
 CRA - SUCTION & DISCHARGE LINES EXPANSION JOINT REHAB
 CRA - SUPERVISORY CONTROL AND DATA ACQUISITION (SCADA) SYSTEM
 CRA - SWITCHYARDS AND HEAD GATES REHAB
 CRA - SWITCHYARDS AND HEAD GATES REHABILITATION
 CRA - TRANSFORMER OIL & CHEMICAL UNLOADING PAD CONTAINMENT
 CRA - TUNNELS VULNERABILITY STUDY - REPAIRS TO TUNNELS
 CRA - WEST PORTAL UPGRADE - REHAB OF STILLING WELL, SLIDE GATE OPERATORS AND RADIAL GATES
 CRA 2.4 KV STANDBY DIESEL ENGINE GENERATORS REPLACEMENT
 CRA 230 KV & 69 KV DISCONNECTS SWITCH REPLACEMENT
 CRA 230 KV SYSTEM INTER-AGENCY OPERABILITY UPGRADES
 CRA 230 KV TRANSMISSION SYSTEM REGULATORY AND OPERATIONAL FLEXIBILITY UPGRADES
 CRA 230KV & 69KV PROTECTION PANEL UPGRADE
 CRA 230KV TRANSMISSION SYSTEM REGULATORY COMPLIANCE AND OPERATIONAL FLEXIBILITY UPGRADES
 CRA 6.9 KV LEAD JACKETED CABLES
 CRA 6.9 KV POWER CABLES REPLACEMENT
 CRA 69KV PANEL UPGRADE
 CRA ACCESS STRUCTURE, TRANSITION STRUCTURE AND MANHOLE COVERS REPLACEMENT
 CRA ALL PUMPING PLANTS - FLOW METER UPGRADES
 CRA AND IRON MOUNTAIN RESERVOIR PANEL REPLACEMENT
 CRA AQUEDUCT BLOCKER GATE REPLACEMENT
 CRA AQUEDUCT ISOLATION GATES REPLACEMENT
 CRA AUXILIARY POWER SYSTEM REHABILITATION/UPGRADES FOR FOUR PUMPING PLANTS
 CRA BLACK METAL COMMUNICATION SITE II UPGRADE
 CRA CANAL CRACK REHAB AND EVALUATION
 CRA CANAL CRACK REHABILITATION
 CRA CANAL IMPROVEMENTS
 CRA CIRCULATING WATER SYSTEM STRAINER REPLACEMENT
 CRA CONDUIT FORMIT WASH EROSION REPAIRS
 CRA CONDUIT STRUCTURAL PROTECTION
 CRA CONVEYANCE RELIABILITY PROGRAM (CCRP) - BLOW-OFF REPAIR
 CRA CONVEYANCE RELIABILITY PROGRAM PART 1 & PART 2
 CRA COPPER BASIN AND GENE WASH DAM SLUICWAYS
 CRA COPPER BASIN OUTLET GATES RELIABILITY STUDY
 CRA DELIVERY LINE REHABILITATION
 CRA DESERT AIRFIELDS IMPROVEMENT
 CRA DESERT REGION SECURITY IMPROVEMENTS
 CRA DISCHARGE CONTAINMENT PROGRAM - CONTINGENCY
 CRA DISCHARGE CONTAINMENT PROGRAM - GENE & IRON DRAIN SYSTEMS
 CRA DISCHARGE CONTAINMENT PROGRAM - INVESTIGATION
 CRA DISCHARGE CONTAINMENT PROGRAM - OIL & CHEMICAL UNLOADING PAD CONTAINMENT
 CRA ELECTRICAL / POWER SYSTEM RELIABILITY PROGRAM (CEPSRP)
 CRA ENERGY EFFICIENCY IMPROVEMENTS
 CRA GENE PUMPING PLANT HEAVY EQUIPMENT SERVICE PIT
 CRA GENE STORAGE WAREHOUSE REPLACEMENT
 CRA HINDS PUMPING PLANT - WASH AREA UPGRADE
 CRA INTAKE PPLANT - POWER & COMMUNICATION LINE REPLACEMENT
 CRA IRON GARAGE HEAVY EQUIPMENT SERVICE PIT REPLACEMENT
 CRA IRON HOUSING REPLACEMENT
 CRA IRON MOUNTAIN SUCTION JOINT REFURBISHMENT PILOT
 CRA MAIN PUMP & MOTOR REFURISHMENT
 CRA MAIN PUMP AND MOTOR REFURISHMENT
 CRA MAIN PUMP CONTROLS & INSTRUMENTATION
 CRA MAIN PUMP DISCHARGE VALVE REFURBISHMENT
 CRA MAIN PUMP MOTOR EXCITERS ASSESSMENT
 CRA MAIN PUMP MOTOR EXCITERS REHABILITATION
 CRA MAIN PUMP REHABILITATION
 CRA MAIN PUMP STUDY
 CRA MAIN PUMP SUCTION AND DISCHARGE LINES, EXPANSION JOINT REPAIRS
 CRA MAIN PUMPING PLANT DISCHARGE LINE ISOLATION BULKHEAD COUPLING CONSTRUCTION
 CRA MAIN PUMPING PLANT UNIT COOLERS & HEAT ESCHANGERS
 CRA MAIN PUMPING PLANTS DISCHARGE LINE ISOLATION BULHEAD COUPLINGS
 CRA MAIN PUMPING PLANTS LUBRICATION SYSTEM
 CRA MAIN PUMPING PLANTS SERVICE WATER & SAND REMOVAL SYSTEM
 CRA MAIN TRANSFORMER REFURBISHMENT
 CRA MAIN TRANSFORMER REPLACEMENT /REHABILITATION
 CRA MAIN TRANSFORMER REPLACEMENT/REHAB.
 CRA MILE 12 POWER LINE & FLOW MONITORING EQUIP. STUDY
 CRA OVER-CURRENT RELAY REPLACEMENT

TABLE 3 CONVEYANCE, DISTRIBUTION, AND STORAGE SYSTEM COSTS	
Description	
<u>Conveyance and Aqueduct Facilities</u>	
CRA PROTECTIVE SLABS	
CRA PUMP PLANT FLOW METER REPLACEMENT	
CRA PUMP PLANT FLOW METER UPGRADE	
CRA PUMP PLANT SUMP PIPING REPLACEMENT STUDY	
CRA PUMP PLANT SUMP SYSTEM REHABILITATION	
CRA PUMP PLANT UNINTERRUPTABLE POWER STUDY (UPS) UPGRADE	
CRA PUMP PLANTS 2.3KV AND 480V SWITCH RACK REHABILITATION	
CRA PUMP PLANTS 2300KV & 480 V SWITCHRACK REHAB	
CRA PUMP WELLS CONVERSION AND BLOW-OFF REPAIR	
CRA PUMPING PLANT DELIVERY LINE REHABILITATION	
CRA PUMPING PLANT REHABILITATION STUDY	
CRA PUMPING PLANT REHABILITATION STUDY AND INVESTIGATION	
CRA PUMPING PLANT RELIABILITY PROGRAM - HIGH PRESSURE COMPRESSOR REPLACEMENT	
CRA PUMPING PLANT RELIABILITY PROGRAM - SUCTION & DISCHARGE LINES EXPANSION JOINT STUDY	
CRA PUMPING PLANT RELIABILITY PROGRAM - SUCTION AND DISCHARGE LINES-EXPANSION JOINT REPAIRS	
CRA PUMPING PLANT STORAGE BUILDINGS AT HINDS, EAGLE MOUNTAIN AND IRON MOUNTAIN	
CRA PUMPING PLANT SUMP SYSTEM REHABILITATION	
CRA PUMPING PLANT WASTEWATER SYSTEM - GENE & IRON MTN.	
CRA PUMPING PLANT WASTEWATER SYSTEM - INTAKE	
CRA PUMPING PLANT WASTEWATER SYSTEM REHABILITATION - ALL FIVE PUMPING PLANT PRELIMINARY DESIGN	
CRA PUMPING PLANT WASTEWATER SYSTEM REPLACEMENT - GENE/IRON MTN FINAL DESIGN	
CRA PUMPING PLANT WASTEWATER SYSTEM REPLACEMENT - HINDS & EAGLE MTN.	
CRA PUMPING PLANTS - AUXILIARY POWER SYSTEM REHABILITATE/UPGRADES	
CRA PUMPING PLANTS 230KV & 69K DISCONNECT SWITCH REPLACEMENT	
CRA PUMPING PLANTS ASPHALT REPLACEMENT	
CRA PUMPING PLANTS CRANE IMPROVEMENTS	
CRA PUMPING PLANTS SWITCH HOUSE FAULT CURRENT PROTECTION	
CRA PUMPING PLANTS VULNERABILITY ASSESSMENT	
CRA PUMPING PLANTS WATER TREATMENT SYSTEMS REPLACEMENT	
CRA PUMPING PLT RELIABILITY PROGRAM, DISCHARGE LINE COUPLING INSTALLATION	
CRA PUMPING WELL CONVERSION	
CRA QUAGGA MUSSEL BARRIERS	
CRA RADIAL GATES AND SLIDE GATE REHABILITATION	
CRA RADIAL GATES REPLACEMENT	
CRA RELIABILITY PHASE II - PUMPING PLANTS 230KV & 69KV DISCONNECT SWITCH REPLACEMENT	
CRA RELIABILITY PROGRAM - DISCHARGE VALVE LUBRICATORS	
CRA RELIABILITY PROGRAM - MOTOR BREAKER FAULTY CURRENT STUDY (5 PLANTS)	
CRA RELIABILITY PROGRAM PHASE 6 (AQUEDUCT PHASE 6 REHAB.) - SPEC 1568	
CRA RELIABILITY PHASE II - PUMPING PLANT SWITCH HOUSE FAULT CURRENT PROTECTION	
CRA SAND TRAP EQUIPMENT UPGRADES	
CRA SEISMIC EVALUATION - SWITCH HOUSE AND PUMP ANCHORAGE	
CRA SEISMIC RETROFIT OF 6.9KV SWITCH HOUSES	
CRA SEISMIC UPGRADE OF 6.9KV SWITCH HOUSES	
CRA SERVICE CONNECTION DWCV-2T VALVES REPLACEMENT AND STRUCTURE CONSTRUCTION	
CRA SERVICE CONNECTION DWCV-4 VALVES REPLACEMENT	
CRA SIPHON REHAB	
CRA SIPHONS, TRANSITIONS, CANALS, AND TUNNELS REHABILITATION AND IMPROVEMENTS	
CRA SURGE CHAMBER DISCHARGE LINE BY-PASS COVERS	
CRA SWITCHRACKS & ANCILLARY STRUCTURES EROSION CONTROL	
CRA TRANSFORMER OIL AND SODIUM HYPOCHLORITE CONTAINMENT	
CRA TRANSITION STRUCTURE AND MANHOLE COVERS REPLACEMENT	
CRA UPS REPLACEMENT	
CRA VILLAGES DOMESTIC WATER MAIN DISTRIBUTION REPLACEMENT STUDY	
CRA WATER DISTRIBUTION SYSTEM & VILLAGE ASPHALT REPLACEMENT - GENE & IRON MOUNTAIN	
CRA WATER DISTRIBUTION SYSTEM REPLACEMENT AND CRA ROADWAY ASPHALT REPLACEMENT - ALL PP	
CUF DECHLORINATION SYSTEM	
DAM SLUICWAYS AND OUTLETS REHABILITATION	
DANBY TOWER FOOTER REPLACEMENT	
DANBY TOWERS FOUNDATION REHABILITATION	
DESERT FACILITIES FIRE PROTECTION SYSTEMS UPGRADE	
DESERT LAND ACQUISITIONS	
DESERT PUMP PLANT OIL CONTAINMENT	
DESERT ROADWAY IMPROVEMENT	
DESERT SEPTIC SYSTEM	
DESERT SEWER SYSTEM REHABILITATION	
DESERT WATER TANK ACCESS - FIRE WATER, CIRCULATING WATER, DOMESTIC WATER- STUDY	
DISCHARGE LINE ISOLATION BULKHEAD COUPLINGS	
DISTRIBUTION SYSTEM FACILITIES - REHABILITATION PROGRAM	
DISTRIBUTION SYSTEM FACILITIES REHABILITATION PROGRAM - MAINTENANCE & STORAGE SHOP (PC-1)	
DISTRIBUTION SYSTEM RELIABILITY PROGRAM - PHASE 2	
DVL INLET / OUTLET TOWER FISH SCREENS REPLACEMENT	
DVL TO SKINNER TRANSMISSION LINE STUDY	
E. THORNTON IBBETSON GUEST QUARTERS	
EAGLE AND HINDS EQUIPMENT WASH AREA UPGRADE	
EAGLE KITCHEN UPGRADE	
EAGLE MOUNTAIN PUMPING PLANT SCADA SYSTEM	
EAGLE MOUNTAIN SAND TRAPS STUDY	
EAGLE MOUNTAIN SIPHONS SEISMIC VULNERABILITY STUDY	
EAGLE MTN SAND TRAPS STUDY	
EAGLE ROCK ASPHALT REPAIR PROJECT	
EAGLE ROCK MAIN ROOF REPLACEMENT	
ENHANCED VAPOR RECOVERY UPGRADES FOR GASOLINE DISPENSERS	
ENVIRONMENTAL MITIGATION	
ETIWANDA PIPELINE LINER REPAIR	
ETIWANDA RESERVOIR LINER REPAIR	
FUTURE SYSTEM RELIABILITY PROJECTS	
GARVEY RESERVOIR - AUTOMATED DATA ACQUISITION SYSTEM	
GARVEY RESEVOIR AUTOMATED DATA ACQUISITION SYSTEM REPLACEMENT	
GENE & INTAKE P.P. - FREQUENCY PROTECTION RELAY REPLACEMENT	
GENE & INTAKE PUMPING PLANT SURGE CHAMBER OUTLET GATES RE-COATING	
GENE & INTAKE PUMPING PLANTS - REPLACE UNDER FREQUENCY PROTECTION RELAY	
GENE AIR CONDITION	
GENE CAMP STATION SERVICE TRANSFORMER REPLACEMENT	
GENE PUMPING PLANT - AIR STRIP EXTENSION PROJECT	
GENE PUMPING PLANT - HEAVY EQUIPMENT SERVICE PIT	

<p style="text-align: center;">TABLE 3 CONVEYANCE, DISTRIBUTION, AND STORAGE SYSTEM COSTS</p>
<p>Description <u>Conveyance and Aqueduct Facilities</u></p> <p> GENE PUMPING PLANT - PEDDLER SUBSTATION REPLACEMENT GENE PUMPING PLANT - SCADA SYSTEM GENE PUMPING PLANT EXPANSION JOINT REHABILITATION GENE PUMPING PLANT MAIN TRANSFORMER AREA GENE PUMPING PLANT STANDBY GENERATOR REPLACEMENT GENE STORAGE BUILDING REPLACEMENT GENE STORAGE WAREHOUSE REPLACEMENT GENE WASH RESERVOIRS DISCHARGE VALVE REHABILITATION HEADGATE OPERATORS & CIRCUIT BREAKERS REHAB. HIGHLAND PIPELINE CONSTRUCTION HINDS EAGLE & IRON MOUNTAINS STORAGE BUILDINGS HINDS PUMPING PLANT DISCHARGE VALVE PIT PLATFORM REPLACEMENT HINDS PUMPING PLANT EQUIPMENT WASH AREA UPGRADES HINDS PUMPING PLANT SCADA SYSTEM HINDS PUMPING PLANT STANDBY GENERATOR REPLACEMENT INLAND FDR, ARROWHEAD TUNNELS REDESIGN INLAND FDR, ARROWHEAD WEST TUNNEL CONSTRUCTION INLAND FDR, CONTRACT 9, CONSTRUCTION OF RIVERSIDE PPLN SOUTH INLAND FDR, OWNER CONTROLLED INSURANCE PROGRAM INLAND FDR, REACH 4, RUSD PPLN INLAND FDR-CNTR #1/DEVIL CYN-WATERMAN RD INLAND FDR-CNTR #4-SOFT GRND TNL/SANTA ANA INLAND FDR-CONT #8-PIPEL PARALLEL TO DAVIS RD INLAND FDR-ENVIRON. MITIG. INLAND FEEDER - RIGHT OF WAY AND EASEMENT PROCUREMENT INLAND FEEDER CONTINGENCY INLAND FEEDER COST OF LAND AND RIGHT OF WAY INLAND FEEDER ENVIRONMENTAL MITIGATION INLAND FEEDER GROUNDWATER MONITORING INLAND FEEDER HIGHLAND PIPELINE CLAIMS COST INLAND FEEDER HIGHLAND PIPELINE CONSTRUCTION INLAND FEEDER HIGHLAND PIPELINE DESIGN INLAND FEEDER MENTONE PIPELINE CONSTRUCTION INLAND FEEDER MENTONE PIPELINE DESIGN INLAND FEEDER MENTONE PIPELINE RUSD CONSTRUCTION INLAND FEEDER OWNER CONTROLLED INSURANCE PROGRAM INLAND FEEDER PROGRAM REMAINING BUDGET/CONTINGENCY INLAND FEEDER PROJECT MANAGEMENT SUPPORT INLAND FEEDER PURCHASE OF LAND AND RIGHT OF WAY INLAND FEEDER RAISE BURIED STRUCTURES AND REALIGN DAVIS RD. INLAND FEEDER REVERSE OSMOSIS PLANT INLAND FEEDER RIVERSIDE BADLANDS TUNNEL CONSTRUCTION INLAND FEEDER RIVERSIDE NORTH PIPELINE DESIGN INLAND FEEDER RUSD CLAIMS DEFENSE INLAND FEEDER STUDIES INLAND FEEDER UNDERGROUND STORAGE TANK REMOVAL & ABOVEGROUND STORAGE TANK INSTALLATION INLAND FEEDER, ARROWHEAD EAST TUNNEL INLAND FEEDER, ARROWHEAD TUNNELS CONSTRUCTION INLAND FEEDER, CONTRACT #5, OPAL AVENUE PORTAL / BADLANDS TUNNEL INLAND FEEDER, CONTRACT #7, RIVERSIDE NORTH PIPELINE CONSTRUCTION INLAND FEEDER, PROGRAM MANAGEMENT INLAND FEEDER/SBMWD HIGHLAND INTERTIE BYPASS LINE REHAB INSULATION JOINT TEST STATIONS INTAKE POWER AND COMMUNICATION LINE RELOCATION INTAKE POWER AND COMMUNICATIONS LINE RELOCATION INTAKE PPLANT - POWER & COMMUNICATION LINE REPLACEMENT INTAKE PUMPING PLANT - COOLING AND REJECT WATER DISCHARGE TO LAKE HAVASU INTAKE PUMPING PLANT AUTOMATION PROGRAMMING INTAKE PUMPING PLANT INSTRUMENTATION REPLACEMENT INTAKE PUMPING PLANT INSTRUMENTATION REPLACEMENT & AUTOMATION INTAKE PUMPING PLANT INSTRUMENTATION REPLACEMENT & AUTOMATION (4 PLANTS) INTAKE PUMPING PLANT POWER & COMMUNICATION LINE REPLACEMENT INTAKE PUMPING PLANT SCADA SYSTEM INTAKE PUMPING PLANT STANDBY GENERATOR REPLACEMENT IRON MOUNTAIN & EAGLE MOUNTAIN 230KV TRANSMISSION LINE PILOT RELAY IRON MOUNTAIN AUXILIARY POWER SYSTEM REHABILITATION IRON MOUNTAIN GENERATOR REPLACEMENT IRON MOUNTAIN PUMPING PLANT IRON MOUNTAIN PUMPING PLANT DELIVERY LINE NO. 1 RELINING IRON MOUNTAIN PUMPING PLANT HOUSING REPLACEMENT IRON MOUNTAIN PUMPING PLANT SCADA SYSTEM IRON MOUNTAIN SERVICE PIT REHABILITATION IRON MOUNTAIN & EAGLE MOUNTAIN 230kv TRANSMISSION LINE PILOT RELAY JULIAN HINDS PUMPING PLANT DELIVERY PIPE EXPANSION JOINT PHASE 2 REPAIRS JULIAN HINDS PUMPING PLANT DELIVERY PIPE EXPANSION JOINT PHASE I REPAIR LAKE MATHEWS FOREBAY & HEADWORK FACILITY & EQUIPMENT LAKE MATHEWS FOREBAY WALKWAY REPAIRS LAKE MATHEWS ICS LAKE MATHEWS INTERIM CHLORINATION SYSTEM LAKE SKINNER - OUTLET CONDUIT FLOWMETER INSTALLATION LAKE SKINNER BYPASS PIPELINE NO. 2 CATHODIC PROTECTION LAKE SKINNER OUTLET CONDUIT LAKEVIEW PIPELINE LEAK REPAIR AT STA. 2510+49 LAVERNE FACILITIES - EMERGENCY GENERATOR LAVERNE FACILITIES - MATERIAL TESTING LOWER FEEDER EROSION PROTECTION MAGAZINE CANYON - VALVE REPLACEMENT FOR SAN FERNADO TUNNEL (STATION 778+80) MAGAZINE CANYON OIL & WATER SEPARATOR MAGAZINE CANYON OIL/WATER SEPARATOR MAPES LAND ACQUISITION MENTONE PPLN, RUSD, DEFENSE OF CLAIM MILE 12 FLOW AND CHLORINE MONITORING STATION UPGRADES MILE 12 POWER LINE & FLOW MONITORING EQUIPMENT STUDY MILLS PLANT SUPPLY PUMP STATION STUDY MINOR CAP FY 2011/12 MOTOR BREAKER FAULTY (5 PPLANTS) </p>

TABLE 3 CONVEYANCE, DISTRIBUTION, AND STORAGE SYSTEM COSTS	
Description	
<u>Conveyance and Aqueduct Facilities</u>	
NEW HALL TUNNEL - REPAIR STEEL LINER NEW HALL TUNNEL - UPGRADE LINER SYSTEM NITROGEN STORAGE STUDY AT DVL, INLAND FEEDER PC-1, AND LAKE MATHEWS OC 44 SERVICE CONNECTIONS & EOC#2 METER ACCESS ROAD REPAIR OC 88 PUMP PLANT FIRE PROTECTION STUDY OC-71 SERVICE CONNECTION REPAIRS OLINDA PCS FACILITY REHABILITATION AND UPGRADE OLINDA PRESSURE CONTROL STRUCTURE FACILITY REHABILITATION AND UPGRADE ORANGE COUNTY 44 SERVICE CONNECTIONS & EOC#2 METER ACCESS ROAD REPAIR ORANGE COUNTY 88 PUMP PLANT FIRE PROTECTION STUDY OWNER CONTROLLED INSURANCE PROGRAM PALO VERDE VALLEY LAND PURCHASE - 16,000 ACRES PALOS VERDES FEEDER REHABILITATION OF DOMINGUEZ CHANNEL PALOS VERDES RESERVOIR SPILLWAY MODIFICATION PROJECT MANAGEMENT SUPPORT PUDDINGSTONE RADIAL GATE REHABILITATION PURCHASE OF LAND AND RIGHT OF WAY QUAGGA MUSSEL STUDY R&R FOR CRA REPAIR UPPER FEEDER LEAKING EXPANSION JOINT REPAIRS TO TUNNELS RIALTO FEEDER REPAIR @ STA. 3662+23 RIALTO FEEDER REPAIR OF ANOMALOUS PIPE SECTION RIVERSIDE BADLANDS TUNNEL CONSTRUCTION RIVERSIDE BRANCH - ALESSANDRO BLVD. LEFT LAND TURN LANE RIVERSIDE BRANCH - CONSTRUCTION OF CONTROL PANEL DISPLAY WALL RIVERSIDE NORTH PIPELINE DESIGN & CONSTRUCTION RIVERSIDE SOUTH PIPELINE CONSTRUCTION SAN DIEGO PIPELINE REPAIR AT STATION 1268+57 SAN FERNANDO TUNNEL STATION 778+80 VALVE REPLACEMENT SAN GABRIEL TOWER SEISMIC ASSESSMENT SAN GABRIEL TOWER SLIDE GATE REHABILITATION SAN JACINTO TUNNEL EAST ADIT REHABILITATION SAN JACINTO TUNNEL, WEST PORTAL SAN JOAQUIN RESERVOIR - NEW DESIGN SAN JOAQUIN RESERVOIR IMPROVEMENT- FLOATING COVER SAN JOAQUIN RESERVOIR IMPROVEMENTS SAN JOAQUIN RESERVOIR IMPROVEMENTS STUDY SAND TRAP CLEANING EQUIPMENT AND TRAVELING CRANE STUDY SANTA ANA RIVER BRIDGE SEISMIC RETROFIT SANTIAGO TOWER ACCESS ROAD UPGRADE SANTIAGO TOWER PATROL ROAD REPAIR SD5 REPAIR SECOND LOWER FEEDER STRAY CURRENT MITIGATION SYSTEMS REFURBISHMENT SECURITY FENCING AT OC-88 PUMPING PLANT SEISMIC EVALUATION OF CRA STRUCTURES SEISMIC PROGRAM SEISMIC UPGRADE OF 11 FACILITIES OF THE CONVEYANCE & DISTRIBUTION SYSTEM SEPULVEDA FEEDER CORROSION INTERFERENCE MITIGATION SEPULVEDA FEEDER REPAIR AT STATION 1099 SEPULVEDA FEEDER STRAY CURRENT MITIGATION SYSTEM REFURBISHMENT SERVICE CONNECTION & EOCF #2 METER ACCESS ROAD UPGRADE & BETTERMENT SERVICE CONNECTION DWCV-2T VALVES REPLACEMENT AND STRUCTURE CONSTRUCTION SKINNER BR - IMPROVE CABAZON RADIAL GATE FACILITY SUCTION & DISCHARGE LINES EXPANSION JOINT STUDY SWITCHYARDS AND HEAD GATES REHAB TEMESCAL HYDRO-ELECTRIC PLANT ACCESS ROAD UPGRADE TEMESCAL POWER PLANT ACCESS ROAD PAVING TRANSFORMER OIL & CHEMICAL UNLOADING PAD CONTAINMENT TRANSFORMER OIL AND SODIUM HYPOCHLORITE CONTAINMENT PROJECT U.S. BUREAU OF LAND MANAGEMENT LAND ACQUISITION UPPER FEEDER CATHODIC PROTECTION SYSTEM UPPER FEEDER GATES REHABILITATION PROJECTS UPPER FEEDER LEAKING EXPANSION JOINT REPAIR VALLEY BRANCH - PIPELINE CORROSION TEST STATION WASTEWATER SYSTEM REHABILITATION WASTEWATER SYSTEM REHABILITATION - GENE/IRON MTN WASTEWATER SYSTEM REHABILITATION - HINDS/EAGLE MTN WEST VALLEY FEEDER #2 CATHODIC PROTECTION SYSTEM REHABILITATION WHITE WATER SIPHON PROTECTION WHITEWATER EROSION PROTECTION STRUCTURE REHABILITATION WHITEWATER SIPHON EROSION PROTECTION WHITEWATER SIPHON PROTECTION STRUCTURE	
<i>Sub-total Conveyance and Aqueduct facilities costs</i>	\$ 76,253,010

TABLE 3 CONVEYANCE, DISTRIBUTION, AND STORAGE SYSTEM COSTS	
Description	
Distribution Facilities	
108TH STREET PRESSURE CONTROL STRUCTURE VALVE REPLACEMENT	
42" CONICAL PLUG VALVE REPLACEMENT	
ACCUSONIC FLOW METER UPGRADE	
ACCUSTIC FIBER OPTIC MONITORING OF PCCP LINES	
ALAMEDA CORRIDOR PIPELINE	
ALL FACILITIES - WATER DISCHARGE ELIMINATION	
ALL FACILITIES, INSPECTION AND REPLACEMENT OF CRITICAL VACUUM VALVES	
ALL FEEDERS - MANHOLE LOCKING DEVICE RETROFIT	
ALL PUMPING PLANTS - INSTALL HYPOCHLORINATION STATIONS	
ALLEN MCCOLLOCH PIPELINE 2010 REFURBISHMENT	
ALLEN MCCOLLOCH PIPELINE CATHODIC PROTECTION	
ALLEN MCCOLLOCH PIPELINE INTERCONNECTIONS	
ALLEN MCCOLLOCH PIPELINE LOCAL CONTROL MODIFICATIONS	
ALLEN MCCOLLOCH PIPELINE REPAIR	
ALLEN MCCOLLOCH PIPELINE REPAIR - CARBON FIBER LINING REPAIR	
ALLEN MCCOLLOCH PIPELINE REPAIR - SERVICE CONNECTIONS UPGRADES	
ALLEN MCCOLLOCH PIPELINE REPAIR - STATION 276+63	
ALLEN MCCOLLOCH PIPELINE REPAIR - SURGE SUPPRESSION SYSTEM AT OC88A	
ALLEN MCCOLLOCH PIPELINE REPAIR - VALVE ACTUATOR REPLACEMENTS	
ALLEN MCCOLLOCH PIPELINE REPAIR SERVICE CONNECTIONS SIMPLIFICATION	
ALLEN MCCOLLOCH PIPELINE STRUCTURE - ROOF SLAB REPAIRS	
ALLEN MCCOLLOCH PIPELINE VALVE VAULT REPAIRS	
ALLEN-MCCOLLOCH CORROSION/INTERFERENCE MITIGATION, STATION 719+34 TO 1178+02	
ALLEN-MCCOLLOCH PIPELINE	
ALLEN-MCCOLLOCH PIPELINE OC-76 TURNOUT RELOCATION	
ALLEN-MCCOLLOCH PIPELINE PCCP REHABILITATION	
ALLEN-MCCOLLOCH PIPELINE REFURBISHMENT - STAGE 2	
ALLEN-MCCOLLOCH PIPELINE VALVE AND SERVICE CONNECTION VAULT REPAIRS	
AMP -SERVICE CONNECTIONS UPGRADES	
AMP -VALVE ACTUATOR REPLACEMENTS	
AMP COMPLETION RESOLUTION RIGHT OF WAY ISSUES	
AMR - RTU UPGRADE - PHASE 2	
ANODE WELL REPLACEMENT FOR ORANGE COUNTY AND RIALTO FEEDERS	
APPIAN WAY VALVE REPLACEMENT	
ARROW HIGHWAY PROPERTY DEVELOPMENT	
ASPHALT REHABILITATION AT WEYMOUTH FINISHED WATER RESERVOIR	
ASPHALT REPAIRS TO PERIMETER OF SEPULVEDA PCS	
ASSESS THE CONDITION OF METROPOLITAN'S PRESTRESSED CONCRETE CYLINDER PIPE	
ASSESS THE CONDITIONS OF MET'S	
ASSESSMENT OF PRESTRESSED CONCRETE CYLINDER PIPELINES - PHASE 3	
AULD VALLEY CONTROL STRUCTURE AREA FACILITIES	
AUTOMATED RESERVOIR WATER QUALITY MONITORING	
AUTOMATIC METER READING SYSTEM - RTU UPGRADE PHASE 2	
AUTOMATIC METER READING SYSTEM UPGRADE	
AUTOMATION COMMUNICATION UPGRADE	
AUTOMATION DOCUMENTATION SURVEY F/A	
BAR 97- ENHANCED AREA VEHICLE TESTING	
BATTERY MONITORING SYSTEM FOR AUTOMATIC METER READING SYSTEM	
BIXBY VALVE REPLACEMENT	
BLACK METAL MOUNTAIN ELECTRICAL TRANSFORMER	
BOX SPRINGS FEEDER BROKEN BACK REPAIR	
BOX SPRINGS FEEDER BROKEN BACK REPAIR PHASE I	
BOX SPRINGS FEEDER PHASE 3 AND 4 ENVIRONMENTAL MONITORING	
BOX SPRINGS FEEDER REPAIR - PHASE II	
BOX SPRINGS FEEDER REPAIRS PHASE 3 AND PHASE 4	
C&D CRANE INSTALLATION AT OC-88 PUMPING PLANT	
CAJALCO CREEK DAM MANHOLE COVER RETROFIT	
CAJALCO CREEK DETENTION DAM SPILLWAY ACCESS ROAD	
CALABASAS FEEDER CARBON FIBER /BROKEN BACK REPAIR	
CALABASAS FEEDER INTERFERENCE MITIGATION	
CALABASAS FEEDER PCCP REHABILITATION	
CALABASAS FEEDER REPAIR, STUDY	
CAPITAL PROGRAM FOR PROJECTS COSTING LESS THAN \$250,000 FOR FY 2010/11	
CAPITAL PROJECTS COSTING LESS THAN \$250,000 FOR FY2008-09	
CARBON CREEK PRESSURE CONTROL STRUCTURE SEISMIC ASSESSMENT	
CARBON CREEK PRESSURE CONTROL STRUCTURE SEISMIC RETROFIT	
CASA LOMA AND SAN DIEGO CANAL LINING STUDY - PART 2	
CASA LOMA SIPHON BARREL 1 & 2 DVL AND SD CANAL FLOW METER REPLACEMENT	
CASA LOMA SIPHON BARREL NO. 1 - PERMANENT REPAIRS	
CASA LOMA SIPHON BARREL NO. 1 JOINT REPAIR	
CASA LOMA SIPHON NO 1, CASA LOMA CANAL & SAN DIEGO CANAL FLOW METER REPLACEMENT	
CATHODIC PROTECTION FOR THE FOOTHILL FEEDER	
CATHODIC PROTECTION SYSTEM UPGRADES	
CCP-PHASE 2 CONSTRUCTION	
CDSRP - DISCHARGE ELIMINATION	
CDSRP - ENTRAINED AIR IN UPPER FEEDER PIPELINE STUDY	
CDSRP - SEPULVEDA FEEDER REPAIRS	
CDSRP - SEPULVEDA TANKS RECOATING	
CENTRAL POOL AUGMENTATION - TUNNEL AND PIPELINE & RIGHT-OF-WAY ACQUISITION	
CENTRAL POOL AUGMENTATION (CPA) PROGRAM - PIPELINE AND TUNNEL ALIGNMENT	
CENTRAL POOL AUGMENTATION AND WATER QUALITY PROJECT (CPAWQP)	
CHEMICAL INVENTORY AND USAGE REWRITE AND ELECTRICAL. SYSTEM LOG	
CHEMICAL UNLOADING FACILITY RETROFIT	
CHEVALIER FALCON MILLING MACHINE	
COASTAL JUNCTION REVERSE FLOW BYPASS	
COASTAL PRESSURE CONTROL STRUCTURE ROOF REPLACEMENT	
COLLIS AVENUE VALVE REPLACEMENT	
COLLIS VALVE REPLACEMENT	
COLORADO RIVER AQUEDUCT CASA LOMA SIPHON BARREL NO. 1 PROJECT NO. 2 - PERMANENT REPAIRS	
COMMUNICATIONS STRUCTURE ALARM MONITORING	
COMPREHENSIVE INFORMATION SECURITY ASSESSMENT PHASE III	
CONSTRUCTION PHASE 2	
CONTRACT & LITIGATION TASKS -CONTRACT # 1396	

<p style="text-align: center;">TABLE 3 CONVEYANCE, DISTRIBUTION, AND STORAGE SYSTEM COSTS</p>
<p>Description Distribution Facilities</p> <p>CONTROL SYSTEM DATA STORAGE AND REPORTING CONTROL SYSTEM DRAWING & DOCUMENTATION UPDATE CONTROL SYSTEM ENHANCEMENT PROGRAM (CSEP) - DIGITAL SUBNET STANDARDIZATION CONTROL SYSTEMS AUTOMATION COMMUNICATION UPGRADE CONTROLS COMMUNICATIONS FRAME RELAY CONVERSION - APPROPRIATED CONVERSION OF DEFORMATION SURVEY MONITORING AT GENE WASH, COPPER BASIN, AND DIEMER BASIN 8 CONVEYANCE AND DISTRIBUTION SYSTEM ELECTRICAL STRUCTURES REHABILITATION CONVEYANCE AND DISTRIBUTION SYSTEM REHABILITATION PROGRAM (CDSRP) - CURRENT DRAIN STATIONS COPPER BASIN ICS COPPER BASIN SEWER SYSTEM CORONA POWER PLANT REPLACE EMERGENCY GENERATOR CORROSION MATERIALS TESTING FACILITY SCADA UPGRADE COVINA PRESSURECONTROL FACILITY COYOTE CREEK NORTHERN PERIMETER LANDSCAPING COYOTE PRESSURE CONTROL STRUCTURE ROOF REPLACEMENT CPA PIPELINE & TUNNEL ALIGNMENT CPA PIPELINE & TUNNEL ALIGNMENT - NON FUNDED PORTION CPA PIPELINE & TUNNEL ALIGNMENT - STUDY CPA WATER TREATMENT PLANT - NON FUNDED PORTION CPA WATER TREATMENT PLANT - RIGHT OF WAY - PHASE 2 CPAWQP - PHASE 2 CPAWQP - STUDY AND LAND ACQUISITION - CONTINGENCY CPAWQP - STUDY AND LAND ACQUISITION - PIPELINE & TUNNEL ALIGNMENT - STUDY CPAWQP - STUDY AND LAND ACQUISITION - RIGHT-OF-WAY-ACQUISITION CPAWQP - STUDY AND LAND ACQUISITION - WATER TREATMENT PLANT - RIGHT OF WAY - PHASE 2 CPAWQP - STUDY AND LAND ACQUISITION - WATER TREATMENT PLANT - STUDY CRA - PC-1 EFFLUENT OPEN CHANNEL TRASH RACK CRA CABAZON & POTRERO SHAFT COVERS CRA CONTROL INTEGRATION CRA PROTECTIVE SLAB AT STATION 9704+77 CROSS CONNECTION PREVENTION PROGRAM - PHASE II CONSTRUCTION CROSS CONNECTION PREVENTION PROJECT, COMPLETE PRELIMINARY DESIGN AND CEQA DOCUMENTATION CSEP - ELECTRONIC SYSTEM LOG (ESL) CSEP - ENERGY MANAGEMENT SYSTEM PHASE II CSEP - ENHANCED DISTRIBUTION SYSTEM CONTROL PROJECT CSEP - IMPLEMENTATION CSEP - OPERATIONS & BUSINESS DATA INTEGRATION PILOT CSEP - PLANT INFLUENT REDUNDANT FLOW METERING AND SPLITTING CSEP - PLC PHASE 2 - LIFE-CYCLE REPLACEMENT CSEP - PLC STANDARDIZATION CSEP - PLC STANDARDIZATION PHASE II CSEP - POWER MANAGEMENT SYSTEM CSEP - WATER PLANNING APPLICATION CSEP IMPLEMENTATION CSEP- SMART OPS (FORMERLY REAL TIME OPERATIONS SIMULATION) CURRENT DRAIN STATIONS DAM REHABILITATION & SAFETY IMPROVEMENTS ST. JOHN'S CANYON CHANNEL EROSION MITIGATION DANBY TOWER FOUNDATION INVESTIGATION AND SHORT TERM MITIGATION DEODERA PCS PAVEMENT UPGRADE & BETTERMENT DESERT BRANCH - REPLACE STOLEN COPPER GROUND WIRE FOOTINGS/GROUNDING, AND COPPER PIPING DESERT BRANCH PUMP PLANT AUXILIARY (STATION SERVICE) DESERT BRANCH, PURCHASE & INSTALL 5 PORT VIDEO CONFERENCING DESERT FACILITIES DOMESTIC WATER GAC SYSTEM INSTALLATION DESERT HIGH VOLTAGE TRANSMISSION TOWERS - REPLACE COPPER GROUND WIRES ON DETAIL SEISMIC EVALUATION OF WATER STORAGE TANK DFFP - ELIMINATE BACKUP GENERATOR TIE-BUS & INSTALL MANUAL TRANSFER SWITCH FOR CHLORINE SCRUBBER DIEMER FILTRATION PLANT - SLOPE REPAIR DIEMER OZONE COOLING WATER ALTERNATIVE SOURCE DIRECTIONAL SIGNS FOR DIAMOND VALLEY LAKE FACILITY DISCHARGE ELIMINATION DIST SYS-AIR RELEASE & VAC VALVE MODS DISTRIBUTION SYSTEM - CCPP CONSTRUCTION PACKAGES 9,11,12 DISTRIBUTION SYSTEM - STANDPIPE STRENGTHENING PROGRAM DISTRIBUTION SYSTEM - STATIONARY CORROSION REFERENCE DISTRIBUTION SYSTEM - TREATED WATER CROSS CONNECTION PREVENTION PROJECT - FINAL DESIGN & CONSTRUCTION DISTRIBUTION SYSTEM ASSESSMENTS/UPGRADES OF LOS ANGELES COUNTY DISTRIBUTION SYSTEM ASSESSMENTS/UPGRADES OF RIVERSIDE AND SAN DIEGO COUNTY DISTRIBUTION SYSTEM ASSESSMENTS/UPGRADES OF SAN BERNARDINO COUNTY DISTRIBUTION SYSTEM CONTROL & EQUIP UPGRADE - ENHANCED DISTRIB. SYSTEM AUTOMATION PHASE I DISTRIBUTION SYSTEM EQUIPMENT & INSTRUMENTATION UPGRADES DISTRIBUTION SYSTEM INFRASTRUCTURE PROTECTION IMPROVEMENTS FOR ORANGE COUNTY DISTRIBUTION SYSTEM REHABILITATION PROGRAM - ASSESS THE STATE OF MWD'S DISTRIBUTION SYSTEM DISTRIBUTION SYSTEM REPLACEMENT OF AREA CONTROL SYSTEMS - WILLOWGLEN RTUS ADMINISTRATION DISTRIBUTION SYSTEM REPLACEMENT OF AREA CONTROL SYSTEMS (DSRACS) DISTRICT WIDE - ENHANCED VAPOR RECOVERY PHASE 2 GASOLINE DISPENSING DSRACS - OPERATIONS CONTROL CENTER - CONTRACT #1396 DSRACS - SKINNER AREA DSRACS - SOFTWARE DEVELOPMENT COST DSRACS - WEYMOUTH DVL & CONTROL SYSTEM REPLACEMENT INVESTIGATION & PREPARATION FOR PRELIMINARY DESIGN DVL VIEWPOINT ROAD SECURITY UPGRADES EAGLE EQUIPMENT WASH AREA UPGRADE EAGLE ROCK - ASPHALT REHABILITATION EAGLE ROCK - FIRE PROTECTION AT THE WESTERN AREA OF THE EAGLE ROCK CONTROL CENTER PERIMETER GROUNDS EAGLE ROCK CONTROL CENTER FIREHYDRANT EAGLE ROCK LATERAL INTERCONNECTION REPAIR EAGLE ROCK MAIN BUILDING ROOF REPLACEMENT - STUDY EAGLE ROCK OCC - REHAB CONTROL ROOM EAGLE ROCK OPERATIONS CONTROL CENTER EAGLE ROCK RESIDENCE CONVERSION EAGLE ROCK TOWER AND PUDDINGSTONE SPILLWAY GATES REHABILITATION EAGLE ROCK TOWER SLIDE GATE REHABILITATION EAST INFLUENT CHANNEL REPAIR PROJECT</p>

<p style="text-align: center;">TABLE 3 CONVEYANCE, DISTRIBUTION, AND STORAGE SYSTEM COSTS</p>
<p>Description</p> <p><u>Distribution Facilities</u></p> <p>EAST ORANGE COUNTY FEEDER #2 REPAIR EAST ORANGE COUNTY FEEDER NO. 2 SERVICE CONNECTION A-6 REHABILITATION EAST VALLEY FEEDER VALVE STRUCTURE ELECTRICAL UPGRADE EASTERN AND DESERT REGIONS PLUMBING RETROFIT EASTERN REGION PCCP JOINT MODIFICATION 2012 E-DISCOVERY STORAGE MANAGEMENT SYSTEM UPGRADE ELECTRIC CURRENT DRAIN STATION INSTALLATIONS ELECTRICAL UPGRADES AT 15 STRUCTURES, OC REGION ELECTROMAGNETIC INSPECTIONS OF PCCP LINES ELECTRONIC SYSTEM LOG (ESL) ENERGY MANAGEMENT SYSTEM - PHASE 2 ENHANCED DISTRIBUTION SYSTEM AUTOMATIC FLOW TRANSFERS SOFTWARE REDEVELOPMENT ENHANCED DISTRIBUTION SYSTEM AUTOMATION PHASE I ENHANCED DISTRIBUTION SYSTEM AUTOMATION PHASE II ENVIRONMENTAL REGULATORY AGREEMENTS AND OTHER REGULATORY AGENCY EQUIPMENT UPGRADE AT THE NORTH PORTAL OF THE HOLLYWOOD TUNNEL ETIWANDA / RIALTO PIPELINE INTER-TIE CATHODIC PROTECTION ETIWANDA CAVITATION FACILITY INFRASTRUCTURE REHABILITATION ETIWANDA CAVITATION TEST FACILITY COMMUNICATION AND CONTROL SYSTEM REPLACEMENT ETIWANDA HEP NEEDLE VALVE OPERATORS ETIWANDA PIPELINE - LINING REPLACEMENT ETIWANDA PIPELINE AND CONTROL FACILITY - RIGHT OF WAY ETIWANDA PIPELINE AND CONTROL FACILITY - AS BUILT ETIWANDA PIPELINE AND CONTROL FACILITY - CATHODIC PROTECTION ETIWANDA PIPELINE AND CONTROL FACILITY - EMERGENCY DISCHARGE CONDUITS ETIWANDA PIPELINE AND CONTROL FACILITY - LANDSCAPING AND IRRIGATION ETIWANDA PIPELINE AND CONTROL FACILITY - RESIDENCES ETIWANDA PIPELINE AND CONTROL FACILITY - RIALTO FEEDER TO UPPER PIPELINE ETIWANDA PIPELINE LINING REPAIRS ETIWANDA PIPELINE LINING REPLACEMENT ETIWANDA RESERVOIR - EXTEND OUTLET STRUCTURE FACILITY AND PROCESS RELIABILITY ASSESSMENT FAIRPLEX AND WALNUT PCS VALVES REPLACEMENT FILTER ISOLATION GATE AND BACKWASH CONTROL WEIR COVERS MODULES 1- 6 FLOW METER REPLACEMENT PROJECT FLOWMETER MODIFICATION - LAKE SKINNER INLET, ETIWANDA EFFLUENT & WADSWORTH CROSS CHANNEL FOOTHILL & SEPULVEDA FEEDER PCCP CARBON FIBER JOINT REPAIRS FOOTHILL FEEDER - CASTAIC VALLEY BLOW-OFF VALVES REPLACEMENT FOOTHILL FEEDER ADEN AVE. REHABILITATION FOOTHILL FEEDER CARBON FIBER REPAIR FOOTHILL FEEDER CATHODIC PROTECTION FOOTHILL FEEDER PIPELINE REPLACEMENT PROJECT FOOTHILL FEEDER POWER PLANT EXPANSION FOOTHILL FEEDER REPAIR @ SANTA CLARITA RIVER FOOTHILL FEEDER, CARBON FIBER REPAIRS FOOTHILL HYDROELECTRIC RUNNER REPLACEMENT FOOTHILL PCS - UNINTERRUPTIBLE POWER SOURCE SYSTEMS INSTALLATION FOOTHILL PCS FLOOD PUMP INSTALLATION DESIGN DOCUMENTATION FOOTHILL PCS INTERNAL VALVE LINERS UPGRADE FUTURE SYSTEM RELIABILITY PROGRAM GARVEY RESERVOIR - HYPOCHLORITE FEED SYSTEM GARVEY RESERVOIR - INSTALL HYPOCHLORINATION STATIONS GARVEY RESERVOIR - LOWER ACCESS PAVING ROAD & DRAINS GARVEY RESERVOIR CONTROL VALVES REPLACEMENT GARVEY RESERVOIR HYPOCHLORITE FEED SYSTEM GARVEY RESERVOIR SITE DRAINAGE REPAIRS AND MODIFICATIONS GARVEY RESERVOIR SODIUM HYPOCHLORITE FEED SYSTEM REHABILITATION GENE & IRON POOLS GENE AIR CONDITIONING SYSTEM REPLACEMENT GENE MESS HALL AIR CONDITIONING UNIT GENE SPARE PARTS WAREHOUSE IMPROVEMENTS GLENDALE 01 SERVICE CONNECTION REHAB GLENDALE-01 SERVICE CONNECTION REHABILITATION AND UPGRADE GLENDALE-01 SERVICE CONNECTION REHABILITATION GREG AVE PCS FACILITY REHABILITATION GREG AVENUE CONTROL STRUCTURE VALVE REPLACEMENT GREG AVENUE PCS - PUMP MODIFICATIONS AND NEW CONTROL BUILDING GREG AVENUE PCS CONTROL BUILDING INTERIOR REHABILITATION HINDS GARAGE ASBESTOS SHEETING REPLACEMENT HOLLYWOOD TUNNEL NORTH PORTAL EQUIPMENT UPGRADES HVAC MODIFICATIONS FOR ELECTRICAL SAFETY AND RELIABILITY HYDRAULIC MODELING PROJECT HYDROELECTRIC PLANT CARBON DIOXIDE (CO2) FIRE SUPPRESSION SYSTEM MODIFICATIONS HYDROELECTRIC POWER PLANT (HEP) DISCHARGE ELIMINATION IAS PROJECTS - CPA IAS PROJECTS - DVL-SKINNER IAS PROJECTS - MILLS SUPPLY RELIABILITY INLAND FEEDER AND LAKEVIEW PIPELINE INTERTIE INLAND PCSUST REMOVAL & AST INSTALLATION INSTALL MOTION SENSORS IN NEW EXPANSION INSTALL TEST LEADS AT FOUR LOCATIONS INSULATION JOINT TEST STATIONS INTAKE PUMPING PLANT - UNDER FREQUENCY PROTECTION RELAY UPGRADE IRON MOUNTAIN - TRANSFORMER OIL TANK RELOCATION JENSEN DISTRIBUTION SYSTEM - REPLACEMENT OF AREA CONTROL SYSTEMS - CONTRACT # 1396 JENSEN EGEN UST UPGRADE - LINE LEAK DETECTOR INSTALLATION JENSEN FILTER EFFLUENT TURBIDIMETER RELIABILITY</p>

<p style="text-align: center;">TABLE 3 CONVEYANCE, DISTRIBUTION, AND STORAGE SYSTEM COSTS</p>
<p>Description</p> <p><u>Distribution Facilities</u></p> <p>JENSEN FILTRATION PLANT - REPLACE ADMINISTRATION BUILDING AIR CONDITIONING</p> <p>JENSEN FILTRATION PLANT - ROAD RECONSTRUCTION</p> <p>JENSEN FLUORIDE TANK REPLACEMENT</p> <p>LA VERNE FACILITIES - BRIDGEPORT E-2-PATH</p> <p>LA VERNE FACILITIES - ENERGY CONSERVATION ECM1 - 10</p> <p>LA VERNE FACILITIES - EXPANSION OF THE SANITARY SEWER</p> <p>LA VERNE FACILITIES - HAZARDOUS WASTE STORAGE</p> <p>LA VERNE FACILITIES - MAIN TRANSFORMERS REPLACEMENT</p> <p>LA VERNE FACILITIES - MATERIALS TESTING LABORATORY</p> <p>LA VERNE FACILITIES - REPLACEMENT OF FLOCCULATOR STUB SHAFT - BASINS 1 & 2</p> <p>LA VERNE MACHINE SHOP - AIR CONDITIONING UNIT REPLACEMENT</p> <p>LA VERNE MACHINE SHOP - REPAIR HORIZONTAL BORING MILL</p> <p>LA-35 DISCHARGE STRUCTURE REPAIRS</p> <p>LAKE MATHEWS - CONSTRUCTION OF BACKUP COMPUTER FACILITIES</p> <p>LAKE MATHEWS - DIVERSION TUNNEL WALKWAY REPAIR</p> <p>LAKE MATHEWS - FACILITY WIDE EMERGENCY WARNING AND PAGING SYSTEM</p> <p>LAKE MATHEWS - FOREBAY MCC ROOF IMPROVEMENT</p> <p>LAKE MATHEWS - MAIN DAM TOE SEEPAGE COLLECTION</p> <p>LAKE MATHEWS - MULTIPLE SPECIES MANAGER'S OFFICE & RESIDENCE</p> <p>LAKE MATHEWS - RENOVATION OF BLDGS. 8 & 15, GENERAL ASSEMBLY & ADMIN. BLDG. OFFICE AREAS</p> <p>LAKE MATHEWS - RETROFIT LOWER ENTRANCE GATE SWING ARM</p> <p>LAKE MATHEWS FENCING SECURITY UPGRADE</p> <p>LAKE MATHEWS FOREBAY MCC ROOF IMPROVEMENT</p> <p>LAKE MATHEWS MAIN DAM TOE SEEPAGE COLLECTION</p> <p>LAKE MATHEWS RETROFIT LOWER ENTRANCE GATE SWING ARM</p> <p>LAKE PERRIS BYPASS PIPELINE EXPLORATION</p> <p>LAKE PERRIS BYPASS PIPELINE RELINING</p> <p>LAKE PERRIS EMERGENCY STANDBY GENERATOR AND TRANSFER SWITCH REPLACEMENT</p> <p>LAKE SKINNER - AERATOR AIR COMPRESSOR REPLACEMENT</p> <p>LAKE SKINNER - OUTLET TOWER VALVE REHABILITATION</p> <p>LAKE SKINNER - REPLACEMENT AERATOR RING</p> <p>LAKE SKINNER AERATOR AIR COMPRESSOR REPLACEMENT</p> <p>LAKE SKINNER AREA DISTRIBUTION SYSTEM VALVE REPLACEMENT</p> <p>LAKE SKINNER DAM ROAD REHAB</p> <p>LAKE SKINNER EAST BYPASS SCREENING STRUCTURES</p> <p>LAKE SKINNER OUTLET TOWER CHLORINE SYSTEM MODIFICATION</p> <p>LAKE SKINNER WEST BYPASS SCREENING STRUCTURE</p> <p>LAKE SKINNER WEST BYPASS SCREENING STRUCTURE REHABILITATION</p> <p>LAKE VIEW PIPE LINE REPAIRS</p> <p>LAKEVIEW PIPELINE - REPLACE VACUUM/AIR RELEASE</p> <p>LAKEVIEW PIPELINE CATHODIC PROTECTION SYSTEM</p> <p>LAKEVIEW PIPELINE RELINING</p> <p>LAKEVIEW PIPELINE REPAIR</p> <p>LAKEVIEW PIPELINE UPGRADE</p> <p>LIVE OAK RESERVOIR BYPASS PIPELINE CATHODIC PROTECTION</p> <p>LOWER FEEDER - CATHODIC PROTECTION</p> <p>LOWER FEEDER WR 33 - AREA REPAIR AND REMEDIATION</p> <p>MAGAZINE CANYON CANOPY</p> <p>MAGAZINE CANYON-ISOLATION GATE JACKING FRAME</p> <p>MAPES LAND ACQUISITION</p> <p>MICROWAVE COMMUNICATION SITES BUILDING UPGRADE</p> <p>MIDDLE CROSS FEEDER CATHODIC PROTECTION</p> <p>MIDDLE FEEDER - CATHODIC PROTECTION SYSTEMS</p> <p>MIDDLE FEEDER - NORTH CATHODIC PROTECTION SYSTEM</p> <p>MIDDLE FEEDER BLOW-OFF VALVE REPLACEMENT AT STA 782+53.16</p> <p>MIDDLE FEEDER NORTH CATHODIC PROTECTION SYSTEM</p> <p>MIDDLE FEEDER RELOCATION FOR SCE MESA SUBSTATION</p> <p>MILLS FILTRATION PLANT - INVESTIGATION TO RELOCATE ACCESS ROAD</p> <p>MINOR CAP 08/09 PLACEHOLDER</p> <p>MINOR CAP FY 2009/10</p> <p>MINOR CAP FY 2012/13</p> <p>MINOR CAP FY 2014/16</p> <p>MINOR CAPITAL PROJECTS PROGRAM 07/08 - REMAINING FUNDS</p> <p>MOUNT OLYMPUS TUNNEL COST RIGHT-OF-WAY (ROW)</p> <p>MWD ROAD GUARDRAIL</p> <p>NITROGEN STORAGE COMPLIANCE AT DVL, INLAND FEEDER PCS, AND LAKE MATHEWS</p> <p>NITROGEN STORAGE STUDY</p> <p>NON PCPP LINES CONDITION INSPECTION AND ASSESSMENT</p> <p>NORTH PORTAL OF HOLLYWOOD TUNNEL</p> <p>NORTH REACH CONSTRUCTION / INSPECTION / CM</p> <p>NORTH REACH CONSTRUCTION/ASBUILT</p> <p>NORTH REACH ENVIRONMENTAL - CONSTRUCTION</p> <p>NORTH REACH FINAL DESIGN & ADV/INTP</p> <p>NORTH REACH POST DESIGN / ASBUILT</p> <p>NORTH REACH PROGRAM MANAGEMENT - CONSTRUCTION</p> <p>NORTHERN PIPELINE ENVIRONMENTAL FINAL DESIGN</p> <p>NORTHERN PIPELINE RIGHT OF WAY FINAL DESIGN</p> <p>OAK ST. PCS ROOF REPLACEMENT</p> <p>OAK STREET PRESSURE CONTROL STRUCTURE ROOF REPLACEMENT - CONSTRUCTION</p> <p>OC 44 SERVICE CONNECTIONS & EOC#2 METER ACCESS ROAD REHAB</p> <p>OC FEEDER STA 1920+78 BLOWOFF STRUCTURE & RIP-RAP REPAIRS</p> <p>OC RESERVOIR SODIUM HYPOCHLORITE PUMP AND PIPING REPLACEMENT</p> <p>OC-71 FLOW CONTROL FACILITY</p> <p>OC-88 - SECURITY FENCING AT PUMP PLANT</p> <p>OC-88 EMERGENCY STANDBY GENERATOR UPGRADE STUDY</p> <p>OC-88 PUMP PLANT AIR COMPRESSOR UPGRADE</p> <p>OC-88 PUMP STATION FLOW METER UPGRADE</p> <p>OC-88 PUMPING PLANT SURGE TANKS UPGRADES</p> <p>OC-88 PUMPING PLANT UPGRADES</p> <p>OLINDA PCS AND SANTIAGO TOWER EMERGENCY GENERATORS</p> <p>OLINDA PCS VALVE REPLACEMENT</p> <p>OLINDA PRESSURE CONTROL STRUCTURE</p> <p>OLINDA PRESSURE CONTROL STRUCTURE AND SANTIAGO TOWER EMERGENCY GENERATORS</p>

<p style="text-align: center;">TABLE 3 CONVEYANCE, DISTRIBUTION, AND STORAGE SYSTEM COSTS</p>
<p>Description <u>Distribution Facilities</u> ON-CALL RESOURCES MANAGEMENT APPLICATION OPERATIONS CONTROL CENTER AT EAGLE ROCK OPERATIONS CONTROL CENTER UPS REPLACEMENT OPERATIONS SCOPING STUDY ORANGE CO FDR, BLOW-OFF STRUCTURE AND ACCESS ROAD REPAIR ORANGE COUNTY - 88 PUMP PLANT AIR COMPRESSOR UPGRADE ORANGE COUNTY - 88 SECURITY FENCING AT PUMP PLANT ORANGE COUNTY AREA DISTRIBUTION SYSTEM VALVE REPLACEMENT ORANGE COUNTY C & D ELECTRICAL IMPROVEMENTS - STUDY ORANGE COUNTY C&D INSTRUMENTATION PANEL IMPROVEMENTS ORANGE COUNTY C&D TEAM SUPPORT FACILITY ORANGE COUNTY CONVEYANCE AND DISTRIBUTION SERVICE CENTER ORANGE COUNTY FEEDER CATHODIC PROTECTION ORANGE COUNTY FEEDER CATHODIC PROTECTION SYSTEM REHABILITATION ORANGE COUNTY FEEDER EXTENSION LINING REPAIR ORANGE COUNTY FEEDER INSPECTION ORANGE COUNTY FEEDER INTERNAL INSPECTION STUDY ORANGE COUNTY FEEDER LINING REPAIRS ORANGE COUNTY FEEDER PRESSURE CONTROL STRUCTURES ORANGE COUNTY FEEDER RELINING ORANGE COUNTY FEEDER RELOCATION IN FULLERTON ORANGE COUNTY FEEDER SCHEDULE 37SC CATHODIC PROTECTION ORANGE COUNTY FEEDER STA 1920+78 BLOWOFF STRUCTURE & RIP-RAP REPAIRS ORANGE COUNTY REGION ENVIRONMENTAL MITIGATION MONITORING ORANGE COUNTY RESERVOIR - INSTALL HYPOCHLORINATION STATIONS ORANGE COUNTY RESERVOIR - PIEZOMETERS & SEEPAGE MONITORING AUTOMATION OXIDATION DEMONSTRATION PLANT CONTROL SYSTEM REPLACEMENT PALOS ALTOS FEEDER - 108TH ST. PALOS VERDES FEEDER - LONG BEACH LATERAL TURNOUT STRUCTURES STA. 1442+15 VALVE REPLACEMENTS PALOS VERDES FEEDER PCS - VALVE REPLACEMENT PALOS VERDES RESERVOIR - INSTALL HYPOCHLORINATION STATIONS PC-1 EFFLUENT OPEN CHANNEL TRASH RACK PC-1 EFFLUENT OPEN CHANNEL TRASH RACK PROJECT PCCP HYDRAULIC ANALYSES PCCP REHABILITATION - PROGRAM MANAGEMENT PERIMETER FENCING AT PLACERITA CREEK PERMANENT LEAK DETECTION/PIPELINE MONITORING SYSTEM PERRIS PCS - UNINTERRUPTIBLE POWER SOURCE SYSTEMS INSTALLATION PERRIS CONTROL FACILITY BYPASS & PCS UPGRADE PERRIS PCS ROOF REHAB PERRIS PRESSURE CONTROL STRUCTURE ROOF REPLACEMENT PERRIS PUMPBACK COVER PERRIS VALLEY PIPELINE - DESIGN-BUILD (EMWD) PERRIS VALLEY PIPELINE - GENERAL PERRIS VALLEY PIPELINE - NORTH REACH PERRIS VALLEY PIPELINE - RESERVED FOR STAGE II DESIGN / BUILD PERRIS VALLEY PIPELINE - SOUTH REACH PERRIS VALLEY PIPELINE - STUDY PERRIS VALLEY PIPELINE - TIE-IN (WMWD) PERRIS VALLEY PIPELINE - TUNNELS PERRIS VALLEY PIPELINE - VALVES PERRIS VALLEY PIPELINE DESIGN-BUILD (EMWD) PERRIS VALLEY PIPELINE NORTH REACH PERRIS VALLEY PIPELINE SOUTH REACH PERRIS VALLEY PIPELINE TIE-IN (WMWD) PERRIS VALLEY PIPELINE VALVES PLACENTIA RAILROAD LOWERING PROJECT PLACERITA CREEK PERIMETER FENCING PLANT INFLUENT REDUNDANT FLOW METERING AND SPLITTING PLC REPLACEMENT PHASE II PRESTRESSED CONCRETE CYLINDER PIPE - PHASE 2 PRESTRESSED CONCRETE CYLINDER PIPE (PCCP) STRUCTURAL PERFORMANCE RISK ANALYSIS PRESTRESSED CONCRETE CYLINDER PIPE -PHASE 3 PROGRAMATTIC ENVIRONMENTAL DOCUMENTATION OF ORANGE COUNTY PROGRAMATTIC ENVIRONMENTAL DOCUMENTATION OF SAN BERNARDINO COUNTY PROGRAMMABLE LOGIC CONTROLLER (PLC) STANDARDIZATION PROGRAMMATIC ENVIRONMENTAL DOCUMENTATION FOR THE LOS ANGELES CO. OPERATING REGION PROGRAMMATIC ENVIRONMENTAL DOCUMENTATION FOR THE ORANGE COUNTY OPERATING REGION PROGRAMMATIC ENVIRONMENTAL DOCUMENTATION FOR THE RIVERSIDE/SAN DIEGO CO. OPERATING REGION PROGRAMMATIC ENVIRONMENTAL DOCUMENTATION FOR THE WESTERN SAN BERNARDINO COUNTY OPERATING REGION PUDDINGSTONE SPILLWAY CROSS CONNECTION PV RESERVOIR HYPOCHLORITE PUMP AND PIPING REPLACEMENT R&R FOR DISTRIBUTION REAL PROPERTY ACQUISITION RED MOUNTAIN - OCT. 2007 FIRE DAMAGE - COMMUNICATION POWER TOWERS & METER STRUCTURES REPAIR/REPLACE (INCIDENT NO. 2007-1023-0271) RED MOUNTAIN HEP FLOOD DAMAGE RED MTN COMM. TOWER & METER STRUCTURE REHABILITATION OF THE GREG AVE PCS CONTROL BUILDING INTERIOR RELOCATION OF ORANGE COUNTY FEEDER RELOCATION OF PORTION OF ORANGE COUNTY FEEDER (MWD'S SHARE) REMAINING PORTIONS REPAIRS TO THE LA-35 DISCHARGE STRUCTURE REPLACE 2 FIRE & DOMESTIC WATER SYSTEM REPLACE COMMUNICATION LINE TO THE SAN GABRIEL CONTROL TOWER REPLACE COPPER GROUNDWIRES ON DESERT HIGH VOLTAGE TRANSMISSION TOWERS REPLACE VALVE POSITION INDICATORS REPLACEMENT OF COMMUNICATION LINE AT SAN GABRIEL TOWER REPLACEMENT/ RELINE AT-RISK PCCP LINES - STAGE 1 RIALTO FEEDER BROKEN BACK REPAIR RIALTO FEEDER VALVE STRUCTURE RIALTO FEEDER, REPAIRS AT SELECT LOCATIONS, STUDY RIALTO PIPELINE - CONSTRUCTION PHASE 1 RIALTO PIPELINE - CONSTRUCTION PHASE 2 RIALTO PIPELINE IMPROVEMENTS RIALTO PIPELINE IMPROVEMENTS - CONSTRUCTION</p>

TABLE 3 CONVEYANCE, DISTRIBUTION, AND STORAGE SYSTEM COSTS	
Description	
Distribution Facilities	
RIALTO PIPELINE IMPROVEMENTS - CONSTRUCTION PHASE III	
RIALTO PIPELINE IMPROVEMENTS - DESIGN PHASE 2	
RIALTO PIPELINE IMPROVEMENTS - DESIGN PHASE 3	
RIALTO PIPELINE IMPROVEMENTS - FINAL DESIGN	
RIALTO PIPELINE IMPROVEMENTS - VALVE PROCUREMENT	
RIALTO PIPELINE IMPROVEMENTS PHASE 1 FINAL DESIGN	
RIALTO PIPELINE PCCP REHABILITATION	
RIALTO PIPELINE REPAIR @ STA 3196+44	
RIALTO PIPELINE REPAIR AT THOMPSON CREEK	
RIALTO PIPELINE REPAIRS AT STATION 3198+44	
RIALTO PIPELINE VALVE PROCUREMENT	
RIGHT OF WAY INFRASTRUCTURE PROTECTION PROGRAM - LOS ANGELES COUNTY REGION	
RIGHT OF WAY INFRASTRUCTURE PROTECTION PROGRAM - O. C. REGION	
RIGHT OF WAY INFRASTRUCTURE PROTECTION PROGRAM - RIVERSIDE AND SAN DIEGO COUNTY REGION	
RIGHT OF WAY INFRASTRUCTURE PROTECTION PROGRAM - WESTERN SAN BERNARDINO COUNTY REGION	
RIGHT OF WAY SURVEY AND MAPPING	
RIO HONDO PRESSURE CONTROL STRUCTURE VALVE REPLACEMENTS	
ROBERT B. DIEMER FILTRATION PLANT - LAND ACQUISITION	
ROOF REPLACEMENT AT SOTO ST. FACILITY	
SAN DIEGO #3 BLOWOFF TO PUMPELL CONVERSION	
SAN DIEGO CANAL - EAST & WEST BYPASS SCREENING STRUCTURES STUDY	
SAN DIEGO CANAL - ELECTRICAL VAULT & CONDUCTOR REPLACEMENT	
SAN DIEGO CANAL - FENCING	
SAN DIEGO CANAL - INSTALL ACOUSTIC FLOW METER	
SAN DIEGO CANAL - PIEZOMETER	
SAN DIEGO CANAL - REPLACE SODIUM BISULFATE TANK	
SAN DIEGO CANAL - SEEPAGE STUDY	
SAN DIEGO CANAL BISULFITE TANK REPLACEMENT	
SAN DIEGO CANAL LINER REPAIR	
SAN DIEGO CANAL RADIAL GATE (VO-6) REHABILITATION	
SAN DIEGO CANAL RADIAL GATE (VO-8) REHABILITATION	
SAN DIEGO CANAL RADIAL GATE REHAB	
SAN DIEGO CANAL SEEPAGE STUDY	
SAN DIEGO CANAL WEST BYPASS TRASH RACK	
SAN DIEGO PIPELINE #4 VALVE REPLACEMENT	
SAN DIEGO PIPELINE 1 BLOW-OFF VALVE REPLACEMENT	
SAN DIEGO PIPELINE 3 & 5 REMOTE CONTROL OF BYPASS	
SAN DIEGO PIPELINE 4 AND AULD VALLEY PIPELINE CARBON FIBER REPAIRS	
SAN DIEGO PIPELINE 5 & LAKE SKINNER OUTLET REPAIR	
SAN DIEGO PIPELINE 6 - PRESSURE CONTROL STRUCTURE/HYDROELECTRIC PLANT - FEASIBILITY STUDY	
SAN DIEGO PIPELINE 6 NORTH REACH, ENVIRONMENTAL MONITORING DURING CONSTRUCTION	
SAN DIEGO PIPELINE NO. 1 JOINT REPAIR	
SAN DIEGO PIPELINE NO. 3 BYPASS	
SAN DIEGO PIPELINE NO. 3 PIPING MODIFICATIONS	
SAN DIEGO PIPELINE NO. 5 - OCT. 2007 FIRE DAMAGE - REPLACE ABOVE GROUND CORROSION CONTROL SYSTEM EQUIPMENT, AND STRUCTURAL APPURTENANCES	
SAN DIEGO PIPELINE NO. 6 - RIVERSIDE BRANCH - ETIWANDA FACILITY/DROP INLET STRUCTURE	
SAN DIEGO PIPELINE NO. 6 - RIVERSIDE BRANCH - PLEASANT PEAK, COMMUNICATIONS	
SAN DIEGO PIPELINE NO. 6 - RIVERSIDE TUNNEL CONSTRUCTION - AS BUILT	
SAN DIEGO PIPELINE NO. 6 - RIVERSIDE TUNNEL COST OF RIGHT OF WAY (OPTIONAL PORTAL SITE)	
SAN DIEGO PIPELINE NO. 6 - RIVERSIDE TUNNEL ENVIRONMENTAL CONSTRUCTION	
SAN DIEGO PIPELINE NO. 6 - RIVERSIDE TUNNEL ENVIRONMENTAL PRELIMINARY DESIGN	
SAN DIEGO PIPELINE NO. 6 - RIVERSIDE TUNNEL PRELIMINARY DESIGN	
SAN DIEGO PIPELINE NO. 6 - RIVERSIDE TUNNEL PROGRAM MANAGEMENT	
SAN DIEGO PIPELINE NO. 6 - RIVERSIDE TUNNEL RIGHT OF WAY PRELIMINARY DESIGN	
SAN DIEGO PIPELINE NO. 6 - CONTRACT NO.1 SAN DIEGO CANAL TO MOUNT OLYMPUS	
SAN DIEGO PIPELINE NO. 6 - CONTRACT NO.2 MOUNT OLYMPUS TUNNEL & PORTALS	
SAN DIEGO PIPELINE NO. 6 - NORTH REACH CONSTRUCTION - AS BUILT	
SAN DIEGO PIPELINE NO. 6 - NORTH REACH ENVIRONMENTAL - CONSTRUCTION	
SAN DIEGO PIPELINE NO. 6 - NORTH REACH ENVIRONMENTAL PRELIMINARY DESIGN	
SAN DIEGO PIPELINE NO. 6 - NORTH REACH FINAL DESIGN & ADV/NTP	
SAN DIEGO PIPELINE NO. 6 - NORTH REACH POST DESIGN	
SAN DIEGO PIPELINE NO. 6 - NORTH REACH PRELIMINARY DESIGN	
SAN DIEGO PIPELINE NO. 6 - NORTH REACH PROGRAM MANAGEMENT - CONSTRUCTION	
SAN DIEGO PIPELINE NO. 6 - NORTH REACH PROGRAM MANAGEMENT - DESIGN	
SAN DIEGO PIPELINE NO. 6 - NORTH REACH RIGHT OF WAY FINAL DESIGN	
SAN DIEGO PIPELINE NO. 6 - NORTH REACH RIGHT OF WAY PRELIMINARY DESIGN	
SAN DIEGO PIPELINE NO. 6 - NORTHERN PIPELINE COST OF RIGHT OF WAY	
SAN DIEGO PIPELINE NO. 6 - NORTHERN REACH ENVIRONMENTAL FINAL DESIGN	
SAN DIEGO PIPELINE NO. 6 - OPERATIONS SCOPING STUDY	
SAN DIEGO PIPELINE NO. 6 - PIPELINE/TUNNEL STUDY - DESIGN	
SAN DIEGO PIPELINE NO. 6 - PIPELINE/TUNNEL STUDY - ENVIRONMENTAL	
SAN DIEGO PIPELINE NO. 6 - PIPELINE/TUNNEL STUDY - PROJECT MANAGEMENT	
SAN DIEGO PIPELINE NO. 6 - PIPELINE/TUNNEL STUDY - RIGHT OF WAY	
SAN DIEGO PIPELINE NO. 6 - PROJECT MANAGEMENT	
SAN DIEGO PIPELINE NO. 6 - RIGHT OF WAY	
SAN DIEGO PIPELINE NO. 6 - SOUTH REACH - PROGRAM MANAGEMENT	
SAN DIEGO PIPELINE NO. 6 - SOUTH REACH / TUNNEL STUDY	
SAN DIEGO PIPELINE NO. 6 - SOUTH REACH CONSTRUCTION / AS BUILT	
SAN DIEGO PIPELINE NO. 6 - SOUTH REACH COST OF RIGHT OF WAY	
SAN DIEGO PIPELINE NO. 6 - SOUTH REACH ENVIRONMENTAL - CONSTRUCTION	
SAN DIEGO PIPELINE NO. 6 - SOUTH REACH ENVIRONMENTAL FINAL DESIGN	
SAN DIEGO PIPELINE NO. 6 - SOUTH REACH ENVIRONMENTAL PRELIMINARY DESIGN	
SAN DIEGO PIPELINE NO. 6 - SOUTH REACH FINAL DESIGN/ADV	
SAN DIEGO PIPELINE NO. 6 - SOUTH REACH PRELIMINARY DESIGN	
SAN DIEGO PIPELINE NO. 6 - SOUTH REACH RIGHT OF WAY FINAL DESIGN	
SAN DIEGO PIPELINE NO. 6 - SOUTH REACH RIGHT OF WAY PRELIMINARY DESIGN	
SAN DIEGO PIPELINE NO. 6 - SOUTH REACH TUNNEL ALIGNMENT ANALYSIS	
SAN DIEGO PIPELINE NO. 6 AREA STUDY	
SAN DIEGO PIPELINE NO. 6 ENVIRONMENTAL MITIGATION	
SAN DIEGO PIPELINE NO.4 & AULD VALLEY PIPELINE CARBON FIBER REPAIR STUDY	
SAN DIEGO PIPELINE NOS. 1AND 3 - VALVE REPLACEMENT	
SAN DIMAS AND RED MOUNTAIN POWER PLANTS STANDBY DIESEL ENGINE GENERATOR REPLACEMENTS	
SAN DIMAS CONTROL STRUCTURE 500 GALLONS DIESEL TANK REPLACEMENT	
SAN DIMAS HEP BATTERY BANK AND GENERATOR BREAKER	
SAN DIMAS PCS - UNINTERRUPTIBLE POWER SOURCE SYSTEMS INSTALLATION	
SAN FRANCISQUITO PIPELINE BLOW OFF STRUCTURE, STA 287+70, ACCESS ROAD CONSTRUCTION	
SAN GABRIEL TOWER AND SPILLWAY IMPROVEMENTS	

TABLE 3 CONVEYANCE, DISTRIBUTION, AND STORAGE SYSTEM COSTS	
Description	
Distribution Facilities	
SAN GABRIEL TOWER SEISMIC UPGRADE	
SAN GABRIEL TOWER SLIDE GATE REHABILITATION	
SAN JACINTO #1 AND #2 CASA LOMA FAULT CROSSING STRUCTURE UPGRADE	
SAN JACINTO DIVERSION STRUCTURE SLIDE GATE V-03 REPLACEMENT	
SAN JOAQUIN RELIEF STRUCTURE FOR EASTERN ORANGE COUNTY FEEDER #2	
SAN JOAQUIN RELIEF STRUCTURE FOR EASTR OC FDR #2	
SAN JOAQUIN RESERVOIR, INSTALL BULKHEAD	
SANTA ANA RIVER BRIDGE EXPANSION JOINT REPLACEMENT	
SANTA ANA RIVER BRIDGE SEISMIC RETROFIT	
SANTA ANA RIVER BRIDGE SEISMIC UPGRADE	
SANTA MONICA FEEDER RELOCATION	
SANTA MONICA FEEDER STATION 495+10 REHABILITATION	
SANTIAGO CONTROL TOWER CATHODIC PROTECTION	
SANTIAGO LATERAL REPLACE MOTOR - OPERATED VALVE	
SANTIAGO LATERAL SECTIONALIZATION VALVE REPLACEMENT	
SANTIAGO LATERAL STA 216+40 BUTTERFLY VALVE REPLACEMENT	
SANTIAGO PRESSURE CONTROL STRUCTURE	
SANTIAGO TOWER ACCESS ROAD IMPROVEMENT	
SCADA COMMUNICATIONS MPLS UPGRADE - AT&T REGION (MINOR CAP)	
SCADA COMMUNICATIONS MPLS UPGRADE - VERIZON REGION (MINOR CAP)	
SCADA SYSTEM HARDWARE UPGRADE	
SCADA SYSTEM NT SOFTWARE UPGRADE	
SCADA SYSTEM SUPPORT PROGRAMS	
SD AND CASA LOMA CANALS LINING	
SD CANAL EAST & WEST BYPASS SCREENING STRUCTURES STUDY	
SD CANAL REPLACE SODIUM BISULFITE TANK	
SD PIPELINE 3 CULVERT ROAD REHAB	
SD PIPELINE 3, 4, AND 5 PROTECTIVE COVER	
SD PIPELINE 4 EXPLORATORY EXCAVATION	
SD PIPELINE 5 EXPLORATORY EXCAVATION	
SD PIPELINES 3 AND 5 REMOTE CONTROL BYPASS STRUCTURE GATES AND ISOLATION VALVES	
SECOND LOWER & SEPULVEDA FEEDERS SCI DRAIN STATIONS	
SECOND LOWER CROSS FEEDER - VALVE PROCUREMENT	
SECOND LOWER CROSS FEEDER CONSTRUCTION	
SECOND LOWER CROSS FEEDER FINAL DESIGN	
SECOND LOWER FEEDER - INSTALL LINER	
SECOND LOWER FEEDER CATHODIC PROTECTION SYSTEM	
SECOND LOWER FEEDER CURRENT MITIGATION REFURBISHMENT	
SECOND LOWER FEEDER PCCP REHABILITATION	
SECOND LOWER FEEDER PCCP REPAIRS	
SECOND LOWER FEEDER RELIABILITY AT 3 LOCATIONS - SEISMIC STUDY	
SEISMIC UPGRADE OF 11 FACILITIES ON THE ALLEN MCCOLLOCH PIPELINE	
SEISMIC UPGRADES AT 10 SERVICE CONNECTION STRUCTURES ALONG AMP	
SELECTED PRESSURE REPLACE VALVE POSITION INDICATORS	
SEPULVEDA CANYON CONTROL FACILITY BYPASS PROJECT	
SEPULVEDA CANYON CONTROL FACILITY WATER STORAGE TANKS SEISMIC UPGRADE	
SEPULVEDA CANYON POWER PLANT TAIL RACE COATINGS	
SEPULVEDA CANYON TANKS EXTERIOR AND INTERIOR RECOATING	
SEPULVEDA FEEDER - CARBON FIBER LINER REPAIRS	
SEPULVEDA FEEDER CATHODIC PROTECTION SYSTEM	
SEPULVEDA FEEDER CORROSION/INTERFERENCE MITIGATION, STATION 950+00 TO 1170+00	
SEPULVEDA FEEDER HEP AUTO PILOT	
SEPULVEDA FEEDER PCCP DEL AMO BLVD URGENT RELINING	
SEPULVEDA FEEDER REPAIRS AT 3 SITES	
SEPULVEDA FEEDER SOUTH CATHODIC PROTECTION SYSTEM	
SEPULVEDA FEEDER STATION 2002+02 TO 2273+28 STRAY CURRENT INTERFERENCE MITIGATION	
SEPULVEDA FEEDER STRAY CURRENT MITIGATION REFURBISHMENT	
SEPULVEDA FEEDER/EAST VALLEY FEEDER INTERCONNECTION ELECTRICAL UPGRADES	
SEPULVEDA PCS - PERIMETER ASPHALT REPAIRS	
SEPULVEDA PIPELINE PCCP REHABILITATION	
SEPULVEDA-WEST BASIN INTERCONNECTION VALVE REPLACEMENTS	
SERVICE CONNECTION LV-01 UPGRADES	
SERVICE CONNECTION OC-26 - RELOCATION OF METER CABINET, INSTRUMENT HOUSING & AIR VENT STACK	
SERVICE CONNECTION WB13 - WEST BASIN FEEDER	
SERVICE CONNECTIONS CB-12 & CB-16 TURNOUT VALVE REPLACEMENT & ELECTRICAL UPGRADE	
SERVICE CONNECTIONS WB-2A AND WB-2B EQUIPMENT RELOCATION	
SIMULATION AND MODELING APPLICATION FOR REAL TIME OPERATIONS SMART OPS	
SITE 3 SECOND LOWER FEEDER URGENT REPAIRS - FINAL DESIGN	
SITES 1 & 2 SECOND LOWER FEEDER URGENT REPAIRS - FINAL DESIGN & PIPE FABRICATION	
SKINNER ACCUSONIC FLOWMETER REPLACEMENT	
SKINNER BRANCH - AIR INJECTION MODIFICATIONS TO RED MOUNTAIN POWER PLANT	
SKINNER BRANCH - CASA LOMA CANAL	
SKINNER BRANCH - CASA LOMA SIPHON BARREL ONE	

<p align="center">TABLE 3</p> <p align="center">CONVEYANCE, DISTRIBUTION, AND STORAGE SYSTEM COSTS</p>
<p>Description</p> <p><u>Distribution Facilities</u></p> <p>SKINNER BRANCH - CATWALK FOR TRAVELING MAINTENANCE BRIDGE FOR</p> <p>SKINNER BRANCH - FABRICATE & REPLACE THE STEMS, NUTS & KEYS</p> <p>SKINNER BRANCH - REPAIR MODULE 1 AND 2 FLOCCULATORS BRIDGES</p> <p>SKINNER DAM REMEDIATION</p> <p>SKINNER DISTRIBUTION SYSTEM - CONTRACT # 1396</p> <p>SKINNER ELECTRICAL BUILDING HVAC UPGRADE</p> <p>SKINNER FACILITY AREA PAVING</p> <p>SKINNER FILTRATION PLANT - ELEVATED SLAB IN SERVICE BLDG 1</p> <p>SKINNER HELIPAD REHAB</p> <p>SKINNER REPLACEMENT FOR WETCELL BATTERY AND INVERTER</p> <p>SKINNER SCADA SERVERS RELOCATION</p> <p>SMART-OPS (FORMERLY RTOS)</p> <p>SOTO STREET FACILITY - BUILDING SEISMIC UPGRADE</p> <p>SOTO STREET FACILITY - REPLACE HEATING</p> <p>SOTO STREET FACILITY - ROOF REPLACEMENT</p> <p>SOUTH COUNTY PIPELINE PROTECTION AT SAN JUAN CREEK CROSSING</p> <p>SOUTH REACH / TUNNEL STUDY</p> <p>SOUTH REACH CONSTRUCTION/ASBUILT - FUTURE UNAPPROPRIATED</p> <p>SOUTH REACH DESIGN - FUTURE/UNAPPROPRIATED</p> <p>SOUTH REACH ENVIRONMENTAL - FUTURE/UNAPPROPRIATED</p> <p>SOUTH REACH FEASIBILITY STUDY</p> <p>SOUTH REACH PROJECT MANAGEMENT - FUTURE/UNAPPROPRIATED</p> <p>SOUTH REACH RIGHT OF WAY - FUTURE/UNAPPROPRIATED</p> <p>SPECIAL SERVICE BRANCH - REPLACE PLATE BENDING</p> <p>ST. JOHN'S CANYON CHANNEL EROSION MITIGATION</p> <p>SYSTEM RELIABILITY PROGRAM</p> <p>SYSTEM-WIDE ASPHALT REPLACEMENT</p> <p>TEMESCAL POWER PLANT REPLACE EMERGENCY GENERATOR</p> <p>TREATED WATER CROSS CONNECTION PREVENTION - FINAL DESIGN & CONSTRUCTION</p> <p>TREATED WATER CROSS CONNECTION PREVENTION - UNFUNDED WORK</p> <p>TWO-WAY RADIO ENHANCEMENT - EMERGENCY SERVICES, FIRE CONTROL, EVACUATION & BLDG. MAINT.</p> <p>TWO-WAY RADIO ENHANCEMENT FOR EMERGENCY SERVICES, FIRE CONTROL, EVACUATION AND BLDG. MAINTENANCE</p> <p>UNDER GROUND STORAGE TANK DISPENSER SPILL CONTAINMENT & REMEDIATION</p> <p>UNION STATION TWO-WAY RADIO ENHANCEMENT FOR EMERGENCY SERVICES, FIRE CONTROL, EVACUATION AND BUILDING MAINTENANCE</p> <p>UPGRADE CATHODIC PROTECTION RECTIFIERS</p> <p>UPGRADE HOLLYWOOD TUNNEL PORTAL SLEEVE VALVE EQUIPMENT</p> <p>UPGRADE SUNSET GARAGE</p> <p>UPPER FEEDER - SANTA ANA RIVER BRIDGE REPAIRS</p> <p>UPPER FEEDER - STRUCTURAL PROTECTION</p> <p>UPPER FEEDER AIR ENTRAINMENT</p> <p>UPPER FEEDER CATHODIC PROTECTION SYSTEM</p> <p>UPPER FEEDER GATE REHABILITATION</p> <p>UPPER FEEDER JUNCTION STRUCTURE SEISMIC UPGRADE</p> <p>UPPER FEEDER SANTA ANA RIVER DISCHARGE PAD</p> <p>UPPER FEEDER SERVICE CONNECTIONS UPGRADES</p> <p>UPPER NEWPORT BAY BLOW-OFF STRUCTURE REHABILITATION</p> <p>UPS SYSTEMS INSTALLATION AT FOOTHILL PCS</p> <p>UPS SYSTEMS INSTALLATION AT PERRIS CONTROL STRUCTURE</p> <p>UTILITY BUSINESS ARCHITECTURE (OBJECT MAPPING/MODELING)</p> <p>VACUUM AIR RELEASE VALVE RELOCATION PILOT PROGRAM</p> <p>VALLEY & LOS ANGELES DISTRIBUTION VALVE POSITION DISPLAY UPGRADE</p> <p>VALVE PROCUREMENT</p> <p>VIDEO CONFERENCE SYSTEM UPGRADE</p> <p>VIDEOCONFERENCING UPGRADE</p> <p>WADSWORTH PUMPING PLANT - MODIFICATION/REPAIRS OF FIFTY-NINE 6.9KV BREAKERS/CABINETS</p> <p>WADSWORTH PUMPING PLANT CONDUIT REPAIR AND PROTECTION</p> <p>WADSWORTH PUMPING PLANT CONTROL & PROTECTION UPGRADES</p> <p>WADSWORTH PUMPING PLANT FOREBAY GANTRY CRANE UPGRADE</p> <p>WADSWORTH PUMPING PLANT RECOATING 144" YARD PIPING</p> <p>WADSWORTH PUMPING PLANT SLEEVE VALVE REFURBISHMENT</p> <p>WADSWORTH PUMPING PLANT STOP LOGS ADDITION - STUDY</p> <p>WADSWORTH PUMPING PLANT YARD PIPING LINING REPLACEMENT</p> <p>WADSWORTH/DVL CONTROL & PROTECTION SYSTEM UPGRADE - UPS REPLACEMENT</p> <p>WATER DELIVERY SYSTEM AUTOMATION</p> <p>WATER PLANNING APPLICATION</p> <p>WATER QUALITY - REMOTE MONITORING</p> <p>WATER QUALITY LABORATORY BUILDING EXPANSION</p> <p>WATER QUALITY MONITORING AND EVENT DETECTION SYSTEM</p> <p>WEST COAST FEEDER - CATHODIC PROTECTION SYSTEMS</p> <p>WEST OC FEEDER VALVE REPLACEMENT</p> <p>WEST ORANGE COUNTY FEEDER OC-09 REHABILITATION</p> <p>WEST ORANGE COUNTY FEEDER VALVE REPLACEMENT</p> <p>WEST VALLEY AREA STUDY</p> <p>WEST VALLEY FEEDER # 1 STAGE 2 VALVE STRUCTURE MODIFICATIONS - CONSTRUCTION</p> <p>WEST VALLEY FEEDER NO. 1 - DE SOTO VALVE STRUCTURE IMPROVEMENTS</p> <p>WEST VALLEY FEEDER NO. 1 ACCESS ROADS AND STRUCTURE IMPROVEMENTS (STAGE 2)</p> <p>WEST VALLEY FEEDER NO. 1 ACCESS ROADS AND STRUCTURE IMPROVEMENTS (STAGE 3)</p> <p>WEST VALLEY FEEDER NO. 1 ACCESS ROADS AND STRUCTURES IMPROVEMENTS</p> <p>WEST VALLEY FEEDER NO. 1 VALVE STRUCTURE MODIFICATIONS</p> <p>WESTERN REGION PLUMBING RETROFIT</p> <p>WESTERN SAN BERNARDINO COUNTY REGION ENVIRONMENTAL MITIGATION MONITORING</p> <p>WEYM. PLT/LA VERNE FAC-BACKFLO PREV ASSY</p> <p>WEYMOUTH - BUILDING NO. 4 - HAND RAIL AND STAIRS ADDITION</p> <p>WEYMOUTH - FLAG POLE AREA LANDSCAPE UPGRADE</p> <p>WEYMOUTH ASPHALT REHABILITATION</p> <p>WEYMOUTH COMPRESSED AIR SYSTEM</p> <p>WEYMOUTH DISTRIBUTION SYSTEM - REPLACEMENT OF AREA CONTROL SYSTEMS - CONTRACT #1396</p> <p>WEYMOUTH FLOCCULATOR REHABILITATION</p> <p>WEYMOUTH WATER TREATMENT PLANT DOMESTIC AND FIRE WATER SYSTEM IMPROVEMENT</p> <p>WFP - ASPHALT REHABILITATION</p> <p>WFP - COMPRESSED AIR SYSTEM IMPROVEMENT</p> <p>WFP - PURCHASE OF REAL PROPERTY</p> <p>WFP - REPAIR TO BLDG # 1</p> <p>YORBA LINDA FEEDER - STA 924+11 PORTAL ACCESS</p> <p>YORBA LINDA FEEDER BYPASS</p>

TABLE 3 CONVEYANCE, DISTRIBUTION, AND STORAGE SYSTEM COSTS	
Description	
<u>Distribution Facilities</u>	
YORBA LINDA PORTAL STRUCTURE ACCESS/TELEGRAPH CREEK BRIDGE	
<i>Sub-total Distribution facilities costs</i>	\$ 76,379,326

TABLE 4							
FISCAL YEAR 2022/23 ESTIMATED READINESS-TO-SERVE CHARGE REVENUE							
Member Agency	Rolling Ten- Year Average Firm Deliveries (Acre-Feet) FY2010/11 - FY2019/20	RTS Share	6 months @ \$140 million per year (7/22- 12/22)	Rolling Ten- Year Average Firm Deliveries (Acre-Feet) FY2011/12 - FY2020/21	RTS Share	6 months @ \$157 million per year (1/23- 6/23)	Total RTS Charge FY 2022/23
Anaheim	17,275.2	1.21%	848,822	19,376.9	1.37%	1,071,991	1,920,813
Beverly Hills	10,355.2	0.73%	508,806	10,308.7	0.73%	570,309	1,079,115
Burbank	13,339.1	0.94%	655,421	13,354.6	0.94%	738,818	1,394,239
Calleguas MWD	96,173.4	6.75%	4,725,510	96,573.4	6.81%	5,342,742	10,068,252
Central Basin MWD	37,402.1	2.63%	1,837,764	34,311.0	2.42%	1,898,192	3,735,956
Compton	522.9	0.04%	25,693	340.2	0.02%	18,821	44,514
Eastern MWD	96,004.3	6.74%	4,717,202	97,570.2	6.88%	5,397,888	10,115,090
Foothill MWD	8,204.3	0.58%	403,121	8,306.1	0.59%	459,519	862,640
Fullerton	7,573.6	0.53%	372,131	7,280.1	0.51%	402,758	774,889
Glendale	16,339.5	1.15%	802,847	16,256.7	1.15%	899,371	1,702,218
Inland Empire Utilities Agency	56,041.5	3.93%	2,753,617	55,761.7	3.93%	3,084,911	5,838,528
Las Virgenes MWD	20,472.7	1.44%	1,005,933	20,715.7	1.46%	1,146,057	2,151,990
Long Beach	29,958.6	2.10%	1,472,025	29,251.8	2.06%	1,618,301	3,090,326
Los Angeles	258,508.9	18.15%	12,701,917	273,537.0	19.28%	15,132,920	27,834,837
Municipal Water District of Orange County	200,102.2	14.05%	9,832,085	195,277.4	13.76%	10,803,355	20,635,440
Pasadena	18,721.0	1.31%	919,862	18,954.2	1.34%	1,048,605	1,968,468
San Diego County Water Authority	232,196.6	16.30%	11,409,053	214,362.4	15.11%	11,859,197	23,268,250
San Fernando	35.6	0.00%	1,749	29.7	0.00%	1,643	3,392
San Marino	0.0	0.07%	46,315	974.0	0.07%	53,885	100,200
Santa Ana	10,060.6	0.71%	494,331	9,606.6	0.68%	531,467	1,025,798
Santa Monica	4,865.2	0.34%	239,053	4,607.4	0.32%	254,896	493,949
Three Valleys MWD	63,723.8	4.47%	3,131,089	63,736.2	4.49%	3,526,085	6,657,175
Torrance	15,852.7	1.11%	778,927	15,549.0	1.10%	860,219	1,639,147
Upper San Gabriel Valley MWD	27,250.3	1.91%	1,338,952	30,096.0	2.12%	1,665,005	3,003,957
West Basin MWD	114,374.8	8.03%	5,619,842	113,660.3	8.01%	6,288,042	11,907,884
Western MWD	68,340.5	4.80%	3,357,932	69,139.3	4.87%	3,825,002	7,182,934
MWD Total	1,424,637.2	100.00%	\$ 70,000,000	1,418,936.6	100.00%	\$ 78,500,000	\$ 148,500,000
Totals may not foot due to rounding							

TABLE 5
FISCAL YEAR 2022/23
ESTIMATED STANDBY CHARGE REVENUE

Member Agencies	Total Parcel Charge	Number of Parcels Or Acres	Gross Revenues (Dollars) ¹
Anaheim	\$ 8.55	69,024	590,155
Beverly Hills	-	-	-
Burbank	14.20	29,111	413,378
Calleguas MWD	9.58	260,024	2,491,030
Central Basin MWD	10.44	340,264	3,552,356
Compton	2.49	18,144	45,178
Eastern MWD	6.94	406,560	2,821,528
Foothill MWD	10.28	30,361	312,113
Fullerton	10.71	35,251	377,543
Glendale	12.23	45,057	551,050
Inland Empire Utilities Agency	7.59	262,180	1,989,945
Las Virgenes MWD	8.03	55,414	444,973
Long Beach	12.16	92,471	1,124,441
Los Angeles	-	-	-
Municipal Water District of Orange County ²	10.09	662,675	7,534,624
Pasadena	11.73	39,489	463,203
San Diego County Water Authority	11.51	1,112,302	12,802,601
San Fernando	-	5,102	-
San Marino	8.24	4,972	40,972
Santa Ana	7.88	65,040	512,519
Santa Monica	-	-	-
Three Valleys MWD	12.21	151,490	1,849,691
Torrance	12.23	40,578	496,264
Upper San Gabriel Valley MWD	9.27	214,737	1,990,616
West Basin MWD	-	-	-
Western MWD	9.23	389,885	3,598,640
MWD Total		4,330,132	\$ 44,002,818

(1) Estimates per FY 2020/21 applied amounts

(2) Adjusted for inclusion of Coastal MWD

Note: Totals may not foot due to rounding.

TABLE 6 PARCELS SUBJECT TO ANNEXATION STANDBY CHARGES AS OF JULY 1, 2021				
Annexation	Parcel Number	Acres		Proposed Standby Charge (FY 2020/21)
Eastern MWD				
111th Fringe Area	910-230-003	5.82		40.39
REORGANIZATIONS BETWEEN MEMBER AGENCIES				
Annexation	Parcel Number	Acres	Original Standby Charge	Proposed Standby Charge (FY 2020/21)
Reorg No. 2012-10			West Basin MWD	Las Virgenes MWD
From West Basin MWD	4438-037-003	5.27	0.00	42.32
To Las Virgenes MWD				

Option 1**THE METROPOLITAN WATER DISTRICT
OF SOUTHERN CALIFORNIA****RESOLUTION ____**

**RESOLUTION OF THE BOARD OF DIRECTORS
OF THE METROPOLITAN WATER DISTRICT OF
SOUTHERN CALIFORNIA
FIXING AND ADOPTING
A CAPACITY CHARGE
EFFECTIVE JANUARY 1, 2023**

The Board of Directors of The Metropolitan Water District of Southern California (the “Board”) hereby finds that:

1. The Board of The Metropolitan Water District of Southern California (“Metropolitan”), pursuant to Sections 133, 134 and 134.5 of the Metropolitan Water District Act (the “Act”), is authorized to fix such rate or rates for water as will result in revenue which, together with revenue from any water standby or availability of service charge or assessment, will pay the operating expenses of Metropolitan, provide for repairs and maintenance, provide for payment of the purchase price or other charges for property or services or other rights acquired by Metropolitan, and provide for the payment of the interest and principal of its bonded debt; and
2. The amount of revenue to be raised by the Capacity Charge shall be as determined by the Board and allocation of such charges among member agencies shall be in accordance with the method established by the Board; and
3. The Capacity Charge is a charge fixed and adopted by Metropolitan and charged to its member agencies, and is not a fee or charge imposed upon real property or upon persons as an incident of property ownership; and
4. The Capacity Charge is intended to recover the debt service and other appropriately allocated costs to construct, operate and maintain projects needed to meet peak demands on Metropolitan’s distribution system, as shown in the FYs 2022/23 and 2023/24 Cost of Service Report for Proposed Water Rates and Charges (the “2022 Cost of Service Report”); and
5. Pursuant to Resolution 8329, adopted by the Board on July 9, 1991, Resolution 9199, adopted by the Board on March 8, 2016, and Resolution 9201, adopted by the Board on March 8, 2016, and as each is thereafter amended and supplemented, proceeds of the Capacity Charge and other revenues from the sale or availability of water are pledged to the payment of Metropolitan’s outstanding revenue bonds, subordinate revenue bonds and short-term certificates, and to revenue bonds, subordinate revenue bonds and short-term certificates to be issued pursuant to Resolution 8329, Resolution 9199, and Resolution 9201; and
6. The Capacity Charge is charged (on a dollar per cubic-foot-per-second basis) to member public agencies (“member agencies”), based upon the amount of capacity used by such member agency that is designed to recover the cost of providing peaking capacity within the distribution system; and

7. On April 12, 2022, the Board considered the rates and charges presented by the General Manager and approved the biennial budget for fiscal years 2022/23 and 2023/24 and adopted recommended water rates for calendar years 2023 and 2024 and charges for calendar year 2021, and received information and documents available at <https://www.mwdh2o.com/who-we-are/budget-finance/>; and

8. In approving the biennial budget and adopting the rates and charges on April 12, 2022, the Board determined the amount of revenue to be raised by the Capacity Charge in calendar year 2023 to be based on a Capacity Charge in such year of \$10,800 per cubic-foot-per-second, based on information and documents available at <https://www.mwdh2o.com/who-we-are/budget-finance/>; and

9. Each of the meetings of the Board were conducted in accordance with the Brown Act (commencing at Section 54950 of the Government Code), for which due notice was provided and at which quorums were present and acting throughout;

NOW, THEREFORE, the Board does hereby resolve, determine and order as follows:

Section 1. That the Board hereby fixes and adopts a Capacity Charge, as described below, to be effective January 1, 2023.

Section 2. That said Capacity Charge shall be in an amount sufficient to provide for payment of the capital financing costs not paid from *ad valorem* property taxes, as well as other appropriately allocated costs, incurred to provide peaking capacity within Metropolitan's distribution system.

Section 3. That such Capacity Charge effective January 1, 2023 shall be a charge as specified in Section 5 (set in dollars per cubic-foot-per-second of the peak day capacity) for capacity provided to a member agency, based on the maximum summer day demand placed on the system between May 1 and September 30 for the three-calendar year period ending December 31, 2003, and thereafter for a rolling three-calendar year period.

Section 4. The allocation of the Capacity Charge among member agencies is based on data recorded by Metropolitan and shall be conclusive in the absence of manifest error. Corrections may be made by staff for any incorrect recording or calculation, upon verification by the member agency.

Section 5. That the Capacity Charge shall be a fixed charge as shown in the following table and collected from each member agency monthly, quarterly or semiannually as agreed to by Metropolitan and the member agency.

Table 1. Calendar Year 2023 Capacity Charge

Calendar Year 2023 Capacity Charge					
	Peak Day Demand (cfs) (May 1 through September 30)				Rate (\$/cfs): \$10,800
	Calendar Year				
Member Agency	2019	2020	2021	3-Year Peak	Calendar Year 2023 Capacity Charge
Anaheim	37.1	84.1	77.2	84.1	\$908,280
Beverly Hills	23.5	23.2	24.8	24.8	\$267,840
Burbank	17.3	16.6	15.5	17.3	\$186,840
Calleguas	168.9	178.2	189.6	189.6	\$2,047,680
Central Basin	48.6	51.9	54.1	54.1	\$584,280
Compton	2.9	0.0	0.0	2.9	\$31,320
Eastern	196.8	211.5	215.3	215.3	\$2,325,240
Foothill	16.0	19.3	22.8	22.8	\$246,240
Fullerton	13.1	14.1	20.0	20.0	\$216,000
Glendale	32.2	37.9	32.5	37.9	\$409,320
Inland Empire	118.7	98.4	101.4	118.7	\$1,281,960
Las Virgenes	39.4	41.7	42.9	42.9	\$463,320
Long Beach	51.8	67.3	45.7	67.3	\$726,840
Los Angeles	283.2	339.0	584.1	584.1	\$6,308,280
MWDOC	262.8	272.0	315.3	315.3	\$3,405,240
Pasadena	39.9	46.4	48.2	48.2	\$520,560
San Diego CWA	672.1	723.4	672.5	723.4	\$7,812,720
San Fernando	0.0	0.0	0.0	0.0	\$0
San Marino	2.3	7.3	5.4	7.3	\$78,840
Santa Ana	19.4	21.7	18.3	21.7	\$234,360
Santa Monica	20.7	17.0	15.1	20.7	\$223,560
Three Valleys	128.1	134.3	138.3	138.3	\$1,493,640
Torrance	27.8	28.9	27.2	28.9	\$312,120
Upper San Gabriel	29.1	21.1	32.4	32.4	\$349,920
West Basin	211.8	196.0	218.2	218.2	\$2,356,560
Western MWD	186.1	175.1	189.4	189.4	\$2,045,520
Total	2,649.6	2,826.4	3,106.2	3,225.6	\$34,836,480
Totals may not foot due to rounding					

Section 6. That the Capacity Charge for each member agency, the method of its calculation, cost allocations and other data used in its determination are as specified in the adopted rates and charges to be effective January 1, 2023, which forms the basis of the Capacity Charge, and the corresponding 2022 Cost of Service Report. The adopted rates and charges and cost of service reports are on file and available for review by interested parties at Metropolitan's headquarters.

Section 7. That the Capacity Charge specified in Section 5, together with other revenues from Metropolitan's water rates, other charges, ad valorem property taxes, and other miscellaneous revenue, does not exceed the reasonable and necessary cost of providing Metropolitan's water service for which the rates and charges are made, or conferring the benefit provided, and is fairly apportioned to each member agency in proportion to the peak day capacity utilized by each member agency.

Section 8. That if any provision of this Resolution or the application to any member agency, property or person whatsoever is held invalid, that invalidity shall not affect other provisions or applications of this Resolution

which can be given effect without the invalid portion or application, and to that end the provisions of this Resolution are severable.

Section 9. That the General Manager and the General Counsel are hereby authorized to do all things necessary and desirable to accomplish the purposes of this Resolution, including, without limitation, the commencement or defense of litigation and taking all necessary action to satisfy relevant statutes requiring notice by publication.

Section 10. That the Board Executive Secretary is hereby directed to transmit a certified copy of this Resolution to the presiding officer of the governing body of each member agency.

I HEREBY CERTIFY that the foregoing is a full, true and correct copy of a Resolution adopted by the Board of Directors of The Metropolitan Water District of Southern California, at its meeting held on April 12, 2022.

Secretary of the Board of Directors
of The Metropolitan Water District
of Southern California



Finance & Insurance Committee

Approve the proposed biennial budget for fiscal years 2022/23 and 2023/24, which includes the Capital Investment Plan and revenue requirements for fiscal years 2022/23 and 2023/24, and ten-year forecast; adopt resolutions fixing and adopting the water rates and charges for calendar years 2023 and 2024

Item 7-3
April 11, 2022

Process

February 7, 2022	F&I Committee, board letters 9-2, Workshop #1
February 11, 2022	Notice of public hearing regarding proposed rates and charges transmitted to member agencies
February 22, 2022	F&I Committee, Workshop #2
February 24, 2022	Notice of public hearing regarding Section 124.5 transmitted to Legislature
March 7, 2022	F&I Committee, Workshop #3
March 8, 2022	A public hearing on proposed water rates and charges and applicability of the tax rate limit pursuant to Section 124.5 of the MWD Act
March 22, 2022	F&I Committee, Workshop #4
April 11, 2022	F&I Committee, Recommended Biennial Budget, Calendar Year rates and charges, and applicability of Section 124.5 tax rate limit
April 12, 2022	Board <u>action</u> regarding Biennial Budget, Calendar Year rates and charges, and applicability of Section 124.5 tax rate limit

Option I: Proposed Biennial Budget (March update)

- Overall rate increase of 8% for CY2023 and 8% for CY2024
- Limits increase in Departmental O&M expenditures to ~3% per year
 - Includes 20 new regular FTEs to support SRI, DE&I, EEO offices and key operational needs
 - Includes \$20M for planning activities related to the RRWP
- \$600M CIP
 - Maintain PAYGO funding at \$135M per year to limit rate impacts
 - contributes to not meeting MWD's 2x revenue bond coverage target
- \$99M for the Delta Conveyance Project planning activities
 - Partially funded from \$34.5M California WaterFix refund
- Conservation Program increased to \$43M per year over the biennium
 - The additional \$18M per year is bond funded to limit the short-term rate impact

Option I: Proposed Biennial Budget continued...

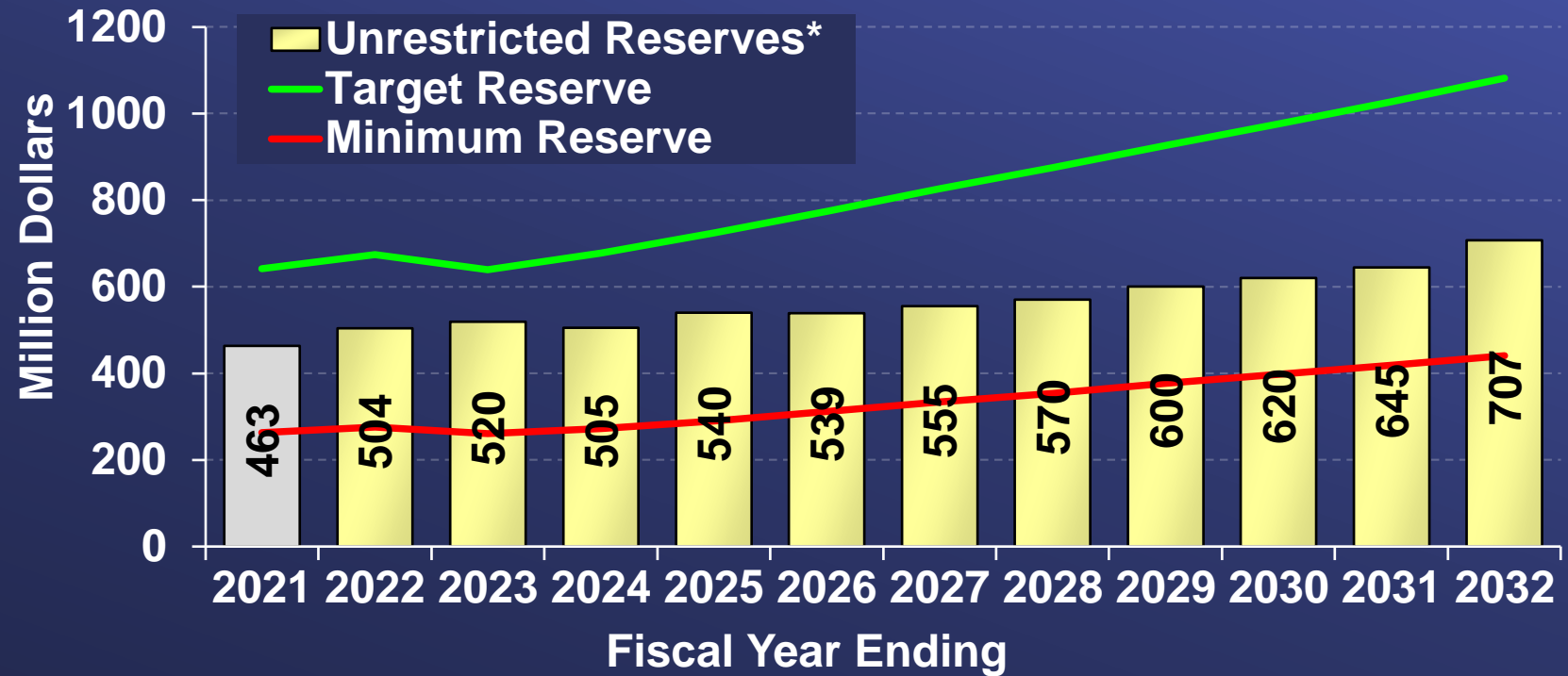
- Bond finance the AVEK High Desert Program
 - Reduces short-term rate impacts
- Net reserve draw of \$55.2M over the biennium
 - \$0.9M added to unrestricted reserves
 - \$56.1M draw from the Water Stewardship Fund
- Revenue bond coverage drops to 1.5x over the biennium
 - Below target of 2.0x
- Long-term overall rate increases are projected at 5% per year
 - Includes the full scale RRWP
 - Does not include the Delta Conveyance Project
 - Projection is subject to change based on many factors including implementation of the 2020 IRP and updated water transactions.

Option I: Water Rates and Charges

Rates & Charges Effective January 1st	2022	2023	% Increase (Decrease)	2024	% Increase (Decrease)
Tier 1 Supply Rate (\$/AF)	\$243	\$329	35%	\$355	8%
Tier 2 Supply Rate (\$/AF)	\$285	\$532	87%	\$540	2%
System Access Rate (\$/AF)	\$389	\$381	(2%)	\$412	8%
System Power Rate (\$/AF)	\$167	\$169	1%	\$190	12%
Treatment Surcharge (\$/AF)	\$344	\$367	7%	\$373	2%
Full Service Untreated Volumetric Cost (\$/AF)					
Tier 1	\$799	\$879	10%	\$957	9%
Tier 2	\$841	\$1,082	29%	\$1,142	6%
Full Service Treated Volumetric Cost (\$/AF)					
Tier 1	\$1,143	\$1,246	9%	\$1,330	7%
Tier 2	\$1,185	\$1,449	22%	\$1,515	5%
RTS Charge (\$M)	\$140	\$157	12%	\$175	11%
Capacity Charge (\$/cfs)	\$12,200	\$10,800	(11%)	\$11,800	9%
Overall Rate Increase			8.0%		8.0%

Full Service Cost means the Full Service Rate, consisting of the following rate components: the applicable Supply Rate, the System Access Rate, the System Power Rate, and if applicable the Treatment Surcharge for treated water service.

Option I: Ten-year Financial Projection



Overall Rate Inc.	3.0%	4.0%	8.0%	8.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
Water Transactions (MAF)**	1.52	1.60	1.59	1.54	1.54	1.51	1.53	1.53	1.54	1.55	1.55	1.57
Rev. Bond Cvg	2.0	1.6	1.5	1.5	1.8	1.7	1.8	1.7	1.7	1.8	1.8	1.7
Fixed Chg Cvg	2.0	1.6	1.5	1.5	1.8	1.7	1.8	1.7	1.7	1.7	1.7	1.6
PAYGO, \$M	110	135	135	135	175	175	175	175	200	200	200	200

* Revenue Remainder and Water Rate Stabilization Fund

** Includes water sales, exchanges and wheeling

Option 2

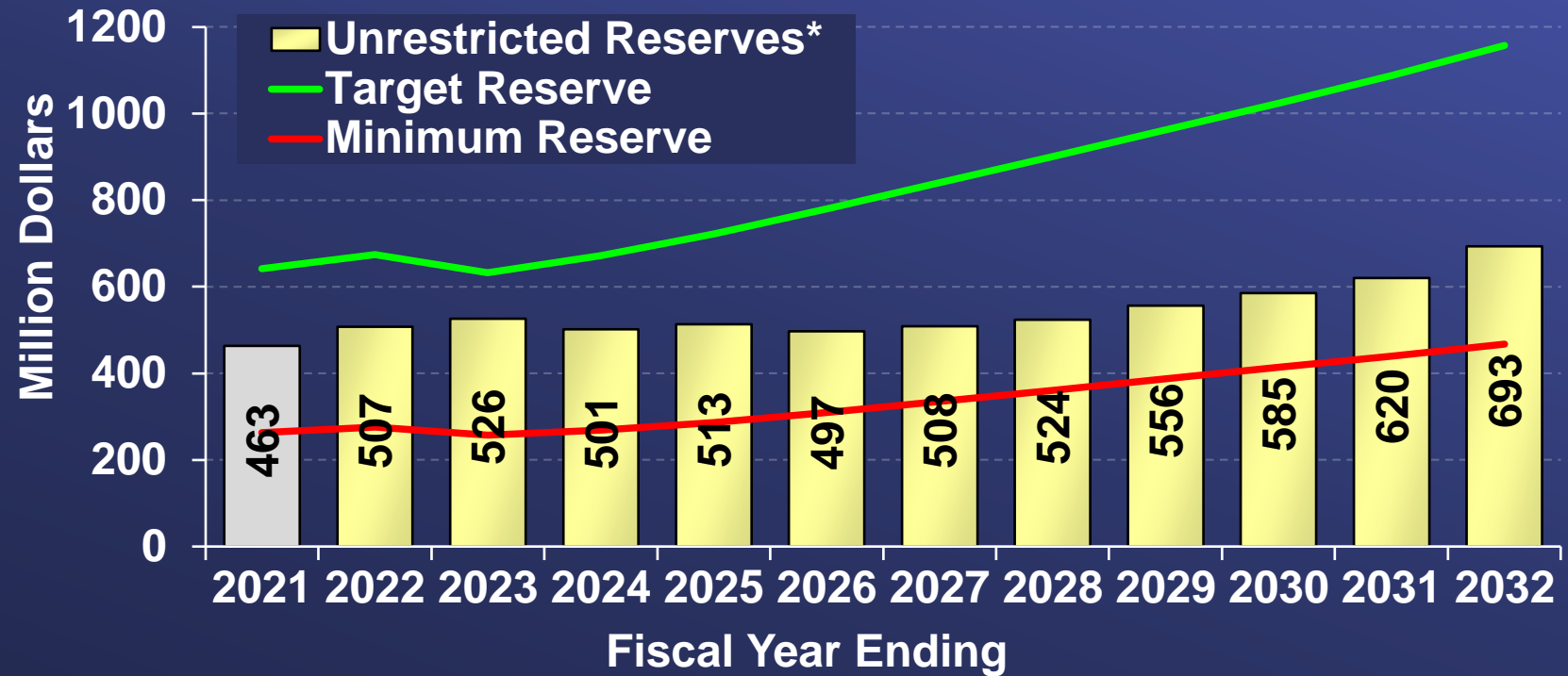
- Overall rate increase of 6.5% for CY2023 and 6.5% for CY2024
- Changes as compared to Option 1
 - Increased departmental budget vacancy rate from 2% to 5%
 - Reflects current conditions
 - Reduces departmental O&M \$24M over the biennium. The higher vacancy rate is assumed to persist through FY2031/32.
 - Risk: some savings might not materialize as savings from unfilled positions are often spent on overtime or temporary labor. Also, the savings might not be maintained if the vacancy rate decreases.
 - Updated LRP projection
 - Reflects the expectation that no new agreements will be added during the biennial budget
 - Increases CY2025 to CY2029 rates
 - Decreases revenue bond coverage to 1.4x in FY2023/24
- Additional risks as compared to Option 1
 - Savings might not materialize or be maintained
 - Increased risk of large reserves draws that necessitate unplanned rate increases or higher future rates

Option 2: Water Rates and Charges

Rates & Charges Effective January 1st	2022	2023	% Increase (Decrease)	2024	% Increase (Decrease)
Tier 1 Supply Rate (\$/AF)	\$243	\$325	34%	\$341	5%
Tier 2 Supply Rate (\$/AF)	\$285	\$531	86%	\$532	0%
System Access Rate (\$/AF)	\$389	\$375	(4%)	\$401	7%
System Power Rate (\$/AF)	\$167	\$167	0%	\$187	12%
Treatment Surcharge (\$/AF)	\$344	\$360	5%	\$363	1%
Full Service Untreated Volumetric Cost (\$/AF)					
Tier 1	\$799	\$867	9%	\$929	7%
Tier 2	\$841	\$1,073	28%	\$1,120	4%
Full Service Treated Volumetric Cost (\$/AF)					
Tier 1	\$1,143	\$1,227	7%	\$1,292	5%
Tier 2	\$1,185	\$1,433	21%	\$1,483	3%
RTS Charge (\$M)	\$140	\$156	11%	\$172	10%
Capacity Charge (\$/cfs)	\$12,200	\$10,700	(12%)	\$11,500	7%
Overall Rate Increase			6.5%		6.5%

Full Service Cost means the Full Service Rate, consisting of the following rate components: the applicable Supply Rate, the System Access Rate, the System Power Rate, and if applicable the Treatment Surcharge for treated water service.

Option 2: Ten-year Financial Projection



Overall Rate Inc.	3.0%	4.0%	6.5%	6.5%	6.0%	5.5%	5.5%	5.5%	5.5%	5.0%	5.0%	5.0%
Water Transactions (MAF)**	1.52	1.60	1.59	1.54	1.54	1.51	1.53	1.53	1.54	1.55	1.55	1.57
Rev. Bond Cvg	2.0	1.6	1.5	1.4	1.7	1.6	1.7	1.7	1.7	1.8	1.8	1.8
Fixed Chg Cvg	2.0	1.6	1.5	1.4	1.7	1.6	1.7	1.7	1.7	1.7	1.7	1.6
PAYGO, \$M	110	135	135	135	175	175	175	175	200	200	200	200

* Revenue Remainder and Water Rate Stabilization Fund

** Includes water sales, exchanges and wheeling

Option 3

- Overall rate increase of 5.5% for CY2023 and 5.5% for CY2024
- Changes as compared to Option 2
 - Assume MWD receives \$10M in grant funding per year to offset O&M expenditures through FY 2031/32
 - Reduce the Departmental O&M budget another \$10M over the biennial budget period
 - IMPACTS: substantial impacts to MWD's operations and research & planning efforts
 - Increases CY2025 to CY2029 rates
- Additional risks as compared to Option 2
 - Grants might not be obtained
 - Increased risk of large reserves draws that necessitate unplanned rate increases or higher future rates

Option 3 – Impacts of cuts

Research and Planning Impacts

- Cancel Feather River Watershed Climate Modeling effort & cut spatial analysis work by 50%
 - Reduce the ability to understand climate change impacts and monitor the effectiveness of water efficiency actions
- Cut Delta-related studies and projects and limit the level of engineering and agricultural coordination support for the Delta Islands
- Cut cost-sharing agreements with other agencies and academic institutions on scientific studies

Travel, training and conferences

- Cut results in reduced staff development and professional and technical opportunities
- Reduce Director, state and legislative inspection trips

Option 3 – Impacts of cuts continued...

Operations Impacts

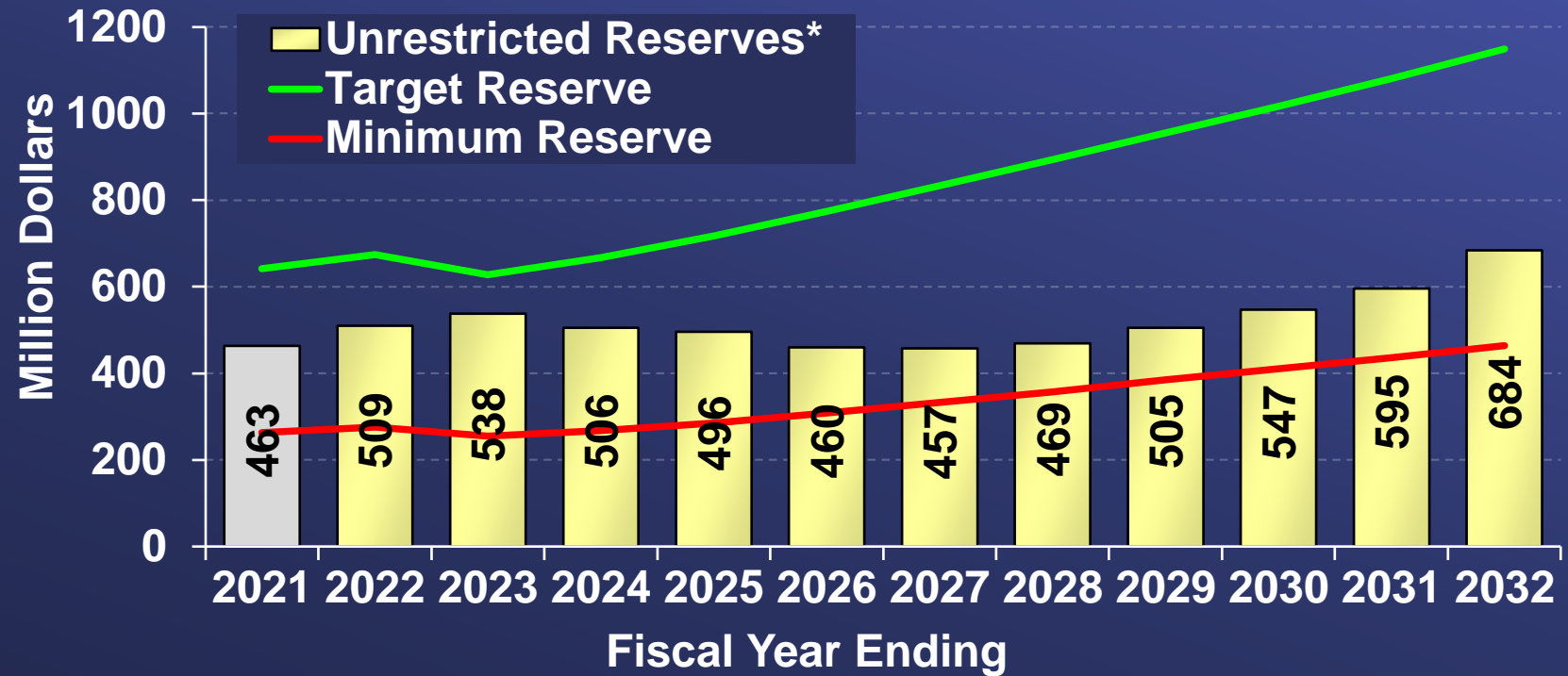
- Limit the scope of the Seismic Resilience Strategy; postpone a variety of scheduled system vulnerability and reliability studies
- Extend shutdowns (e.g., the 7-day shutdown could extend to 14 days or more) or defer or cancel some shutdowns to reduce overtime
- Cut WSO materials and supplies, which increases the risk to system reliability and may impact the ability to do extended research into emerging water quality issues and trends
- Cut WSO field travel to support work in remote areas in response to potential deferment of select shutdowns
- Cuts in IT outside services and materials and supplies, which will result in slower response time to unplanned outages, possible increase in system downtime, and limited ability to respond to ad hoc requests and system enhancements
- Cut IT training which will greatly decrease innovation and ability to support new technology
- Cancel IT project implementations related to procurement, contracting, HR systems improvement and other projects which may impact district productivity and vendor experience

Option 3: Water Rates and Charges

Rates & Charges Effective January 1st	2022	2023	% Increase (Decrease)	2024	% Increase (Decrease)
Tier 1 Supply Rate (\$/AF)	\$243	\$323	33%	\$335	4%
Tier 2 Supply Rate (\$/AF)	\$285	\$531	86%	\$532	0%
System Access Rate (\$/AF)	\$389	\$370	(5%)	\$393	6%
System Power Rate (\$/AF)	\$167	\$166	(1%)	\$183	10%
Treatment Surcharge (\$/AF)	\$344	\$356	3%	\$357	<1%
Full Service Untreated Volumetric Cost (\$/AF)					
Tier 1	\$799	\$859	8%	\$911	6%
Tier 2	\$841	\$1,067	27%	\$1,108	4%
Full Service Treated Volumetric Cost (\$/AF)					
Tier 1	\$1,143	\$1,215	6%	\$1,268	4%
Tier 2	\$1,185	\$1,423	20%	\$1,465	3%
RTS Charge (\$M)	\$140	\$155	11%	\$169	9%
Capacity Charge (\$/cfs)	\$12,200	\$10,600	(13%)	\$11,400	8%
Overall Rate Increase			5.5%		5.5%

Full Service Cost means the Full Service Rate, consisting of the following rate components: the applicable Supply Rate, the System Access Rate, the System Power Rate, and if applicable the Treatment Surcharge for treated water service.

Option 3: Ten-year Financial Projection



Overall Rate Inc.	3.0%	4.0%	5.5%	5.5%	6.0%	6.0%	6.0%	6.0%	6.0%	5.0%	5.0%	5.0%
Water Transactions (MAF)**	1.52	1.60	1.59	1.54	1.54	1.51	1.53	1.53	1.54	1.55	1.55	1.57
Rev. Bond Cvg	2.0	1.6	1.5	1.4	1.7	1.6	1.7	1.7	1.7	1.8	1.8	1.8
Fixed Chg Cvg	2.0	1.6	1.5	1.4	1.7	1.6	1.7	1.7	1.7	1.7	1.7	1.7
PAYGO, \$M	110	135	135	135	175	175	175	175	200	200	200	200

* Revenue Remainder and Water Rate Stabilization Fund

** Includes water sales, exchanges and wheeling

Biennial Budget Recommendation

● Option 1

- Approve the FY 2022/23 and FY 2023/24 Proposed Biennial Budget with overall rate increases of 8 percent in CY 2023 and 8 percent in CY 2024, which includes \$3,840.5M in appropriations for ongoing operations, bond-financed conservation and supply programs, and debt service obligations;
- Authorize the use of \$270M in operating revenues to fund the Capital Investment Plan for FYs 2022/23 and 2023/24;
- Determine the revenue requirements to be \$1,712.9M in FY 2022/23 and \$1,800.7M in FY 2023/24;
- Approve the Ten-Year Financial Forecast
- Adopt resolutions fixing and adopting the Readiness-To-Serve Charge, Capacity Charge, and Water Rates
- Authorize a change in the method of installing, keeping, and rendering all accounts from a modified-accrual basis method of accounting to a cash-basis method of accounting for the purpose of budgeting.

Biennial Budget Recommendation

● Option 2

- Approve the FY 2022/23 and FY 2023/24 Proposed Biennial Budget with overall rate increases of 6.5 percent in CY 2023 and 6.5 percent in CY 2024, which includes \$3,810.8M in appropriations for ongoing operations, bond-financed conservation and supply programs, and debt service obligations;
- Authorize the use of \$270M in operating revenues to fund the Capital Investment Plan for FYs 2022/23 and 2023/24;
- Determine the revenue requirements to be \$1,696.3M in FY 2022/23 and \$1,781.8M in FY 2023/24;
- Approve the Ten-Year Financial Forecast
- Adopt resolutions fixing and adopting the Readiness-To-Serve Charge, Capacity Charge, and Water Rates
- Authorize a change in the method of installing, keeping, and rendering all accounts from a modified-accrual basis method of accounting to a cash-basis method of accounting for the purpose of budgeting.

Biennial Budget Recommendation

● Option 3

- Approve the FY 2022/23 and FY 2023/24 Proposed Biennial Budget with overall rate increases of 5.5 percent in CY 2023 and 5.5 percent in CY 2024, which includes \$3,800.5M in appropriations for ongoing operations, bond-financed conservation and supply programs, and debt service obligations;
- Authorize the use of \$270M in operating revenues to fund the Capital Investment Plan for FYs 2022/23 and 2023/24;
- Determine the revenue requirements to be \$1,677.6M in FY 2022/23 and \$1,769.7M in FY 2023/24;
- Approve the Ten-Year Financial Forecast
- Adopt resolutions fixing and adopting the Readiness-To-Serve Charge, Capacity Charge, and Water Rates
- Authorize a change in the method of installing, keeping, and rendering all accounts from a modified-accrual basis method of accounting to a cash-basis method of accounting for the purpose of budgeting.

Staff Recommendation

- Option 1





Finance & Insurance Committee

Approve the proposed biennial budget for fiscal years 2022/23 and 2023/24, which includes the Capital Investment Plan and revenue requirements for fiscal years 2022/23 and 2023/24, and ten-year forecast; adopt resolutions fixing and adopting the water rates and charges for calendar years 2023 and 2024

Item 7-3
April 12, 2022

Option 4

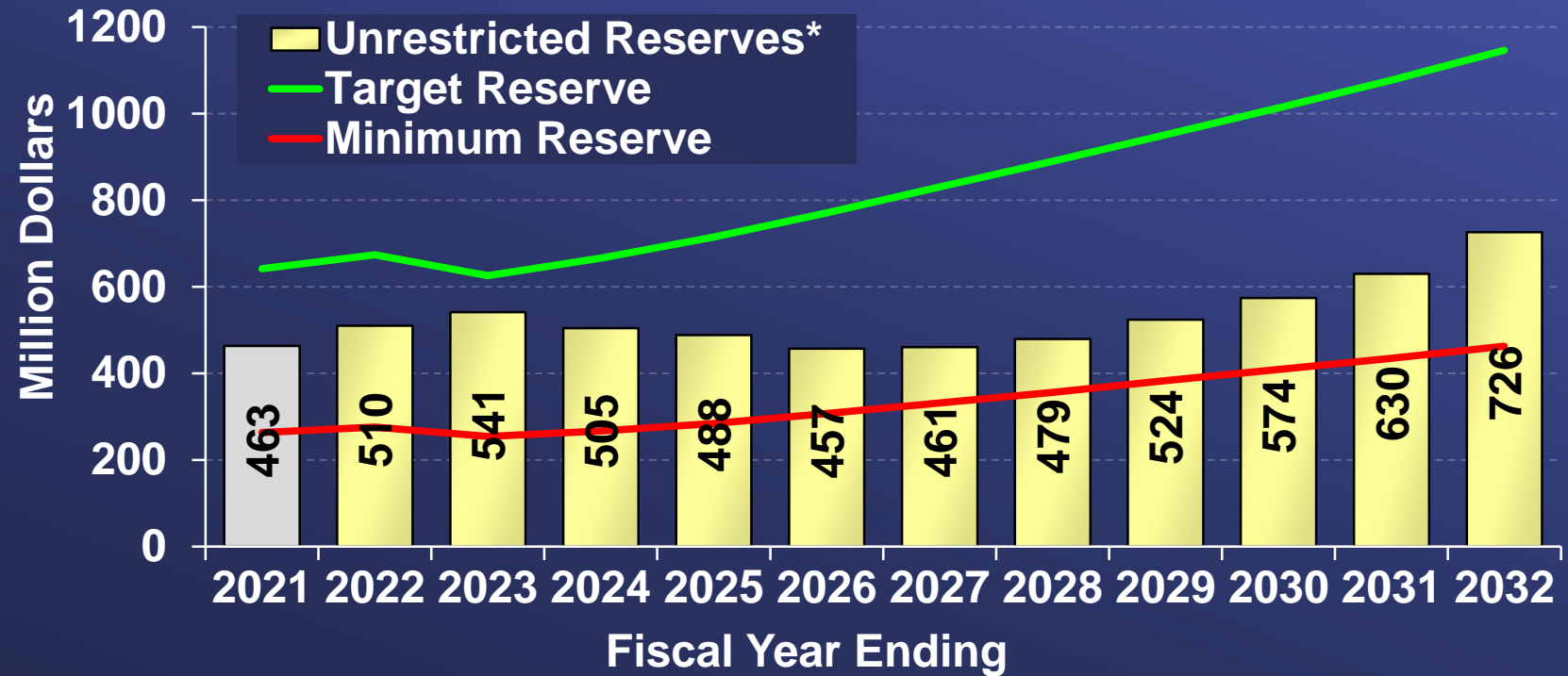
- Overall rate increase of 5% for CY2023 and 5% for CY2024
- Changes as compared to Option 3
 - Assume MWD obtains \$3M/yr in misc. revenues through FY 2031/32
 - Reduce the Departmental O&M budget another \$3M/yr through FY 2031/32
 - Additional impacts not yet evaluated
 - Increases CY2025 rate to 7%
- Additional risks as compared to Option 3
 - New revenue sources must be realized
 - Increased risk of large reserves draws over the biennium that necessitate unplanned rate increases or higher future rates
- Assumes no elimination or limitation of demand management programs and no projected increased use of reserves over the biennium from Option 1

Option 4: Water Rates and Charges

Rates & Charges Effective January 1st	2022	2023	% Increase (Decrease)	2024	% Increase (Decrease)
Tier 1 Supply Rate (\$/AF)	\$243	\$321	32%	\$332	3%
Tier 2 Supply Rate (\$/AF)	\$285	\$530	86%	\$531	0%
System Access Rate (\$/AF)	\$389	\$368	(5%)	\$389	6%
System Power Rate (\$/AF)	\$167	\$166	(1%)	\$182	10%
Treatment Surcharge (\$/AF)	\$344	\$354	3%	\$353	(0%)
Full Service Untreated Volumetric Cost (\$/AF)					
Tier 1	\$799	\$855	7%	\$903	6%
Tier 2	\$841	\$1,064	27%	\$1,102	4%
Full Service Treated Volumetric Cost (\$/AF)					
Tier 1	\$1,143	\$1,209	6%	\$1,256	4%
Tier 2	\$1,185	\$1,418	20%	\$1,455	3%
RTS Charge (\$M)	\$140	\$154	10%	\$167	8%
Capacity Charge (\$/cfs)	\$12,200	\$10,600	(13%)	\$11,200	6%
Overall Rate Increase			5.0%		5.0%

Full Service Cost means the Full Service Rate, consisting of the following rate components: the applicable Supply Rate, the System Access Rate, the System Power Rate, and if applicable the Treatment Surcharge for treated water service.

Option 4



Overall Rate Inc.	3.0%	4.0%	5.0%	5.0%	7.0%	6.0%	6.0%	6.0%	6.0%	5.0%	5.0%	5.0%
Water Transactions (MAF)**	1.52	1.60	1.59	1.54	1.54	1.51	1.53	1.53	1.54	1.55	1.55	1.57
Rev. Bond Cvg	2.0	1.6	1.5	1.4	1.6	1.6	1.7	1.7	1.8	1.8	1.8	1.8
Fixed Chg Cvg	2.0	1.6	1.5	1.4	1.6	1.6	1.7	1.7	1.7	1.7	1.7	1.7
PAYGO, \$M	110	135	135	135	175	175	175	175	200	200	200	200

* Revenue Remainder and Water Rate Stabilization Fund

** Includes water sales, exchanges and wheeling

Biennial Budget Recommendation

● Option 4

- Approve the FY 2022/23 and FY 2023/24 Proposed Biennial Budget with overall rate increases of 5 percent in CY 2023 and 5 percent in CY 2024, which includes \$3,794.5M in appropriations for ongoing operations, bond-financed conservation and supply programs, and debt service obligations;
- Authorize the use of \$270M in operating revenues to fund the Capital Investment Plan for FYs 2022/23 and 2023/24;
- Determine the revenue requirements to be \$1,670.9M in FY 2022/23 and \$1,763.6M in FY 2023/24;
- Approve the Ten-Year Financial Forecast
- Adopt resolutions fixing and adopting the Readiness-To-Serve Charge, Capacity Charge, and Water Rates
- Authorize a change in the method of installing, keeping, and rendering all accounts from a modified-accrual basis method of accounting to a cash-basis method of accounting for the purpose of budgeting.



**THE METROPOLITAN WATER DISTRICT
OF SOUTHERN CALIFORNIA**

RESOLUTION 9302

**RESOLUTION OF THE BOARD OF DIRECTORS
OF THE METROPOLITAN WATER DISTRICT OF
SOUTHERN CALIFORNIA
FIXING AND ADOPTING WATER RATES
TO BE EFFECTIVE JANUARY 1, 2023 AND 2024**

The Board of Directors of The Metropolitan Water District of Southern California (the “Board”) hereby finds that:

1. The Board of Directors (“Board”) of The Metropolitan Water District of Southern California (“Metropolitan”), pursuant to Sections 133 and 134 of the Metropolitan Water District Act (the “Act”), is authorized to fix such rate or rates for water that, so far as practicable, will result in revenue which, together with revenue from any water standby or availability service charge or assessment, will pay the operating expenses of Metropolitan, provide for repairs and maintenance, provide for payment of the purchase price or other charges for property or services or other rights acquired by Metropolitan, and provide for the payment of the interest and principal of its bonded debt; and

2. On March 12, 2002, the Board adopted Resolution 8805, “Resolution Of The Board Of Directors Of The Metropolitan Water District Of Southern California Fixing And Adopting Rates And Charges For Fiscal Year 2002/03 And To Direct Further Actions In Connection Therewith”, adopting a new structure for Metropolitan’s water rates and charges in order to enhance Metropolitan’s fiscal stability and ability to ensure the region’s long-term water supply while reasonably and fairly allocating the cost of providing service to its member agencies; and

3. The rate structure adopted by Resolution 8805 was the product of a three-year process that included a strategic planning process commenced by the Board in July 1998, discussions with member agencies, retail agencies and other stakeholders and numerous meetings of Metropolitan’s Board, Audit, Budget and Finance Committee, Budget, Finance and Investment Committee and Subcommittee on Rate Structure Implementation; and

4. Development of the rate structure adopted by Resolution 8805 included Strategic Plan Policy Principles adopted by the Board on December 14, 1999 to provide a framework for the development of a revised rate structure; a Composite Rate Structure Framework adopted by

the Board on April 11, 2000 (the “Rate Structure Framework”); a Rate Structure Action Plan adopted by the Board on December 12, 2000; and study of (i) a detailed rate design proposal presented in December 2000 (the “December 2000 Proposal”) developed from the Rate Structure Framework and (ii) an alternative rate structure proposal presented in September 2001 (the “Proposal”) that addressed concerns which were raised about the December 2000 Proposal; and

5. By Resolution 8774, “Resolution Of The Board Of Directors Of The Metropolitan Water District Of Southern California To Approve Rate Structure Proposal And To Direct Further Actions In Connection Therewith,” adopted October 16, 2001, the Board approved the Proposal, which unbundled water rates and charges to reflect the different functions undertaken by Metropolitan to provide its services, and determined that the Proposal (i) was consistent with the Board's Strategic Plan Policy Principles, (ii) addressed issues raised during the consideration of the December 2000 Proposal, (iii) furthered Metropolitan's strategic objectives of ensuring the region's long term water supply reliability through encouragement of sound and efficient water resources management, water conservation, and accommodating a water transfer market, and (iv) enhanced the fiscal stability of Metropolitan; and

6. By Resolution 8774, the Board directed the General Manager to (i) prepare a report on the Proposal describing each of the rates and charges and the cost of service process used to develop the rates and charges and (ii) utilize the Proposal as the basis for determining Metropolitan's revenue requirements and recommending rates to become effective January 1, 2003, in accordance with Metropolitan's annual rate-setting procedure under the Administrative Code; and

7. On January 7, 2002, the General Manager presented to the Budget, Finance and Investment Committee (formerly the Audit, Budget and Finance Committee and today, the Finance and Insurance Committee) a detailed report describing each of the rates and charges and the supporting cost of service process, dated December 2001 (the “2001 Cost of Service Report”), that (i) described the rate structure process and design; (ii) identified revenue requirements; (iii) showed the costs of major functions that Metropolitan undertakes to provide its services to its member agencies, (iv) classified these service function costs based on the use of and benefit from the Metropolitan system to create a logical nexus between the costs and the revenues required from each of the rates and charges; and (iv) set forth the rates and charges necessary to defray such costs; and

8. By Resolution 8805 the Board found and determined that the cost of service process reasonably and fairly: (i) identified revenue requirements; (ii) allocated costs to the functions that Metropolitan undertakes to provide its services to its member agencies; (iii) classified service function costs based upon use of and benefit from Metropolitan's system, and (iv) allocated costs to rates and charges based upon customary water industry standards; and

9. By Resolution 8805 the Board found and determined that the water rates and charges were supported by the cost of service process and that such rates and charges reasonably and fairly allocated the costs of providing service of Metropolitan's water system to its member agencies and third-party transporters of water, if any; and

10. The Board received the Final Report on Rates and Charges, dated June 28, 2002, that (i) described the rate structure process and design; (ii) identified revenue requirements; (iii) showed the costs of major service functions that Metropolitan undertakes, (iv) classified these service function costs based on the use of and benefit of the Metropolitan system to create a logical nexus between the costs and the revenues required from each of the rates and charges; and (iv) set forth the rates and charges necessary to defray such costs; and

11. Metropolitan's water rates approved by the Board thereafter have utilized the unbundled water rate elements in the rate structure approved by Resolution 8774 and implemented by Resolution 8805; and

12. The cost of service process supporting Metropolitan's water rates approved by the Board on March 11, 2003 and in following years is consistent with the cost of service process described in the 2001 Cost of Service Report. Raftelis Financial Consultants, Inc. ("RFC"), the firm engaged in 1998 to perform a comprehensive cost of service study and assist in the development of the rate structure, confirmed to the Board in a report dated April 6, 2010, that the fiscal year 2010/11 cost of service report presented to the Board in January 2010 was accurate and consistent with the 2001 Cost of Service Report and that the fiscal year 2010/11 cost of service report and rate methodology was consistent with water industry best practices and complies with cost of service and rate guidelines in the American Water Works Association's Manual M-1, *Principles of Water Rates, Fees and Charges*; and

13. In *San Diego County Water Authority v. Metropolitan Water District of Southern California, et al.*, San Francisco Superior Court Case Nos. CPF-10-510830 and CPF-12-512466 (the "2010 and 2012 Cases," collectively), the San Diego County Water Authority challenged Metropolitan's water rates adopted on April 13, 2010 and April 10, 2012; and

14. On June 21, 2017, the Court of Appeal entered a decision in the 2010 and 2012 Cases in *San Diego County Water Authority v. Metropolitan Water District of Southern California, et al.*, 12 Cal.App.5th 1124, holding that Metropolitan may recover its State Water Project transportation costs through its transportation rates and that based on the administrative record before it the rates in CYs 2011 through 2014 did not support Metropolitan's Water Stewardship Rate allocation to its transportation rates, and on September 27, 2017, the California Supreme Court denied SDCWA's Petition for Review, making the decision final; and

15. On September 21, 2021, the Court of Appeal issued a new appellate decision in which it interpreted its 2017 appellate decision. The Court of Appeal clarified that its 2017 decision regarding the Water Stewardship Rate was not limited to 2011-2014, and that it prohibits the inclusion of the Water Stewardship Rate in transportation rates charged under Metropolitan's wheeling rate and in the price term of the SDCWA-MWD Exchange Agreement from 2015 forward. On November 23, 2021, Metropolitan's Board approved an action directing staff to recover 100 percent of demand management costs from Metropolitan's supply rate elements in the future rate and charge proposals.

16. San Diego County Water Authority has filed lawsuits also challenging Metropolitan's water rates adopted on April 8, 2014, April 12, 2016, and April 10, 2018, each also titled *San Diego County Water Authority v. Metropolitan Water District of Southern California, et al.*, pending in the San Francisco Superior Court under Case Nos. CPF-14-514004, CPF-16-515282, and CPF-18-516389, and a consolidated trial is scheduled for those cases on May 16, 2022; and

17. Pursuant to Resolution 8329, adopted by the Board on July 9, 1991, Resolution 9199, adopted by the Board on March 8, 2016, and Resolution 9201, adopted by the Board on March 8, 2016, and as each is thereafter amended and supplemented, proceeds of the rates and other revenues from the sale or availability of water are pledged to the payment of Metropolitan's outstanding revenue bonds, subordinate revenue bonds, short-term certificates and to the payment of revenue bonds, subordinate revenue bonds and short-term certificates to be issued pursuant to Resolution 8329, Resolution 9199, and Resolution 9201; and

18. On February 4, 2022, the General Manager and Chief Financial Officer provided to the Board and the public a board letter describing the proposed biennial budget for fiscal years 2022/23 and 2023/24, identifying key assumptions, addressing key circumstances such as current state water supply conditions, and continued maintenance of the current ad valorem tax rate, incorporating a ten-year financial forecast; determining anticipated total revenues and revenues anticipated to be derived from water transactions and firm revenue sources required during fiscal years 2022/23 and 2023/24, identifying revenue requirements for that period and recommending rates and charges consistent with cost of service principles to be effective January 1, 2023 and January 1, 2024, and explaining that costs and revenues may be at variance with forecasts and variations will be addressed, for example by contributions to, or withdrawals from, financial reserves maintained for this purpose; and

19. The recommended rates were developed using the same unbundled water rate elements in the rate structure approved by Resolution 8774 and implemented by Resolution 8805, as detailed in the FYs 2022/23 and 2023/24 Cost of Service Report for Proposed Water Rates and Charges (the "2022 Cost of Service Report") provided to the Board and the public on February 4, 2022; and

20. The detailed proposed departmental and non-departmental biennial budget for fiscal years 2022/23 and 2023/24 (the "Proposed Biennial Budget") was distributed to the Board and the public on February 4, 2022; and

21. On February 4, 2022, the capital investment plan (CIP) appendix to the detailed Proposed Biennial Budget for fiscal years 2022/23 and 2023/24 was also provided to the Board and the public, providing detailed information on proposed capital projects and capital improvement costs; and

22. Board workshops and discussions regarding the Proposed Biennial Budget and future water rates and charges were held on February 8, 2022, March 7, 2022, and April 11, 2022

at the regularly scheduled Finance and Insurance Committee meetings, and on March 22, 2022 at a special meeting of the Finance and Insurance Committee; and

23. The Board conducted a public hearing at its regular meeting on March 8, 2022, at which interested parties were given the opportunity to present their views regarding the proposed water rates and charges; and

24. Notice of the public hearing was published prior to the hearing in various newspapers of general circulation within Metropolitan's service area; and

25. Metropolitan received written comments regarding the proposed water rates and charges, which, together with Metropolitan's responses, have been provided to the Board and the public; and

26. Before the April 12, 2022 Board meeting, the General Manager and Chief Financial Officer provided to the Board and the public a board letter describing modifications to the Proposed Biennial Budget for fiscal years 2022/23 and 2023/24 with additional alternatives to the budget recommendations made in February 2022 pursuant to Board and public feedback; alternatives to the determination of total revenues and of revenues to be derived from water transactions and firm revenue sources required during fiscal years 2022/23 and 2023/24, and alternatives to the proposed rates to be effective January 1, 2023 and January 1, 2024, and charges to be effective January 1, 2023; and

27. Each of the meetings of the Board were conducted in accordance with the Brown Act (commencing at Section 54950 of the Government Code), for which due notice was provided and at which quorums were present and acting throughout; and

28. All board letters, reports, presentations and other documents referred to in this Resolution may be viewed by Board members and the public on Metropolitan's web page at the Budget & Finance page of Metropolitan's website, <http://www.mwdh2o.com>, or in the office of the Board Executive Secretary;

NOW, THEREFORE, the Board of Directors of The Metropolitan Water District of Southern California does hereby resolve, determine and order as follows:

Section 1. That the Board of Directors of The Metropolitan Water District of Southern California hereby fixes and adopts the following water rates, to be effective on January 1, 2023 and January 1, 2024 as shown in the table below, in order to enhance Metropolitan's fiscal stability and ability to ensure the region's long-term water supply while reasonably and fairly allocating the cost of providing service to its member agencies and other potential users of Metropolitan's system:

Table 1. Rates and Charges

Rates & Charges Effective January 1st	2023	2024
Tier 1 Supply Rate (\$/AF)	\$321	\$332
Tier 2 Supply Rate (\$/AF)	\$530	\$531
System Access Rate (\$/AF)	\$368	\$389
System Power Rate (\$/AF)	\$166	\$182
Treatment Surcharge (\$/AF)	\$354	\$353
Full Service Untreated Volumetric Cost (\$/AF)		
Tier 1	\$855	\$903
Tier 2	\$1,064	\$1,102
Full Service Treated Volumetric Cost (\$/AF)		
Tier 1	\$1,209	\$1,256
Tier 2	\$1,418	\$1,455
Readiness-to-Serve Charge (\$M)	\$154	\$167
Capacity Charge (\$/cfs)	\$10,600	\$11,200

Section 2. The Board finds and determines that the rates specified in Section 1 utilize the unbundled water rate and charge elements of the rate structure approved by Resolution 8774 and implemented by Resolution 8805, with the exception of the removal of the Water Stewardship Rate element and recovery of demand management costs from the supply rate elements, and that the cost of service process supporting the rates and charges specified in Section 1 is the cost of service process described in the 2022 Cost of Service report. The adopted rates and charges and final cost of service reports will be on file at the Budget & Finance page of www.mwdh2o.com and available for review by interested parties at Metropolitan’s headquarters.

Section 3. The Board finds and determines that the cost of service process reasonably, fairly and proportionately: (i) identifies revenue requirements; (iii) shows the costs of major service functions that Metropolitan undertakes, (iii) assigns costs to the service functions; (iv) allocates service function costs based upon use of and benefit from Metropolitan’s system, and (v) distributes costs to rates and charges based upon customary water industry standards. Accordingly, the Board finds that the cost of service process supports the rates and charges by creating a logical nexus between the costs and the revenues required and the rates and charges necessary to defray Metropolitan’s costs of providing its services and for use of its water system.

Section 4. The Board finds and determines that the rates specified in Section 1 are fixed by the Board pursuant to Sections 133 and 134 of the Act, and, so far as practicable, will result in revenue which, together with revenue from water standby or availability service charges or assessments, will pay the operating expenses of Metropolitan, provide for repairs and maintenance, provide for payment of the purchase price or other charges for property or services or other rights acquired by Metropolitan, and provide for the payment of the interest and principal of its bonded debt. Actual revenues and expenses may vary from budgeted amounts for a variety of reasons, and Administrative Code Section 5202(e) contemplates variation in actuals to budget and provides policy guidance to the Board, and the Board finds and determines that Metropolitan's financial obligations may include liabilities and future commitments, such as retiree obligations and debt service, that are not reflected in the budget but that can be addressed in a fiscally prudent manner to reduce future obligations and keep future rate increases reasonable within the policy guidance provided by Administrative Code Section 5202(e).

Section 5. The Board finds and determines that the rates specified in Section 1, together with other revenues from Metropolitan's charges, ad valorem property taxes, and other miscellaneous revenue, do not exceed the reasonable and necessary cost of providing Metropolitan's water services for which the rates and charges are made, or of conferring the benefit provided, and is fairly apportioned to each member agency as specified in Section 6 below.

Section 6. The Board finds and determines that the respective per-acre-foot rates and charges specified in Section 1 are paid for the corresponding products or services and use of Metropolitan's water system, that Metropolitan provides such products or services directly to the member agencies or other users of Metropolitan's system that pay such rates and charges, and that such products or services are not provided to those not charged.


Section 7. The Board finds and determines that each of the rates specified in Section 1 are set for Metropolitan's services and are not levied for separate general revenue purposes.

Section 8. The General Manager and the General Counsel are hereby authorized to do all things necessary and desirable to accomplish the purposes of this Resolution, including, without limitation, the commencement or defense of litigation.

Section 9. If any provision of this Resolution is held invalid, that invalidity shall not affect other provisions of this Resolution which can be given effect without the invalid portion or application, and to that end the provisions of this Resolution are severable.

Section 10. That the Board Executive Secretary is hereby directed to transmit a certified copy of this Resolution to the presiding officer of the governing body of each member agency.

I HEREBY CERTIFY that the foregoing is a full, true and correct copy of a Resolution adopted by the Board of Directors of The Metropolitan Water District of Southern California, at its meeting held on April 12, 2022.

A handwritten signature in dark ink, appearing to read "Judy Adams", is written over a horizontal line.

Secretary of the Board of Directors
of The Metropolitan Water District
of Southern California

**THE METROPOLITAN WATER
DISTRICT OF SOUTHERN CALIFORNIA**

RESOLUTION 9303

**RESOLUTION OF THE BOARD OF DIRECTORS
OF THE METROPOLITAN WATER DISTRICT OF
SOUTHERN CALIFORNIA
FIXING AND ADOPTING
A READINESS-TO-SERVE CHARGE EFFECTIVE JANUARY 1, 2023**

The Board of Directors of The Metropolitan Water District of Southern California (the “Board”) hereby finds that:

1. Pursuant to Resolution 8774, the Board of The Metropolitan Water District of Southern California (“Metropolitan”) approved a rate structure proposal at its meeting on October 16, 2001, described in Board Letter 9-6, including a Readiness-To-Serve (“RTS”) Charge; and
2. Providing firm revenue sources is a goal of such rate structure; and
3. The amount of revenue to be raised by the RTS Charge shall be as determined by the Board and allocation of the RTS Charge among member public agencies (“member agencies”) shall be in accordance with the method established by the Board; and
4. The RTS Charge is a charge fixed and adopted by Metropolitan and charged to its member agencies, and is not a fee or charge imposed upon real property or upon persons as an incident of property ownership; and
5. Metropolitan has legal authority to fix and adopt such RTS Charge as a water rate pursuant to Sections 133 and 134 of the Metropolitan Water District Act (the “Act”), and to fix it as an availability of service charge pursuant to Section 134.5 of the Act; and
6. Under authority of Sections 133 and 134 of the Act, the Board has the authority to fix the rate or rates for water as will result in revenue which, together with other revenues, will pay Metropolitan’s operating expenses and provide for payment of other costs, including payment of the interest and principal of Metropolitan’s non-tax funded bonded debt; and
7. The RTS Charge recovers the capital expenditures for infrastructure projects needed to provide emergency storage capacity and available capacity needed to maintain reliable deliveries during outages and service interruptions and during periods of hydrologic variability; and
8. Pursuant to Resolution 8329, adopted by the Board on July 9, 1991, Resolution 9199, adopted by the Board on March 8, 2016, and Resolution 9201, adopted by the Board on March 8, 2016, and as each is thereafter amended and supplemented, proceeds of the RTS Charge and other revenues from the sale or availability of water are pledged to the payment of Metropolitan’s outstanding revenue bonds, subordinate

revenue bonds, short-term certificates and to the payment of revenue bonds, subordinate revenue bonds and short-term certificates to be issued pursuant to Resolution 8329, Resolution 9199, and Resolution 9201; and

9. Under authority of Section 134.5 of the Act, an RTS Charge levied as an availability of service charge may be collected from the member agencies within Metropolitan, or may continue to be collected as a standby charge against individual parcels within Metropolitan's service area; and

10. Certain member agencies of Metropolitan have opted in prior fiscal years to provide collection of all or a portion of their RTS Charge obligation through a Metropolitan water standby charge ("Standby Charge") levied on parcels within those member agencies; and

11. Under authority of Section 134.5 of the Act, the Standby Charge may continue to be levied on each acre of land or each parcel of land less than an acre within Metropolitan to which water is made available for any purpose by Metropolitan, whether the water is actually used or not; and

12. Metropolitan is willing to comply with the requests of member agencies opting to have Metropolitan continue to levy the Standby Charge within their respective territories, on the terms and subject to the conditions contained herein; and

13. On April 12, 2022, the Board considered the rates and charges presented by the General Manager, approved the biennial budget for fiscal years 2022/23 and 2023/24, adopted recommended water rates for calendar years 2023 and 2024 and charges for calendar year 2023, and received information and documents that have been made available at <https://www.mwdh2o.com/who-we-are/budget-finance/>; and

14. In approving the Proposed Biennial Budget and adopting the rates and charges on April 12, 2022, the Board determined the amount of revenue to be raised by the RTS Charge in calendar year 2023 to be \$154,000,000, based on information and documents available at <https://www.mwdh2o.com/who-we-are/budget-finance/>; and

15. Written notice of intention of Metropolitan's Board to consider and take action at its regular meeting of April 12, 2022, to adopt Metropolitan's RTS Charge for calendar year 2023 was given to each of Metropolitan's member agencies; and

16. The RTS Charge for calendar year 2023 applicable to each member agency is reflected in the Engineer's Report dated April 2022 and its method of its calculation and the specific data used in its determination are as specified in the cost of service report; and

17. Each of the meetings of the Board were conducted in accordance with the Brown Act (commencing at Section 54950 of the Government Code), for which due notice was provided and at which quorums were present and acting throughout;

NOW, THEREFORE, the Board does hereby resolve, determine and order as follows:

Section 1. That the Board hereby fixes and adopts an RTS Charge for the period from January 1, 2023 through December 31, 2023.

Section 2. That said RTS Charge shall be in an amount sufficient to provide for payment of debt service not paid from *ad valorem* property taxes, and other appropriately allocated costs, for capital expenditures for infrastructure projects needed to provide emergency storage capacity and available capacity needed to maintain reliable deliveries during outages and service interruptions and during periods of hydrologic variability.

Section 3. That such RTS Charge for January 1, 2023 through and including December 31, 2023 shall be in the amounts specified in Section 4, which shall be determined on a historic basis for each acre-foot of water, excluding water sales of reclaimed water under the Local Projects Program and Local Resources Program, groundwater under the Groundwater Recovery Program and Local Resources Program, groundwater under the Groundwater Recovery Program, and deliveries under Replenishment and Interim Agricultural Water, included in Metropolitan's average water deliveries to its member agencies for the applicable ten-year period identified in Section 4. The aggregate RTS Charge for the period from January 1, 2023 through and including December 31, 2023 shall also be as specified in Section 4.

Section 4. That the RTS Charge for January 1, 2023 through and including December 31, 2023 shall be allocated among the member agencies in proportion to the average of applicable deliveries through Metropolitan's system (in acre-feet) to each member agency during the ten-year period ending June 30, 2021. The allocation of the RTS Charge among member agencies is based on deliveries data recorded by Metropolitan and shall be conclusive in the absence of manifest error, but may be corrected by Metropolitan to reflect any errors discovered by Metropolitan.

The amount of the RTS Charge to be charged to each member agency effective January 1, 2023, is as set forth in Schedule 1, which is based on deliveries data prepared by Metropolitan and may be corrected as agreed to by the impacted member agencies:

Schedule 1

Calendar Year 2023 RTS Charge			
Member Agency	Rolling Ten-Year Average Firm Deliveries (Acre-Feet) FY2011/12 - FY2020/21	RTS Share	12 months @ \$154 million per year (1/23-12/23)
Anaheim	19,376.9	1.37%	\$ 2,103,235
Beverly Hills	10,308.7	0.73%	1,118,941
Burbank	13,354.6	0.94%	1,449,554
Calleguas MWD	96,573.4	6.81%	10,482,406
Central Basin MWD	34,311.0	2.42%	3,724,233
Compton	340.2	0.02%	36,926
Eastern MWD	97,570.2	6.88%	10,590,602
Foothill MWD	8,306.1	0.59%	901,572
Fullerton	7,280.1	0.51%	790,207
Glendale	16,256.7	1.15%	1,764,558
Inland Empire Utilities Agency	55,761.7	3.93%	6,052,565
Las Virgenes MWD	20,715.7	1.46%	2,248,553
Long Beach	29,251.8	2.06%	3,175,090
Los Angeles	273,537.0	19.28%	29,690,639
Municipal Water District of Orange County	195,128.0	13.75%	21,179,858
Pasadena	18,954.2	1.34%	2,057,353
San Diego County Water Authority	214,362.4	15.11%	23,267,626
San Fernando	29.7	0.00%	3,224
San Marino	974.0	0.07%	105,721
Santa Ana	9,606.6	0.68%	1,042,733
Santa Monica	4,607.4	0.32%	500,103
Three Valleys MWD	63,736.2	4.49%	6,918,144
Torrance	15,549.0	1.10%	1,687,741
Upper San Gabriel Valley MWD	30,096.0	2.12%	3,266,722
West Basin MWD	113,660.3	8.01%	12,337,076
Western MWD	69,139.3	4.87%	7,504,615
MWD Total	1,418,787.2	100.00%	\$ 154,000,000

Totals may not foot due to rounding

The General Manager shall establish and make available to member public agencies procedures for administration of the RTS Charge, including filing and consideration of applications for reconsideration of their respective RTS Charge. The General Manager shall review any applications for reconsideration submitted in a timely manner. The General Manager shall also establish reasonable procedures for the filing of appeals from his determination.

Section 5. That the RTS Charge specified in Schedule 1, together with other revenues from Metropolitan's water rates, other charges, ad valorem property taxes, and other miscellaneous revenue, does not exceed the reasonable and necessary cost of providing Metropolitan's water services for which the rates and charges are made, or of conferring the benefit provided, and is fairly apportioned to each member agency as specified in Section 6 below.

Section 6. That water conveyed through Metropolitan's system for the purposes of water transfers, exchanges or other similar arrangements shall be included in the calculation of a member agency's rolling ten-year average firm demands used to allocate the RTS Charge.

Section 7. That the RTS Charge and the amount applicable to each member agency, the method of its calculation, and the specific data used in its determination are as specified in the adopted rates and charges to be effective January 1, 2023, which forms the basis of the RTS Charge, and the corresponding 2022 Cost of Service Report. The adopted rates and charges and cost of service reports are on file and available for review by interested parties at Metropolitan's headquarters.

Section 8. That except as provided in Section 10 below with respect to any RTS Charge collected by means of the Standby Charge, the RTS Charge shall be due monthly, quarterly or semiannually as agreed upon by Metropolitan and the member agency.

Section 9. That such RTS Charge may, at the request of any member agency which elected to utilize the Standby Charge as a mechanism for collecting the RTS Charge obligation in fiscal year 1993/94, be collected by continuing the Standby Charge at rates not to exceed rates levied in fiscal year 1996/97 upon land within Metropolitan's (and such member agency's) service area to which water is made available by Metropolitan for any purpose, whether such water is used or not.

Section 10. That the Standby Charge shall be collected on the tax rolls, together with the *ad valorem* property taxes which are levied by Metropolitan for the payment of pre-1978 voter-approved indebtedness. Any amounts so collected shall be applied as a credit against the applicable member agency's RTS Charge obligation. After such member agency's RTS Charge allocation is fully satisfied, any additional collections shall be credited to other outstanding obligations of such member agency to Metropolitan that funds the capital costs or maintenance and operation expenses for Metropolitan's water system, or future RTS Charge obligations of such agency. Notwithstanding the provisions of Sections 8 and 9 above, any member agency requesting to have all or a portion of its RTS Charge obligation collected through Standby Charge levies within its territory as provided herein shall pay any portion not collected through net Standby Charge collections to Metropolitan, as provided in Administrative Code Section 4507.

Section 11. That notice is hereby given to the public and to each member agency of The Metropolitan Water District of Southern California of the intention of Metropolitan's Board to consider and take action at its regular meeting to be held May 10, 2022 (or such other date as the Board shall hold its regular meeting in such month), on the General Manager's recommendation to continue the Standby Charge for fiscal year 2022/23 under authority of Section 134.5 of the Act on land within Metropolitan at rates not to exceed rates, per acre of land, or per parcel of land less than an acre, levied in fiscal year 1996/97 upon land within Metropolitan's (and such

member agency's) service area. Such Standby Charge will be continued as a means of collecting the RTS Charge.

Section 12. That no failure to collect, and no delay in collecting, any Standby Charge shall excuse or delay payment of any portion of the RTS Charge when due.

Section 13. That the RTS Charge is fixed and adopted by Metropolitan as a rate or charge on its member agencies, and is not a fee or charge imposed upon real property or upon persons as incidents of property ownership, and the Standby Charge is collected within the respective territories of electing member agencies as a mechanism for payment of the RTS Charge. In the event that the Standby Charge, or any portion thereof, is determined to be an unauthorized or invalid fee, charge or assessment by a final judgment in any proceeding at law or in equity, which judgment is not subject to appeal, or if the collection of the Standby Charge shall be permanently enjoined and appeals of such injunction have been declined or exhausted, or if Metropolitan shall determine to rescind or revoke the Standby Charge, then no further Standby Charge shall be collected within any member agency and each member agency which has requested continuation of the Standby Charge as a means of collecting its RTS Charge obligation shall pay such RTS Charge obligation in full, as if continuation of such Standby Charge had never been sought.

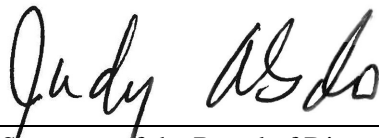
Section 14. That the General Manager and the General Counsel are hereby authorized to do all things necessary and desirable to accomplish the purposes of this Resolution, including, without limitation, the commencement or defense of litigation.

Section 15. That if any provision of this Resolution or the application to any member agency, property or person whatsoever is held invalid, that invalidity shall not affect other provisions or applications of this Resolution which can be given effect without the invalid portion or application, and to that end the provisions of this Resolution are severable.

Section 16. That the General Manager is hereby authorized and directed to take all necessary action to satisfy relevant statutes requiring notice by mailing or by publication.

Section 17. That the Board Executive Secretary is hereby directed to transmit a certified copy of this Resolution to the presiding officer of the governing body of each member agency.

I HEREBY CERTIFY that the foregoing is a full, true and correct copy of a Resolution adopted by the Board of Directors of The Metropolitan Water District of Southern California, at its meeting held on April 12, 2022.



Secretary of the Board of Directors
of The Metropolitan Water District
of Southern California

THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA ENGINEER'S REPORT

PROGRAM TO SET A READINESS-TO-SERVE CHARGE EFFECTIVE JANUARY 1, 2023, INCLUDING LOCAL OPTION TO CONTINUE COLLECTING A STANDBY CHARGE, DURING FISCAL YEAR 2022/23

April 2022

BACKGROUND

The Metropolitan Water District of Southern California is a public agency with a primary purpose to provide imported wholesale water service for domestic and municipal uses to its 26 member public agencies. Approximately 19 million people reside within Metropolitan's service area, which covers approximately 5,200 square miles and includes portions of the six counties of Los Angeles, Orange, Riverside, San Bernardino, San Diego and Ventura. Metropolitan historically provided between 40 and 60 percent of the water used within its service area. To supply Southern California with reliable and safe water, Metropolitan imports water from the Colorado River and Northern California to supplement its member agencies' local supplies, and helps its member agencies develop increased water conservation, recycling, storage and other local resource programs.

REPORT PURPOSES

As part of its role as a regional imported water supplier, Metropolitan builds capital facilities and implements water management programs that ensure the delivery of reliable high-quality water supplies throughout its service area. The purpose of this report is to: (1) identify and describe those facilities and programs that will be financed in part by Metropolitan's Readiness-to-Serve (RTS) Charge, and (2) describe the method and basis for levying Metropolitan's Standby Charge for those agencies electing to continue to collect a portion of their RTS obligation through Metropolitan's Standby Charge in fiscal year 2022/23. **Because the Standby Charge is levied and collected on a fiscal year basis the calculations in this report also are for the fiscal year, even though the RTS Charge is levied on a calendar year basis.** The RTS Charge for calendar year 2022 was adopted by Metropolitan's Board on April 13, 2021 and the RTS Charge for 2023 will be considered by the Board on April 12, 2022. The Board will consider the continuation of the Standby Charge for fiscal year 2022/23 on May 10, 2022.

Metropolitan collects the RTS Charge from its member agencies to recover a portion of the capital costs including debt service on bonds issued to finance capital facilities needed to meet demands on Metropolitan's system for emergency storage and available capacity to meet outages and hydrologic variability. The Standby Charge is collected from parcels of land within Metropolitan's member agencies that have elected to collect all or a portion of their RTS obligation through the Standby Charge, as a method of recovering the costs of special benefits conferred on parcels within their service area. The RTS Charge will partially pay for the facilities and programs described in this report, namely, the amount attributable to the portions providing emergency storage and available capacity to meet outages and hydrologic variability. The Standby Charge, when collected, will be utilized solely for capital payments and debt service on the capital facilities funded by the RTS Charge, as identified in this report.

The budgeted total RTS revenue for fiscal year 2022/23 is \$147.0 million, of which \$44.0 million is estimated to be collected via the Standby Charge. The Standby Charge is collected on property tax bill.

METROPOLITAN'S RESPONSE TO FLUCTUATING WATER DEMANDS AND AVAILABILITY OF WATER SOURCES

Metropolitan's member agencies have widely differing imported water supply needs and the availability of imported water supply from various sources also varies widely. Some agencies have no local water resources and rely on Metropolitan for 100 percent of their annual water needs. Other agencies have adequate local surface supplies and storage and/or groundwater basins that provide them with the majority of their water supplies during wet and average years. However, during dry periods and/or based on a variety of other factors, these agencies rely on Metropolitan to make up any shortfalls in local water supplies. Similar coordination challenges arise in managing water available from Metropolitan's various water supply sources.

To respond to fluctuating demands for water, Metropolitan and its member agencies collectively examined the available local and imported resource options in order to develop a least-cost plan that meets the reliability and quality needs of the region. The product of this intensive effort was an Integrated Resources Plan (IRP) for achieving a reliable and affordable water supply for Southern California. The major objective of the IRP was to develop a comprehensive water resources plan that ensures (1) reliability, (2) affordability, (3) water quality, (4) diversity of supply, and (5) adaptability for the region, while recognizing the environmental, institutional, and political constraints to resource development. As these constraints change over time, the IRP is periodically revisited and updated by Metropolitan and the member agencies to reflect current conditions. To meet the water supply needs of the region, Metropolitan continues to identify and develop additional water supplies to maintain the reliability of the imported water supply and delivery system to its member agencies.

CAPITAL FACILITIES — CONVEYANCE AND DISTRIBUTION

Metropolitan's total water system has been built over time to meet the widely differing needs of its member agencies and the various sources of water available to Metropolitan. To meet those needs, Metropolitan's water delivery system is comprised of three basic conveyance and delivery components that form one integrated water system:

- State Water Project (SWP);
- Colorado River Aqueduct (CRA); and
- Distribution System

The system draws on diverse supply sources, transports water across a large part of the State and distributes water in six counties, where member agencies or their retail sub-agencies serve an estimated 19 million people. The CRA and the California Aqueduct of the SWP convey imported water into the Metropolitan service area. This water is then delivered to Metropolitan's member agencies via a regional network of canals, pipelines, and appurtenant facilities, which constitute the Distribution System. Supply, treatment, and storage facilities augment the Distribution System. The system is an interconnected regional conveyance and distribution system with the ability to deliver supplies from each of the SWP, the CRA, and its storage portfolio throughout its vast and diverse service area to almost every member agency. This flexibility derives from the capital facilities and provides local and system-wide benefits to all member agencies, as the facilities directly contribute to the reliable delivery of water supplies throughout Metropolitan's service area.

As the 2007 Integrated Area Study (IAS) emphasized, regional system flexibility is a key component of overall reliability.¹ Today, system flexibility continues to be essential to the availability of Metropolitan's services.² Metropolitan must maintain operational flexibility—the ability to respond to short-term changes in regional water supply, water quality, treatment requirements, and member agency demands. Metropolitan must maintain delivery flexibility—the ability to maintain partial to full water supply deliveries during planned and unplanned facility outages. Metropolitan is also required by state statute to serve as large an area as is determined to be reasonable and practical with SWP water; and where a blend of water sources is served, to have the objective to the extent determined to be reasonable and practical, that at least 50 percent of the blend be SWP water. (MWD Act, Sec. 136.)

Operational flexibility has been achieved by creating an interconnected regional delivery network integrating the SWP and the CRA conveyance systems with the Distribution System. This integrated network allows Metropolitan to incorporate supply from the SWP and the CRA with a diverse portfolio of geographically dispersed storage programs, including the Central Valley groundwater storage programs, carryover storage in San Luis Reservoir, flexible storage capacity in Castaic Lake and Lake Perris, Lake Mead storage, the Desert Water Agency/Coachella Valley Water District Advanced Delivery account, in-basin surface storage in Diamond Valley Lake and Lake Mathews, and in-basin groundwater Conjunctive Use Programs. This integrated, regional network also allows Metropolitan to move supplies throughout the system in response to service demands, supply availability and operational needs.

Therefore, each of Metropolitan's integrated conveyance, distribution and storage assets contributes to regional system reliability. It is fair and reasonable for member agencies and all property owners within the service area to share the cost of developing and maintaining these assets because they all benefit from regional system reliability.

State Water Project Description and Benefits

One of Metropolitan's two major sources of water is the SWP.³ The SWP is the largest state-built, multipurpose, user-financed water project in the country. It was designed and built primarily to deliver water, but also provides flood control, generates power for pumping, is used for recreation, and enhances habitat for fish and wildlife.

The SWP consists of a complex system of dams, reservoirs, power plants, pumping plants, canals and aqueducts to deliver water. See Figure 1. SWP water consists of water from rainfall and snowmelt runoff that is captured and stored in SWP conservation facilities and then delivered through SWP transportation facilities to water agencies and districts located throughout the Upper Feather River, Bay Area, Central Valley, Central Coast, and Southern California. In addition to the delivery of SWP water, the SWP is also used to convey transfers of SWP water and non-SWP water. Metropolitan receives water from the SWP through the California Aqueduct, which is 444 miles long, and at four delivery points near the northern and eastern boundaries of Metropolitan's service area.

¹ 2007 Integrated Area Study, Report No. 1317, pg. 2-10.

² 2022 Annual Operating Plan, pg. 6-10

³ For historical and current information regarding the SWP, refer to Bulletin 132, published periodically by DWR since 1963. The most recently published Bulletin is Bulletin 132-18 dated January 2021 and titled "Management of the California State Water Project. Appendices to the Bulletin are also updated separately. Both are available at: <https://water.ca.gov/Programs/State-Water-Project/Management/Bulletin-132>.

Figure 1. Facilities of the State Water Project



The SWP is managed and operated by the Department of Water Resources (DWR). All water supply-related capital expenditures and operations, maintenance, power and replacement (OMP&R) costs associated with the SWP conservation and transportation facilities are paid for by 29 agencies and districts, known collectively as the State Water Contractors (Contractors). The Contractors are participants in the SWP through long-term contracts for the delivery of SWP water and use of the SWP transportation facilities.

In 1960, Metropolitan signed the first water supply contract (as amended, the State Water Contract) with DWR. In addition to SWP water, Metropolitan also obtains water from water transfers, groundwater banking and exchange programs delivered through the California Aqueduct.

Since 1960, the SWP system has been extended, improved, and refurbished. All such costs are payable by the Contractors. California WaterFix was a comprehensive science-based solution proposed by the state to modernize critical water delivery infrastructure of the SWP. On October 10, 2017, Metropolitan's Board voted to support financing for the California WaterFix project. However, the state terminated the project in April 2019. Consistent with the Governor's Executive Order N-10-19, the state then announced a new single tunnel Delta conveyance project, which was notably included as part of the Governor's 2020 Water Resilience Portfolio. In 2019, DWR initiated planning and environmental review for a single tunnel Delta Conveyance Project (DCP) to protect the future reliability of access to SWP supplies. In December 2020, the Metropolitan Board authorized the General Manager to execute agreements for (a) funding a share of up to 60.2 percent for planning and pre-construction costs for the DCP, and (b) an amendment to the Joint Powers Agreement for the Delta Conveyance Design and Construction Joint Powers Authority. A Delta conveyance project will contribute to the improvement of capital facilities needed to meet demands on Metropolitan's system for emergency storage and available capacity to meet outages and hydrologic variability. Metropolitan's biennial budget for fiscal years 2022/23 and 2023/24 includes Metropolitan's planned contribution of \$99.0 million for DWR's planning costs of a new Delta conveyance project.

All Metropolitan member agencies benefit from the SWP system and its supplies, which can be distributed to all member agencies. Metropolitan's member agencies distribute that water to parcels as retail water providers or as wholesale water providers to retail agencies. In this way, the SWP water that Metropolitan delivers to its member agencies contributes to water available to existing and future end users throughout Metropolitan's service area. The cost of the net capital payments for the SWP less the portion covered by property taxes in fiscal year 2022/23 is \$60.7 million, as shown in Table 1. Real property throughout Metropolitan's service area benefits from the availability of the SWP facilities and its integration into Metropolitan's system and therefore all such costs may be attributed to such parcels. However, Metropolitan's Standby Charge collects only \$44.0 million of the total \$312.9 million system costs, representing 14% of the total system costs.

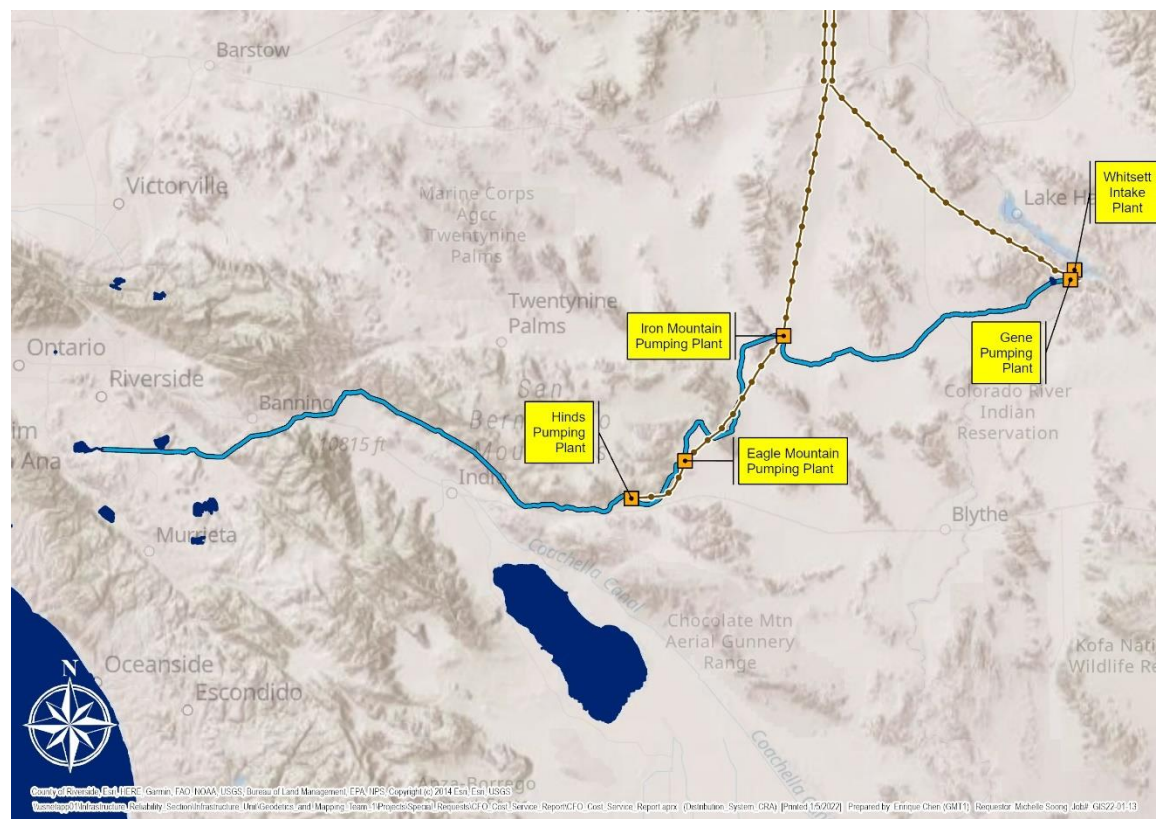
Colorado River Aqueduct Description and Benefits

Metropolitan's other major source of water is the CRA. Metropolitan was established to obtain an allotment of Colorado River water, and its first mission was to construct and operate the CRA. The CRA consists of five pumping plants, 450 miles of high voltage power lines, one electric substation, four regulating reservoirs, and 242 miles of aqueducts, siphons, canals, conduits and pipelines terminating at Lake Mathews in Riverside County. See Figure 2. Metropolitan owns, operates, and manages the Colorado River Aqueduct. Metropolitan is responsible for operating, maintaining, rehabilitating, and repairing the CRA, and is responsible for obtaining and scheduling energy resources adequate to power pumps at the CRA's five pumping stations.

Metropolitan incurs capital and operations and maintenance expenditures to support the CRA activities. The direct costs of the CRA activities include labor, materials and supplies, as well as outside services to provide repair and maintenance, and professional services. The CRA activities benefit from Water System Operations support services and management supervision, as well as Administrative and General activities of Metropolitan. Metropolitan finances past, current and future capital improvements on the CRA, and capitalizes those

improvements as assets. The costs of Metropolitan's capital financing activities are apportioned to cost functions, such as the CRA Conveyance and Aqueduct function. The capital cost of the Colorado River Aqueduct and Inland Feeder in fiscal year 2022/23 is \$76.3 million, and is included in the Non-SWP Conveyance System line item in Table 1. Real property throughout Metropolitan's service area benefits from the availability of the CRA facilities and its integration into Metropolitan's system and therefore all such costs may be attributed to such parcels. However, Metropolitan's Standby Charge collects only \$44.0 million of the total \$312.9 million system costs, representing 14% of the total system costs.

Figure 2. Colorado River Aqueduct



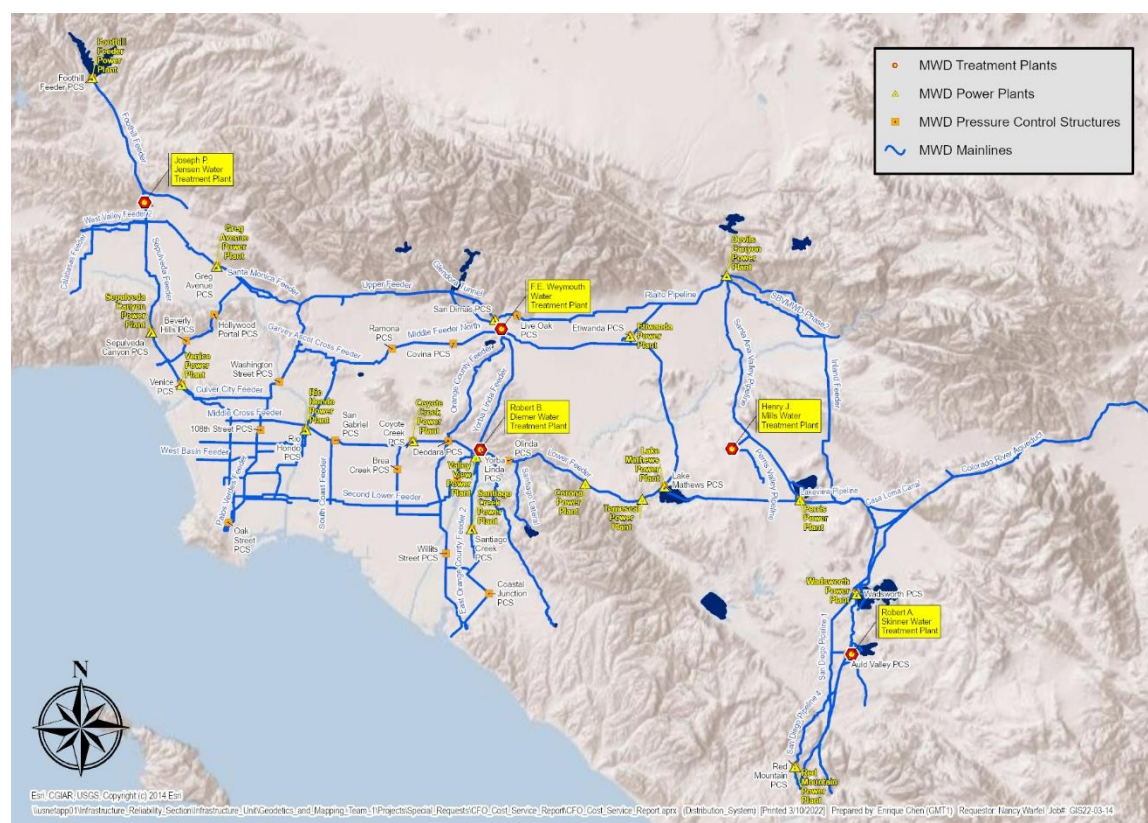
Metropolitan's Conveyance and Distribution System Benefits

For purposes of this report, components of the conveyance system are considered to include only those major trunk facilities that transport water from primary supply sources to either regional storage facilities or feeder lines linked to the primary conveyance facilities. See Figure 3. For a list of Metropolitan's conveyance facilities within its service area, see Table 3. All other water transport facilities, including pipelines, feeders, laterals, canals and aqueducts, are considered to be distribution facilities. Distribution facilities can be further identified in that they generally have at least one connection to a member agency's local distribution system. For a list of Metropolitan's distribution facilities, see Table 3.

All water transport facilities not specifically identified as part of the regional conveyance system are considered to be distribution facilities (Distribution System). While conveyance and aqueduct system components are regional in nature and generally do not link directly to local agency distribution systems, Distribution System facilities do ultimately connect to local agency systems. As a result, these facilities rely on conveyance and aqueduct facilities

to import water from regional supply sources. The Distribution System is a complex network of facilities which routes water from the CRA and SWP to the member agencies. Beginning at the terminal delivery points of the CRA and SWP, Metropolitan's Distribution System includes approximately 775 miles of pipelines, feeders, and canals. Distribution System operations are coordinated from the Operations Control Center in Eagle Rock. The control center plans, schedules, and balances daily water operations in response to member agency demands and the operational limits of the system as a whole. Metropolitan's storage and treatment facilities augment the Distribution System. Metropolitan operates and maintains separate untreated and treated distribution facilities.

Figure 3. Metropolitan's Distribution and Storage Facilities



Metropolitan has an ongoing commitment, through physical system improvements and the maintenance and rehabilitation of existing facilities, to maintain the reliable delivery of water throughout the entire service area. System improvement projects include additional conveyance and distribution facilities to maintain the dependable delivery of water supplies, provide alternative system delivery capacity, and enhance system operations. Conveyance and distribution system improvement benefits also include projects to upgrade obsolete facilities or equipment, or to rehabilitate or replace facilities or equipment. These projects are needed to enhance system operations, comply with new regulations, and maintain a reliable distribution system. A list of conveyance and distribution system facilities is provided in Table 3 along with the fiscal year 2022/23 estimated conveyance and distribution system benefits. The capital cost of the Distribution System in fiscal year 2022/23 is \$76.4 million, and is included in the Distribution System line item in Table 1. Real property throughout Metropolitan's service area benefits from the availability of the Distribution System and its integration into Metropolitan's system and therefore all such costs may be attributed to such parcels. However, Metropolitan's Standby Charge collects only \$44.0 million of the total \$312.9 million system costs, representing 14% of the total system costs.

CAPITAL FACILITIES – WATER STORAGE

System Storage Benefits

The Metropolitan system, for purposes of meeting demands during times of shortage, regulating system flows, and ensuring system reliability in the event of a system outage, provides over 1,000,000 acre-feet of system storage capacity. Diamond Valley Lake provides 810,000 acre-feet of that storage capacity, effectively doubling Southern California's previous surface water storage capacity. Other existing imported water storage available to the region consists of Metropolitan's raw water reservoirs, a share of the SWP's raw water reservoirs in and near the service area, and the portion of the groundwater basins used for conjunctive-use storage.

Water stored in system storage during above average supply conditions (surplus) provides a reserve against shortages when supply sources are limited or disrupted. Water storage also preserves Metropolitan's capability to deliver water during scheduled maintenance periods, when conveyance facilities must be removed from service for rehabilitation, repair, or maintenance. The benefits of these capital facilities are both local and system-wide, as the facilities directly contribute to the reliable delivery of water supplies throughout Metropolitan's service area. The capital costs of water storage in fiscal year 2022/23 is \$99.5 and, as shown in Table 1. Real property throughout Metropolitan's service area benefits from the availability of the storage capacity throughout the service area and its integration into Metropolitan's system and therefore all such costs may be attributed to such parcels. However, Metropolitan's Standby Charge collects only \$44.0 million of the total \$312.9 million system costs, representing 14% of the total system costs.

METROPOLITAN'S REVENUE

Metropolitan's major capital facilities are financed largely from the proceeds of revenue bond issues, which are repaid over future years. The principal source of revenue for repayment of these bonds is water sales to its member agencies, which is currently Metropolitan's largest source of revenue. In addition, *ad valorem* property taxes provide an additional limited revenue source, which is used to pay pre-1978 voter-approved indebtedness. However, the use of water rates as a primary source of revenue has placed an increasing burden on member agencies and their ratepayers, which would more equitably continue to be paid in part by assessments on land that in part derives its value from the availability of water through an integrated and reliable water system.

Readiness-To-Serve

In December 1993, Metropolitan's Board approved a revenue structure that included additional charges to establish a commitment to Metropolitan's capital improvement program and provide revenue stability. This revenue structure included the RTS Charge, which in 1995 certain member agencies opted to pay in part pursuant to the collection of a standby charge. In October 2001, the Board adopted the current unbundled rate structure, and maintained the RTS Charge.

As noted above, Metropolitan levies the RTS Charge on its member agencies to recover capital costs, including a portion of the debt service on bonds issued to finance capital facilities needed to meet existing demands on Metropolitan's system for emergency storage and available capacity.

The estimated fiscal year 2022/23 RTS Charge for each member agency is shown in Table 4.

Standby Charge Option

Metropolitan's Standby Charge is authorized by the State Legislature and has been levied by Metropolitan since fiscal year 1992/93. The Standby Charge recognizes that there are economic benefits to lands that have access to

a water supply, whether or not such lands are using it, which excludes lands permanently committed to open space and maintained in their natural state that are not now and will not in the future be supplied water and lands that the General Manager, in his discretion, finds do not now and cannot reasonably be expected to derive a benefit from the projects to which the proceeds of the Standby Charge will be applied. Utilization of the Standby Charge transfers some of the burden of maintaining Metropolitan's capital infrastructure from water rates and *ad valorem* taxes to all the benefiting properties within the service area. A fraction of the value of this benefit and of the cost of providing it can be effectively recovered, in part, through the levying of a standby charge. The projects to be supported in part by the Standby Charge are capital projects that provide both local and Metropolitan-wide benefit to current landowners as well as existing water users.

Although a standby charge could have been set to recover all Conveyance, Distribution, and Storage costs as detailed in Table 1, Metropolitan's continued Standby Charge only collects about 14% of those costs. For fiscal year 2022/23, the amount to be recovered by the RTS Charge is estimated to be \$147.0 million and of that only \$44.0 million is estimated to be recovered by the Standby Charge.

The Standby Charge for each acre or parcel of less than an acre varies from member agency to member agency, as permitted under the legislation establishing Metropolitan's Standby Charge. The water Standby Charge for each member agency is continued at amounts not to exceed the rates in place since fiscal year 1996/97 and is shown in Table 5, which consists of composite rates by member agencies, not to exceed \$15.00. The composite rates consisted in part of a uniform component of \$5 applicable throughout Metropolitan, and in part of a variable component, not exceeding \$10 in any member public agency, reflecting the allocation of historical water deliveries by the member agencies as of fiscal year 1993/94 when the composite rates were initially established. Metropolitan will continue Standby Charges only within the service areas of the member agencies that have requested that the Standby Charge be utilized for purposes of meeting their outstanding RTS obligation. Although rates may not exceed the amounts in place in fiscal year 1996/97, some rates may be lower.

The Standby Charge is proposed to be collected from: (1) parcels on which water standby charges have been levied in fiscal year 1993/94 and annually thereafter and (2) parcels annexed to Metropolitan and to an electing member agency after January 1997. Table 6 lists parcels annexed, or to be annexed, to Metropolitan and to electing member agencies during fiscal year 2020/21, such parcels being subject to the Standby Charge upon annexation.

The estimated costs of Metropolitan's wholesale water system, which could be paid by a Standby Charge, are approximately \$312.9 million for fiscal year 2022/23, as shown in Table 1. An average total Standby Charge of about \$72.26 per acre of land or per parcel of land less than one acre would be necessary to pay for the total potential program benefits. Benefits in this amount will accrue to each acre of property and parcel within Metropolitan's service area, as Metropolitan delivers water to member agencies that contributes to water available to these properties, via that member agency or a retail sub-agency. Because Metropolitan's water deliveries to member agencies contributes to water available only to properties located within Metropolitan's service area boundaries (except for certain contractual deliveries as permitted under Section 131 of the Metropolitan Water District Act), any benefit received by the public at large or by properties outside of the area is merely incidental.

Table 5 shows that the distribution of Standby Charge revenues from the various member agency service areas would provide net revenue flow of approximately \$44.0 million for fiscal year 2022/23. Metropolitan will use other revenue sources, such as water sales revenues, RTS Charge revenues (except to the extent collected through standby charges, as described above), interest income, and revenue from sales of hydroelectric power, to pay for the remaining program costs. Additionally, the actual Standby Charge proposed to be continued ranges from \$2.49 to \$15 per acre of land or per parcel of land less than one acre. Thus, the benefits of Metropolitan's investments in water conveyance, storage, and distribution far exceed the recommended Standby Charge.

Equity

The RTS Charge is a firm revenue source. The revenues to be collected through this charge will not vary with sales in the current year. This charge is levied on Metropolitan's member agencies and is not a fee or charge upon real property or upon persons as an incident of property ownership. It ensures that agencies that only occasionally purchase water from Metropolitan but receive the reliability benefits of Metropolitan's system pay an equitable share of the costs to provide that reliability. Within member agencies that elect to pay the RTS Charge through Metropolitan's standby charges, the Standby Charge results in a lower RTS Charge than would otherwise be necessary due to the amount of revenue collected from lands which benefit from the availability of Metropolitan's water system. With the Standby Charge, these properties are now contributing a more appropriate share of the cost of importing water to Southern California.

Metropolitan's water system increases the availability and reliable delivery of water throughout Metropolitan's service area. A reliable system benefits existing end users and land uses through retail water service provided by Metropolitan member agencies or by water retailers that purchase water from a Metropolitan member agency, and through the replenishment of groundwater basins and reservoir storage as reserves against shortages due to droughts, natural emergencies, or scheduled facility shutdowns for maintenance. The benefits of reliable water resources from the SWP, CRA, Storage, and system improvements accrue to more than 250 cities and communities within Metropolitan's six-county service area. Metropolitan's regional water system is interconnected, so water supplies from the SWP and CRA can be used throughout most of the service area and therefore benefit water users and properties system-wide.

A major advantage of a firm revenue source, such as an RTS charge, is that it contributes to revenue stability during times of drought or low water sales. It affords Metropolitan additional security, when borrowing funds, that a portion of the revenue stream will be unaffected by drought or by rainfall. This security will help maintain Metropolitan's historically high credit rating, which results in lower interest expense to Metropolitan, and therefore, lower overall cost to its member agencies.

SUMMARY

The foregoing and the attached tables describe the current costs of Metropolitan's system and benefits provided by the projects listed as mainstays to the water system for Metropolitan's service area. Benefits are provided to member agencies, their retail sub-agencies, water users and property owners. The projects represented by this report provide both local benefits as well as benefits throughout the entire service area. It is recommended, for calendar year 2023, that the Metropolitan Board of Directors adopt the RTS Charge as set forth in Table 4 with an option for local agencies to request that a Standby Charge be collected for fiscal year 2022/23 from lands within Metropolitan's service area as a credit against such member agency's RTS Charge, up to the Standby Charge amounts collected by Metropolitan within the applicable member agency for fiscal year 1996/97. The maximum Standby Charge would not exceed \$15 per acre of land or per parcel of less than one acre. The costs of the system described in this Engineer's Report exceeds the recommended Standby Charge by at least \$268 million. A preliminary listing of all parcels subject to the proposed 2022/23 Standby Charge and the amounts proposed to be continued for each is available in the office of the Chief Financial Officer. A final listing is available upon receipt of final information from each county.

Prepared Under the Supervision of:



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Assistant General Manager/
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TABLE 1

**ESTIMATED COSTS OF
WATER SYSTEM INFRASTRUCTURE
BENEFITING REAL PROPERTY WITHIN METROPOLITAN'S SERVICE AREA**

	Estimated Program Costs for FY2022/23	Dollars Per Parcel of 1 Acre or Less
Capital Payments for Water System Infrastructure		
Net Capital Payments to State Water Project (SWP) (less portion paid by property taxes)	\$ 60,722,840	\$14.02
Non Tax Supported Capital Costs for Non-SWP Conveyance System ¹	\$ 76,253,010	\$17.61
Non Tax Supported Capital Costs for Distribution System ²	\$ 76,379,326	\$17.64
Non Tax Supported Capital Costs for Water Storage ³	\$ 99,537,336	\$22.99
Total Capital Payments	\$ 312,892,512	\$72.26
Estimated Standby Charge Revenues	\$ 44,002,818	\$10.16
Percent Collected by Standby Charge	14%	
Total Remaining Costs Not Paid by Standby Charge	\$ 268,889,693	\$62.10
Notes:		
[1] Non-SWP Conveyance include the Colorado River Aqueduct and Inland Feeder.		
[2] Distribution facilities include the pipelines, laterals, feeders and canals that distribute water throughout the service area.		
[3] System storage includes Diamond Valley Lake, Lake Mathews, Lake Skinner and several other smaller surface reservoirs which provide storage for operational purposes.		
Totals may not foot due to rounding		

<p>TABLE 2</p> <p>WATER RECYCLING, GROUNDWATER RECOVERY AND CONSERVATION PROJECTS</p>	
Project Name	FISCAL YEAR 2022/23 Payment
Water Recycling Projects	\$7,706,314
Alamitos Barrier Reclaimed Water Project	
Anaheim Water Recycling Demonstration Project	
Burbank Recycled Water System Expansion Phase II Project	
CBMWD Recycled Water System Expansion Phase I	
Development of Non-Domestic Water System in Ladera Ranch and Talega Valley	
Direct Reuse Project Phase IIA	
Dry Weather Runoff Reclamation Facility	
Eastern Recycled Water Pipeline Reach 16 Project	
El Toro Phase II Recycled Water Distribution System Expansion Project	
El Toro Recycled Water System Expansion	
Elsinore Valley Recycled Water Program	
EMWD Recycled Water System Expansion Project	
Escondido Regional Reclaimed Water Project	
Glendale Verdugo-Scholl and Brand Park Project	
Griffith Park South Water Recycling Project	
Groundwater Reliability Improvement Program Recycled Water Project	
Hansen Area Water Recycling Phase I Project	
Hansen Dam Golf Course Water Recycling Project	
Harbor Water Recycling Project	
Lake Mission Viejo Advanced Purification WTF	
Leo J. Vander Lans Water Treatment Facility Expansion Project	
Long Beach Reclaimed Water Master Plan Phase I System Expansion	
Los Angeles Taylor Yard Park Water Recycling Project	
Michelson/Los Alisos Water Reclamation Plant Upgrades and Distribution System Expansion Project	
North Atwater Area Water Recycling Project	
North City Water Reclamation Project	
North Hollywood Area Water Recycling Project	
Otay Recycled Water System	
Oxnard Advanced Water Purification Facility Project	

TABLE 2 (Continued)	
WATER RECYCLING, GROUNDWATER RECOVERY AND CONSERVATION PROJECTS	
Project Name	FISCAL YEAR 2022/23 Payment
Water Recycling Projects (continued)	
Padre Dam MWD Reclaimed Water System Phase I	
Rowland Water District Portion of the City of Industry Regional Recycled Water Project	
San Clemente Recycled Water System Expansion Project	
San Elijo Water Reclamation System	
Santa Maria Water Reclamation Project	
Sepulveda Basin Sports Complex Water Recycling Project	
Sepulveda Basin Water Recycling Project - Phase 4	
Terminal Island Recycled Water Expansion Project	
USGVMWD Portion of the City of Industry Regional Recycled Water Project	
Van Nuys Area Water Recycling Project	
Walnut Valley Water District Portion of the City of Industry Regional Recycled Water Project	
West Basin Water Recycling Program Phase V Project	
Westside Area Water Recycling Project	

TABLE 2 (Continued)	
WATER RECYCLING, GROUNDWATER RECOVERY AND CONSERVATION PROJECTS	
Project Name	FISCAL YEAR 2022/23 Payment
Groundwater Recovery Projects	\$11,469,103
Beverly Hills Desalter Project	
Cal Poly Pomona Water Treatment Plant	
Capistrano Beach Desalter Project	
Chino Basin Desalination Program / IEUA	
Chino Basin Desalination Program / Western	
Colored Water Treatment Facility Project	
Irvine Desalter Project	
IRWD Wells 21 & 22 Desalter Project	
Madrona Desalination Facility (Goldsworthy Desalter) Project	
Menifee Basin Desalter Project	
North Pleasant Valley Regional Desalter	
Perris II Brackish Groundwater Desalter	
Pomona Well #37-Harrison Well Groundwater Treatment Project	
Round Mountain Water Treatment Plant	
San Juan Basin Desalter Project	
Temescal Basin Desalting Facility Project	
On-site Retrofit Program	\$3,000,000
Future Supply Actions	\$3,639,900
Conservation Projects	\$25,000,000
Regionwide Residential	
Regionwide Commercial	
Member Agency Administered/MWD Funded	
Water Incentive Savings Program	
Landscape Training Classes	
Landscape Irrigation Surveys	
Pilot programs/Studies	
Inspections	
Landscape Transformation Program (Turf Removal)	
Disadvantaged Communities Program	

Total Demand Management Programs	\$50,815,317
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TABLE 3 CONVEYANCE, DISTRIBUTION, AND STORAGE SYSTEM COSTS
<p>Description</p> <p>Storage Facilites</p> <p>ALAMEDA CORRIDOR, PIPELINE RELOCATION, PROTECTION CAPITAL PROGRAM FOR PROJECTS COSTING LESS THAN \$250,000-LIVE OAK CAPITAL PROGRAM FOR PROJECTS COSTING LESS THAN \$250,000-MORRIS DAM CHINO BASIN GROUNDWATER SERVICE CONNECTION CB-15T CHLORINATION AND PH CONTROL FACILITIES- ORANGE COUNTY & GARVEY (50/50) CLEARING OF LAKE MATHEWS RESERVOIR AREA CONVERSION OF DEFORMATION SURVEY MONITORING AT COPPER BASIN COPPER BASIN AND GENE WASH DAM, INSTALL SEEPAGE ALARM (50/50) COPPER BASIN RESERVOIR SUPERVISORY CONTROL COPPER BASIN SEWER SYSTEM CORONA DEL MAR RESERVOIR- REPLENISHMENT CORONA DEL MAR RESERVOIR-: CHLORINATION STATION CRANE - LAKE MATHEWS OUTLET TOWER (ORG CONST) DAM MONITORING SYSTEM UPGRADES - Lake Mathews DAM MONITORING SYSTEM UPGRADES - LAKE SKINNER DAM SEISMIC ASSESSMENT - PHASE 3 DAM SEISMIC UPGRADES - PHASE 3 DIAMOND VALLEY LAKE DAM MONITORING SYSTEM UPGRADE DIAMOND VALLEY LAKE DAM MONITORING SYSTEM UPGRADES - STAGE 3 DIAMOND VALLEY LAKE DAM MONITORING SYSTEM UPGRADES - STAGES 1 & 2 DIAMOND VALLEY LAKE INLET/OUTLET TOWER FISH SCREEN REPLACEMENT - CONSTRUCTION DIAMOND VALLEY LAKE MONITORYING SYSTEM UPGRADES DIAMOND VALLEY LAKE, CAL PLAZA CHARGES DIAMOND VALLEY LAKE, CONSULTANT COSTS DIAMOND VALLEY LAKE, DAM DEFORMATION MONITORING DIAMOND VALLEY LAKE, EAST DAM SUMP PUMP ELECTRICAL STUDY DIAMOND VALLEY LAKE, GENERAL CONSTRUCTION MGMT, 2000-2001 DIAMOND VALLEY LAKE, INUNDATION MAPS DIAMOND VALLEY LAKE, UNDERGROUND TANK CLOSURE DIAMOND VALLEY RECREATION, EAST MARINA DIAMOND VALLEY RECREATION, FISHERY DIAMOND VALLEY RECREATION, MUSEUM FOUNDATION REHABILITATION DIAMOND VALLEY RECREATION, SEARL PARKWAY IMPROVEMENTS, PHASE I DIAMOND VALLEY TRAILS PROGRAM, TRAILS DISTRICT DESIGN AND INSPECTION - MORRIS DAM DISTRICT RESERV. AQUEOUS AMMONIA FEED SYSTEM DISTRICT RESERVOIR - LONGTERM CHEMICAL FAC CONTAINMENT DOMESTIC WATER SUPPLY - LAKE MATHEWS (ORG CONST) DOMESTIC WATER SYSTEM-PALOS VERDES RESERVOIR (INTERIM CONST) DVL - SEARL PARKWAY EXTENSION - PHASE 2 DVL - SEARL PARKWAY LANDSCAPING DVL EAST DAM ELECTRICAL UPGRADES DVL EAST DAM POWER LINE REALIGNMENT DVL INLET/OUTLET FISH SCREEN REHABILITATION DVL RECREATION - ALTERNATE ACCESS ROAD DVL RECREATION, COMMUNITY PARK AND REGIONAL AQUATIC FACILITY DVL SECURITY ENHANCEMENT DVL, CONSTRUCTION DVL, CONSTRUCTION CLAIMS SUPPORT DVL, CONSTRUCTION MANAGEMENT SERVICE DVL, CONSTRUCTION SUPERVISION DVL, CONSTRUCTION, WEST DAM FOUNDATION DVL, DEDICATION CEREMONY DVL, DISTURBED DVL, DOMENIGONI PARK DVL, EAST DAM DVL, EAST DAM EMBANKMENT DVL, EAST DAM FENCING DVL, EAST DAM INLET OUTLET TOWER CONSTRUCTION DVL, EAST DAM LANDSCAPE SCREENING DVL, EAST DAM NORTH RIM REMEDIATION DVL, EAST DAM P-1 FACILITIES DVL, EAST DAM SITE COMPLETION DVL, EAST DAM STATE STREET IMPROVEMENTS DVL, EAST DAM VERTICAL SLEEVE VALVE DVL, EAST MARINA, PHASE 2 DVL, EXCAVATION DVL, FIXED CONE, SPHERE DVL, GENERAL DVL, GRADING OF CONT DVL, INSTALL NEW WATERLINE DVL, MISC SMALL CONS DVL, NORTH HIGH WATER ROAD DVL, P-1 PUMPING FACILITY DVL, PROCUREMENT DVL, SCOTT ROAD EXTENSION DVL, SOUTH HIGH WATER ROAD & QUARRY DVL, SPILLWAY DVL, START UP DVL, VALLEY-WIDE SITE ROUGH GRADING DVL, WORK PACKAGE DVL, WORK PACKAGE 1 DVL, WORK PACKAGE 10, INLET OUTLET WORK DVL, WORK PACKAGE 11, FOREBAY DVL, WORK PACKAGE 12, TUNNEL DVL, WORK PACKAGE 13, P-1 PUMP OPERATIONS FACILITY DVL, WORK PACKAGE 14, PC-1 DVL, WORK PACKAGE 15, SITE CLEARING DVL, WORK PACKAGE 16, GROUNDWATER MONITORING DVL, WORK PACKAGE 17, FIELD OFFICE DVL, WORK PACKAGE 18, TEMPORARY VISITOR CENTER DVL, WORK PACKAGE 19, PERMANENT VISITOR CENTER DVL, WORK PACKAGE 2, EASTSIDE PIPELINE DVL, WORK PACKAGE 20, EAST DAM EXCAVATION, FOUNDATION DVL, WORK PACKAGE 21, WEST DAM EXCAVATION, FOUNDATION DVL, WORK PACKAGE 23, WEST RECREATION AREA</p>

<div>TABLE 3</div> <div>CONVEYANCE, DISTRIBUTION, AND STORAGE SYSTEM COSTS</div>
<div>Description</div> <div>Storage Facilites</div> <div>DVL, WORK PACKAGE 24, EAST RECREATION AREA</div> <div>DVL, WORK PACKAGE 25, EXCAVATION</div> <div>DVL, WORK PACKAGE 26, ELECTRICAL TRANSMISSION LINES</div> <div>DVL, WORK PACKAGE 27, MAJOR EQUIPMENT P-1</div> <div>DVL, WORK PACKAGE 28, MAJOR EQUIPMENT, GATES</div> <div>DVL, WORK PACKAGE 29, MAJOR EQUIPMENT, PC-1</div> <div>DVL, WORK PACKAGE 30, INSTRUMENTATION AND CONTROL SYSTEMS</div> <div>DVL, WORK PACKAGE 31, GEOGRAPHICAL INFO</div> <div>DVL, WORK PACKAGE 32, PERMIT</div> <div>DVL, WORK PACKAGE 33, MAJOR EQUIPMENT, VALVES</div> <div>DVL, WORK PACKAGE 34, EMERGENCY RELEASE</div> <div>DVL, WORK PACKAGE 35</div> <div>DVL, WORK PACKAGE 36, TRANSMISSION LINE TO PC-1</div> <div>DVL, WORK PACKAGE 38, RUNOFF EROSION</div> <div>DVL, WORK PACKAGE 39, SADDLE DAM FOUNDATION</div> <div>DVL, WORK PACKAGE 4, NEWPORT ROAD RELOCATION</div> <div>DVL, WORK PACKAGE 40</div> <div>DVL, WORK PACKAGE 42, GEOTECHNICAL</div> <div>DVL, WORK PACKAGE 43, MOBILIZATION</div> <div>DVL, WORK PACKAGE 44, SITE DEVELOPMENT</div> <div>DVL, WORK PACKAGE 47, HAZARDOUS MATERIAL</div> <div>DVL, WORK PACKAGE 48, GENERAL ADMIN</div> <div>DVL, WORK PACKAGE 49</div> <div>DVL, WORK PACKAGE 5, SALT CREEK FLOOD CONTROL</div> <div>DVL, WORK PACKAGE 52, HISTORY ARCHEOLOGY INVENTORY</div> <div>DVL, WORK PACKAGE 53, PREHISTORIC ARCHEOLOGY</div> <div>DVL, WORK PACKAGE 54, PLANTS, WILDLIFE</div> <div>DVL, WORK PACKAGE 55, AIR QUALITY, NOISE</div> <div>DVL, WORK PACKAGE 6, SURFACE WATER MITIGATION</div> <div>DVL, WORK PACKAGE 7, DESIGN WEST DAM ACCESS</div> <div>DVL, WORK PACKAGE 8, DESIGN EAST DAM ACCESS</div> <div>DVL, WORK PACKAGE 9, SADDLE DAM</div> <div>DVL, WORKING INVENTORY, 80,000 ACRE FEET (10% OF CAPACITY)</div> <div>EAST DAM TUNNELS</div> <div>EAST MARINA BOAT RAMP EXTENSION</div> <div>ELECTRICAL SERVICE - LAKE MATHEWS (ORG CONST)</div> <div>ELECTRICAL SYSTEM - LAKE MATHEWS (ORG CONST)</div> <div>FIRST SAN DIEGO AQUEDUCT - REPLACE PIPELINE SECTION BOTH BARRELS</div> <div>FLOATING BOAT HOUSE - LAKE MATHEW</div> <div>FLOOD RELEASE VALVE, MORRIS DAM & WATER SUPPLY SYSTEM,PV RESER.</div> <div>FOOTBRIDGE - LAKE MATHEWS (ORG CONST)</div> <div>FOOTHILL FEEDER- LIVE OAK RESERVOIR- CLAIMS</div> <div>FOOTHILL FEEDER- LIVE OAK RESERVOIR- RESIDENCE</div> <div>GARVEY RESERVIOR OPERATION & MAINTENANCE CENTER</div> <div>GARVEY RESERVIOR OPERATION & MAINTENANCE CENTER (RETIREMENT)</div> <div>GARVEY RESERVOIR - JUNCTION STRUCTURE,REPLACE VALVE # 1</div> <div>GARVEY RESERVOIR COVER AND LINER REPLACEMENT PROJECT</div> <div>GARVEY RESERVOIR DRAINAGE & EROSION CONTROL IMPROVEMENTS</div> <div>GARVEY RESERVOIR- EMERGENCY GENERATOR</div> <div>GARVEY RESERVOIR- FLOATING COVER</div> <div>GARVEY RESERVOIR HYPOCHLORITE FEED SYSTEM</div> <div>GARVEY RESERVOIR- JUNCTION STRUCTURE, REPLACE VALVE #1</div> <div>GARVEY RESERVOIR- JUNCTION STRUCTURE, REPLACE VALVE #1 - INTEREST</div> <div>GARVEY RESERVOIR- JUNCTION STRUCTURE, REPLACE VALVES # 4 & 5</div> <div>GARVEY RESERVOIR- MODIFY DESILTING BASINS</div> <div>GARVEY RESERVOIR REPAIR</div> <div>GARVEY RESERVOIR, LOWER ACCESS ROAD, PAVING & DRAINS</div> <div>GARVEY RESERVOIR, REPLACE VALVE # 4 & 5</div> <div>GARVEY RESERVOIR, TWO VALVES AT JUNCTION STRUCTURE</div> <div>GARVEY RESERVOIR: CONT. 565, SPEC.412</div> <div>GARVEY RESERVOIR: TWO COTTAGES WITH GARAGES</div> <div>GARVEY RESERVOIR-HYPOCHLORINATION</div> <div>GARVEY RESERVOIR-HYPOCHLORINE STATION</div> <div>GARVEY RESERVOIR-INLET AND OUTLET CONDUIT SYSTEM MODIFICATION</div> <div>GARVEY RESEVOIR-JUNCTION STRUCTURE REPLACE TWO VALVES</div> <div>GARVEY RSVR REPLACE VENTURI THROAT SECTION</div> <div>HEADWORKS OF DISTRIBUTION SYSTEM LAKE MATHEWS</div> <div>HEADWORKS: ADDITIONAL VALVES</div> <div>HEADWORKS: MOTOR OPERATED SLIDE GATES</div> <div>HOUSE AND GARAGE AT CORONA DEL MAR RESERVOIR</div> <div>HOUSE AND GARAGE AT ORANGE COUNTY RESERVOIR</div> <div>HOUSE AT PALOS VERDES RESERVOIR</div> <div>HOWELL-BUNGER VALVE OPERATOR, LAKE MATHEWS, 5 VALVES 1939</div> <div>HOWELL-BUNGER VALVE OPERATOR, LAKE MATHEWS, 5 VALVES 1955</div> <div>JENSEN FINISHED WATER RESERVOIR NO. 1 COVER REHABILITATION</div> <div>JENSEN FINISHED WATER RESERVOIR NO. 2 FLOATING COVER IMPROVEMENT</div> <div>JENSEN FLUORIDE TANK REPLACEMENT</div> <div>JENSEN FWR # 2 FLOATING COVER REPLACEMENT</div> <div>JENSEN FWR NO. 2 FLOATING COVER REPLACEMENT</div> <div>JENSEN, REPAIR COVER OVER RESERVOIR 1</div> <div>LAKE MATHEWS - REPLACE STANDBY GENERATOR</div> <div>LAKE MATHEWS - ELECTRICAL SYSTEM IMPROVEMENT</div>

TABLE 3 CONVEYANCE, DISTRIBUTION, AND STORAGE SYSTEM COSTS
<p>Description</p> <p>Storage Facilites</p> <p>LAKE MATHEWS ABOVEGROUND STORAGE TANK REPLACEMENT</p> <p>LAKE MATHEWS BUILDING</p> <p>LAKE MATHEWS BUILDINGS 8 & 15, RENOVATION OF ASSEMBLY AREA AND ADMIN. BLDG.</p> <p>LAKE MATHEWS- CARPENTER AND VEHICLE MAINTENANCE BUILDING</p> <p>LAKE MATHEWS- CHLORINATION FACILITIES</p> <p>LAKE MATHEWS CHLORINATION FACILITY- REPLACE CHLORINATION EQPMT.</p> <p>LAKE MATHEWS CNTRL TOWER-REPL. 45 30-INCH GATE/BUTTERFLY VALVES</p> <p>LAKE MATHEWS CONTROL TOWER - REPLACE 45 10-INCH GATE VALVE</p> <p>LAKE MATHEWS DAM SAFETY INSTRUMENTATION UPGRADES</p> <p>LAKE MATHEWS DAM SPILLWAY ASSESSMENT</p> <p>LAKE MATHEWS DIKE</p> <p>LAKE MATHEWS DISCHARGE FACILITY UPGRADES</p> <p>LAKE MATHEWS DIVERSION TUNNEL</p> <p>LAKE MATHEWS DIVERSION TUNNEL WALKWAY REPAIR</p> <p>LAKE MATHEWS- DOCK AND BOAT SHELTER</p> <p>LAKE MATHEWS DOMESTIC FACILITIES</p> <p>LAKE MATHEWS- DOMESTIC WATER SYSTEM</p> <p>LAKE MATHEWS ELECTRICAL RELIABILITY</p> <p>LAKE MATHEWS- ELECTRICAL SYSTEM IMPROVEMENT</p> <p>LAKE MATHEWS- EMERGENCY GENERATOR</p> <p>LAKE MATHEWS ENLARGEMENT (SPEC NO. 505)</p> <p>LAKE MATHEWS FOREBAY LINING AND TOWER REPAIRS</p> <p>LAKE MATHEWS FOREBAY OUTLET STRCTR-REPL.CONCRETE BLOCK BLDG</p> <p>LAKE MATHEWS FOREBAY OUTLET, CONCRETE BLDG</p> <p>LAKE MATHEWS FOREBAY PRESSURE CONTROL STRUCTURE AND BYPASS</p> <p>LAKE MATHEWS FOREBAY- REPLACE FOOTBRIDGE</p> <p>LAKE MATHEWS FOREBAY WALKWAY REPAIRS</p> <p>LAKE MATHEWS FOREBAY, HEADWORK FACILITY AND EQUIPMENT UPGRADE</p> <p>LAKE MATHEWS HEADWORKS-INSTALL AIR MTRS,3 HOWELL BNGR VALVE OP.</p> <p>LAKE MATHEWS- HOUSE AND GARAGE</p> <p>LAKE MATHEWS I/O TOWER EMERGENCY GENERATOR</p> <p>LAKE MATHEWS- IMPROVE MAIN SUBSTATION</p> <p>LAKE MATHEWS- IMPROVEMENT OF DOMESTIC WATER & FIRE PROT. SYSTEM</p> <p>LAKE MATHEWS -LUMBER STORAGE BUILDING</p> <p>LAKE MATHEWS -LUMBER STORAGE BUILDING - INTEREST</p> <p>LAKE MATHEWS LUMBER STORAGE ROOF COVER</p> <p>LAKE MATHEWS MAIN DAM AND SPILLWAY</p> <p>LAKE MATHEWS MAIN DAM SUB DRAIN SYSTEM</p> <p>LAKE MATHEWS MAINTENANCE BUILDING</p> <p>LAKE MATHEWS MAINTN.FACILITIES-REPLACE 75 KVA TRANSFORMER.SERV.</p> <p>LAKE MATHEWS- MODIFY CHLORINATION</p> <p>LAKE MATHEWS- MODIFY CHLORINE STORAGE TANK FOUNDATIONS</p> <p>LAKE MATHEWS- MODIFY ELECTRICAL SERVICE</p> <p>LAKE MATHEWS MULTIPLE SPECIES RESERVE, MANAGER"S OFFICE AND RESIDENCE</p> <p>LAKE MATHEWS OFFICE BLDG MODIFICATIONS-AMERICANS W/ DISABILITY</p> <p>LAKE MATHEWS OFFICE TRAILER MODIFICATIONS-AMERICANS W/ DISABILITY</p> <p>LAKE MATHEWS -OPERATOR RESIDENCE</p> <p>LAKE MATHEWS OULET TOWER</p> <p>LAKE MATHEWS OUTLET FACILITIES</p> <p>LAKE MATHEWS OUTLET TOWER NO. 2 VALVE REHABILITATION</p> <p>LAKE MATHEWS OUTLET TOWER- REPLACE CRANES</p> <p>LAKE MATHEWS OUTLET TOWER-REPLACE GATE VALVES</p> <p>LAKE MATHEWS OUTLET TOWER-REPLACE GATE VALVES (RETIREMENT)</p> <p>LAKE MATHEWS OUTLET TUNNEL</p> <p>LAKE MATHEWS- PREFABRICATED AIRCRAFT HANGER</p> <p>LAKE MATHEWS- PREFABRICATED AIRCRAFT HANGER - INTEREST</p> <p>LAKE MATHEWS- PROPANE STORAGE TANK</p> <p>LAKE MATHEWS- PROPANE STORAGE TANK - INTEREST</p> <p>LAKE MATHEWS- REPLACE HOWELL-BUNGER VALVE OPERATORS</p> <p>LAKE MATHEWS- REPLACE VALVES</p> <p>LAKE MATHEWS RESERVOIR-RELOCATE SOUTHERLY SECURITY FENCE</p> <p>LAKE MATHEWS RESERVOIR-RELOCATE SOUTHERLY SECURITY FENCE - INTEREST</p> <p>LAKE MATHEWS- SEEPAGE ALARMS</p> <p>LAKE MATHEWS- SEEPAGE ALARMS - INTEREST</p> <p>LAKE MATHEWS SODIUM HYPOCHLORITE TANK REPLACEMENT</p> <p>LAKE MATHEWS SODIUM HYPOCLORITE INJECTION SYSTEM</p> <p>LAKE MATHEWS- SPRAY PAINT BOOTH</p> <p>LAKE MATHEWS WASTEWATER SYSTEM REPLACEMENT</p> <p>LAKE MATHEWS WATERSHED, DRAINAGE</p> <p>LAKE MATHEWS WATERSHED, DRAINAGE WATER QUALITY MGMT PLAN (CAJALCO CREEK DAM)</p> <p>LAKE MATHEWS, HAZEL ROAD</p> <p>LAKE MATHEWS, REPLACE CHLORINATION EQUIPMENT</p> <p>LAKE MATHEWS,DIKE #1- INSTALL PIEZOMETERS, STAS.55+00 & 85+50</p> <p>LAKE MATHEWS: VALVES AND FITTINGS IN HEADWORKS</p> <p>LAKE MATHEWS-CONST. CONCR.TRAFFIC BARR. WALL TO PROTECT HQ FACIL.</p> <p>LAKE MATTHEWS FIRE WATER LINE</p> <p>LAKE PERRIS POLLUTION PREVENTION AND SOURCE WATER PROTECTION (CAPITAL PORTION)</p> <p>LAKE SKINNER - AERATION SYSTEM</p> <p>LAKE SKINNER - CHLORINATION SYSTEM OUTLET TOWER BYPASS PPLN</p> <p>LAKE SKINNER - CHLORINATION SYSTEM OUTLET TOWER BYPASS PPLN - INTEREST</p> <p>LAKE SKINNER - INSTALL OUTLET CONDUIT FLOWMETER</p> <p>LAKE SKINNER (AULD VALLEY RESERVOIR)- CLAIMS</p> <p>LAKE SKINNER AERATOR AIR COMPRESSORS REPLACEMENT</p> <p>LAKE SKINNER- EQUIPMENT YARD SECURITY</p> <p>LAKE SKINNER- EQUIPMENT YARD SECURITY - INTEREST</p> <p>LAKE SKINNER FACILITIES</p> <p>LAKE SKINNER FACILITIES - EMPLOYEE HOUSING</p> <p>LAKE SKINNER FACILITIES - FENCING</p> <p>LAKE SKINNER FACILITIES - LANDSCAPING</p> <p>LAKE SKINNER FACILITIES - RELOCATE BENTON ROAD</p> <p>LAKE SKINNER OUTLET CONDUIT REPAIR</p> <p>LAKE SKINNER OUTLET TOWER SEISMIC ASSESSMENT</p> <p>LAKE SKINNER- PROPANE STORAGE TANK</p> <p>LAKE SKINNER- PROPANE STORAGE TANK - INTEREST</p> <p>LIVE OAK RESERVOIR & RESERVOIR BYPASS SCHEDULE 264A</p> <p>LIVE OAK RESERVOIR REHABILITATION</p>

TABLE 3 CONVEYANCE, DISTRIBUTION, AND STORAGE SYSTEM COSTS	
Description	
Storage Facilities	
LIVE OAK RESERVOIR SURFACE REPAIR MAINTENANCE FACILITIES, 75KVA TRANSFORMER SERVICE-LAKE MATHEWS (ORG CONST) MILLS FINISHED WATER RESERVOIR REHABILITATION MINOR CAPITAL PROJECTS FOR FY 1989/90 - LAKE MATHEWS MINOR CAPITAL PROJECTS FOR FY 1989/90 - PALOS VERDES RESERVOIR MINOR CAPITAL PROJECTS-LAKE SKINNER, INLET CANAL ELECTRIC FISH BARRIER MINOR CAPITAL PROJECTS-LIVE OAK RESERVOIR, DESILT BASIN IMPROVEMENTS MODIFICATION OF THE LAKE MATHEWS SERVICE WATER SYSTEM MORRIS DAM COTTAGE MORRIS DAM- ENLARGMT. OF SPILLWAY FACLT.& UPPER FDR.VALVE MODF MORRIS DAM ROAD IMPROVEMENT MORRIS DAM, SEISMIC STABILITY REANALYSIS MORRIS DAM-REPLACE EMERGENGY POWER SYSTEM MORRIS RESERVOIR- CAPITAL OBLIGATION PAID MORRIS RESERVOIR- INTEREST OBLIGATION PAID O.C.RESERVOIR - IMPROVE DOMESTIC SYSTEM ORANGE COUNTY RESERVOIR -- JUNCTION STRUCTURE,REPLACE VALVE # 1 ORANGE COUNTY RESERVOIR (SPEC NO. 341) ORANGE COUNTY RESERVOIR CHLORINATION STATION ORANGE COUNTY RESERVOIR- EMBANKMENT AND SPILLWAY ORANGE COUNTY RESERVOIR- EMERGENCY GENERATOR ORANGE COUNTY RESERVOIR- FLOATING COVER ORANGE COUNTY RESERVOIR- HOUSE ORANGE COUNTY RESERVOIR- MODIFY DOMESTIC WATER SYSTEM ORANGE COUNTY RESERVOIR- REPLACE RESIDENCE NO. 95D ORANGE COUNTY RESERVOIR-MODIFY ELEC. CONTROL CENTER ORANGE COUNTY RESERVOIR-REPLACE CHLORINATION EQUIPMENT ORANGE COUNTY RESERVOIR-REPLACE CHLORINATION SYSTEM P V RESERVOIR-REPLACE CHLORINATION SYSTEM PALOS VERDES CHLORINATION STATION AND COTTAGE PALOS VERDES RESERVOIR PALOS VERDES RESERVOIR - INLET/OUTLET TOWER PALOS VERDES RESERVOIR- BY PASS PIPELINES PALOS VERDES RESERVOIR COVER AND LINER REPLACEMENT PALOS VERDES RESERVOIR COVER REPLACEMENT PALOS VERDES RESERVOIR- FENCING AROUND PALOS VERDES RESERVOIR- REPLACE DOMESTIC WATER SYSTEM PIPING PALOS VERDES RESERVOIR SODIUM HYPOCHLORITE FEED SYSTEM UPGRADE PALOS VERDES RESERVOIR,BYPASS PIPELINE RELIEF STRUCTURE MODIFN. PALOS VERDES RESERVOIR,COVERING PALOS VERDES RESERVOIR,REPLACE ACCESS AND PERIMETER ROADS PALOS VERDES RESERVOIR: INCREASING ELEVATION OF SPILLWAY CREST PALOS VERDES RESERVOIR-INSTALL VALVE & CHLORINATION NOZZLE,INL.TWR PALOS VERDES RESERVOIR-REPLACE CHLORINATION SYSTEM PAMO RESERVOIR- WATER STORAGE FEASIBILITY STUDY PAMO RESERVOIR- WATER STORAGE FEASIBILITY STUDY- INTEREST PV RESERVOIR GROUNDWATER MANAGEMENT PVR FACILITY SEWER CONNECTION RECORD DRAWING RESTORATION PROGRAM, CRA REPAIRS TO AZUSA CONDUIT REPLACEMENT OF A 30 INCH GATE VALVE P.V.R. RESIDENCE # 95-D, ORANGE COUNTY RESERVOIR RESIDENCE 45-D - CORONA DEL MAR RESERVOIR RESIDENCE 80-D - ORANGE COUNTY RESERVOIR RESIDENCE 90-D - LAKE MATHEW RESIDENCE 91-D - SAN JACINTO RESERVOIR RESIDENCE 93-D - SAN JACINTO RESERVOIR ROADS AT LAKE MATHEWS ABOVE FLOODLINE SAN DIEGO ACQUEDUCT: COTTAGE AT SAN JACINTO RESERVOIR SAN JACINTO RESERVOIR - SAN DIEGO AQUEDUCT SECOND OUTLET, PALOS VERDES RESERVOIR (SPEC NO. 597) SEEPAGE CONTROL AT LAKE MATHEWS SKINNER DAM SAFETY INSTRUMENTATION UPGRADES SKINNER DAM SPILLWAY ASSESSMENT SKINNER FINISHED WATER RESERVOIR SLIDE GATES REHABILITATION TEMPORARY EMPLOYEE LABOR SETTLEMENT VALVE - GENE RESERVOIR (REPLACED 201) VALVE STRUCTURE MODIFICATIONS-UPPER FDR, SAN GABRIEL CROSSING (INTERIM CONST) WADSWORTH PUMP PLANT CONDUIT PROTECTION WADSWORTH PUMP PLANT, PUMP MOTOR CONVERSION WADSWORTH PUMPING PLANT FIRE PROTECTION SYSTEM UPGRADES WADSWORTH/DVL CONTROL & PROTECTION SYSTEM UPGRADE - CONSTRUCTION & STARTUP WATER QUALITY PROJECT UPSTREAM WATER SUPPLY SYSTEM, OPERATING TOWER, LAKE MATHEWS WEYMOUTH FINISHED WATER RESERVOIR GATE REPLACEMENT	
Sub-total Storage facilities costs	99,537,336

<div>TABLE 3</div> <div>CONVEYANCE, DISTRIBUTION, AND STORAGE SYSTEM COSTS</div>
<div>Description</div> <div> <div>Conveyance and Aqueduct Facilities</div> <div> 2.4 KV STANDBY DIESEL ENGINE GENERATOR REPLACEMENT - GENE 2.4 KV STANDBY DIESEL ENGINE GENERATOR REPLACEMENT - INTAKE 2.4 KV STANDBY DIESEL ENGINE GENERATOR REPLACEMENT - IRON ACCESS STRUCTURE, TRANSITION STRUCTURE AND MANHOLE COVER REPLACEMENT ALL PUMPING PLANTS - 230 KV & 69 KV DISCONNECTS REPLACEMENT ALL PUMPING PLANTS - BRIDGE CRANES ALL PUMPING PLANTS - TRANSFORMER BANK BRIDGE ALLEN MCCOLLOCH PIPELINE - CORROSION INTERFERENCE MITIGATION ALLEN MCCOLLOCH PIPELINE - RIGHT OF WAY ALLEN MCCOLLOCH PIPELINE - UPDATE / MODIFY ALL BOYLE ENGINEERING DRAWINGS AMP VALVE & SERVICE CONNECTION VAULT REPAIR AQUEDUCT & PUMPING PLANT ISOLATION / ACCESS FIXTURES - STUDY AQUEDUCT & PUMPING PLANT ISOLATION GATES ARROWHEAD EAST TUNNEL CONSTRUCTION ARROWHEAD TDS REDUCTION ARROWHEAD TUNNELS CLAIMS COST ARROWHEAD TUNNELS CONNECTOR ROAD ARROWHEAD TUNNELS CONSTRUCTION ARROWHEAD TUNNELS ENGINEERING ARROWHEAD TUNNELS RE-DESIGN ARROWHEAD WEST TUNNEL CONSTRUCTION AULD VALLEY CONTROL STRUCTURE AREA FACILITIES UPGRADE STUDY AUXILIARY POWER SYSTEM REHABILITATION / UPGRADES STUDY AUXILIARY POWER SYSTEM REHABILITATION/UPGRADES BACHELOR MOUNTAIN COMMUNICATION SITE ACQUISITION BACHELOR MOUNTAIN TELECOM SITE IMPROVEMENTS BANK TRANSFORMERS REPLACEMENT STUDY BLACK METAL MOUNTAIN - COMMUNICATIONS FACILITY UPGRADE BLACK METAL MOUNTAIN 2.4KV ELECTRICAL POWER UPGRADE BOX SPRINGS FEEDER REHAB PHASE III BUDGET ADJUSTMENT CABAZON RADIAL GATE FACILITY IMPROVEMENTS CAJALCO CREEK MITIGATION FLOWS CAST-IRON BLOW OFF REPLACEMENT - PHASE 4 CATHODIC PROTECTION STUDY - DESIGN AND CONSTRUCTION CCRP - BLOW-OFF VALVES PHASE 4 PROJECT CCRP - CONTINGENCY CCRP - EMERGENCY REPAIR CCRP - HEADGATE OPERATORS & CIRCUIT BREAKERS REHAB. CCRP - PART 1 & 2 CCRP - SAND TRAP CLEANING EQUIPMENT & TRAVELING CRANE STUDY CCRP - TRANSITION & MAN-WAY ACCESS COVER REPLACEMENT - STUDY & DESIGN CCRP - TUNNELS STUDY CEPSRP - 230 KV SYSTEM SYNCHRONIZERS CEPSRP - ALL PUMPING PLANTS - CONTINGENCY & OTHER CREDITS CEPSRP - ALL PUMPING PLANTS - REPLACE 6.9 KV TRANSFORMER BUSHINGS CEPSRP - ALL PUMPING PLANTS - REPLACE 230KV , 69 KV & 6.9 KV LIGHTENING ARRESTERS CEPSRP - ALL PUMPING PLANTS - REPLACE 230KV TRANSFORMER PROTECTION CEPSRP - SWITCHYARDS & HEAD GATES REHABILITATION CEPSRP- ALL PUMPING PLANTS - IRON MOUNTAIN - 230KV BREAKER SWITCH. INST. COLORADO RIVER AQUEDUCT - PUMPING COLORADO RIVER AQUEDUCT - SIPHONS AND RESERVOIR OUTLETS REFURBISHMENT COLORADO RIVER AQUEDUCT CONVEYANCE RELIABILITY, PHASE II REPAIRS AND INSTRUMENTATION CONTROL SYSTEM DRAWING UPGRADE STUDY (PHASE 1) - STUDY COPPER BASIN AND GENE DAM OUTLET WORKS REHABILITATION (STUDY & DESIGN) COPPER BASIN AND GENE WASH RESERVOIRS DISCHARGE VALVE REHABILITATION COPPER BASIN INTERIM CHLORINATION SYSTEM COPPER BASIN OUTLET GATES RELIABILITY COPPER BASIN OUTLET REHABILITATION COPPER BASIN OUTLET, AND COPPER BASIN & GENE WASH DAM SLUICEWAYS REHABILITATION COPPER BASIN POWER & PHONE LINES REPLACEMENT COPPER BASIN RESERVOIR OUTLET STRUCTURE REHABILITATION PROJECT COPPER BASIN RESERVOIRS DISCHARGE VALVE REHABILITATION & METER REPLACEMENT COPPER SULFATE STORAGE AT LAKE SKINNER AND LAKE MATHEWS CORROSION CONTROL OZONE MATERIAL TEST FACILITY COST OF LAND AND RIGHT OF WAY CRA - ACCESS STRUCTURE, TRANSITION STRUCTURE AND MANHOLE COVER REPLACEMENT CRA - AQUEDUCT AND PUMPING PLANT ISOLATION GATES CRA - AQUEDUCT RESERVOIR AND DISCHARGE LINE ISOLATION GATES CRA - AUXILIARY POWER SYSTEM REHAB CRA - BANK TRANSFORMERS REPLACEMENT STUDY CRA - BLOW-OFF VALVES PHASE 4 CRA - CIRCULATING WATER SYSTEM STRAINER REPLACEMENT CRA - CONTROL SYSTEM IMPLEMENTATION PHASE CLOSE OUT CRA - CONVEYANCE RELIABILITY PROGRAM PART 1 & PART 2 CRA - COPPER BASIN OUTLET, AND COPPER BASIN & GENE WASH SLUICEWAYS REHABILITATION CRA - COPPER BASIN POWER & PHONE LINES REPLACEMENT CRA - CUT & COVER FORNAT WASH EXPOSURE STUDY CRA - DANBYTOWER FOOTER REPLACEMENT CRA - DELIVERY LINE NO. 1 SUPPORTS REHAB - FIVE PUMPING PLANTS CRA - DELIVERY LINES 2&3 SUPPORTS REHAB - GENE & INTAKE CRA - DELIVERY LINES 2&3 SUPPORTS REHAB - IRON, EAGLE, & HINDS CRA - DESERT PUMP PLANT OIL CONTAINMENT CRA - DESERT SEWER SYSTEM REHABILITATION PROJECT CRA - DESERT WATER TANK ACCESS & SAFETY IMPROVEMENTS CRA - DISCHARGE CONTAINMENT PROGRAM - INVESTIGATION CRA - DISCHARGE LINE ISOLATION GATES CRA - DWCV-4 VALVE REPLACEMENT CRA - EAGLE MOUNTAIN SAND TRAPS INFLOW STUDY </div> </div>

<div>TABLE 3</div> <div>CONVEYANCE, DISTRIBUTION, AND STORAGE SYSTEM COSTS</div>
<div>Description</div> <div> <div>Conveyance and Aqueduct Facilites</div> <div> CRA - ELECTRICAL/ POWER SYST REL. PROG. - IRON MTN - 230KV BREAKER SWITC. INST. CRA - GENE PUMPING PLANT MAIN TRANSFORMER AREA CRA - HINDS PUMP UNIT NO. 8 REFURBISHMENT CRA - INTAKE PUMPING PLANT - COOLING AND REJECT WATER DISCHARGE TO LAKE HAVASU CRA - INTAKE PUMPING PLANT AUTOMATION PROGRAMMING CRA - INVESTIGATION OF SIPHONS AND RESERVOIR OUTLETS CRA - IRON MOUNTAIN RESERVOIR AND CANAL LINER REPAIRS CRA - IRON MTN. TUNNEL REHABILITATION CRA - LAKEVIEW SIPHON FIRST BARREL - REPAIR DETERIORATED JOINTS CRA - MAIN PUMP MOTOR EXCITERS CRA - MAIN PUMP STUDY CRA - MOUNTAIN SIPHONS SEISMIC VULNERABILITY STUDY CRA - PUMPING PLANT RELIABILITY PROGRAM CONTINGENCY CRA - PUMPING PLANTS VULNERABILITY ASSESSMENT CRA - PUMPING WELL CONVERSION CRA - QUAGGA MUSSEL BARRIERS CRA - REAL PROPERTY - BOUNDARY SURVEYS CRA - RELIABILITY PROGRAM 230 KV & 69 KV DISCONNECTS REPLACEMENT STUDY (5 PLANTS) CRA - RELIABILITY PROGRAM INVESTIGATION CRA - RELIABILITY PROGRAM PHASE 6 (AQUEDUCT PHASE 6 REHAB.) - SPEC 1568 CRA - RELIABILTY PHASE II CONTINGENCY CRA - SAND TRAP CLEANING EQUIPMENT AND TRAVELING CRANE CRA - SERVICE CONNECTION DWCV-2T VALVES REPLACEMENT AND STRUCTURE CONSTRUCTION CRA - SERVICE CONNECTION DWCV-4 A, B, C, & D PLUG VALVES REPLACEMENT CRA - SIPHONS, TRANSITIONS, CANALS, AND TUNNELS REHABILITATION AND IMPROVEMENTS CRA - SUCTION & DISCHARGE LINES EXPANSION JOINT REHAB CRA - SUPERVISORY CONTROL AND DATA ACQUISITION (SCADA) SYSTEM CRA - SWITCHYARDS AND HEAD GATES REHAB CRA - SWITCHYARDS AND HEAD GATES REHABILITATION CRA - TRANSFORMER OIL & CHEMICAL UNLOADING PAD CONTAINMENT CRA - TUNNELS VULNERABILITY STUDY - REPAIRS TO TUNNELS CRA - WEST PORTAL UPGRADE - REHAB OF STILLING WELL, SLIDE GATE OPERATORS AND RADIAL GATES CRA 2.4 KV STANDBY DIESEL ENGINE GENERATORS REPLACEMENT CRA 230 KV & 69 KV DISCONNECTS SWITCH REPLACEMENT CRA 230 KV SYSTEM INTER-AGENCY OPERABILITY UPGRADES CRA 230 KV TRANSMISSION SYSTEM REGULATORY AND OPERATIONAL FLEXIBILITY UPGRADES CRA 230KV & 69KV PROTECTION PANEL UPGRADE CRA 230kv TRANSMISSION SYSTEM REGULATORY COMPLIANCE AND OPERATIONAL FLEXIBILITY UPGRADES CRA 6.9 KV LEAD JACKETED CABLES CRA 6.9 KV POWER CABLES REPLACEMENT CRA 69KV PANEL UPGRADE CRA ACCESS STRUCTURE, TRANSITION STRUCTURE AND MANHOLE COVERS REPLACEMENT CRA ALL PUMPING PLANTS - FLOW METER UPGRADES CRA AND IRON MOUNTAIN RESERVOIR PANEL REPLACEMENT CRA AQUEDUCT BLOCKER GATE REPLACEMENT CRA AQUEDUCT ISOLATION GATES REPLACEMENT CRA AUXILIARY POWER SYSTEM REHABILITATION/UPGRADES FOR FOUR PUMPING PLANTS CRA BLACK METAL COMMUNICATION SITE II UPGRADE CRA CANAL CRACK REHAB AND EVALUATION CRA CANAL CRACK REHABILITATION CRA CANAL IMPROVEMENTS CRA CIRCULATING WATER SYSTEM STRAINER REPLACEMENT CRA CONDUIT FORMAT WASH EROSION REPAIRS CRA CONDUIT STRUCTRUAL PROTECTION CRA CONVEYANCE RELIABILITY PROGRAM (CCRP) - BLOW-OFF REPAIR CRA CONVEYANCE RELIABILITY PROGRAM PART 1 & PART 2 CRA COPPER BASIN AND GENE WASH DAM SLUICEWAYS CRA COPPER BASIN OUTLET GATES RELIABILITY STUDY CRA DELIVERY LINE REHABILITATION CRA DESERT AIRFIELDS IMPROVEMENT CRA DESERT REGION SECURITY IMPROVEMENTS CRA DISCHARGE CONTAINMENT PROGRAM - CONTINGENCY CRA DISCHARGE CONTAINMENT PROGRAM - GENE & IRON DRAIN SYSTEMS CRA DISCHARGE CONTAINMENT PROGRAM - INVESTIGATION CRA DISCHARGE CONTAINMENT PROGRAM - OIL & CHEMICAL UNLOADING PAD CONTAINMENT CRA ELECTRICAL / POWER SYSTEM RELIABILITY PROGRAM (CEPSRP) CRA ENERGY EFFICIENCY IMPROVEMENTS CRA GENE PUMPING PLANT HEAVY EQUIPMENT SERVICE PIT CRA GENE STORAGE WAREHOUSE REPLACEMENT CRA HINDS PUMPING PLANT - WASH AREA UPGRADE CRA INTAKE PPLANT - POWER & COMMUNICATION LINE REPLACEMENT CRA IRON GARAGE HEAVY EQUIPMENT SERVICE PIT REPLACEMENT CRA IRON HOUSING REPLACEMENT CRA IRON MOUNTAIN SUCTION JOINT REFURBISHMENT PILOT CRA MAIN PUMP & MOTOR REFURISHMENT CRA MAIN PUMP AND MOTOR REFURISHMENT CRA MAIN PUMP CONTROLS & INSTRUMENTATION CRA MAIN PUMP DISCHARGE VALVE REFURBISHMENT CRA MAIN PUMP MOTOR EXCITERS ASSESSMENT CRA MAIN PUMP MOTOR EXCITERS REHABILITATION CRA MAIN PUMP REHABILITATION CRA MAIN PUMP STUDY CRA MAIN PUMP SUCTION AND DISCHARGE LINES, EXPANSION JOINT REPAIRS CRA MAIN PUMPING PLANT DISCHARGE LINE ISOLATION BULKHEAD COUPLING CONSTRUCTION CRA MAIN PUMPING PLANT UNIT COOLERS & HEAT ESCHANGERS CRA MAIN PUMPING PLANTS DISCHARGE LINE ISOLATION BULHEAD COUPLINGS CRA MAIN PUMPING PLANTS LUBRICATION SYSTEM CRA MAIN PUMPING PLANTS SERVICE WATER & SAND REMOVAL SYSTEM CRA MAIN TRANSFORMER REFURBISHMENT CRA MAIN TRANSFORMER REPLACEMENT /REHABILITATION CRA MAIN TRANSFORMER REPLACEMENT/REHAB. CRA MILE 12 POWER LINE & FLOW MONITORING EQUIP. STUDY CRA OVER-CURRENT RELAY REPLACEMENT </div> </div>

<div>TABLE 3</div> <div>CONVEYANCE, DISTRIBUTION, AND STORAGE SYSTEM COSTS</div>
<div>Description</div> <div> <div>Conveyance and Aqueduct Facilities</div> <div> CRA PROTECTIVE SLABS CRA PUMP PLANT FLOW METER REPLACEMENT CRA PUMP PLANT FLOW METER UPGRADE CRA PUMP PLANT SUMP PIPING REPLACEMENT STUDY CRA PUMP PLANT SUMP SYSTEM REHABILITATION CRA PUMP PLANT UNINTERRUPTABLE POWER STUDY (UPS) UPGRADE CRA PUMP PLANTS 2.3KV AND 480V SWITCH RACK REHABILITATION CRA PUMP PLANTS 2300KV & 480 V SWITCHRACK REHAB CRA PUMP WELLS CONVERSION AND BLOW-OFF REPAIR CRA PUMPING PLANT DELIVERY LINE REHABILITATION CRA PUMPING PLANT REHABILITATION STUDY CRA PUMPING PLANT REHABILITATION STUDY AND INVESTIGATION CRA PUMPING PLANT RELIABILITY PROGRAM - HIGH PRESSURE COMPRESSOR REPLACEMENT CRA PUMPING PLANT RELIABILITY PROGRAM - SUCTION & DISCHARGE LINES EXPANSION JOINT STUDY CRA PUMPING PLANT RELIABILITY PROGRAM - SUCTION AND DISCHARGE LINES-EXPANSION JOINT REPAIRS CRA PUMPING PLANT STORAGE BUILDINGS AT HINDS, EAGLE MOUNTAIN AND IRON MOUNTAIN CRA PUMPING PLANT SUMP SYSTEM REHABILITATION CRA PUMPING PLANT WASTEWATER SYSTEM - GENE & IRON MTN. CRA PUMPING PLANT WASTEWATER SYSTEM - INTAKE CRA PUMPING PLANT WASTEWATER SYSTEM REHABILITATION - ALL FIVE PUMPING PLANT PRELIMINARY DESIGN CRA PUMPING PLANT WASTEWATER SYSTEM REPLACEMENT - GENE/IRON MTN FINAL DESIGN CRA PUMPING PLANT WASTEWATER SYSTEM REPLACEMENT - HINDS & EAGLE MTN. CRA PUMPING PLANTS - AUXILIARY POWER SYSTEM REHABILITATE/UPGRADES CRA PUMPING PLANTS 230KV & 69K DISCONNECT SWITCH REPLACEMENT CRA PUMPING PLANTS ASPHALT REPLACEMENT CRA PUMPING PLANTS CRANE IMPROVEMENTS CRA PUMPING PLANTS SWITCH HOUSE FAULT CURRENT PROTECTION CRA PUMPING PLANTS VULNERABILITY ASSESSMENT CRA PUMPING PLANTS WATER TREATMENT SYSTEMS REPLACEMENT CRA PUMPING PLT RELIABILITY PROGRAM, DISCHARGE LINE COUPLING INSTALLATION CRA PUMPING WELL CONVERSION CRA QUAGGA MUSSEL BARRIERS CRA RADIAL GATES AND SLIDE GATE REHABILITATION CRA RADIAL GATES REPLACEMENT CRA RELIABILITY PHASE II - PUMPING PLANTS 230KV & 69KV DISCONNECT SWITCH REPLACEMENT CRA RELIABILITY PROGRAM - DISCHARGE VALVE LUBRICATORS CRA RELIABILITY PROGRAM - MOTOR BREAKER FAULTY CURRENT STUDY (5 PLANTS) CRA RELIABILITY PROGRAM PHASE 6 (AQUEDUCT PHASE 6 REHAB.) - SPEC 1568 CRA RELIABILTY PHASE II - PUMPING PLANT SWITCH HOUSE FAULT CURRENT PROTECTION CRA SAND TRAP EQUIPMENT UPGRADES CRA SEISMIC EVALUATION - SWITCH HOUSE AND PUMP ANCHORAGE CRA SEISMIC RETROFIT OF 6.9KV SWITCH HOUSES CRA SEISMIC UPGRADE OF 6.9KV SWITCH HOUSES CRA SERVICE CONNECTION DWCV-2T VALVES REPLACEMENT AND STRUCTURE CONSTRUCTION CRA SERVICE CONNECTION DWCV-4 VALVES REPLACEMENT CRA SIPHON REHAB CRA SIPHONS, TRANSITIONS, CANALS, AND TUNNELS REHABILITATION AND IMPROVEMENTS CRA SURGE CHAMBER DISCHARGE LINE BY-PASS COVERS CRA SWITCHRACKS & ANCILLARY STRUCTURES EROSION CONTROL CRA TRANSFORMER OIL AND SODIUM HYPOCHLORITE CONTAINMENT CRA TRANSITION STRUCTURE AND MANHOLE COVERS REPLACEMENT CRA UPS REPLACEMENT CRA VILLAGES DOMESTIC WATER MAIN DISTRIBUTION REPLACEMENT STUDY CRA WATER DISTRIBUTION SYSTEM & VILLAGE ASPHALT REPLACEMENT - GENE & IRON MOUNTAIN CRA WATER DISTRIBUTION SYSTEM REPLACEMENT AND CRA ROADWAY ASPHALT REPLACEMENT - ALL PP CUF DECHLORINATION SYSTEM DAM SLUICeways AND OUTLETS REHABILITATION DANBY TOWER FOOTER REPLACEMENT DANBY TOWERS FOUNDATION REHABILITATION DESERT FACILITIES FIRE PROTECTION SYSTEMS UPGRADE DESERT LAND ACQUISITIONS DESERT PUMP PLANT OIL CONTAINMENT DESERT ROADWAY IMPROVEMENT DESERT SEPTIC SYSTEM DESERT SEWER SYSTEM REHABILITATION DESERT WATER TANK ACCESS - FIRE WATER, CIRCULATING WATER, DOMESTIC WATER- STUDY DISCHARGE LINE ISOLATION BULKHEAD COUPLINGS DISTRIBUTION SYSTEM FACILITIES - REHABILITATION PROGRAM DISTRIBUTION SYSTEM FACILITIES REHABILITATION PROGRAM - MAINTENANCE & STORAGE SHOP (PC-1) DISTRIBUTION SYSTEM RELIABILITY PROGRAM - PHASE 2 DVL INLET / OUTLET TOWER FISH SCREENS REPLACEMENT DVL TO SKINNER TRANSMISSION LINE STUDY E. THORNTON IBBETSON GUEST QUARTERS EAGLE AND HINDS EQUIPMENT WASH AREA UPGRADE EAGLE KITCHEN UPGRADE EAGLE MOUNTAIN PUMPING PLANT SCADA SYSTEM EAGLE MOUNTAIN SAND TRAPS STUDY EAGLE MOUNTAIN SIPHONS SEISMIC VULNERABILITY STUDY EAGLE MTN SAND TRAPS STUDY EAGLE ROCK ASPHALT REPAIR PROJECT EAGLE ROCK MAIN ROOF REPLACEMENT ENHANCED VAPOR RECOVERY UPGRADES FOR GASOLINE DISPENSERS ENVIRONMENTAL MITIGATION ETIWANDA PIPELINE LINER REPAIR ETIWANDA RESERVOIR LINER REPAIR FUTURE SYSTEM RELIABILITY PROJECTS GARVEY RESERVOIR - AUTOMATED DATA ACQUISITION SYSTEM GARVEY RESEVOIR AUTOMATED DATA ACQUISITON SYSTEM REPLACEMENT GENE & INTAKE P.P. - FREQUENCY PROTECTION RELAY REPLACEMENT GENE & INTAKE PUMPING PLANT SURGE CHAMBER OUTLET GATES RE-COATING GENE & INTAKE PUMPING PLANTS - REPLACE UNDER FREQUENCY PROTECTION RELAY GENE AIR CONDITION GENE CAMP STATION SERVICE TRANSFORMER REPLACEMENT GENE PUMPING PLANT - AIR STRIP EXTENSION PROJECT GENE PUMPING PLANT - HEAVY EQUIPMENT SERVICE PIT </div> </div>

TABLE 3 CONVEYANCE, DISTRIBUTION, AND STORAGE SYSTEM COSTS
<p>Description</p> <p>Conveyance and Aqueduct Facilities</p> <p>GENE PUMPING PLANT - PEDDLER SUBSTATION REPLACEMENT GENE PUMPING PLANT - SCADA SYSTEM GENE PUMPING PLANT EXPANSION JOINT REHABILITATION GENE PUMPING PLANT MAIN TRANSFORMER AREA GENE PUMPING PLANT STANDBY GENERATOR REPLACEMENT GENE STORAGE BUILDING REPLACEMENT GENE STORAGE WAREHOUSE REPLACEMENT GENE WASH RESERVOIRS DISCHARGE VALVE REHABILITATION HEADGATE OPERATORS & CIRCUIT BREAKERS REHAB. HIGHLAND PIPELINE CONSTRUCTION HINDS EAGLE & IRON MOUNTAINS STORAGE BUILDINGS HINDS PUMPING PLANT DISCHARGE VALVE PIT PLATFORM REPLACEMENT HINDS PUMPING PLANT EQUIPMENT WASH AREA UPGRADES HINDS PUMPING PLANT SCADA SYSTEM HINDS PUMPING PLANT STANDBY GENERATOR REPLACEMENT INLAND FDR, ARROWHEAD TUNNELS REDESIGN INLAND FDR, ARROWHEAD WEST TUNNEL CONSTRUCTION INLAND FDR, CONTRACT 9, CONSTRUCTION OF RIVERSIDE PPLN SOUTH INLAND FDR, OWNER CONTROLLED INSURANCE PROGRAM INLAND FDR, REACH 4, RUSD PPLN INLAND FDR-CNTR #1/DEVIL CYN-WATERMAN RD INLAND FDR-CNTR #4-SOFT GRND TNL/SANTA ANA INLAND FDR-CONT #8-PIPEL PARALLEL TO DAVIS RD INLAND FDR-ENVIRON. MITIG. INLAND FEEDER - RIGHT OF WAY AND EASEMENT PROCUREMENT INLAND FEEDER CONTINGENCY INLAND FEEDER COST OF LAND AND RIGHT OF WAY INLAND FEEDER ENVIRONMENTAL MITIGATION INLAND FEEDER GROUNDWATER MONITORING INLAND FEEDER HIGHLAND PIPELINE CLAIMS COST INLAND FEEDER HIGHLAND PIPELINE CONSTRUCTION INLAND FEEDER HIGHLAND PIPELINE DESIGN INLAND FEEDER MENTONE PIPELINE CONSTRUCTION INLAND FEEDER MENTONE PIPELINE DESIGN INLAND FEEDER MENTONE PIPELINE RUSD CONSTRUCTION INLAND FEEDER OWNER CONTROLLED INSURANCE PROGRAM INLAND FEEDER PROGRAM REMAINING BUDGET/CONTINGENCY INLAND FEEDER PROJECT MANAGEMENT SUPPORT INLAND FEEDER PURCHASE OF LAND AND RIGHT OF WAY INLAND FEEDER RAISE BURIED STRUCTURES AND REALIGN DAVIS RD. INLAND FEEDER REVERSE OSMOSIS PLANT INLAND FEEDER RIVERSIDE BADLANDS TUNNEL CONSTRUCTION INLAND FEEDER RIVERSIDE NORTH PIPELINE DESIGN INLAND FEEDER RUSD CLAIMS DEFENSE INLAND FEEDER STUDIES INLAND FEEDER UNDERGROUND STORAGE TANK REMOVAL & ABOVEGROUND STORAGE TANK INSTALLATION INLAND FEEDER, ARROWHEAD EAST TUNNEL INLAND FEEDER, ARROWHEAD TUNNELS CONSTRUCTION INLAND FEEDER, CONTRACT #5, OPAL AVENUE PORTAL / BADLANDS TUNNEL INLAND FEEDER, CONTRACT #7, RIVERSIDE NORTH PIPELINE CONSTRUCTION INLAND FEEDER, PROGRAM MANAGEMENT INLAND FEEDER/SBMWD HIGHLAND INTERTIE BYPASS LINE REHAB INSULATION JOINT TEST STATIONS INTAKE POWER AND COMMUNICATION LINE RELOCATION INTAKE POWER AND COMMUNICATIONS LINE RELOCATION INTAKE PPLANT - POWER & COMMUNICATION LINE REPLACEMENT INTAKE PUMPING PLANT - COOLING AND REJECT WATER DISCHARGE TO LAKE HAVASU INTAKE PUMPING PLANT AUTOMATION PROGRAMMING INTAKE PUMPING PLANT INSTRUMENTATION REPLACEMENT INTAKE PUMPING PLANT INSTRUMENTATION REPLACEMENT & AUTOMATION INTAKE PUMPING PLANT INSTRUMENTATION REPLACEMENT & AUTOMATION (4 PLANTS) INTAKE PUMPING PLANT POWER & COMMUNICATION LINE REPLACEMENT INTAKE PUMPING PLANT SCADA SYSTEM INTAKE PUMPING PLANT STANDBY GENERATOR REPLACEMENT IRON MOUNTAIN & EAGLE MOUNTAIN 230KV TRANSMISSION LINE PILOT RELAY IRON MOUNTAIN AUXILIARY POWER SYSTEM REHABILITATION IRON MOUNTAIN GENERATOR REPLACEMENT IRON MOUNTAIN PUMPING PLANT IRON MOUNTAIN PUMPING PLANT DELIVERY LINE NO. 1 RELINING IRON MOUNTAIN PUMPING PLANT HOUSING REPLACEMENT IRON MOUNTAIN PUMPING PLANT SCADA SYSTEM IRON MOUNTAIN SERVICE PIT REHABILITATION IRON MOUNTAN & EAGLE MOUNTAIN 230kv TRANSMISSION LINE PILOT RELAY JULIAN HINDS PUMPING PLANT DELIVERY PIPE EXPANSION JOINT PHASE 2 REPAIRS JULIAN HINDS PUMPING PLANT DELIVERY PIPE EXPANSION JOINT PHASE I REPAIR LAKE MATHEWS FOREBAY & HEADWORK FACILITY & EQUIPMENT LAKE MATHEWS FOREBAY WALKWAY REPAIRS LAKE MATHEWS ICS LAKE MATHEWS INTERIM CHLORINATION SYSTEM LAKE SKINNER - OUTLET CONDUIT FLOWMETER INSTALLATION LAKE SKINNER BYPASS PIPELINE NO. 2 CATHODIC PROTECTION LAKE SKINNER OUTLET CONDUIT LAKEVIEW PIPELINE LEAK REPAIR AT STA. 2510+49 LAVERNE FACILITIES - EMERGENCY GENERATOR LAVERNE FACILITIES - MATERIAL TESTING LOWER FEEDER EROSION PROTECTION MAGAZINE CANYON - VALVE REPLACEMENT FOR SAN FERNADO TUNNEL (STATION 778+80) MAGAZINE CANYON OIL & WATER SEPARATOR MAGAZINE CANYON OIL/WATER SEPARATOR MAPES LAND ACQUISTION MENTONE PPLN, RUSD, DEFENSE OF CLAIM MILE 12 FLOW AND CHLORINE MONITORING STATION UPGRADES MILE 12 POWER LINE & FLOW MONITORING EQUIPMENT STUDY MILLS PLANT SUPPLY PUMP STATION STUDY MINOR CAP FY 2011/12 MOTOR BREAKER FAULTY (5 PPLANTS)</p>

TABLE 3 CONVEYANCE, DISTRIBUTION, AND STORAGE SYSTEM COSTS	
Description	
<u>Conveyance and Aqueduct Facilities</u>	
NEWHALL TUNNEL - REPAIR STEEL LINER	
NEWHALL TUNNEL - UPGRADE LINER SYSTEM	
NITROGEN STORAGE STUDY AT DVL, INLAND FEEDER PC-1, AND LAKE MATHEWS	
OC 44 SERVICE CONNECTIONS & EOC#2 METER ACCESS ROAD REPAIR	
OC 88 PUMP PLANT FIRE PROTECTION STUDY	
OC-71 SERVICE CONNECTION REPAIRS	
OLINDA PCS FACILITY REHABILITATION AND UPGRADE	
OLINDA PRESSURE CONTROL STRUCTURE FACILITY REHABILITATION AND UPGRADE	
ORANGE COUNTY 44 SERVICE CONNECTIONS & EOC#2 METER ACCESS ROAD REPAIR	
ORANGE COUNTY 88 PUMP PLANT FIRE PROTECTION STUDY	
OWNER CONTROLLED INSURANCE PROGRAM	
PALO VERDE VALLEY LAND PURCHASE - 16,000 ACRES	
PALOS VERDES FEEDER REHABILITATION OF DOMINGUEZ CHANNEL	
PALOS VERDES RESERVOIR SPILLWAY MODIFICATION	
PROJECT MANAGEMENT SUPPORT	
PUDDINGSTONE RADIAL GATE REHABILITATION	
PURCHASE OF LAND AND RIGHT OF WAY	
QUAGGA MUSSEL STUDY	
R&R FOR CRA	
REPAIR UPPER FEEDER LEAKING EXPANDSION JOINT	
REPAIRS TO TUNNELS	
RIALTO FEEDER REPAIR @ STA. 3662+23	
RIALTO FEEDER REPAIR OF ANOMALOUS PIPE SECTION	
RIVERSIDE BADLANDS TUNNEL CONSTRUCTION	
RIVERSIDE BRANCH - ALESSANDRO BLVD. LEFT LAND TURN LANE	
RIVERSIDE BRANCH - CONSTRUCTION OF CONTROL PANEL DISPLAY WALL	
RIVERSIDE NORTH PIPELINE DESIGN & CONSTRUCTION	
RIVERSIDE SOUTH PIPELINE CONSTRUCTION	
SAN DIEGO PIPELINE REPAIR AT STATION 1268+57	
SAN FERNANDO TUNNEL STATION 778+80 VALVE REPLACEMENT	
SAN GABRIEL TOWER SEISMIC ASSESSMENT	
SAN GABRIEL TOWER SLIDE GATE REHABILITATION	
SAN JACINTO TUNNEL EAST ADIT REHABILITATION	
SAN JACINTO TUNNEL, WEST PORTAL	
SAN JOAQUIN RESERVOIR - NEW DESIGN	
SAN JOAQUIN RESERVOIR IMPROVEMENT- FLOATING COVER	
SAN JOAQUIN RESERVOIR IMPROVEMENTS	
SAN JOAQUIN RESERVOIR IMPROVEMENTS STUDY	
SAND TRAP CLEANING EQUIPMENT AND TRAVELING CRANE STUDY	
SANTA ANA RIVER BRIGDE SEISMIC RETROFIT	
SANTIAGO TOWER ACCESS ROAD UPGRADE	
SANTIAGO TOWER PATROL ROAD REPAIR	
SD5 REPAIR	
SECOND LOWER FEEDER STRAY CURRENT MITIGATION SYSTEMS REFURBISHMENT	
SECURITY FENCING AT OC-88 PUMPING PLANT	
SEISMIC EVALUATION OF CRA STRUCTURES	
SEISMIC PROGRAM	
SEISMIC UPGRADE OF 11 FACILITIES OF THE CONVEYANCE & DISTRIBUTION SYSTEM	
SEPULVEDA FEEDER CORROSION INTERFERENCE MITIGATION	
SEPULVEDA FEEDER REPAIR AT STATION 1099	
SEPULVEDA FEEDER STRAY CURRENT MITIGATION SYSTEM REFURBISHMENT	
SERVICE CONNECTION & EOCF #2 METER ACCESS ROAD UPGRADE & BETTERMENT	
SERVICE CONNECTION DWCV-2T VALVES REPLACEMENT AND STUCTURE CONSTRUCTION	
SKINNER BR - IMPROVE CABAZON RADIAL GATE FACILITY	
SUCTION & DISCHARGE LINES EXPANSION JOINT STUDY	
SWITCHYARDS AND HEAD GATES REHAB	
TEMESCAL HYDRO-ELECTRIC PLANT ACCESS ROAD UPGRADE	
TEMESCAL POWER PLANT ACCESS ROAD PAVING	
TRANSFORMER OIL & CHEMICAL UNLOADING PAD CONTAINMENT	
TRANSFORMER OIL AND SODIUM HYPOCHLORITE CONTAINMENT PROJECT	
U.S. BUREAU OF LAND MANAGEMENT LAND ACQUISITION	
UPPER FEEDER CATHODIC PROTECTION SYSTEM	
UPPER FEEDER GATES REHABILITATION PROJECTS	
UPPER FEEDER LEAKING EXPANDSION JOINT REPAIR	
VALLEY BRANCH - PIPELINE CORROSION TEST STATION	
WASTEWATER SYSTEM REHABILITATION	
WASTEWATER SYSTEM REHABILITATION - GENE/IRON MTN	
WASTEWATER SYSTEM REHABILITATION - HINDS/EAGLE MTN	
WEST VALLEY FEEDER #2 CATHODIC PROTECTION SYSTEM REHABILITATION	
WHITE WATER SIPHON PROTECTION	
WHITEWATER EROSION PROTECTION STRUCTURE REHABILITATION	
WHITEWATER SIPHON EROSION PROTECTION	
WHITEWATER SIPHON PROTECTION STRUCTURE	
<i>Sub-total Conveyance and Aqueduct facilities costs</i>	\$ 76,253,010

<div>TABLE 3</div> <div>CONVEYANCE, DISTRIBUTION, AND STORAGE SYSTEM COSTS</div>
<div>Description</div> <div><u>Distribution Facilites</u></div> <div> 108TH STREET PRESSURE CONTROL STRUCTURE VALVE REPLACEMENT 42" CONICAL PLUG VALVE REPLACEMENT ACCUSONIC FLOW METER UPGRADE ACCUSTIC FIBER OPTIC MONITORING OF PCCP LINES ALAMEDA CORRIDOR PIPELINE ALL FACILITIES - WATER DISCHARGE ELIMINATION ALL FACILITIES, INSPECTION AND REPLACEMENT OF CRITICAL VACUUM VALVES ALL FEEDERS - MANHOLE LOCKING DEVICE RETROFIT ALL PUMPING PLANTS - INSTALL HYPOCHLORINATION STATIONS ALLEN MCCOLLOCH PIPELINE 2010 REFURBISHMENT ALLEN MCCOLLOCH PIPELINE CATHODIC PROTECTION ALLEN MCCOLLOCH PIPELINE INTERCONNECTIONS ALLEN MCCOLLOCH PIPELINE LOCAL CONTROL MODIFICATIONS ALLEN MCCOLLOCH PIPELINE REPAIR ALLEN MCCOLLOCH PIPELINE REPAIR - CARBON FIBER LINING REPAIR ALLEN MCCOLLOCH PIPELINE REPAIR - SERVICE CONNECTIONS UPGRADES ALLEN MCCOLLOCH PIPELINE REPAIR - STATION 276+63 ALLEN MCCOLLOCH PIPELINE REPAIR - SURGE SUPPRESSION SYSTEM AT OC88A ALLEN MCCOLLOCH PIPELINE REPAIR - VALVE ACTUATOR REPLACEMENTS ALLEN MCCOLLOCH PIPELINE REPAIR SERVICE CONNECTIONS SIMPLIFICATION ALLEN MCCOLLOCH PIPELINE STRUCTURE - ROOF SLAB REPAIRS ALLEN MCCOLLOCH PIPELINE VALVE VAULT REPAIRS ALLEN-MCCOLLOCH CORROSION/INTERFERENCE MITIGATION, STATION 719+34 TO 1178+02 ALLEN-MCCOLLOCH PIPELINE ALLEN-MCCOLLOCH PIPELINE OC-76 TURNOUT RELOCATION ALLEN-MCCOLLOCH PIPELINE PCCP REHABILITATION ALLEN-MCCOLLOCH PIPELINE REFURBISHMENT - STAGE 2 ALLEN-MCCOLLOCH PIPELINE VALVE AND SERVICE CONNECTION VAULT REPAIRS AMP -SERVICE CONNECTIONS UPGRADES AMP -VALVE ACTUATOR REPLACEMENTS AMP COMPLETION RESOLUTION RIGHT OF WAY ISSUES AMR - RTU UPGRADE - PHASE 2 ANODE WELL REPLACEMENT FOR ORANGE COUNTY AND RIALTO FEEDERS APPIAN WAY VALVE REPLACEMENT ARROW HIGHWAY PROPERTY DEVELOPMENT ASPHALT REHABILITATION AT WEYMOUTH FINISHED WATER RESERVOIR ASPHALT REPAIRS TO PERIMETER OF SEPULVEDA PCS ASSESS THE CONDITION OF METROPOLITAN'S PRESTRESSED CONCRETE CYLINDER PIPE ASSESS THE CONDITIONS OF MET'S ASSESSMENT OF PRESTRESSED CONCRETE CYLINDER PIPELINES - PHASE 3 AULD VALLEY CONTROL STRUCTURE AREA FACILITIES AUTOMATED RESERVOIR WATER QUALITY MONITORING AUTOMATIC METER READING SYSTEM - RTU UPGRADE PHASE 2 AUTOMATIC METER READING SYSTEM UPGRADE AUTOMATION COMMUNICATION UPGRADE AUTOMATION DOCUMENTATION SURVEY F/A BAR 97- ENHANCED AREA VEHICLE TESTING BATTERY MONITORING SYSTEM FOR AUTOMATIC METER READING SYSTEM BIXBY VALVE REPLACEMENT BLACK METAL MOUNTAIN ELECTRICAL TRANSFORMER BOX SPRINGS FEEDER BROKEN BACK REPAIR BOX SPRINGS FEEDER BROKEN BACK REPAIR PHASE I BOX SPRINGS FEEDER PHASE 3 AND 4 ENVIRONMENTAL MONITORING BOX SPRINGS FEEDER REPAIR - PHASE II BOX SPRINGS FEEDER REPAIRS PHASE 3 AND PHASE 4 C&D CRANE INSTALLATION AT OC-88 PUMPING PLANT CAJALCO CREEK DAM MANHOLE COVER RETROFIT CAJALCO CREEK DETENTION DAM SPILLWAY ACCESS ROAD CALABASAS FEEDER CARBON FIBER /BROKEN BACK REPAIR CALABASAS FEEDER INTERFERENCE MITIGATION CALABASAS FEEDER PCCP REHABILITATION CALABASAS FEEDER REPAIR, STUDY CAPITAL PROGRAM FOR PROJECTS COSTING LESS THAN \$250,000 FOR FY 2010/11 CAPITAL PROJECTS COSTING LESS THAN \$250,000 FOR FY2008-09 CARBON CREEK PRESSURE CONTROL STRUCTURE SEISMIC ASSESSMENT CARBON CREEK PRESSURE CONTROL STRUCTURE SEISMIC RETROFIT CASA LOMA AND SAN DIEGO CANAL LINING STUDY - PART 2 CASA LOMA SIPHON BARREL 1 & 2 DVL AND SD CANAL FLOW METER REPLACEMENT CASA LOMA SIPHON BARREL NO. 1 - PERMANENT REPAIRS CASA LOMA SIPHON BARREL NO. 1 JOINT REPAIR CASA LOMA SIPHON NO 1, CASA LOMA CANAL & SAN DIEGO CANAL FLOW METER REPLACEMENT CATHODIC PROTECTION FOR THE FOOTHILL FEEDER CATHODIC PROTECTION SYSTEM UPGRADES CCP-PHASE 2 CONSTRUCTION CDSRP - DISCHARGE ELIMINATION CDSRP - ENTRAINED AIR IN UPPER FEEDER PIPELINE STUDY CDSRP - SEPULVEDA FEEDER REPAIRS CDSRP - SEPULVEDA TANKS RECOATING CENTRAL POOL AUGMENTATION - TUNNEL AND PIPELINE & RIGHT-OF-WAY ACQUISITION CENTRAL POOL AUGMENTATION (CPA) PROGRAM - PIPELINE AND TUNNEL ALIGNMENT CENTRAL POOL AUGMENTATION AND WATER QUALITY PROJECT (CPAWQP) CHEMICAL INVENTORY AND USAGE REWRITE AND ELECTRICAL. SYSTEM LOG CHEMICAL UNLOADING FACILITY RETROFIT CHEVALIER FALCON MILLING MACHINE COASTAL JUNCTION REVERSE FLOW BYPASS COASTAL PRESSURE CONTROL STRUCTURE ROOF REPLACEMENT COLLIS AVENUE VALVE REPLACEMENT COLLIS VALVE REPLACEMENT COLORADO RIVER AQUEDUCT CASA LOMA SIPHON BARREL NO. 1 PROJECT NO. 2 - PERMANENT REPAIRS COMMUNICATIONS STRUCTURE ALARM MONITORING COMPREHENSIVE INFORMATION SECURITY ASSESSMENT PHASE III CONSTRUCTION PHASE 2 CONTRACT & LITIGATION TASKS -CONTRACT # 1396 </div>

<div>TABLE 3</div> <div>CONVEYANCE, DISTRIBUTION, AND STORAGE SYSTEM COSTS</div>
<div>Description</div> <div>Distribution Facilites</div> <div>CONTROL SYSTEM DATA STORAGE AND REPORTING</div> <div>CONTROL SYSTEM DRAWING & DOCUMENTATION UPDATE</div> <div>CONTROL SYSTEM ENHANCEMENT PROGRAM (CSEP) - DIGITAL SUBNET STANDARDIZATION</div> <div>CONTROL SYSTEMS AUTOMATION COMMUNICATION UPGRADE</div> <div>CONTROLS COMMUNICATIONS FRAME RELAY CONVERSION - APPROPRIATED</div> <div>CONVERSION OF DEFORMATION SURVEY MONITORING AT GENE WASH, COPPER BASIN, AND DIEMER BASIN 8</div> <div>CONVEYANCE AND DISTRIBUTION SYSTEM ELECTRICAL STRUCTURES REHABILITATION</div> <div>CONVEYANCE AND DISTRIBUTION SYSTEM REHABILITATION PROGRAM (CDSRP) - CURRENT DRAIN STATIONS</div> <div>COPPER BASIN ICS</div> <div>COPPER BASIN SEWER SYSTEM</div> <div>CORONA POWER PLANT REPLACE EMERGENCY GENERATOR</div> <div>CORROSION MATERIALS TESTING FACILITY SCADA UPGRADE</div> <div>COVINA PRESSURECONTROL FACILITY</div> <div>COYOTE CREEK NORTHERN PERIMETER LANDSCAPING</div> <div>COYOTE PRESSURE CONTROL STRUCTURE ROOF REPLACEMENT</div> <div>CPA PIPELINE & TUNNEL ALIGNMENT</div> <div>CPA PIPELINE & TUNNEL ALIGNMENT - NON FUNDED PORTION</div> <div>CPA PIPELINE & TUNNEL ALIGNMENT - STUDY</div> <div>CPA WATER TREATMENT PLANT - NON FUNDED PORTION</div> <div>CPA WATER TREATMENT PLANT - RIGHT OF WAY - PHASE 2</div> <div>CPAWQP - PHASE 2</div> <div>CPAWQP - STUDY AND LAND ACQUISITION - CONTINGENCY</div> <div>CPAWQP - STUDY AND LAND ACQUISITION - PIPELINE & TUNNEL ALIGNMENT - STUDY</div> <div>CPAWQP - STUDY AND LAND ACQUISITION - RIGHT-OF-WAY-ACQUISITION</div> <div>CPAWQP - STUDY AND LAND ACQUISITION - WATER TREATMENT PLANT - RIGHT OF WAY - PHASE 2</div> <div>CPAWQP - STUDY AND LAND ACQUISITION - WATER TREATMENT PLANT - STUDY</div> <div>CRA - PC-1 EFFLUENT OPEN CHANNEL TRASH RACK</div> <div>CRA CABAZON & POTRERO SHAFT COVERS</div> <div>CRA CONTROL INTEGRATION</div> <div>CRA PROTECTIVE SLAB AT STATION 9704+77</div> <div>CROSS CONNECTION PREVENTION PROGRAM - PHASE II CONSTRUCTION</div> <div>CROSS CONNECTION PREVENTION PROJECT, COMPLETE PRELIMINARY DESIGN AND CEQA DOCUMENTATION</div> <div>CSEP - ELECTRONIC SYSTEM LOG (ESL)</div> <div>CSEP - ENERGY MANAGEMENT SYSTEM PHASE II</div> <div>CSEP - ENHANCED DISTRIBUTION SYSTEM CONTROL PROJECT</div> <div>CSEP - IMPLEMENTATION</div> <div>CSEP - OPERATIONS & BUSINESS DATA INTEGRATION PILOT</div> <div>CSEP - PLANT INFLUENT REDUNDANT FLOW METERING AND SPLITTING</div> <div>CSEP - PLC PHASE 2 - LIFE-CYCLE REPLACEMENT</div> <div>CSEP - PLC STANDARDIZATION</div> <div>CSEP - PLC STANDARDIZATION PHASE II</div> <div>CSEP - POWER MANAGEMENT SYSTEM</div> <div>CSEP - WATER PLANNING APPLICATION</div> <div>CSEP IMPLEMENTATION</div> <div>CSEP- SMART OPS (FORMERLY REAL TIME OPERATIONS SIMULATION)</div> <div>CURRENT DRAIN STATIONS</div> <div>DAM REHABILITATION & SAFETY IMPROVEMENTS ST. JOHN'S CANYON CHANNEL EROSION MITIGATION</div> <div>DANBY TOWER FOUNDATION INVESTIGATION AND SHORT TERM MITIGATION</div> <div>DEODERA PCS PAVEMENT UPGRADE & BETTERMENT</div> <div>DESERT BRANCH - REPLACE STOLEN COPPER GROUND WIRE FOOTINGS/GROUNDING, AND COPPER PIPING</div> <div>DESERT BRANCH PUMP PLANT AUXILIARY (STATION SERVICE)</div> <div>DESERT BRANCH, PURCHASE & INSTALL 5 PORT VIDEO CONFERENCING</div> <div>DESERT FACILITIES DOMESTIC WATER GAC SYSTEM INSTALLATION</div> <div>DESERT HIGH VOLTAGE TRANSMISSION TOWERS - REPLACE COPPER GROUND WIRES ON</div> <div>DETAIL SEISMIC EVALUATION OF WATER STORAGE TANK</div> <div>DFP - ELIMINATE BACKUP GENERATOR TIE-BUS & INSTALL MANUAL TRANSFER SWITCH FOR CHLORINE SCRUBBER</div> <div>DIEMER FILTRATION PLANT - SLOPE REPAIR</div> <div>DIEMER OZONE COOLING WATER ALTERNATIVE SOURCE</div> <div>DIRECTIONAL SIGNS FOR DIAMOND VALLEY LAKE FACILITY</div> <div>DISCHARGE ELIMINATION</div> <div>DIST SYS-AIR RELEASE & VAC VALVE MODS</div> <div>DISTRIBUTION SYSTEM - CCPP CONSTRUCTION PACKAGES 9,11,12</div> <div>DISTRIBUTION SYSTEM - STANDPIPE STRENGTHENING PROGRAM</div> <div>DISTRIBUTION SYSTEM - STATIONARY CORROSION REFERENCE</div> <div>DISTRIBUTION SYSTEM - TREATED WATER CROSS CONNECTION PREVENTION PROJECT - FINAL DESIGN & CONSTRUCTION</div> <div>DISTRIBUTION SYSTEM ASSESSMENTS/UPGRADES OF LOS ANGELES COUNTY</div> <div>DISTRIBUTION SYSTEM ASSESSMENTS/UPGRADES OF RIVERSIDE AND SAN DIEGO COUNTY</div> <div>DISTRIBUTION SYSTEM ASSESSMENTS/UPGRADES OF SAN BERNARDINO COUNTY</div> <div>DISTRIBUTION SYSTEM CONTROL & EQUIP UPGRADE - ENHANCED DISTRIB. SYSTEM AUTOMATION PHASE I</div> <div>DISTRIBUTION SYSTEM EQUIPMENT & INSTRUMENTATION UPGRADES</div> <div>DISTRIBUTION SYSTEM INFRASTRUCTURE PROTECTION IMPROVEMENTS FOR ORANGE COUNTY</div> <div>DISTRIBUTION SYSTEM REHABILITATION PROGRAM - ASSESS THE STATE OF MWD'S DISTRIBUTION SYSTEM</div> <div>DISTRIBUTION SYSTEM REPLACEMENT OF AREA CONTROL SYSTEMS - WILLOWGLEN RTUS ADMINISTRATION</div> <div>DISTRIBUTION SYSTEM REPLACEMENT OF AREA CONTROL SYSTEMS (DSRACS)</div> <div>DISTRICT WIDE - ENHANCED VAPOR RECOVERY PHASE 2 GASOLINE DISPENSING</div> <div>DSRACS - OPERATIONS CONTROL CENTER - CONTRACT #1396</div> <div>DSRACS - SKINNER AREA</div> <div>DSRACS - SOFTWARE DEVELOPMENT COST</div> <div>DSRACS - WEYMOUTH</div> <div>DVL & CONTROL SYSTEM REPLACEMENT INVESTIGATION & PREPARATION FOR PRELIMINARY DESIGN</div> <div>DVL VIEWPOINT ROAD SECURITY UPGRADES</div> <div>EAGLE EQUIPMENT WASH AREA UPGRADE</div> <div>EAGLE ROCK - ASPHALT REHABILITATION</div> <div>EAGLE ROCK - FIRE PROTECTION AT THE WESTERN AREA OF THE EAGLE ROCK CONTROL CENTER PERIMETER GROUNDS</div> <div>EAGLE ROCK CONTROL CENTER FIREHYDRANT</div> <div>EAGLE ROCK LATERAL INTERCONNECTION REPAIR</div> <div>EAGLE ROCK MAIN BUILDING ROOF REPLACEMENT - STUDY</div> <div>EAGLE ROCK OCC - REHAB CONTROL ROOM</div> <div>EAGLE ROCK OPERATIONS CONTROL CENTER</div> <div>EAGLE ROCK RESIDENCE CONVERSION</div> <div>EAGLE ROCK TOWER AND PUDDINGSTONE SPILLWAY GATES REHABILITATION</div> <div>EAGLE ROCK TOWER SLIDEGATE REHABILITATION</div> <div>EAST INFLUENT CHANNEL REPAIR PROJECT</div>

<div>TABLE 3</div> <div>CONVEYANCE, DISTRIBUTION, AND STORAGE SYSTEM COSTS</div>
<div>Description</div> <div>Distribution Facilites</div> <div>EAST ORANGE COUNTY FEEDER #2 REPAIR</div> <div>EAST ORANGE COUNTY FEEDER NO. 2 SERVICE CONNECTION A-6 REHABILITATION</div> <div>EAST VALLEY FEEDER VALVE STRUCTURE ELECTRICAL UPGRADE</div> <div>EASTERN AND DESERT REGIONS PLUMBING RETROFIT</div> <div>EASTERN REGION PCCP JOINT MODIFICATION 2012</div> <div>E-DISCOVERY STORAGE MANAGEMENT SYSTEM UPGRADE</div> <div>ELECTRIC CURRENT DRAIN STATION INSTALLATIONS</div> <div>ELECTRICAL UPGRADES AT 15 STRUCTURES, OC REGION</div> <div>ELECTROMAGNETIC INSPECTIONS OF PCCP LINES</div> <div>ELECTRONIC SYSTEM LOG (ESL)</div> <div>ENERGY MANAGEMENT SYSTEM - PHASE 2</div> <div>ENHANCED DISTRIBUTION SYSTEM AUTOMATIC FLOW TRANSFERS SOFTWARE REDEVELOPMENT</div> <div>ENHANCED DISTRIBUTION SYSTEM AUTOMATION PHASE I</div> <div>ENHANCED DISTRIBUTION SYSTEM AUTOMATION PHASE II</div> <div>ENVIRONMENTAL REGULATORY AGREEMENTS AND OTHER REGULATORY AGENCY</div> <div>EQUIPMENT UPGRADE AT THE NORTH PORTAL OF THE HOLLYWOOD TUNNEL</div> <div>ETIWANDA / RIALTO PIPELINE INTER-TIE CATHODIC PROTECTION</div> <div>ETIWANDA CAVITATION FACILITY INFRASTRUCTURE REHABILITATION</div> <div>ETIWANDA CAVITATION TEST FACILITY COMMUNICATION AND CONTROL SYSTEM REPLACEMENT</div> <div>ETIWANDA HEP NEEDLE VALVE OPERATORS</div> <div>ETIWANDA PIPELINE - LINING REPLACEMENT</div> <div>ETIWANDA PIPELINE AND CONTROL FACILITY - RIGHT OF WAY</div> <div>ETIWANDA PIPELINE AND CONTROL FACILITY - AS BUILTS</div> <div>ETIWANDA PIPELINE AND CONTROL FACILITY - CATHODIC PROTECTION</div> <div>ETIWANDA PIPELINE AND CONTROL FACILITY - EMERGENCY DISCHARGE CONDUITS</div> <div>ETIWANDA PIPELINE AND CONTROL FACILITY - LANDSCAPING AND IRRIGATION</div> <div>ETIWANDA PIPELINE AND CONTROL FACILITY - RESIDENCES</div> <div>ETIWANDA PIPELINE AND CONTROL FACILITY - RIALTO FEEDER TO UPPER PIPELINE</div> <div>ETIWANDA PIPELINE LINING REPAIRS</div> <div>ETIWANDA PIPELINE LINING REPLACEMENT</div> <div>ETIWANDA RESERVOIR - EXTEND OUTLET STRUCTURE</div> <div>FACILITY AND PROCESS RELIABILITY ASSESSMENT</div> <div>FAIRPLEX AND WALNUT PCS VALVES REPLACEMENT</div> <div>FILTER ISOLATION GATE AND BACKWASH CONTROL WEIR COVERS MODULES 1- 6</div> <div>FLOW METER REPLACEMENT PROJECT</div> <div>FLOWMETER MODIFICATION - LAKE SKINNER INLET, ETIWANDA EFFLUENT & WADSWORTH CROSS CHANNEL</div> <div>FOOTHILL & SEPULVEDA FEEDER PCCP CARBON FIBER JOINT REPAIRS</div> <div>FOOTHILL FEEDER - CASTAIC VALLEY BLOW-OFF VALVES REPLACEMENT</div> <div>FOOTHILL FEEDER ADEN AVE. REHABILITATION</div> <div>FOOTHILL FEEDER CARBON FIBER REPAIR</div> <div>FOOTHILL FEEDER CATHODIC PROTECTION</div> <div>FOOTHILL FEEDER PIPELINE REPLACEMENT PROJECT</div> <div>FOOTHILL FEEDER POWER PLANT EXPANSION</div> <div>FOOTHILL FEEDER REPAIR @ SANTA CLARITA RIVER</div> <div>FOOTHILL FEEDER, CARBON FIBER REPAIRS</div> <div>FOOTHILL HYDROELECTRIC RUNNER REPLACEMENT</div> <div>FOOTHILL PCS - UNINTERRUPTIBLE POWER SOURCE SYSTEMS INSTALLATION</div> <div>FOOTHILL PCS FLOOD PUMP INSTALLATION DESIGN DOCUMENTATION</div> <div>FOOTHILL PCS INTERNAL VALVE LINERS UPGRADE</div> <div>FUTURE SYSTEM RELIABILITY PROGRAM</div> <div>GARVEY RESERVOIR - HYPOCHLORITE FEED SYSTEM</div> <div>GARVEY RESERVOIR - INSTALL HYPOCHLORINATION STATIONS</div> <div>GARVEY RESERVOIR - LOWER ACCESS PAVING ROAD & DRAINS</div> <div>GARVEY RESERVOIR CONTROL VALVES REPLACEMENT</div> <div>GARVEY RESERVOIR HYPOCLORITE FEED SYSTEM</div> <div>GARVEY RESERVOIR SITE DRAINAGE REPAIRS AND MODIFICATIONS</div> <div>GARVEY RESERVOIR SODIUM HYPOCLORITE FEED SYSTEM REHABILITATION</div> <div>GENE & IRON POOLS</div> <div>GENE AIR CONDITIONING SYSTEM REPLACEMENT</div> <div>GENE MESS HALL AIR CONDITIONING UNIT</div> <div>GENE SPARE PARTS WAREHOUSE IMPROVEMENTS</div> <div>GLENDALE 01 SERVICE CONNECTION REHAB</div> <div>GLENDALE-01 SERVICE CONNECION REHABILITATION AND UPGRADE</div> <div>GLENDALE-01 SERVICE CONNECTION REHABILITATION</div> <div>GREG AVE PCS FACILITY REHABILITATION</div> <div>GREG AVENUE CONTROL STRUCTURE VALVE REPLACEMENT</div> <div>GREG AVENUE PCS - PUMP MODIFICATIONS AND NEW CONTROL BUILDING</div> <div>GREG AVENUE PCS CONTROL BUILDING INTERIOR REHABILITATION</div> <div>HINDS GARAGE ASBESTOS SHEETING REPLACEMENT</div> <div>HOLLYWOOD TUNNEL NORTH PORTAL EQUIPMENT UPGRADES</div> <div>HVAC MODIFICATIONS FOR ELECTRICAL SAFETY AND RELIABILITY</div> <div>HYDRAULIC MODELING PROJECT</div> <div>HYDROELECTRIC PLANT CARBON DIOXIDE (CO2) FIRE SUPPRESSION SYSTEM MODIFICATIONS</div> <div>HYDROELECTRIC POWER PLANT (HEP) DISCHARGE ELIMINATION</div> <div>IAS PROJECTS - CPA</div> <div>IAS PROJECTS - DVL-SKINNER</div> <div>IAS PROJECTS - MILLS SUPPLY RELIABILITY</div> <div>INLAND FEEDER AND LAKEVIEW PIPELINE INTERTIE</div> <div>INLAND PCSUST REMOVAL & AST INSTALLATION</div> <div>INSTALL MOTION SENSORS IN NEW EXPANSION</div> <div>INSTALL TEST LEADS AT FOUR LOCATIONS</div> <div>INSULATION JOINT TEST STATIONS</div> <div>INTAKE PUMPING PLANT - UNDER FREQUENCY PROTECTION RELAY UPGRADE</div> <div>IRON MOUNTAIN - TRANSFORMER OIL TANK RELOCATION</div> <div>JENSEN DISTRIBUTION SYSTEM - REPLACEMENT OF AREA CONTROL SYSTEMS - CONTRACT # 1396</div> <div>JENSEN EGEN UST UPGRADE - LINE LEAK DETECTOR INSTALLATION</div> <div>JENSEN FILTER EFFLUENT TURBIDIMETER RELIABILITY</div>

<div>TABLE 3</div> <div>CONVEYANCE, DISTRIBUTION, AND STORAGE SYSTEM COSTS</div>
<div>Description</div> <div>Distribution Facilities</div> <div>JENSEN FILTRATION PLANT - REPLACE ADMINISTRATION BUILDING AIR CONDITIONING</div> <div>JENSEN FILTRATION PLANT - ROAD RECONSTRUCTION</div> <div>JENSEN FLUORIDE TANK REPLACEMENT</div> <div>LA VERNE FACILITIES - BRIDGEPORT E-2-PATH</div> <div>LA VERNE FACILITIES - ENERGY CONSERVATION ECM1 - 10</div> <div>LA VERNE FACILITIES - EXPANSION OF THE SANITARY SEWER</div> <div>LA VERNE FACILITIES - HAZARDOUS WASTE STORAGE</div> <div>LA VERNE FACILITIES - MAIN TRANSFORMERS REPLACEMENT</div> <div>LA VERNE FACILITIES - MATERIALS TESTING LABORATORY</div> <div>LA VERNE FACILITIES - REPLACEMENT OF FLOCCULATOR STUB SHAFT - BASINS 1 & 2</div> <div>LA VERNE MACHINE SHOP - AIR CONDITIONING UNIT REPLACEMENT</div> <div>LA VERNE MACHINE SHOP - REPAIR HORIZONTAL BORING MILL</div> <div>LA-35 DISCHARGE STRUCTURE REPAIRS</div> <div>LAKE MATHEWS - CONSTRUCTION OF BACKUP COMPUTER FACILITIES</div> <div>LAKE MATHEWS - DIVERSION TUNNEL WALKWAY REPAIR</div> <div>LAKE MATHEWS - FACILITY WIDE EMERGENCY WARNING AND PAGING SYSTEM</div> <div>LAKE MATHEWS - FOREBAY MCC ROOF IMPROVEMENT</div> <div>LAKE MATHEWS - MAIN DAM TOE SEEPAGE COLLECTION</div> <div>LAKE MATHEWS - MULTIPLE SPECIES MANAGER'S OFFICE & RESIDENCE</div> <div>LAKE MATHEWS - RENOVATION OF BLDGS. 8 & 15, GENERAL ASSEMBLY & ADMIN. BLDG. OFFICE AREAS</div> <div>LAKE MATHEWS - RETROFIT LOWER ENTRANCE GATE SWING ARM</div> <div>LAKE MATHEWS FENCING SECURITY UPGRADE</div> <div>LAKE MATHEWS FOREBAY MCC ROOF IMPROVEMENT</div> <div>LAKE MATHEWS MAIN DAM TOE SEEPAGE COLLECTION</div> <div>LAKE MATHEWS RETROFIT LOWER ENTRANCE GATE SWING ARM</div> <div>LAKE PERRIS BYPASS PIPELINE EXPLORATION</div> <div>LAKE PERRIS BYPASS PIPELINE RELINING</div> <div>LAKE PERRIS EMERGENCY STANDBY GENERATOR AND TRANSFER SWITCH REPLACEMENT</div> <div>LAKE SKINNER - AERATOR AIR COMPRESSOR REPLACEMENT</div> <div>LAKE SKINNER - OUTLET TOWER VALVE REHABILITATION</div> <div>LAKE SKINNER - REPLACEMENT AERATOR RING</div> <div>LAKE SKINNER AERATOR AIR COMPRESSOR REPLACEMENT</div> <div>LAKE SKINNER AREA DISTRIBUTION SYSTEM VALVE REPLACEMENT</div> <div>LAKE SKINNER DAM ROAD REHAB</div> <div>LAKE SKINNER EAST BYPASS SCREENING STRUCTURES</div> <div>LAKE SKINNER OUTLET TOWER CHLORINE SYSTEM MODIFICATION</div> <div>LAKE SKINNER WEST BYPASS SCREENING STRUCTURE</div> <div>LAKE SKINNER WEST BYPASS SCREENING STRUCTURE REHABILITATION</div> <div>LAKE VIEW PIPE LINE REPAIRS</div> <div>LAKEVIEW PIPELINE - REPLACE VACUUM/AIR RELEASE</div> <div>LAKEVIEW PIPELINE CATHODIC PROTECTION SYSTEM</div> <div>LAKEVIEW PIPELINE RELINING</div> <div>LAKEVIEW PIPELINE REPAIR</div> <div>LAKEVIEW PIPELINE UPGRADE</div> <div>LIVE OAK RESERVOIR BYPASS PIPELINE CATHODIC PROTECTION</div> <div>LOWER FEEDER - CATHODIC PROTECTION</div> <div>LOWER FEEDER WR 33 - AREA REPAIR AND REMEDIATION</div> <div>MAGAZINE CANYON CANOPY</div> <div>MAGAZINE CANYON-ISOLATION GATE JACKING FRAME</div> <div>MAPES LAND ACQUISTION</div> <div>MICROWAVE COMMUNICATION SITES BUILDING UPGRADE</div> <div>MIDDLE CROSS FEEDER CATHODIC PROTECTION</div> <div>MIDDLE FEEDER - CATHODIC PROTECTION SYSTEMS</div> <div>MIDDLE FEEDER - NORTH CATHODIC PROTECTION SYSTEM</div> <div>MIDDLE FEEDER BLOW-OFF VALVE REPLACEMENT AT STA 782+53.16</div> <div>MIDDLE FEEDER NORTH CATHODIC PROTECTION SYSTEM</div> <div>MIDDLE FEEDER RELOCATION FOR SCE MESA SUBSTATION</div> <div>MILLS FILTRATION PLANT - INVESTIGATION TO RELOCATE ACCESS ROAD</div> <div>MINOR CAP 08/09 PLACEHOLDER</div> <div>MINOR CAP FY 2009/10</div> <div>MINOR CAP FY 2012/13</div> <div>MINOR CAP FY 2014/16</div> <div>MINOR CAPITAL PROJECTS PROGRAM 07/08 - REMAINING FUNDS</div> <div>MOUNT OLYMPUS TUNNEL COST RIGHT-OF-WAY (ROW)</div> <div>MWD ROAD GUARDRAIL</div> <div>NITROGEN STORAGE COMPLIANCE AT DVL, INLAND FEEDER PCS, AND LAKE MATHEWS</div> <div>NITROGEN STORAGE STUDY</div> <div>NON PCCP LINES CONDITION INSPECTION AND ASSESSMENT</div> <div>NORTH PORTAL OF HOLLYWOOD TUNNEL</div> <div>NORTH REACH CONSTRUCTION / INSPECTION / CM</div> <div>NORTH REACH CONSTRUCTION/ASBUILT</div> <div>NORTH REACH ENVIRONMENTAL - CONSTRUCTION</div> <div>NORTH REACH FINAL DESIGN & ADV/NTP</div> <div>NORTH REACH POST DESIGN / ASBUILT</div> <div>NORTH REACH PROGRAM MANAGEMENT - CONSTRUCTION</div> <div>NORTHERN PIPELINE ENVIRONMENTAL FINAL DESIGN</div> <div>NORTHERN PIPELINE RIGHT OF WAY FINAL DESIGN</div> <div>OAK ST. PCS ROOF REPLACEMENT</div> <div>OAK STREET PRESSURE CONTROL STRUCTURE ROOF REPLACEMENT - CONSTRUCTION</div> <div>OC 44 SERVICE CONNECTIONS & EOC#2 METER ACCESS ROAD REHAB</div> <div>OC FEEDER STA 1920+78 BLOWOFF STRUCTURE & RIP-RAP REPAIRS</div> <div>OC RESERVOIR SODIUM HYPOCHLORITE PUMP AND PIPING REPLACEMENT</div> <div>OC-71 FLOW CONTROL FACILITY</div> <div>OC-88 - SECURITY FENCING AT PUMP PLANT</div> <div>OC-88 EMERGENCY STANDBY GENERATOR UPGRADE STUDY</div> <div>OC-88 PUMP PLANT AIR COMPRESSOR UPGRADE</div> <div>OC-88 PUMP STATION FLOW METER UPGRADE</div> <div>OC-88 PUMPING PLANT SURGE TANKS UPGRADES</div> <div>OC-88 PUMPING PLANT UPGRADES</div> <div>OLINDA PCS AND SANTIAGO TOWER EMERGENCY GENERATORS</div> <div>OLINDA PCS VALVE REPLACEMENT</div> <div>OLINDA PRESSURE CONTROL STRUCTURE</div> <div>OLINDA PRESSURE CONTROL STRUCTURE AND SANTIAGO TOWER EMERGENCY GENERATORS</div>

<div>TABLE 3</div> <div>CONVEYANCE, DISTRIBUTION, AND STORAGE SYSTEM COSTS</div>
<div>Description</div> <div>Distribution Facilites</div> <div> ON-CALL RESOURCES MANAGEMENT APPLICATION OPERATIONS CONTROL CENTER AT EAGLE ROCK OPERATIONS CONTROL CENTER UPS REPLACEMENT OPERATIONS SCOPING STUDY ORANGE CO FDR, BLOW-OFF STRUCTURE AND ACCESS ROAD REPAIR ORANGE COUNTY - 88 PUMP PLANT AIR COMPRESSOR UPGRADE ORANGE COUNTY - 88 SECURITY FENCING AT PUMP PLANT ORANGE COUNTY AREA DISTRIBUTION SYSTEM VALVE REPLACEMENT ORANGE COUNTY C & D ELECTRICAL IMPROVEMENTS - STUDY ORANGE COUNTY C&D INSTRUMENTATION PANEL IMPROVEMENTS ORANGE COUNTY C&D TEAM SUPPORT FACILITY ORANGE COUNTY CONVEYANCE AND DISTRIBUTION SERVICE CENTER ORANGE COUNTY FEEDER CATHODIC PROTECTION ORANGE COUNTY FEEDER CATHODIC PROTECTION SYSTEM REHABILITATION ORANGE COUNTY FEEDER EXTENSION LINING REPAIR ORANGE COUNTY FEEDER INSPECTION ORANGE COUNTY FEEDER INTERNAL INSPECTION STUDY ORANGE COUNTY FEEDER LINING REPAIRS ORANGE COUNTY FEEDER PRESSURE CONTROL STRUCTURES ORANGE COUNTY FEEDER RELINING ORANGE COUNTY FEEDER RELOCATION IN FULLERTON ORANGE COUNTY FEEDER SCHEDULE 37SC CATHODIC PROTECTION ORANGE COUNTY FEEDER STA 1920+78 BLOWOFF STRUCTURE & RIP-RAP REPAIRS ORANGE COUNTY REGION ENVIRONMENTAL MITIGATION MONITORING ORANGE COUNTY RESERVOIR - INSTALL HYPOCHLORINATION STATIONS ORANGE COUNTY RESERVOIR - PIEZOMETERS & SEEPAGE MONITORING AUTOMATION OXIDATION DEMONSTRATION PLANT CONTROL SYSTEM REPLACEMENT PALOS ALTOS FEEDER - 108TH ST. PALOS VERDES FEEDER - LONG BEACH LATERAL TURNOUT STRUCTURES STA. 1442+15 VALVE REPLACEMENTS PALOS VERDES FEEDER PCS - VALVE REPLACEMENT PALOS VERDES RESERVOIR - INSTALL HYPOCHLORINATION STATIONS PC-1 EFFLUENT OPEN CHANNEL TRASH RACK PC-1 EFFLUENT OPEN CHANNEL TRASH RACK PROJECT PCCP HYDRAULIC ANALYSES PCCP REHABILITATION - PROGRAM MANAGEMENT PERIMETER FENCING AT PLACERITA CREEK PERMANENT LEAK DETECTION/PIPELINE MONITORING SYSTEM PERRIS PCS - UNINTERRUPTIBLE POWER SOURCE SYSTEMS INSTALLATION PERRIS CONTROL FACILITY BYPASS & PCS UPGRADE PERRIS PCS ROOF REHAB PERRIS PRESSURE CONTROL STRUCTURE ROOF REPLACEMENT PERRIS PUMPBACK COVER PERRIS VALLEY PIPELINE - DESIGN-BUILD (EMWD) PERRIS VALLEY PIPELINE - GENERAL PERRIS VALLEY PIPELINE - NORTH REACH PERRIS VALLEY PIPELINE - RESERVED FOR STAGE II DESIGN / BUILD PERRIS VALLEY PIPELINE - SOUTH REACH PERRIS VALLEY PIPELINE - STUDY PERRIS VALLEY PIPELINE - TIE-IN (WMWD) PERRIS VALLEY PIPELINE - TUNNELS PERRIS VALLEY PIPELINE - VALVES PERRIS VALLEY PIPELINE DESIGN-BUILD (EMWD) PERRIS VALLEY PIPELINE NORTH REACH PERRIS VALLEY PIPELINE SOUTH REACH PERRIS VALLEY PIPELINE TIE-IN (WMWD) PERRIS VALLEY PIPELINE VALVES PLACENTIA RAILROAD LOWERING PROJECT PLACERITA CREEK PERIMETER FENCING PLANT INFLUENT REDUNDANT FLOW METERING AND SPLITTING PLC REPLACEMENT PHASE II PRESTRESSED CONCRETE CYLINDER PIPE - PHASE 2 PRESTRESSED CONCRETE CYLINDER PIPE (PCCP) STRUCTURAL PEFORMANCE RISK ANALYSIS PRESTRESSED CONCRETE CYLINDER PIPE -PHASE 3 PROGRAMATTIC ENVIRONMENTAL DOCUMENTATION OF ORANGE COUNTY PROGRAMATTIC ENVIRONMENTAL DOCUMENTATION OF SAN BERNARDINO COUNTY PROGRAMMABLE LOGIC CONTROLLER (PLC) STANDARDIZATION PROGRAMMATIC ENVIRONMENTAL DOCUMENTATION FOR THE LOS ANGELES CO. OPERATING REGION PROGRAMMATIC ENVIRONMENTAL DOCUMENTATION FOR THE ORANGE COUNTY OPERATING REGION PROGRAMMATIC ENVIRONMENTAL DOCUMENTATION FOR THE RIVERSIDE/SAN DIEGO CO. OPERATING REGION PROGRAMMATIC ENVIRONMENTAL DOCUMENTATION FOR THE WESTERN SAN BERNARDINO COUNTY OPERATING REGION PUDDINGSTONE SPILLWAY CROSS CONNECTION PV RESERVOIR HYPOCHLORITE PUMP AND PIPING REPLACEMENT R&R FOR DISTRIBUTION REAL PROPERTY ACQUISITION RED MOUNTAIN - OCT. 2007 FIRE DAMAGE - COMMUNICATION POWER TOWERS & METER STRUCTURES REPAIR/REPLACE (INCIDENT NO. 2007-1023-0271) RED MOUNTAIN HEP FLOOD DAMAGE RED MTN COMM. TOWER & METER STRUCTURE REHABILITATION OF THE GREG AVE PCS CONTROL BUILDING INTERIOR RELOCATION OF ORANGE COUNTY FEEDER RELOCATION OF PORTION OF ORANGE COUNTY FEEDER (MWD'S SHARE) REMAINING PORTIONS REPAIRS TO THE LA-35 DISCHARGE STRUCTURE REPLACE 2 FIRE & DOMESTIC WATER SYSTEM REPLACE COMMUNICATION LINE TO THE SAN GABRIEL CONTROL TOWER REPLACE COPPER GROUNDWIRES ON DESERT HIGH VOLTAGE TRANSMISSION TOWERS REPLACE VALVE POSITION INDICATORS REPLACEMENT OF COMMUNICATION LINE AT SAN GABRIEL TOWER REPLACEMENT/ RELINE AT-RISK PCCP LINES - STAGE 1 RIALTO FEEDER BROKEN BACK REPAIR RIALTO FEEDER VALVE STRUCTURE RIALTO FEEDER, REPAIRS AT SELECT LOCATIONS, STUDY RIALTO PIPELINE - CONSTRUCTION PHASE 1 RIALTO PIPELINE - CONSTRUCTION PHASE 2 RIALTO PIPELINE IMPROVEMENTS RIALTO PIPELINE IMPROVEMENTS - CONSTRUCTION </div>

<div>TABLE 3</div> <div>CONVEYANCE, DISTRIBUTION, AND STORAGE SYSTEM COSTS</div>	
Description	
<u>Distribution Facilites</u>	
RIALTO PIPELINE IMPROVEMENTS - CONSTRUCTION PHASE III	
RIALTO PIPELINE IMPROVEMENTS - DESIGN PHASE 2	
RIALTO PIPELINE IMPROVEMENTS - DESIGN PHASE 3	
RIALTO PIPELINE IMPROVEMENTS - FINAL DESIGN	
RIALTO PIPELINE IMPROVEMENTS - VALVE PROCUREMENT	
RIALTO PIPELINE IMPROVEMENTS PHASE 1 FINAL DESIGN	
RIALTO PIPELINE PCCP REHABILITATION	
RIALTO PIPELINE REPAIR @ STA 3196+44	
RIALTO PIPELINE REPAIR AT THOMPSON CREEK	
RIALTO PIPELINE REPAIRS AT STATION 3198+44	
RIALTO PIPELINE VALVE PROCUREMENT	
RIGHT OF WAY INFRASTRUCTURE PROTECTION PROGRAM - LOS ANGELES COUNTY REGION	
RIGHT OF WAY INFRASTRUCTURE PROTECTION PROGRAM - O. C. REGION	
RIGHT OF WAY INFRASTRUCTURE PROTECTION PROGRAM - RIVERSIDE AND SAN DIEGO COUNTY REGION	
RIGHT OF WAY INFRASTRUCTURE PROTECTION PROGRAM - WESTERN SAN BERNARDINO COUNTY REGION	
RIGHT OF WAY SURVEY AND MAPPING	
RIO HONDO PRESSURE CONTROL STRUCTURE VALVE REPLACEMENTS	
ROBERT B. DIEMER FILTRATION PLANT - LAND ACQUISITION	
ROOF REPLACEMENT AT SOTO ST. FACILITY	
SAN DIEGO #3 BLOWOFF TO PUMPWELL CONVERSION	
SAN DIEGO CANAL - EAST & WEST BYPASS SCREENING STRUCTURES STUDY	
SAN DIEGO CANAL - ELECTRICAL VAULT & CONDUCTOR REPLACEMENT	
SAN DIEGO CANAL - FENCING	
SAN DIEGO CANAL - INSTALL ACOUSTIC FLOW METER	
SAN DIEGO CANAL - PIEZOMETER	
SAN DIEGO CANAL - REPLACE SODIUM BISULFATE TANK	
SAN DIEGO CANAL - SEEPAGE STUDY	
SAN DIEGO CANAL BISULFITE TANK REPLACEMENT	
SAN DIEGO CANAL LINER REPAIR	
SAN DIEGO CANAL RADIAL GATE (V0-6) REHABILITATION	
SAN DIEGO CANAL RADIAL GATE (VO-8) REHABILITATION	
SAN DIEGO CANAL RADIAL GATE REHAB	
SAN DIEGO CANAL SEEPAGE STUDY	
SAN DIEGO CANAL WEST BYPASS TRASH RACK	
SAN DIEGO PIPELINE #4 VALVE REPLACEMENT	
SAN DIEGO PIPELINE 1 BLOW-OFF VALVE REPLACEMENT	
SAN DIEGO PIPELINE 3 & 5 REMOTE CONTROL OF BYPASS	
SAN DIEGO PIPELINE 4 AND AULD VALLEY PIPELINE CARBON FIBER REPAIRS	
SAN DIEGO PIPELINE 5 & LAKE SKINNER OUTLET REPAIR	
SAN DIEGO PIPELINE 6 - PRESSURE CONTROL STRUCTURE/HYDROELECTRIC PLANT - FEASIBILITY STUDY	
SAN DIEGO PIPELINE 6 NORTH REACH, ENVIRONMENTAL MONITORING DURING CONSTRUCTION	
SAN DIEGO PIPELINE NO. 1 JOINT REPAIR	
SAN DIEGO PIPELINE NO. 3 BYPASS	
SAN DIEGO PIPELINE NO. 3 PIPING MODIFICATIONS	
SAN DIEGO PIPELINE NO. 5 - OCT. 2007 FIRE DAMAGE - REPLACE ABOVE GROUND CORROSION CONTROL SYSTEM EQUIPMENT, AND STRUCTURAL APPURTENANCES	
SAN DIEGO PIPELINE NO. 6 - RIVERSIDE BRANCH - ETIWANDA FACILITY/DROP INLET STRUCTURE	
SAN DIEGO PIPELINE NO. 6 - RIVERSIDE BRANCH - PLEASANT PEAK, COMMUNICATIONS	
SAN DIEGO PIPELINE NO. 6 - RIVERSIDE TUNNEL CONSTRUCTION - AS BUILT	
SAN DIEGO PIPELINE NO. 6 - RIVERSIDE TUNNEL COST OF RIGHT OF WAY (OPTIONAL PORTAL SITE)	
SAN DIEGO PIPELINE NO. 6 - RIVERSIDE TUNNEL ENVIRONMENTAL CONSTRUCTION	
SAN DIEGO PIPELINE NO. 6 - RIVERSIDE TUNNEL ENVIRONMENTAL PRELIMINARY DESIGN	
SAN DIEGO PIPELINE NO. 6 - RIVERSIDE TUNNEL PRELIMINARY DESIGN	
SAN DIEGO PIPELINE NO. 6 - RIVERSIDE TUNNEL PROGRAM MANAGEMENT	
SAN DIEGO PIPELINE NO. 6 - RIVERSIDE TUNNEL RIGHT OF WAY PRELIMINARY DESIGN	
SAN DIEGO PIPELINE NO. 6 - CONTRACT NO.1 SAN DIEGO CANAL TO MOUNT OLYMPUS	
SAN DIEGO PIPELINE NO. 6 - CONTRACT NO.2 MOUNT OLYMPUS TUNNEL & PORTALS	
SAN DIEGO PIPELINE NO. 6 - NORTH REACH CONSTRUCTION - AS BUILT	
SAN DIEGO PIPELINE NO. 6 - NORTH REACH ENVIRONMENTAL - CONSTRUCTION	
SAN DIEGO PIPELINE NO. 6 - NORTH REACH ENVIRONMENTAL PRELIMINARY DESIGN	
SAN DIEGO PIPELINE NO. 6 - NORTH REACH FINAL DESIGN & ADV/NTP	
SAN DIEGO PIPELINE NO. 6 - NORTH REACH POST DESIGN	
SAN DIEGO PIPELINE NO. 6 - NORTH REACH PRELIMINARY DESIGN	
SAN DIEGO PIPELINE NO. 6 - NORTH REACH PROGRAM MANAGEMENT - CONSTRUCTION	
SAN DIEGO PIPELINE NO. 6 - NORTH REACH PROGRAM MANAGEMENT - DESIGN	
SAN DIEGO PIPELINE NO. 6 - NORTH REACH RIGHT OF WAY FINAL DESIGN	
SAN DIEGO PIPELINE NO. 6 - NORTH REACH RIGHT OF WAY PRELIMINARY DESIGN	
SAN DIEGO PIPELINE NO. 6 - NORTHERN PIPELINE COST OF RIGHT OF WAY	
SAN DIEGO PIPELINE NO. 6 - NORTHERN REACH ENVIRONMENTAL FINAL DESIGN	
SAN DIEGO PIPELINE NO. 6 - OPERATIONS SCOPING STUDY	
SAN DIEGO PIPELINE NO. 6 - PIPELINE/TUNNEL STUDY - DESIGN	
SAN DIEGO PIPELINE NO. 6 - PIPELINE/TUNNEL STUDY - ENVIRONMENTAL	
SAN DIEGO PIPELINE NO. 6 - PIPELINE/TUNNEL STUDY - PROJECT MANAGEMENT	
SAN DIEGO PIPELINE NO. 6 - PIPELINE/TUNNEL STUDY - RIGHT OF WAY	
SAN DIEGO PIPELINE NO. 6 - PROJECT MANAGEMENT	
SAN DIEGO PIPELINE NO. 6 - RIGHT OF WAY	
SAN DIEGO PIPELINE NO. 6 - SOUTH REACH - PROGRAM MANAGEMENT	
SAN DIEGO PIPELINE NO. 6 - SOUTH REACH / TUNNEL STUDY	
SAN DIEGO PIPELINE NO. 6 - SOUTH REACH CONSTRUCTION / AS BUILT	
SAN DIEGO PIPELINE NO. 6 - SOUTH REACH COST OF RIGHT OF WAY	
SAN DIEGO PIPELINE NO. 6 - SOUTH REACH ENVIRONMENTAL - CONSTRUCTION	
SAN DIEGO PIPELINE NO. 6 - SOUTH REACH ENVIRONMENTAL FINAL DESIGN	
SAN DIEGO PIPELINE NO. 6 - SOUTH REACH ENVIRONMENTAL PRELIMINARY DESIGN	
SAN DIEGO PIPELINE NO. 6 - SOUTH REACH FINAL DESIGN/ADV	
SAN DIEGO PIPELINE NO. 6 - SOUTH REACH PRELIMINARY DESIGN	
SAN DIEGO PIPELINE NO. 6 - SOUTH REACH RIGHT OF WAY FINAL DESIGN	
SAN DIEGO PIPELINE NO. 6 - SOUTH REACH RIGHT OF WAY PRELIMINARY DESIGN	
SAN DIEGO PIPELINE NO. 6 - SOUTH REACH TUNNEL ALIGNMENT ANALYSIS	
SAN DIEGO PIPELINE NO. 6 AREA STUDY	
SAN DIEGO PIPELINE NO. 6 ENVIRONMENTAL MITIGATION	
SAN DIEGO PIPELINE NO.4 & AULD VALLEY PIPELINE CARBON FIBER REPAIR STUDY	
SAN DIEGO PIPELINE NOS. 1AND 3 - VALVE REPLACEMENT	
SAN DIMAS AND RED MOUNTAIN POWER PLANTS STANDBY DIESEL ENGINE GENERATOR REPLACEMENTS	
SAN DIMAS CONTROL STRUCTURE 500 GALLONS DIESEL TANK REPLACEMENT	
SAN DIMAS HEP BATTERY BANK AND GENERATOR BREAKER	
SAN DIMAS PCS - UNINTERRUPTIBLE POWER SOURCE SYSTEMS INSTALLATION	
SAN FRANCISQUITO PIPELINE BLOW OFF STRUCTURE, STA 287+70, ACCESS ROAD CONSTRUCTION	
SAN GABRIEL TOWER AND SPILLWAY IMPROVEMENTS	

<div>TABLE 3</div> <div>CONVEYANCE, DISTRIBUTION, AND STORAGE SYSTEM COSTS</div>
<div>Description</div> <div>Distribution Facilites</div> <div> <div>SAN GABRIEL TOWER SEISMIC UPGRADE</div> <div>SAN GABRIEL TOWER SLIDE GATE REHABILITATION</div> <div>SAN JACINTO #1 AND #2 CASA LOMA FAULT CROSSING STRUCTURE UPGRADE</div> <div>SAN JACINTO DIVERSION STRUCTURE SLIDE GATE V-03 REPLACEMENT</div> <div>SAN JOAQUIN RELIEF STRUCTURE FOR EASTERN ORANGE COUNTY FEEDER #2</div> <div>SAN JOAQUIN RELIEF STRUCTURE FOR EASTR OC FDR #2</div> <div>SAN JOAQUIN RESERVOIR, INSTALL BULKHEAD</div> <div>SANTA ANA RIVER BRIDGE EXPANSION JOINT REPLACEMENT</div> <div>SANTA ANA RIVER BRIDGE SEISMIC RETROFIT</div> <div>SANTA ANA RIVER BRIDGE SEISMIC UPGRADE</div> <div>SANTA MONICA FEEDER RELOCATION</div> <div>SANTA MONICA FEEDER STATION 495+10 REHABILITATION</div> <div>SANTIAGO CONTROL TOWER CATHODIC PROTECTION</div> <div>SANTIAGO LATERAL REPLACE MOTOR - OPERATED VALVE</div> <div>SANTIAGO LATERAL SECTIONALIZATION VALVE REPLACEMENT</div> <div>SANTIAGO LATERAL STA 216+40 BUTTERFLY VALVE REPLACEMENT</div> <div>SANTIAGO PRESSURE CONTROL STRUCTURE</div> <div>SANTIAGO TOWER ACCESS ROAD IMPROVEMENT</div> <div>SCADA COMMUNICATIONS MPLS UPGRADE - AT&T REGION (MINOR CAP)</div> <div>SCADA COMMUNICATIONS MPLS UPGRADE - VERIZON REGION (MINOR CAP)</div> <div>SCADA SYSTEM HARDWARE UPGRADE</div> <div>SCADA SYSTEM NT SOFTWARE UPGRADE</div> <div>SCADA SYSTEM SUPPORT PROGRAMS</div> <div>SD AND CASA LOMA CANALS LINING</div> <div>SD CANAL EAST & WEST BYPASS SCREENING STRUCTURES STUDY</div> <div>SD CANAL REPLACE SODIUM BISULFITE TANK</div> <div>SD PIPELINE 3 CULVERT ROAD REHAB</div> <div>SD PIPELINE 3,4, AND 5 PROTECTIVE COVER</div> <div>SD PIPELINE 4 EXPLORATORY EXCAVATION</div> <div>SD PIPELINE 5 EXPLORATOTY EXCAVATION</div> <div>SD PIPELINES 3 AND 5 REMOTE CONTROL BYPASS STRUCTURE GATES AND ISOLATION VALVES</div> <div>SECOND LOWER & SEPULVEDA FEEDERS SCI DRAIN STATIONS</div> <div>SECOND LOWER CROSS FEEDER - VALVE PROCUREMENT</div> <div>SECOND LOWER CROSS FEEDER CONSTRUCTION</div> <div>SECOND LOWER CROSS FEEDER FINAL DESIGN</div> <div>SECOND LOWER FEEDER - INSTALL LINER</div> <div>SECOND LOWER FEEDER CATHODIC PROTECTION SYSTEM</div> <div>SECOND LOWER FEEDER CURRENT MITIGATION REFURBISHMENT</div> <div>SECOND LOWER FEEDER PCCP REHABILITATION</div> <div>SECOND LOWER FEEDER PCCP REPAIRS</div> <div>SECOND LOWER FEEDER RELIABILITY AT 3 LOCATIONS - SEISMIC STUDY</div> <div>SEISMIC UPGRADE OF 11 FACILITIES ON THE ALLEN MCCOLLOCH PIPELINE</div> <div>SEISMIC UPGRADES AT 10 SERVICE CONNECTION STRUCTURES ALONG AMP</div> <div>SELECTED PRESSURE REPLACE VALVE POSITION INDICATORS</div> <div>SEPULVEDA CANYON CONTROL FACILITY BYPASS PROJECT</div> <div>SEPULVEDA CANYON CONTROL FACILITY WATER STORAGE TANKS SEISMIC UPGRADE</div> <div>SEPULVEDA CANYON POWER PLANT TAIL RACE COATINGS</div> <div>SEPULVEDA CANYON TANKS EXTERIOR AND INTERIOR RECOATING</div> <div>SEPULVEDA FEEDER - CARBON FIBER LINER REPAIRS</div> <div>SEPULVEDA FEEDER CATHODIC PROTECTION SYSTEM</div> <div>SEPULVEDA FEEDER CORROSION/INTERFERENCE MITIGATION, STATION 950+00 TO 1170+00</div> <div>SEPULVEDA FEEDER HEP AUTO PILOT</div> <div>SEPULVEDA FEEDER PCCP DEL AMO BLVD URGENT RELINING</div> <div>SEPULVEDA FEEDER REPAIRS AT 3 SITES</div> <div>SEPULVEDA FEEDER SOUTH CATHODIC PROTECTION SYSTEM</div> <div>SEPULVEDA FEEDER STATION 2002+02 TO 2273+28 STRAY CURRENT INTERFERENCE MITIGATION</div> <div>SEPULVEDA FEEDER STRAY CURRENT MITIGATION REFURBISHMENT</div> <div>SEPULVEDA FEEDER/EAST VALLEY FEEDER INTERCONNECTION ELECTRICAL UPGRADES</div> <div>SEPULVEDA PCS - PERIMETER ASPHALT REPAIRS</div> <div>SEPULVEDA PIPELINE PCCP REHABILITATION</div> <div>SEPULVEDA-WEST BASIN INTERCONNECTION VALVE REPLACEMENTS</div> <div>SERVICE CONNECTION LV-01 UPGRADES</div> <div>SERVICE CONNECTION OC-26 - RELOCATION OF METER CABINET, INSTRUMENT HOUSING & AIR VENT STACK</div> <div>SERVICE CONNECTION WB13 - WEST BASIN FEEDER</div> <div>SERVICE CONNECTIONS CB-12 & CB-16 TURNOUT VALVE REPLACEMENT & ELECTRICAL UPGRADE</div> <div>SERVICE CONNECTIONS WB-2A AND WB-2B EQUIPMENT RELOCATION</div> <div>SIMULATION AND MODELING APPLICATION FOR REAL TIME OPERATIONS SMART OPS</div> <div>SITE 3 SECOND LOWER FEEDER URGENT REPAIRS - FINAL DESIGN</div> <div>SITES 1 & 2 SECOND LOWER FEEDER URGENT REPAIRS - FINAL DESIGN & PIPE FABRICATION</div> <div>SKINNER ACCUSONIC FLOWMETER REPLACEMENT</div> <div>SKINNER BRANCH - AIR INJECTION MODIFICATIONS TO RED MOUNTAIN POWER PLANT</div> <div>SKINNER BRANCH - CASA LOMA CANAL</div> <div>SKINNER BRANCH - CASA LOMA SIPHON BARREL ONE</div> </div>

<div>TABLE 3</div> <div>CONVEYANCE, DISTRIBUTION, AND STORAGE SYSTEM COSTS</div>
<div>Description</div> <div>Distribution Facilites</div> <div> <div>SKINNER BRANCH - CATWALK FOR TRAVELING MAINTENANCE BRIDGE FOR</div> <div>SKINNER BRANCH - FABRICATE & REPLACE THE STEMS, NUTS & KEYS</div> <div>SKINNER BRANCH - REPAIR MODULE 1 AND 2 FLOCCULATORS BRIDGES</div> <div>SKINNER DAM REMEDIATION</div> <div>SKINNER DISTRIBUTION SYSTEM - CONTRACT # 1396</div> <div>SKINNER ELECTRICAL BUILDING HVAC UPGRADE</div> <div>SKINNER FACILITY AREA PAVING</div> <div>SKINNER FILTRATION PLANT - ELEVATED SLAB IN SERVICE BLDG 1</div> <div>SKINNER HELIPAD REHAB</div> <div>SKINNER REPLACEMENT FOR WETCELL BATTERY AND INVERTER</div> <div>SKINNER SCADA SERVERS RELOCATION</div> <div>SMART-OPS (FORMERLY RTOS)</div> <div>SOTO STREET FACILITY - BUILDING SEISMIC UPGRADE</div> <div>SOTO STREET FACILITY - REPLACE HEATING</div> <div>SOTO STREET FACILITY - ROOF REPLACEMENT</div> <div>SOUTH COUNTY PIPELINE PROTECTION AT SAN JUAN CREEK CROSSING</div> <div>SOUTH REACH / TUNNEL STUDY</div> <div>SOUTH REACH CONSTRUCTION/ASBUILT - FUTURE UNAPPROPRIATED</div> <div>SOUTH REACH DESIGN - FUTURE/UNAPPROPRIATED</div> <div>SOUTH REACH ENVIRONMENTAL - FUTURE/UNAPPROPRIATED</div> <div>SOUTH REACH FEASIBILITY STUDY</div> <div>SOUTH REACH PROJECT MANAGEMENT - FUTURE/UNAPPROPRIATED</div> <div>SOUTH REACH RIGHT OF WAY - FUTURE/UNAPPROPRIATED</div> <div>SPECIAL SERVICE BRANCH - REPLACE PLATE BENDING</div> <div>ST. JOHN'S CANYON CHANNEL EROSION MITIGATION</div> <div>SYSTEM RELIABILITY PROGRAM</div> <div>SYSTEM-WIDE ASPHALT REPLACEMENT</div> <div>TEMESCAL POWER PLANT REPLACE EMERGENCY GENERATOR</div> <div>TREATED WATER CROSS CONNECTION PREVENTION - FINAL DESIGN & CONSTRUCTION</div> <div>TREATED WATER CROSS CONNECTION PREVENTION - UNFUNDED WORK</div> <div>TWO-WAY RADIO ENHANCEMENT - EMERGENCY SERVICES, FIRE CONTROL, EVACUATION & BLDG. MAINT.</div> <div>TWO-WAY RADIO ENHANCEMENT FOR EMERGENCY SERVICES, FIRE CONTROL, EVACUATION AND BLDG. MAINTENANCE</div> <div>UNDER GROUND STORAGE TANK DISPENSER SPILL CONTAINMENT & REMEDIATION</div> <div>UNION STATION TWO-WAY RADIO ENHANCEMENT FOR EMERGENCY SERVICES, FIRE CONTROL, EVACUATION AND BUILDING MAINTENANCE</div> <div>UPGRADE CATHODIC PROTECTION RECTIFIERS</div> <div>UPGRADE HOLLYWOOD TUNNEL PORTAL SLEEVE VALVE EQUIPMENT</div> <div>UPGRADE SUNSET GARAGE</div> <div>UPPER FEEDER - SANTA ANA RIVER BRIDGE REPAIRS</div> <div>UPPER FEEDER - STRUCTURAL PROTECTION</div> <div>UPPER FEEDER AIR ENTRAINMENT</div> <div>UPPER FEEDER CATHODIC PROTECTION SYSTEM</div> <div>UPPER FEEDER GATE REHABILITATION</div> <div>UPPER FEEDER JUNCTION STRUCTURE SEISMIC UPGRADE</div> <div>UPPER FEEDER SANTA ANA RIVER DISCHARGE PAD</div> <div>UPPER FEEDER SERVICE CONNECTIONS UPGRADES</div> <div>UPPER NEWPORT BAY BLOW-OFF STRUCTURE REHABILITATION</div> <div>UPS SYSTEMS INSTALLATION AT FOOTHILL PCS</div> <div>UPS SYSTEMS INSTALLATION AT PERRIS CONTROL STRUCTURE</div> <div>UTILITY BUSINESS ARCHITECTURE (OBJECT MAPPING/MODELING)</div> <div>VACUUM AIR RELEASE VALVE RELOCATION PILOT PROGRAM</div> <div>VALLEY & LOS ANGELES DISTRIBUTION VALVE POSITION DISPLAY UPGRADE</div> <div>VALVE PROCUREMENT</div> <div>VIDEO CONFERENCE SYSTEM UPGRADE</div> <div>VIDEOCONFERENCING UPGRADE</div> <div>WADSWORTH PUMPING PLANT - MODIFICATION/REPAIRS OF FIFTY-NINE 6.9KV BREAKERS/CABINETS</div> <div>WADSWORTH PUMPING PLANT CONDUIT REPAIR AND PROTECTION</div> <div>WADSWORTH PUMPING PLANT CONTROL & PROTECTION UPGRADES</div> <div>WADSWORTH PUMPING PLANT FOREBAY GANTRY CRANE UPGRADE</div> <div>WADSWORTH PUMPING PLANT RECOATING 144" YARD PIPING</div> <div>WADSWORTH PUMPING PLANT SLEEVE VALVE REFURBISHMENT</div> <div>WADSWORTH PUMPING PLANT STOP LOGS ADDITION - STUDY</div> <div>WADSWORTH PUMPING PLANT YARD PIPING LINING REPLACEMENT</div> <div>WADSWORTH/DVL CONTROL & PROTECTION SYSTEM UPGRADE - UPS REPLACEMENT</div> <div>WATER DELIVERY SYSTEM AUTOMATION</div> <div>WATER PLANNING APPLICATION</div> <div>WATER QUALITY - REMOTE MONITORING</div> <div>WATER QUALITY LABORATORY BUILDING EXPANSION</div> <div>WATER QUALITY MONITORING AND EVENT DETECTION SYSTEM</div> <div>WEST COAST FEEDER - CATHODIC PROTECTION SYSTEMS</div> <div>WEST OC FEEDER VALVE REPLACEMENT</div> <div>WEST ORANGE COUNTY FEEDER OC-09 REHABILITATION</div> <div>WEST ORANGE COUNTY FEEDER VALVE REPLACEMENT</div> <div>WEST VALLEY AREA STUDY</div> <div>WEST VALLEY FEEDER # 1 STAGE 2 VALVE STRUCTURE MODIFICATIONS - CONSTRUCTION</div> <div>WEST VALLEY FEEDER NO. 1 - DE SOTO VALVE STRUCTURE IMPROVEMENTS</div> <div>WEST VALLEY FEEDER NO. 1 ACCESS ROADS AND STRUCTURE IMPROVEMENTS (STAGE 2)</div> <div>WEST VALLEY FEEDER NO. 1 ACCESS ROADS AND STRUCTURE IMPROVEMENTS (STAGE 3)</div> <div>WEST VALLEY FEEDER NO. 1 ACCESS ROADS AND STRUCTURES IMPROVEMENTS</div> <div>WEST VALLEY FEEDER NO. 1 VALVE STRUCTURE MODIFICATIONS</div> <div>WESTERN REGION PLUMBING RETROFIT</div> <div>WESTERN SAN BERNARDINO COUNTY REGION ENVIRONMENTAL MITIGATION MONITORING</div> <div>WEYM. PLT/LA VERNE FAC-BACKFLO PREV ASSY</div> <div>WEYMOUTH - BUILDING NO. 4 - HAND RAIL AND STAIRS ADDITION</div> <div>WEYMOUTH - FLAG POLE AREA LANDSCAPE UPGRADE</div> <div>WEYMOUTH ASPHALT REHABILITATION</div> <div>WEYMOUTH COMPRESSED AIR SYSTEM</div> <div>WEYMOUTH DISTRIBUTION SYSTEM - REPLACEMENT OF AREA CONTROL SYSTEMS - CONTRACT #1396</div> <div>WEYMOUTH FLOCCULATOR REHABILITATION</div> <div>WEYMOUTH WATER TREATMENT PLANT DOMESTIC AND FIRE WATER SYSTEM IMPROVEMENT</div> <div>WFP - ASPHALT REHABILITATION</div> <div>WFP - COMPRESSED AIR SYSTEM IMPROVEMENT</div> <div>WFP - PURCHASE OF REAL PROPERTY</div> <div>WFP - REPAIR TO BLDG # 1</div> <div>YORBA LINDA FEEDER - STA 924+11 PORTAL ACCESS</div> <div>YORBA LINDA FEEDER BYPASS</div> <div>YORBA LINDA PORTAL STRUCTURE ACCESS/TELEGRAPH CREEK BRIDGE</div> </div>

TABLE 4							
FISCAL YEAR 2022/23 ESTIMATED READINESS-TO-SERVE CHARGE REVENUE							
Member Agency	Rolling Ten- Year Average Firm Deliveries (Acre-Feet) FY2010/11 - FY2019/20	RTS Share	6 months @ \$140 million per year (7/22- 12/22)	Rolling Ten- Year Average Firm Deliveries (Acre-Feet) FY2011/12 - FY2020/21	RTS Share	6 months @ \$154 million per year (1/23- 6/23)	Total RTS Charge FY 2022/23
Anaheim	17,275.2	1.21%	848,899	19,376.9	1.37%	1,051,617	1,900,516
Beverly Hills	10,355.2	0.73%	508,852	10,308.7	0.73%	559,471	1,068,322
Burbank	13,339.1	0.94%	655,480	13,354.6	0.94%	724,777	1,380,257
Calleguas MWD	96,173.4	6.75%	4,725,935	96,573.4	6.81%	5,241,203	9,967,138
Central Basin MWD	37,402.1	2.63%	1,837,929	34,311.0	2.42%	1,862,116	3,700,045
Compton	522.9	0.04%	25,695	340.2	0.02%	18,463	44,158
Eastern MWD	96,004.3	6.74%	4,717,625	97,570.2	6.88%	5,295,301	10,012,926
Foothill MWD	8,204.3	0.58%	403,157	8,306.1	0.59%	450,786	853,943
Fullerton	7,573.6	0.53%	372,165	7,280.1	0.51%	395,103	767,268
Glendale	16,339.5	1.15%	802,919	16,256.7	1.15%	882,279	1,685,197
Inland Empire Utilities Agency	56,041.5	3.93%	2,753,864	55,761.7	3.93%	3,026,283	5,780,147
Las Virgenes MWD	20,472.7	1.44%	1,006,023	20,715.7	1.46%	1,124,276	2,130,299
Long Beach	29,958.6	2.10%	1,472,157	29,251.8	2.06%	1,587,545	3,059,703
Los Angeles	258,508.9	18.15%	12,703,057	273,537.0	19.28%	14,845,319	27,548,376
Municipal Water District of Orange County	199,974.3	14.04%	9,826,683	195,128.0	13.75%	10,589,929	20,416,612
Pasadena	18,721.0	1.31%	919,945	18,954.2	1.34%	1,028,677	1,948,622
San Diego County Water Authority	232,196.6	16.30%	11,410,078	214,362.4	15.11%	11,633,813	23,043,891
San Fernando	35.6	0.00%	1,749	29.7	0.00%	1,612	3,361
San Marino	0.0	0.07%	46,319	974.0	0.07%	52,861	99,180
Santa Ana	10,060.6	0.71%	494,375	9,606.6	0.68%	521,367	1,015,742
Santa Monica	4,865.2	0.34%	239,075	4,607.4	0.32%	250,051	489,126
Three Valleys MWD	63,723.8	4.47%	3,131,370	63,736.2	4.49%	3,459,072	6,590,442
Torrance	15,852.7	1.11%	778,997	15,549.0	1.10%	843,871	1,622,868
Upper San Gabriel Valley MWD	27,250.3	1.91%	1,339,072	30,096.0	2.12%	1,633,361	2,972,434
West Basin MWD	114,374.8	8.03%	5,620,347	113,660.3	8.01%	6,168,538	11,788,885
Western MWD	68,340.5	4.80%	3,358,234	69,139.3	4.87%	3,752,308	7,110,541
MWD Total	1,424,509.3	100.00%	\$ 70,000,000	1,418,787.2	100.00%	\$ 77,000,000	\$ 147,000,000
Totals may not foot due to rounding							

TABLE 5
FISCAL YEAR 2022/23
ESTIMATED STANDBY CHARGE REVENUE

Member Agencies	Total Parcel Charge	Number of Parcels Or Acres	Gross Revenues (Dollars) ¹
Anaheim	\$ 8.55	69,024	590,155
Beverly Hills	-	-	-
Burbank	14.20	29,111	413,378
Calleguas MWD	9.58	260,024	2,491,030
Central Basin MWD	10.44	340,264	3,552,356
Compton	2.49	18,144	45,178
Eastern MWD	6.94	406,560	2,821,528
Foothill MWD	10.28	30,361	312,113
Fullerton	10.71	35,251	377,543
Glendale	12.23	45,057	551,050
Inland Empire Utilities Agency	7.59	262,180	1,989,945
Las Virgenes MWD	8.03	55,414	444,973
Long Beach	12.16	92,471	1,124,441
Los Angeles	-	-	-
Municipal Water District of Orange County ²	10.09	662,675	7,534,624
Pasadena	11.73	39,489	463,203
San Diego County Water Authority	11.51	1,112,302	12,802,601
San Fernando	-	5,102	-
San Marino	8.24	4,972	40,972
Santa Ana	7.88	65,040	512,519
Santa Monica	-	-	-
Three Valleys MWD	12.21	151,490	1,849,691
Torrance	12.23	40,578	496,264
Upper San Gabriel Valley MWD	9.27	214,737	1,990,616
West Basin MWD	-	-	-
Western MWD	9.23	389,885	3,598,640
MWD Total		4,330,132	\$ 44,002,818

(1) Estimates per FY 2021/22 applied amounts

(2) Adjusted for inclusion of Coastal MWD

Note: Totals may not foot due to rounding.

<p>TABLE 6</p> <p>PARCELS SUBJECT TO ANNEXATION STANDBY CHARGES</p> <p>AS OF JULY 1, 2021</p>				
Annexation	Parcel Number	Acres		Proposed Standby Charge (FY 2020/21)
Eastern MWD				
111th Fringe Area	910-230-003	5.82		40.39
REORGANIZATIONS BETWEEN MEMBER AGENCIES				
Annexation	Parcel Number	Acres	Original Standby Charge	Proposed Standby Charge (FY 2020/21)
Reorg No. 2012-10			West Basin MWD	Las Virgenes MWD
From West Basin MWD	4438-037-003	5.27	0.00	42.32
To Las Virgenes MWD				

**THE METROPOLITAN WATER DISTRICT
OF SOUTHERN CALIFORNIA**

RESOLUTION 9304

**RESOLUTION OF THE BOARD OF DIRECTORS
OF THE METROPOLITAN WATER DISTRICT OF
SOUTHERN CALIFORNIA
FIXING AND ADOPTING
A CAPACITY CHARGE
EFFECTIVE JANUARY 1, 2023**

The Board of Directors of The Metropolitan Water District of Southern California (the “Board”) hereby finds that:

1. The Board of The Metropolitan Water District of Southern California (“Metropolitan”), pursuant to Sections 133, 134 and 134.5 of the Metropolitan Water District Act (the “Act”), is authorized to fix such rate or rates for water as will result in revenue which, together with revenue from any water standby or availability of service charge or assessment, will pay the operating expenses of Metropolitan, provide for repairs and maintenance, provide for payment of the purchase price or other charges for property or services or other rights acquired by Metropolitan, and provide for the payment of the interest and principal of its bonded debt; and
2. The amount of revenue to be raised by the Capacity Charge shall be as determined by the Board and allocation of such charges among member agencies shall be in accordance with the method established by the Board; and
3. The Capacity Charge is a charge fixed and adopted by Metropolitan and charged to its member agencies, and is not a fee or charge imposed upon real property or upon persons as an incident of property ownership; and
4. The Capacity Charge is intended to recover the debt service and other appropriately allocated costs to construct, operate and maintain projects needed to meet peak demands on Metropolitan’s distribution system, as shown in the FYs 2022/23 and 2023/24 Cost of Service Report for Proposed Water Rates and Charges (the “2022 Cost of Service Report”), as introduced in February 4, 2022 and finalized following the Board’s approval of the budget, rates, and charges on April 12, 2022; and
5. Pursuant to Resolution 8329, adopted by the Board on July 9, 1991, Resolution 9199, adopted by the Board on March 8, 2016, and Resolution 9201, adopted by the Board on March 8, 2016, and as each is thereafter amended and supplemented, proceeds of the Capacity Charge and other revenues from the sale or availability of water are pledged to the payment of Metropolitan’s outstanding revenue bonds, subordinate revenue bonds and short-term certificates, and to revenue bonds, subordinate revenue bonds and short-term certificates to be issued pursuant to Resolution 8329, Resolution 9199, and Resolution 9201; and
6. The Capacity Charge is charged (on a dollar per cubic-foot-per-second basis) to member public agencies (“member agencies”), based upon the amount of capacity used by such member agency that is designed to recover the cost of providing peaking capacity within the distribution system; and

7. On April 12, 2022, the Board considered the options for rates and charges presented by the General Manager and approved the biennial budget for fiscal years 2022/23 and 2023/24 and adopted water rates for calendar years 2023 and 2024 and charges for calendar year 2021, and received information and documents available at <https://www.mwdh2o.com/who-we-are/budget-finance/>; and

8. In approving the biennial budget and adopting the rates and charges on April 12, 2022, the Board determined the amount of revenue to be raised by the Capacity Charge in calendar year 2023 to be based on a Capacity Charge in such year of \$10,600 per cubic-foot-per-second, based on information and documents available at <https://www.mwdh2o.com/who-we-are/budget-finance/>; and

9. Each of the meetings of the Board were conducted in accordance with the Brown Act (commencing at Section 54950 of the Government Code), for which due notice was provided and at which quorums were present and acting throughout;

NOW, THEREFORE, the Board does hereby resolve, determine and order as follows:

Section 1. That the Board hereby fixes and adopts a Capacity Charge, as described below, to be effective January 1, 2023.

Section 2. That said Capacity Charge shall be in an amount sufficient to provide for payment of the capital financing costs not paid from *ad valorem* property taxes, as well as other appropriately allocated costs, incurred to provide peaking capacity within Metropolitan's distribution system.

Section 3. That such Capacity Charge effective January 1, 2023 shall be a charge as specified in Section 5 (set in dollars per cubic-foot-per-second of the peak day capacity) for capacity provided to a member agency, based on the maximum summer day demand placed on the system between May 1 and September 30 for the three-calendar year period ending December 31, 2003, and thereafter for a rolling three-calendar year period.

Section 4. The allocation of the Capacity Charge among member agencies is based on data recorded by Metropolitan and shall be conclusive in the absence of manifest error. Corrections may be made by staff for any incorrect recording or calculation, upon verification by the member agency.

Section 5. That the Capacity Charge shall be a fixed charge as shown in the following table and collected from each member agency monthly, quarterly or semiannually as agreed to by Metropolitan and the member agency.

Table 1. Calendar Year 2023 Capacity Charge

Table 1					
Calendar Year 2023 Capacity Charge					
	Peak Day Demand (cfs) (May 1 through September 30)				Rate (\$/cfs): \$10,600
	Calendar Year				
Member Agency	2019	2020	2021	3-Year Peak	Calendar Year 2023 Capacity Charge
Anaheim	37.1	84.1	77.2	84.1	\$891,460
Beverly Hills	23.5	23.2	24.8	24.8	\$262,880
Burbank	17.3	16.6	15.5	17.3	\$183,380
Calleguas	168.9	178.2	189.6	189.6	\$2,009,760
Central Basin	48.6	51.9	54.1	54.1	\$573,460
Compton	2.9	0.0	0.0	2.9	\$30,740
Eastern	196.8	211.5	215.3	215.3	\$2,282,180
Foothill	16.0	19.3	22.8	22.8	\$241,680
Fullerton	13.1	14.1	20.0	20.0	\$212,000
Glendale	32.2	37.9	32.5	37.9	\$401,740
Inland Empire	118.7	98.4	101.4	118.7	\$1,258,220
Las Virgenes	39.4	41.7	42.9	42.9	\$454,740
Long Beach	51.8	67.3	45.7	67.3	\$713,380
Los Angeles	283.2	339.0	584.1	584.1	\$6,191,460
MWDOC	262.8	272.0	332.4	332.4	\$3,523,440
Pasadena	39.9	46.4	48.2	48.2	\$510,920
San Diego CWA	672.1	723.4	672.5	723.4	\$7,668,040
San Fernando	0.0	0.0	0.0	0.0	\$0
San Marino	2.3	7.3	5.4	7.3	\$77,380
Santa Ana	19.4	21.7	18.3	21.7	\$230,020
Santa Monica	20.7	17.0	15.1	20.7	\$219,420
Three Valleys	128.1	134.3	138.3	138.3	\$1,465,980
Torrance	27.8	28.9	27.2	28.9	\$306,340
Upper San Gabriel	29.1	21.1	32.4	32.4	\$343,440
West Basin	211.8	196.0	218.2	218.2	\$2,312,920
Western MWD	186.1	175.1	189.4	189.4	\$2,007,640
Total	2,649.6	2,826.4	3,123.3	3,242.7	\$34,372,620
Totals may not foot due to rounding					

Section 6. That the Capacity Charge for each member agency, the method of its calculation, cost allocations and other data used in its determination are as specified in the adopted rates and charges to be effective

January 1, 2023, which forms the basis of the Capacity Charge, and the corresponding 2022 Cost of Service Report. The adopted rates and charges and cost of service reports are on file and available for review by interested parties at Metropolitan's headquarters.


Section 7. That the Capacity Charge specified in Section 5, together with other revenues from Metropolitan's water rates, other charges, ad valorem property taxes, and other miscellaneous revenue, does not exceed the reasonable and necessary cost of providing Metropolitan's water service for which the rates and charges are made, or conferring the benefit provided, and is fairly apportioned to each member agency in proportion to the peak day capacity utilized by each member agency.

Section 8. That if any provision of this Resolution or the application to any member agency, property or person whatsoever is held invalid, that invalidity shall not affect other provisions or applications of this Resolution which can be given effect without the invalid portion or application, and to that end the provisions of this Resolution are severable.

Section 9. That the General Manager and the General Counsel are hereby authorized to do all things necessary and desirable to accomplish the purposes of this Resolution, including, without limitation, the commencement or defense of litigation and taking all necessary action to satisfy relevant statutes requiring notice by publication.

Section 10. That the Board Executive Secretary is hereby directed to transmit a certified copy of this Resolution to the presiding officer of the governing body of each member agency.

I HEREBY CERTIFY that the foregoing is a full, true and correct copy of a Resolution adopted by the Board of Directors of The Metropolitan Water District of Southern California, at its meeting held on April 12, 2022.



Secretary of the Board of Directors
of The Metropolitan Water District
of Southern California



● **Board of Directors**
Engineering and Operations Committee

4/12/2022 Board Meeting

7-4

Subject

Authorize an agreement with Stantec Consulting Services, Inc. for a not-to-exceed amount of \$8.5 million to replace the control system at the Mills Water Treatment Plant and amend an existing agreement with CH2M Hill Engineers, Inc. for a not-to-exceed amount of \$4.435 million; the General Manager has determined that this proposed action is exempt or otherwise not subject to CEQA

Executive Summary

Metropolitan's control system is used to operate, monitor, and collect critical information from Metropolitan facilities throughout Southern California. The existing system is nearing the end of its service life and needs to be upgraded to enhance the reliability and operating efficiency of Metropolitan's core facilities. A comprehensive upgrade of the entire control system is needed to maintain reliable water deliveries over the long term. Replacement of the control system at the Henry J. Mills Water Treatment Plant is the first step in a planned upgrade of Metropolitan's entire control system spanning the Colorado River Aqueduct, the five water treatment plants, and the entire conveyance and distribution system.

This action authorizes a professional services agreement for design, procurement of equipment, programming, and commissioning of a new control system at the Mills plant. This action also amends an existing professional services agreement to provide specialized technical support for this project.

Details

Background

Metropolitan's control system was commissioned in the mid-1990s and relies upon proprietary hardware and software to augment the local, manual controls that were installed when facilities were originally constructed. The control system is used by staff to monitor and operate treatment plants, chemical feed systems, flow control structures, hydroelectric power plants, pump stations, and associated facilities. In addition to its control, monitoring, and alarm functions, the system compiles operational data that is critical for regulatory compliance and for daily business processes.

The existing control system has operated reliably for over 25 years but is nearing the end of its service life. A condition assessment of the control system identified near-term cybersecurity risks with certain components, along with impending technological obsolescence of the system's hardware, software, control, and communication features. While upgrades over the past 25 years have extended the system's service, and it continues to operate reliably today, the existing system needs to be replaced to maintain future reliability and reduce cybersecurity risks. Without a reliable control system, a broad range of equipment that was designed to operate remotely would instead need to be operated locally with manual input. Operational data that is presently collected automatically and summarized for submission to regulatory agencies would instead need to be gathered and logged manually, while safety procedures that include automatic alarms would need to be assessed, modified, and staffed appropriately. Over the next ten years, major elements of the control system including hardware, software, and the communication network will need to be upgraded.

Staff has completed preliminary investigations to define business needs and the architecture of the replacement control system. As Metropolitan's control system is distributed over a large region and operates many facilities, a staged effort is recommended to upgrade Metropolitan's control system. Staff selected the Mills plant as the first

facility to be upgraded due to its modularity, smaller size, and relatively large finished water reservoir capacity. Staff recommends authorizing an agreement with the selected consultant to design, furnish equipment, and program the control system at the Mills plant at this time. Following successful completion of the upgrade at the Mills plant, the planned project approach is to roll out the same control system platform, using the same team (and the unit pricing structure submitted in the RFP proposal) across the remaining facilities in Metropolitan's system. This will result in a consistent, uniform, and comprehensive control system throughout Metropolitan's operating facilities.

Metropolitan staff plans to complete start-up and commissioning of the Mills plant prior to beginning design of the control system for the next treatment plant to capture any lessons learned from the Mills control system upgrade. Upon successful completion of the Mills project, staff will return to the Board to authorize additional actions to upgrade additional facilities. This phased approach allows for gradual implementation of the new control system across Metropolitan's treatment plants and conveyance and distribution systems. It is anticipated that the retrofit of all Metropolitan facilities will take approximately 10 years, with an estimated total cost of \$165 million to \$195 million. This implementation approach is part of the Capital Investment Plan (CIP) 10-year expenditure plan that will be included in the planned CIP Appropriation for Fiscal Years 2022/2023 and 2023/2024.

In accordance with the April 2020 action on the biennial budget for fiscal years 2020/21 and 2021/22, the General Manager will authorize staff to proceed with the actions described herein, pending board authorization of the agreements described below. Based on the current CIP expenditure forecast, funds for the work to be performed pursuant to this action during the current biennium are available within the CIP Appropriation for Fiscal Years 2020/21 and 2021/22 (Appropriation No. 15517). Funds required for work to be performed pursuant to the subject agreement after fiscal year 2021/22 will be budgeted in the following fiscal years. This project has been reviewed in accordance with Metropolitan's CIP prioritization criteria and was approved by Metropolitan's CIP Evaluation Team to be included in the System Reliability Program.

Mills Plant Control System Upgrade – Design, Procurement and Implementation

The planned work includes the replacement of computer servers, distributed field computers, input/output devices, software, and communication equipment at the Mills plant and Metropolitan's chemical unloading facility. The control system upgrades will adopt industry-standard technology, programming, and modern architecture. Design activities will be conducted by a consultant as described below. Metropolitan staff will provide updated record drawings and process flow descriptions, consultant oversight, and overall project management.

Due to the critical nature of the Mills plant control systems and to minimize facility disruptions, Metropolitan staff will install the new control system equipment, as well as decommission and remove all obsolete control system equipment for this project. Staff will return to the Board at a later date to award public works contracts, as appropriate, for specific portions of the project that are too large or require special expertise. These areas include potential modifications and upgrades to the control rooms and fiber optical communication system cabling (currently estimated at \$700,000).

A total of \$19.945 million has been budgeted for this work. Allocated funds include \$8.5 million for design, programming, and procurement activities by Stantec Consulting Services, Inc. and \$1.95 million for owner support services by CH2M Hill Engineers, Inc. (CH2M); both agreements are described below. In addition to the amount of the agreements, other allocated funds for Metropolitan staff include \$5,319,000 for installation of equipment and support; \$1,681,000 for inspection, technical support during installation, and testing; \$552,000 for specification development, process hazard analysis, and control panel design participation; \$1,160,000 for contract administration, environmental monitoring, project controls, submittal reviews, and project management; and \$783,000 for the remaining budget.

Agreement for Control System Programming and Equipment Furnishment (Stantec Consulting Services, Inc.) – New Agreement

Metropolitan issued Request for Qualifications (RFQ) 1226 for prequalification of control system suppliers. Metropolitan received a total of eight Statements of Qualifications, and six control system platforms were prequalified as meeting Metropolitan's control system requirements. Subsequently, Metropolitan issued Request

for Proposal (RFP) 1254 in search of an experienced engineering firm to develop, design, furnish, program, test, commission, train, and support a new control system. RFP 1254 required the engineering firms to base their proposal on a control system platform that had been prequalified under RFQ 1226.

Stantec Consulting Services, Inc. was selected through a competitive process via RFP 1254 to provide specialized control system hardware, software, and technical services. Stantec Consulting Services, Inc. is recommended to serve as the prime consultant for the services detailed below based upon its extensive expertise in control and communication technology, as well as its experience in upgrading large control networks similar to Metropolitan's system. (Stantec Consulting Services, Inc. proposed use of the Emerson Process Management Power & Water Solutions Inc. Ovation control system platform.)

The planned work activities include: (1) performing an initial pilot test of the control system upgrade; (2) providing subsequent technical services; and (3) furnishing equipment to replace the existing control system at the Mills plant. This scope of work includes the development and implementation of a complete design for the entire Mills control system upgrade and support facilities, furnishing control system components, performing programming and configuration work for the same, leading testing, commissioning, training, support, and warranty services for the new control system.

This action authorizes an agreement with Stantec Consulting Services, Inc. in an amount not-to-exceed \$8.5 million. For this agreement, Metropolitan has established a Small Business Enterprise (SBE) participation level of 25 percent. The planned subconsultants under this agreement are listed in **Attachment 2**. Staff anticipates that once the Mills plant Supervisory Control and Data Acquisition (SCADA) work is successfully completed, staff will return to the Board to authorize an amendment to this agreement so that Stantec can proceed with the work on the next planned facility.

Agreement for Specialized Technical Services (CH2M) – Amend Existing Agreement

An amendment to an existing agreement with CH2M is recommended to provide specialized technical support services for design, equipment procurement, and the implementation of the control system upgrade at the Mills plant; CH2M is a wholly-owned company of Jacobs Engineering Group, Inc. CH2M was selected via RFQ 1153 to provide specialized control system, network, and communication system services in assessing, planning, and preparing Metropolitan for the control system upgrade. Subsequent to the assessment and planning phases, CH2M assisted Metropolitan in preparing RFQ and RFP documents for this project, utilizing its extensive expertise in control and communication technology and its experience in upgrading large control networks similar to Metropolitan's system. As part of the pilot and full plant implementation phases of the Mills Treatment Plant upgrade, CH2M will provide Metropolitan staff with support services to oversee the work.

Planned work activities include: (1) providing technical support during the pilot demonstration and full plant retrofit, (2) reviewing equipment and programming submittals, (3) providing advice to requests for information from the consultant; and (4) providing scheduling and document management support, cost and deliverable performance monitoring services. Additionally, CH2M will prepare a basis of design document for a new wide-area control system network communication system. The estimated cost for these services is \$1.95 million.

This action authorizes an increase of \$1.95 million to an existing agreement with CH2M, for a new not-to-exceed total of \$4.435 million, to provide technical support during the pilot and implementation phases of the Mills control system upgrade. For this agreement, Metropolitan has established an SBE participation level of 25 percent. The planned subconsultants under this agreement are listed in **Attachment 2**. Staff anticipates that once the Mills plant SCADA work is successfully completed, staff will return to the Board to authorize an amendment to this agreement so that CH2M can provide specialized technical support on the next planned facility.

Alternatives Considered

Alternatives considered for upgrading Metropolitan's control system included using a traditional design-bid-build procurement strategy wherein prescriptive specifications for equipment and software would be developed for advertisement for competitive bidding. Due to the complexities and intricacies of this project, it was determined that this approach would introduce the potential for disputed issues between Metropolitan and the successful bidder. A key complexity identified by the project team was how to ensure that Metropolitan received the intended specified equipment, while ensuring that the system integrator remained responsible for resolving critical

hardware/software interface issues that would arise during software development, equipment procurement and field installation/start-up/testing. Unanticipated complications in any of these intermediate steps could potentially jeopardize both the timely completion of the project and the safe and reliable operation of Metropolitan's operational facilities.

To mitigate these risks, it was determined that Metropolitan should utilize the RFQ/RFP procurement strategy outlined in this letter to (1) prequalify equipment providers, and (2) to select, through a best-value RFP process, a control system team that would deliver a fully integrated product (equipment and software) which utilized the prequalified equipment vendors. With this approach, Metropolitan will rely on the consultant as an overall system integrator to furnish the necessary new control system hardware and perform software programming and pre-testing prior to Metropolitan staff's installation activities. This method of using a system integrator and prequalified equipment suppliers is expected to reduce potential errors and disagreements between the project team which includes the system designer, equipment furnishers, and system programmers. To further streamline the process, staff recommends that Metropolitan's in-house staff install the control system equipment. Currently, Metropolitan staff maintains the core competencies and technical capabilities to perform the necessary installation work as well as knowledge and awareness of the importance of its operational facilities. This overall approach is expected to minimize the potential for project delays and disputes, especially during installation and commissioning at Metropolitan's operational facilities.

Summary

This action authorizes: (1) a new agreement with Stantec Consulting Services, Inc. for a not-to-exceed amount of \$8.5 million for design and equipment procurement to upgrade the control system at the Mills plant; and (2) an amendment to an existing agreement with CH2M for a new not-to-exceed amount of \$4.435 million to provide specialized technical services for the upgrade. See **Attachment 1** for the Allocation of Funds; **Attachment 2** for the List of Subconsultants; and **Attachment 3** for the Location Map.

Project Milestones

January 2023 – Completion of pilot testing at the Mills plant

January 2026 – Completion of Mills control system upgrade

Policy

Metropolitan Water District Administrative Code Section 8121: General Authority of the General Manager to Enter Contracts

Metropolitan Water District Administrative Code Section 11104: Delegation of Responsibilities

By Minutes Item 50792, dated April 2017, the Board authorized preliminary investigations for a system-wide upgrade of Metropolitan's control system.

By Minutes Item 50851, dated June 2017, the Board authorized conceptual design for a system-wide upgrade of Metropolitan's control system.

By Minute Item 51963, dated April 14, 2020, the Board appropriated a total of \$500 million for projects identified in the Capital Investment Plan for Fiscal Years 2020/21 and 2021/22.

California Environmental Quality Act (CEQA)

CEQA determination for Option #1:

The proposed action is categorically exempt under the provisions of CEQA and the State CEQA Guidelines. The overall activities involve the funding, design, minor alterations and replacement of existing public facilities with negligible or no expansion of use and no possibility of significantly impacting the physical environment.

Accordingly, the proposed action qualifies under Class 1 and Class 2 Categorical Exemptions (Sections 15301 and 15302 of the State CEQA Guidelines).

CEQA determination for Option #2:

None required

Board Options

Option #1

- a. Authorize an agreement with Stantec Consulting Services, Inc. for a not-to-exceed amount of \$8.5 million for design and equipment procurement to upgrade the control system at the Mills plant.
- b. Authorize an increase of \$1.95 million to an agreement with CH2M Hill Engineers, Inc for a new not-to-exceed amount of \$4.435 million to provide specialized technical support for the upgrade.

Fiscal Impact: Expenditure of \$19,945,000 in capital funds. Approximately \$250,000 will be incurred in the current biennium and has been previously authorized. The remaining capital expenditures will be funded from future CIP budgets following board approval of those budgets.

Business Analysis: This option will enhance the reliability and operating efficiency of Mills plant's control system.

Option #2



Do not proceed with the project at this time.

Fiscal Impact: None

Business Analysis: This option would forego an opportunity to enhance the operational reliability and operating efficiency while increasing the risk of unplanned outages at the Mills plant.

Staff Recommendation

Option #1

	3/24/2022
John V. Bednarski	Date
Manager/Chief Engineer	
Engineering Services	
	3/31/2022
Adel Hagekhalil	Date
General Manager	

Attachment 1 – Allocation of Funds

Attachment 2 – List of Subconsultants

Attachment 3 – Location Map

Ref #es12680523

Allocation of Funds for Mills Control System Upgrade

	Current Board Action (Apr. 2022)
Labor	
Studies & Investigations	\$ -
Final Design	552,000
Owner Costs (Program mgmt., envir. monitoring, & contract admin.)	1,035,000
Submittals Review & Record Drwgs.	125,000
Inspection & Testing	1,681,000
Metropolitan Force Construction	5,118,000
Materials & Supplies	200,000
Incidental Expenses	1,000
Professional/Technical Services	
Stantec Consulting Services, Inc.	8,500,000
CH2M Hill Engineers, Inc.	1,950,000
Right-of-Way	-
Equipment Use	-
Contracts	-
Remaining Budget	783,000
Total	\$ 19,945,000

The total amount expended to date on the Mills Control System Upgrade is approximately \$4.846 million. The total estimated cost to complete the replacement, including the amount appropriated to date, current funds requested and future work, is approximately \$25.491 million.

The Metropolitan Water District of Southern California
Subconsultants for Agreement with Stantec Consulting Services, Inc.

Subconsultant and Location
Emerson Process Management Power & Water Solutions, Inc. Riverside, CA
O2 Optimizing Organization La Jolla, CA
Modular Building Concepts Poway, CA
DRP Engineering, Inc. Alhambra, CA
Glenmount Global Solutions Vacaville, CA
Ramya & Rashmi LLC San Diego, CA
IEM San Pedro, CA

The Metropolitan Water District of Southern California
Subconsultants for Agreement with CH2M Hill Engineers, Inc.

Subconsultant and Location
PMCS Group, Inc. Long Beach, CA





Engineering & Operations Committee

System-Wide Upgrade of Metropolitan's Control System – Mills Plant

Item 7-4

April 11, 2022

System-Wide
Upgrade of
Metropolitan's
Control System
– Mills Plant

Current Action

- Authorize an agreement with Stantec Consulting Services, Inc. for a not-to-exceed amount of \$8.5 million
- Authorize an increase of \$1.95 million to the agreement with CH2M Hill Engineers, Inc. for a new not-to-exceed amount of \$4.435 million

Distribution System



Background - Control System

Supervisory Control and Data Acquisition (SCADA)

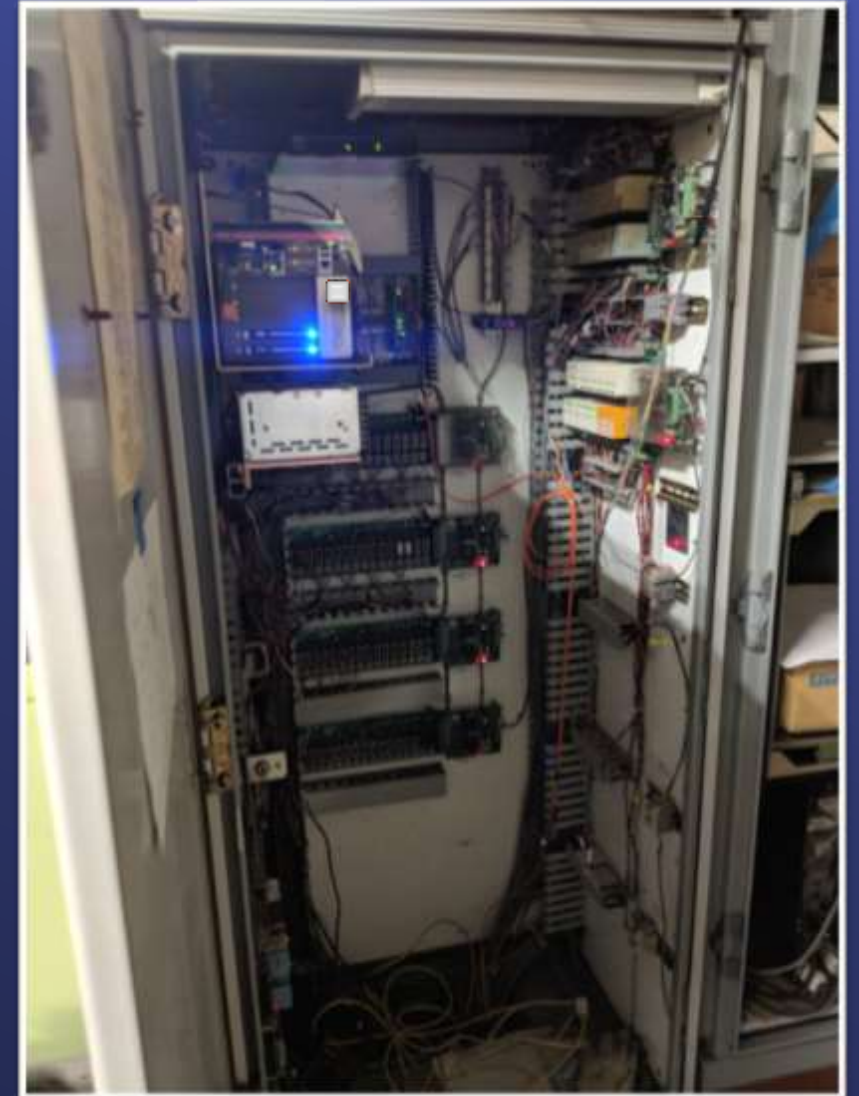
- Primary method to control facility operations
- Monitors pumping, conveyance, treatment & distribution of water
- Critical for safety, regulatory compliance & equipment monitoring
- Collects and transmits core business data



Background - Control System

Existing Equipment

- System architecture/design
>20+ years old
- Increasingly difficult to support and maintain hardware/software
- Difficult to address cybersecurity risks
- Technological obsolescence leads to potential long-term reliability risks



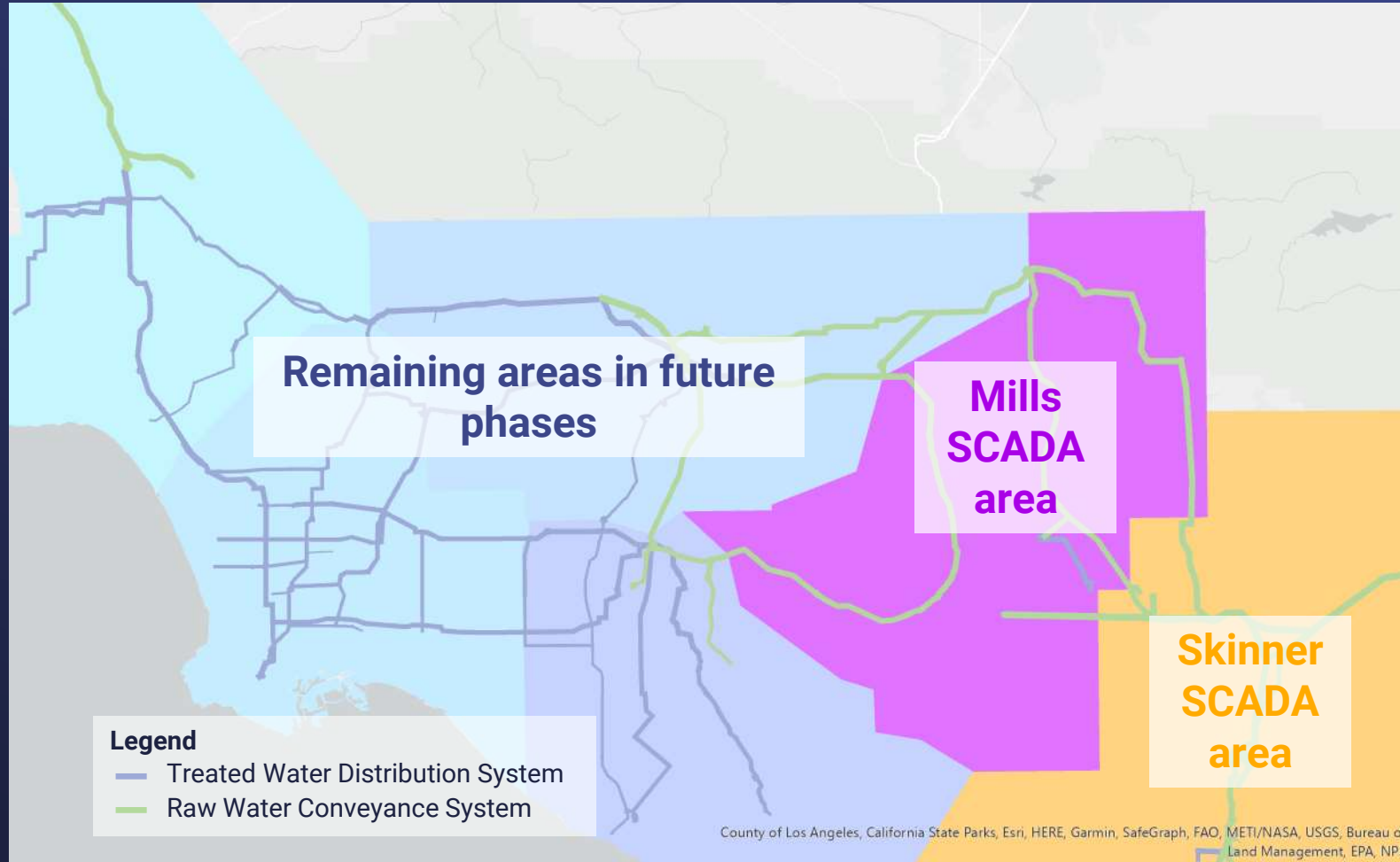
Existing Field Computer

System-Wide Upgrade of Metropolitan's Control System – Mills Plant

Background Recommendations

- Major control system upgrade recommended
 - Adopt industry-standard technology & programming
 - Enhanced cybersecurity capabilities
 - Focus on ease of support and maintainability
 - Include enhancements to the system's communications network
 - Facilitate increased integration with future business applications

Overall Control System Replacement Program



AMR is distributed throughout areas

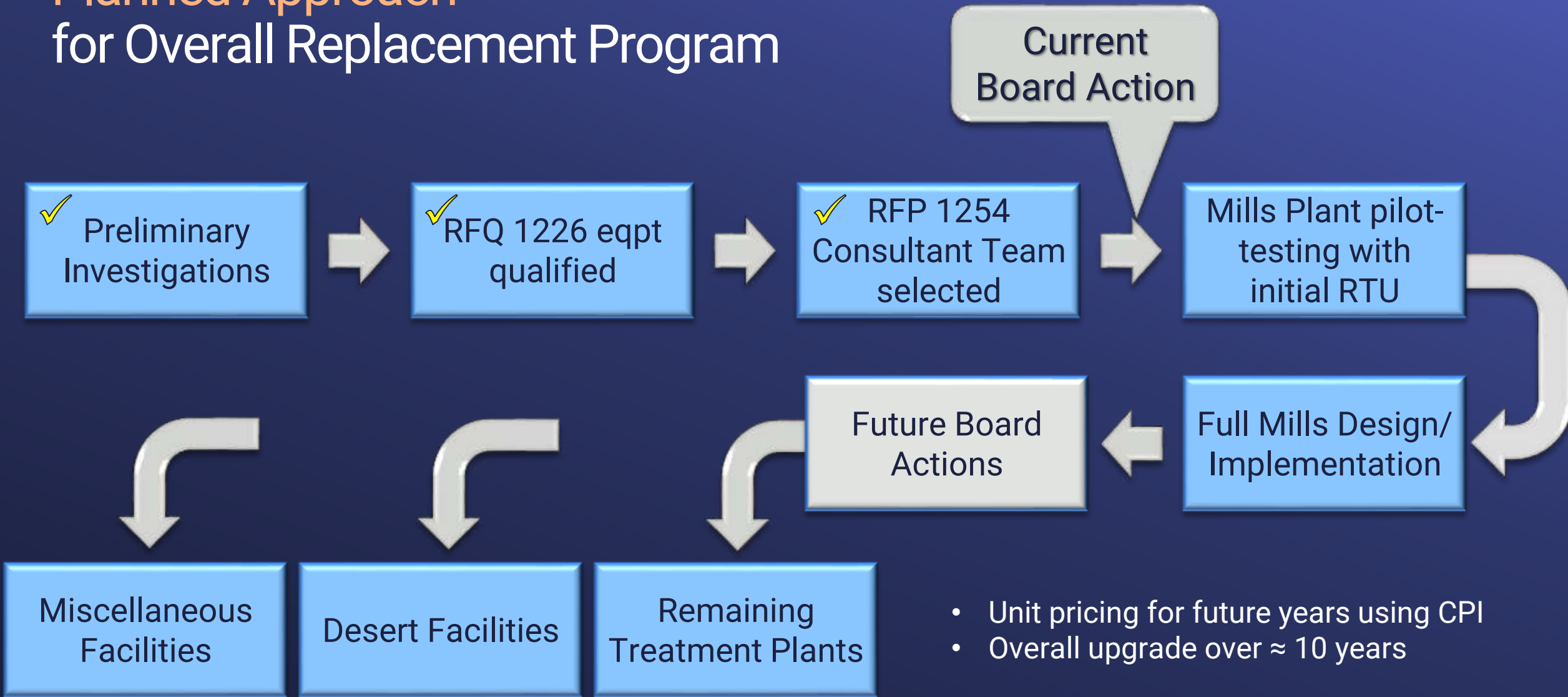
- System-wide upgrade will eventually replace entire existing SCADA system
 - Begin at Mills area
 - Follow on with Skinner area
 - Future phases likely in parallel
- Overall cost estimated at \$165M to \$195M

System-Wide Upgrade of Metropolitan's Control System – Mills Plant

Alternatives Considered

- Use traditional procurement design-bid-build procurement strategy
 - Approach attempts to ensure MWD receives the intended/specified equipment
 - Requires system integrator to resolve equipment/software interfacing issues
 - Potential risks remain between equipment provider/software preparer, installer, & MWD
 - Risks could jeopardize successful & timely completion of program
- Selected option - utilize RFQ/RFP approach

Planned Approach for Overall Replacement Program



System-Wide Upgrade of Metropolitan's Control System – Mills Plant

New Agreement – Stantec Consulting Services, Inc.

- Recommend under RFP 1254
- Best value selection
- Scope of work
 - Perform initial pilot test of the control system upgrade
 - Develop & implement a complete design for the Mills control system upgrade & support facilities
 - Furnish equipment and control system components to replace the existing control system at the Mills plant (Emerson Ovation platform)
 - Perform programming & configuration work
 - Lead testing, commissioning, training, support & warranty services
- SBE participation level: 25%
- NTE amount: \$8.5 million

System-Wide Upgrade of Metropolitan's Control System – Mills Plant

Agreement Amendment – CH2M Hill Engineers, Inc.

wholly owned by Jacobs Engineering Group, Inc.

- Recommend under RFQ 1153
 - Has provided system assessment, alternatives analysis, and RFQ & RFP preparation support
- Scope of work
 - Provide technical support during pilot demonstration & full plant retrofit
 - Review equipment & programming submittals
 - Recommend responses to requests for information
 - Provide cost & deliverable performance monitoring
 - Prepare design doc. for a new wide-area com. system
- SBE participation level: 25%
- NTE amount: \$4.435 million (\$1.95 million amendment this action)

System-Wide Upgrade of Metropolitan's Control System – Mills Plant

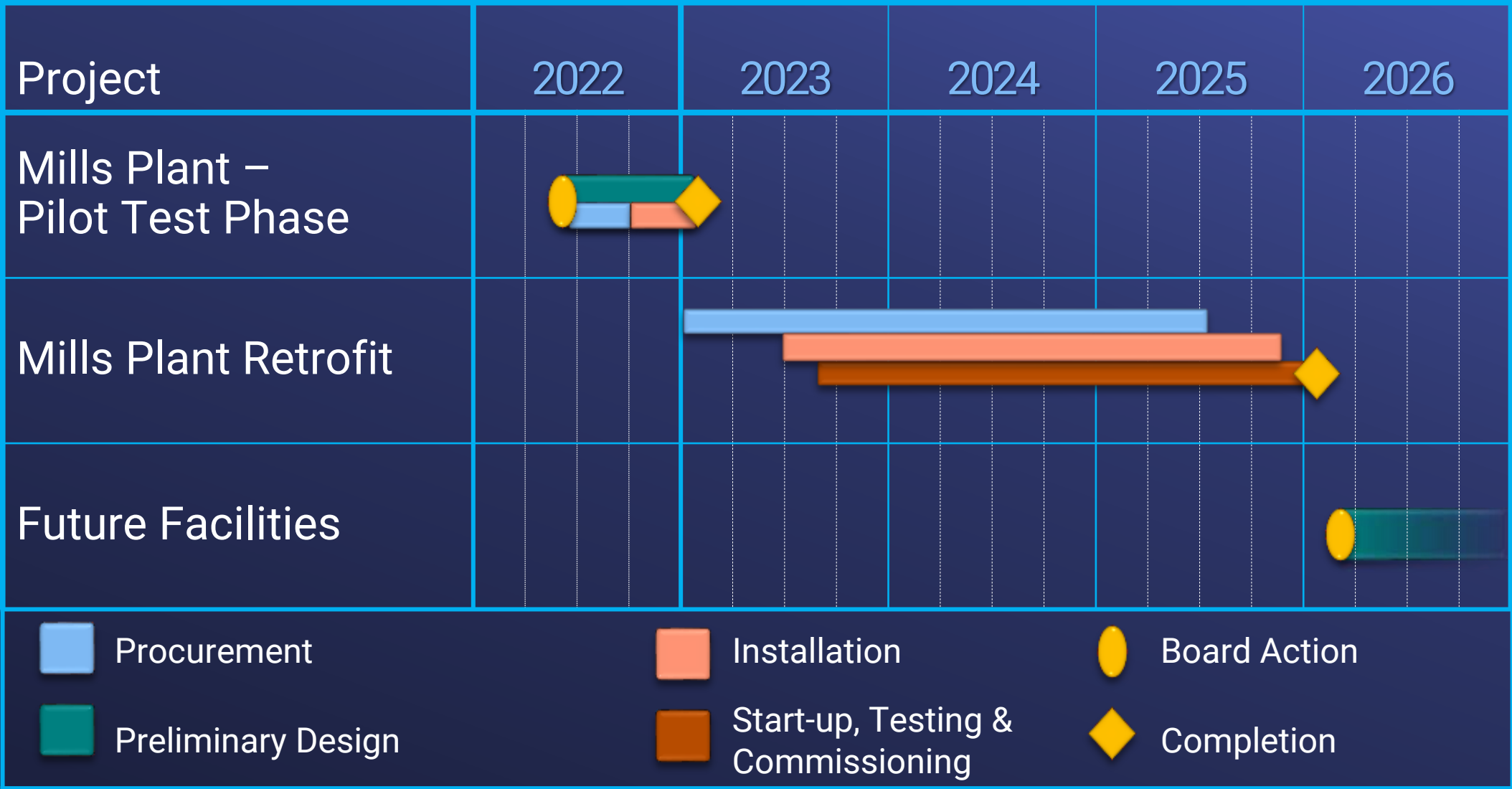
Metropolitan Scope

- Decommission and remove all obsolete control system equipment
- Install the new control system equipment
- Review and concur with system programming
 - MWD staff imbedded in software development process
 - Provides for in-house staff to support & maintain the programs going forward
 - Staff is currently responsible for programming of control logic applications of existing systems
- Project management

Allocation of Budgeted Funds

	Mills Pilot & Plant Cost
Labor	
Final Design	\$ 552,000
Owners Costs (PM & Proj. Controls)	1,035,000
Submittal Review & Record Drwgs.	125,000
Inspection & Testing	1,681,000
Force Construction	5,118,000
Materials & Supplies	201,000
Professional Services	
Stantec Consulting Services, Inc.	8,500,000
CH2M Hill Engineers, Inc.	1,950,000
Remaining Budget	783,000
Total	\$19,945,000

Control System Upgrade - Project Schedule



Board Options

- Option #1
 - a. Authorize an agreement with Stantec Consulting Services, Inc. for a not-to-exceed amount of \$8.5 million for design and equipment procurement to upgrade the control system at the Mills plant.
 - b. Authorize an increase of \$1.95 million to an agreement with CH2M Hill Engineers, Inc. for a new not-to-exceed amount of \$4.435 million to provide specialized technical support for the upgrade.
- Option #2
 - Do not proceed with the project at this time.

Staff Recommendation

- Option #1





• **Board of Directors**
Engineering and Operations Committee

4/12/2022 Board Meeting

7-5

Subject

Appropriate \$600 million for projects identified in the Capital Investment Plan for Fiscal Years 2022/23 and 2023/24 and authorize the General Manager to initiate or proceed with work on capital projects identified in the Capital Investment Plan for Fiscal Years 2022/23 and 2023/24 and Minor Capital Projects to be identified during the biennial period, subject to any limits on the General Manager's authority and CEQA requirements; the General Manager has determined that the proposed actions are exempt or otherwise not subject to CEQA

Executive Summary

This action enables the General Manager to manage capital projects in an efficient manner by following the streamlined board authorization and appropriation process that was approved by the Board in October 2018. Specifically, staff recommends that the Board:

1. Appropriate a total of \$600 million for projects identified in the Capital Investment Plan (CIP) for Fiscal Years (FYs) 2022/23 and 2023/24.
2. Authorize the General Manager, subject to both CEQA requirements and the General Manager's authority as addressed in Metropolitan's Administrative Code, to initiate or proceed with work on capital projects identified in the CIP for FYs 2022/23 and 2023/24, including Minor Capital Projects.

The CIP planned spending for the biennial period totals approximately \$600 million. This action to appropriate funds and authorizes work will allow staff to implement projects identified in the CIP Appendix for FYs 2022/23 and 2023/24.

Details

Background

As part of Metropolitan's biennial budget process, staff develops a recommended two-year budget and expenditure plan for the CIP. The budget and expenditure plan for the CIP are reflected in the CIP Appendix and included in Metropolitan's overall two-year budget and associated budget documents. With the approval of the biennial budget, the Board also takes an action to appropriate the entirety of the funds necessary to fund the CIP in the upcoming biennium. In addition, the Board authorizes the General Manager to initiate or proceed with work on capital projects identified in the CIP Appendix (**Attachment 1**), subject to the requirement of CEQA and the limits of the General Manager's authority. This approach to appropriating funds for the CIP and authorizing the General Manager to conduct work has been in effect since October 2018. Since that time, staff has utilized the streamlined approach to efficiently conduct work on the CIP, which in turn has resulted in a higher percentage of planned CIP work being conducted in a biennium when compared to the prior authorization practices.

For the past 10 years, Metropolitan's Board has authorized planned expenditures on the CIP which have averaged \$250 million per year. With the proposed budget for FYs 2022/23 and 2023/24, staff is recommending that the planned CIP expenditures be increased to \$300 million per year. Staff is recommending this increase so that core work on rehabilitation and replacement work can continue while simultaneously advancing work on key additional initiatives like drought resiliency and flexibility, battery energy storage systems for energy sustainability, and desert housing and village enhancements. The proposed two-year CIP budget does not include

funding for the full-scale Regional Recycled Water Program (RRWP). A separate board action will be required to include the full-scale RRWP in the CIP for FYs 2022/23 and 2023/24.

Staff anticipates that this need to fund the CIP at \$300 million per year will extend through the current 10-year budget forecast and will be increased by three percent per year to account for inflationary trends starting after the next biennium. For this proposed budget preparation, approximately \$3.2 billion of capital work has been identified in the 10-year budget window, of which \$2.9 billion is planned for refurbishment and replacement projects.

In February 2022, staff delivered the proposed CIP Appendix to the Board as Attachment 4 to the Proposed Biennial Budget for FYs 2022/23 and 2023/24 (Board Item 9-2). The CIP Appendix includes a description of the capital project evaluation and prioritization process, a summary by program and project group of planned biennial expenditures, a 2-year and 10-year expenditure projection by program, planned major objectives under each program, and a description of each planned capital project. The only program that does not include individual project descriptions is the Minor Capital Projects Program. Projects within the Minor Capital Projects Program are identified on an ongoing basis during the 2-year budget cycle, and consist of individual projects valued at \$400,000 or less. The anticipated expenditures on this program for the next two years are estimated to be approximately \$16.7 million.

To develop the proposed 2-year budget and 10-year expenditure plan, Metropolitan used an extensive evaluation process that includes a risk analysis to identify and prioritize projects for implementation. The resulting CIP for the upcoming biennium includes a mix of projects that supports Metropolitan's strategic plan and financial targets. The plan takes into account budget and staffing constraints, and the data collected for preparation of the budget indicates that it will take more than ten years to complete the current list of priority projects. This estimate does not take into account additional priority projects that will be identified in future budget cycles. The proposed budget of \$300 million per year for the next two years fits the proposed rate model and reasonably equates to Metropolitan's capacity to work on capital projects at this time. Expenditures of less than the proposed budget would defer priority rehabilitation work needed to maintain system reliability, which in turn would increase the likelihood of unplanned system outages and/or service disruptions.

The CIP Appendix provides the breakdown of planned biennial expenditures totaling approximately \$600 million. Some of the major objectives planned over the next two years are summarized below:

Colorado River Aqueduct Reliability Program

- Complete construction of the Eagle Mountain Pumping Plant Village Utilities and Paving Replacement and Overhead Crane Improvements at all five pumping plants.
- Begin procurement for the Main Bank Transformers Replacement.

Distribution System Reliability Program

- Complete construction of the Casa Loma Siphon Barrel No. 1 Seismic Retrofit, Orange County Feeder Relining - Stage 3, and Etiwanda Pipeline Lining Replacement – Stage 3.
- Begin design of the Lake Mathews Forebay Pressure Control Structure and Bypass.

District Housing and Property Improvements Program

- Complete final design and begin construction of District Housing Improvements and Employee Village Enhancement at Hinds, Eagle Mountain, Iron Mountain, and Gene pumping plants.

Prestressed Concrete Cylinder Pipe (PCCP) Rehabilitation Program

- Continue valve procurement and construction to rehabilitate the remaining PCCP portions of the Second Lower Feeder; continue preliminary design to rehabilitate the PCCP portions of the Allen-McColloch Pipeline, Calabasas Feeder, Rialto Pipeline, and Sepulveda Feeder; continue annual electromagnetic inspections of all PCCP pipelines.
- Complete construction of the Second Lower Feeder Reach 3A project as well as the PCCP Valve and Equipment Storage building project.

Regional Recycled Water Program

- Complete design and initiate construction of Demonstration Plant Direct Potable Reuse Modifications.
- Complete environmental planning process for the full-scale program including board certification of Program Environmental Impact Report (PEIR). This work effort is currently being conducted with O&M funding.

System Flexibility/Supply Reliability Program

- Complete construction of drought-related projects such as Inland Feeder-Rialto Pipeline Intertie and Wadsworth Pumping Plant Bypass Pipeline.
- Begin construction of the Perris Valley Pipeline Tunnel.
- Continue design of the Inland Feeder-Foothill Pump Station Intertie.
- Begin design of West Area drought-related projects.

System Reliability Program

- Complete construction of the La Verne Shops Improvements-Equipment Installation and Building Completion.
- Complete deployment of Maximo Mobile Upgrade, Wifi Upgrade at La Verne, and Fuel Management System Upgrade.

Treatment Plant Reliability Program

- Complete construction of the Jensen Electrical Upgrades – Stage 2 and Mills Electrical Upgrades - Stage 2.
- Substantially complete construction of Weymouth Basins 5-8 and Inlet Channel Refurbishment. Complete design of the Diemer Filter Rehabilitation project.

Summary

This action appropriates \$600 million for projects identified in the CIP Appendix for FYs 2022/23 and 2023/24. This action also authorizes the General Manager to initiate or continue with work on the capital projects described in the CIP Appendix for FYs 2022/23 and 2023/24, initiate new minor capital projects to be identified during the biennial period, and continue work on existing minor capital projects, subject to any limits on the General Manager's authority and CEQA requirements. The General Manager will allocate the appropriated funds to existing and new capital projects as needed in accordance with project schedules and progress. Actions taken by the General Manager per this authority will continue to be reported to the Board in the CIP Quarterly Reports.

Policy

Metropolitan Water District Administrative Code Section 2431: Engineering and Operations Committee Duties and Functions

Metropolitan Water District Administrative Code Section 5108: Appropriations

Metropolitan Water District Administrative Code Section 11104: Delegation of Responsibilities

California Environmental Quality Act (CEQA)

CEQA determination for Option #1:

The proposed action to appropriate CIP funds and authorize work to proceed under the CIP is not defined as a project under CEQA because it involves continuing administrative activities, such as general policy and procedure making (Section 15378(b)(2) of the State CEQA Guidelines). In addition, the proposed action is not subject to CEQA because it involves other government fiscal activities, which do not involve any commitment to any specific project which may result in a potentially significant physical impact on the environment (Section 15378(b)(4) of the State CEQA Guidelines).

Metropolitan, as the Lead Agency, will be responsible for complying with the requirements of CEQA and the State CEQA Guidelines for each project that meets the CIP criteria prior to final approval of that project. As preliminary work and design on CIP projects proceeds, Metropolitan staff will conduct any necessary CEQA review and prepare the appropriate environmental documentation for consideration and approval by the Board or the General Manager, as appropriate.

CEQA determination for Option #2:

None required

Board Options

Option #1

- a. Appropriate \$600 million for projects identified in the CIP appendix for FYs 2022/23 and 2023/24.
- b. Authorize the General Manager to initiate or continue work on the capital projects described in the CIP Appendix for FYs 2022/23 and 2023/24 and Minor Capital Projects to be identified during the biennial period, subject to any limits on the General Manager's authority and CEQA requirements.

Fiscal Impact: Appropriation of \$600 million under Appropriation No. 15525

Business Analysis: This option will enable the continued efficient management of the CIP.

Option #2


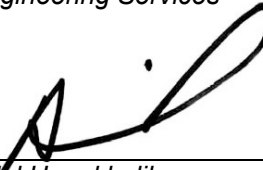
Do not appropriate funds and seek appropriations and board authorizations for each project individually.

Fiscal Impact: Due to additional administrative effort and time required to prepare monthly funding requests for capital projects, it is anticipated that annual capital expenditures will be less than planned under Option #1.

Business Analysis: Appropriation of funds and authorization to execute capital projects individually will increase board paperwork and may result in increased project costs while hindering staff's ability to efficiently manage the CIP.

Staff Recommendation

Option #1

 _____ John V. Bednarski Manager/Chief Engineer Engineering Services	3/24/2022 _____ Date
 _____ Adel Hagekhalil General Manager	3/30/2022 _____ Date

Attachment 1 – Capital Investment Plan Appendix for Fiscal Years 2022/23 and 2023/24

Ref# es12685484



Capital Investment Plan Appendix

Fiscal Years
2022/23 and 2023/24



CAPITAL INVESTMENT PLAN

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CAPITAL INVESTMENT PLAN

Summary

The primary focus of the CIP Appendix is to provide information on all capital programs and projects that have been proposed, evaluated, and included in the budget forecast to begin or continue during and after fiscal year (FY) 2022/23 and FY 2023/24. Projects included in this document are referred to as “planned” and upon appropriation of the CIP budget for FY 2022/23 and FY 2023/24 are authorized to proceed by the Chief Engineer’s approval under the authority of the General Manager.

Scope, accomplishments, objectives and financial projections are provided for each capital program. Every project with work planned for the two budget years and beyond is listed under the Individual Program Summaries. However, projects in the post-construction phase are not included but will proceed to completion and closeout.

The total planned capital spending for FY 2022/23 and FY 2023/24 of approximately \$600 million includes all anticipated costs for labor including administrative overhead, construction and professional services contract costs, right of way, materials, operating equipment, and incidental expenses.

Annual planned capital spending for FY 2022/23 and FY 2023/24 is estimated to be approximately \$300 million and \$300 million, respectively, and is planned to be funded by a combination of current operating revenues (i.e., PAYGO) and debt. Engineering Services tracks actual spending against the plan and adjusts priorities and staff assignments to manage spending consistent with the overall CIP budget.

Capital Program	FY 2022/23	FY 2023/24	Total
Colorado River Aqueduct Reliability	\$ 39,270,000	\$ 36,900,000	\$ 76,170,000
Cost Efficiency & Productivity	\$ 15,610,000	\$ 12,630,000	\$ 28,240,000
Dams & Reservoirs Improvements	\$ 5,300,000	\$ 44,700,000	\$ 50,000,000
Distribution System Reliability	\$ 51,250,000	\$ 12,790,000	\$ 64,040,000
District Housing & Property Improvements	\$ 12,000,000	\$ 15,700,000	\$ 27,700,000
Minor Capital Projects	\$ 8,700,000	\$ 8,000,000	\$ 16,700,000
Prestressed Concrete Cylinder Pipe Rehabilitation	\$ 51,210,000	\$ 53,180,000	\$ 104,390,000
Regional Recycled Water	\$ 3,860,000	\$ 16,030,000	\$ 19,890,000
Right-of-Way & Infrastructure Protection	\$ 7,770,000	\$ 3,790,000	\$ 11,560,000
System Flexibility/Supply Reliability	\$ 31,590,000	\$ 40,610,000	\$ 72,200,000
System Reliability	\$ 48,500,000	\$ 37,700,000	\$ 86,200,000
Treatment Plant Reliability	\$ 24,940,000	\$ 17,170,000	\$ 42,110,000
Water Quality	\$ —	\$ 800,000	\$ 800,000
Total	\$ 300,000,000	\$ 300,000,000	\$ 600,000,000

Capital Investment Plan Organization

CIP Structure

The CIP is structured into three levels for clearer planning and reporting into the following format:

1. PROGRAM
2. PROJECT GROUP
3. PROJECT

The highest level of the CIP structure is Program. Programs are comprised of one or more Project Groups. There are 13 capital programs described in Table 1.

Table 1 - Capital Programs

Program	Definition
Colorado River Aqueduct (CRA) Reliability	Projects under this program will replace or refurbish facilities and components on the CRA system in order to reliably convey water from the Colorado River to Southern California.
Cost Efficiency & Productivity	Projects under this program will upgrade, replace, or provide new facilities, software applications, or technology that will provide economic savings that outweigh project costs through enhanced business and operating processes. Projects that address climate change in addition to providing the economic savings are also included.
Dams & Reservoirs Improvements	Projects under this program will upgrade or refurbish Metropolitan's dams, reservoirs, and appurtenant facilities in order to reliably meet water storage needs and regulatory compliance.
Distribution System Reliability	Projects under this program will replace or refurbish existing facilities within Metropolitan's distribution system including pressure control structures, hydroelectric power plants, and pipelines in order to reliably meet water demands.
District Housing & Property Improvements	Projects under this program will refurbish or upgrade Metropolitan workforce housing to enhance living conditions and attract and retain skilled employees.
Minor Capital Projects	This program will execute refurbishments, replacements, or upgrades at Metropolitan facilities that cost less than \$400,000 each, and which projects will be identified after adoption of the budget.
Prestressed Concrete Cylinder Pipe (PCCP) Rehabilitation	Projects under this program will refurbish or upgrade Metropolitan's PCCP feeders to maintain reliable water deliveries without unplanned shutdowns.
Regional Recycled Water	Projects under this Program are planned to demonstrate the feasibility of recycling wastewater for recharge of groundwater basins, and provide a new, sustainable and drought resistant source of supply for Southern California.
Right-of-Way and Infrastructure Protection	Projects under this program will refurbish or upgrade above-ground facilities and rights-of-way along Metropolitan's pipelines in order to address access limitations, erosion-related work, and security needs.
System Flexibility/Supply Reliability	Projects under this program will enhance the flexibility and/or increase the capacity of Metropolitan's water supply and delivery infrastructure to meet current and projected service demands. Projects under this program address climate change affecting water supply, regional drought, and alternative water sources for areas dependent on State Project Water.

Program	Definition
System Reliability	Projects under this program will improve or modify facilities throughout Metropolitan's service area in order to utilize new processes and/or technologies, and to improve facility safety and overall reliability. These include projects related to Metropolitan's Supervisory Control and Data Acquisition (SCADA) system and other Information Technology projects.
Treatment Plant Reliability: <ul style="list-style-type: none">• Diemer Plant• Jensen Plant• Mills Plant• Skinner Plant• Weymouth Plant	Projects under this program will replace or refurbish facilities and components at Metropolitan's five water treatment plants in order to continue to reliably meet treated water demands.
Water Quality	Projects under this program will add or upgrade facilities to ensure compliance with water quality regulations for treated water at Metropolitan's treatment plants and throughout the distribution system.

Capital Investment Plan Development

Background

The projects that comprise the proposed CIP have been identified from many Metropolitan studies of projected water needs as well as ongoing monitoring and inspections, condition assessments, and focused vulnerability studies. Staff continues to study operational demands on aging facilities and has made recommendations for capital projects that will maintain infrastructure reliability and ensure compliance with all applicable water quality regulations, and building, fire, and safety codes. Staff has also studied business and operations processes and proposed projects that will improve efficiency and provide future cost savings. Additionally, several projects have been identified and prioritized to provide flexibility in system operations to address uncertain supply conditions from the Colorado River and the State Water Project.

CIP Development Process

The CIP is structured to reflect Metropolitan's strategic goals of providing a reliable supply of high-quality water at the lowest cost possible. As part of the CIP development process, all new and existing projects are evaluated against an objective set of criteria to ensure existing and future capital investments are aligned with Metropolitan's priorities for water supply reliability, water quality, and public safety.

This rigorous evaluation process has resulted in a thorough review and assessment of all proposed capital projects by staff and managers prior to inclusion in the CIP budget. Staff continues to conduct comprehensive field investigations that identify critical replacement and refurbishment projects and a variety of necessary facility upgrades related to infrastructure reliability as well as regulatory compliance. Project schedules are evaluated regularly in order to plan for necessary capital investments in infrastructure reliability and to accommodate the urgency of each project. Additionally, current demand projections that account for ongoing conservation, planned increased local supply production, and the economy, have been evaluated to ensure that demand and growth-related projects are appropriately scheduled.

Project Proposals

Sponsors are required to submit proposals for all projects that have not yet been authorized through the completion of the project to be considered for inclusion into the CIP. For newly proposed projects, proposals must include scope, justification, alternatives, impacts of re-scheduling work for a later time, impact on operations and maintenance costs, and an estimate of total project cost. For existing projects, staff must also provide justification for continuing the project, explain any changes since the proposal was last evaluated, and describe critical phases for the upcoming years.

The projects are evaluated, rated, and prioritized based on the contents of the proposals. The guidelines provided to the project sponsors are summarized in Table 2.

Table 2 - Project Proposal Guidelines

Section	Guideline
Appropriation No., CIP Index No., Project No., (if existing) and Project Title	If a proposed project has been previously included in the CIP and has been assigned a CIP index number, provide the appropriation and CIP index number along with the project title and project number if one has been assigned. If not previously included in the CIP, provide a project title only.
Sponsoring Group	Indicate the Group sponsoring the project, as follows: 1) Office of General Manager 2) Water System Operations 3) Water Resource Management 4) Engineering Services 5) Information Technology 6) Real Property 7) Human Resources 8) External Affairs 9) General Counsel Department 10) General Auditor Department 11) Ethics Office 12) Environmental Planning
Project Manager and Proposal Preparer	Enter the name of the project manager if one was assigned and enter the name of proposal preparer.
Estimated Total Project Cost	Show the total estimate of cost from inception to completion of a project, including administrative overhead and contingency, as applicable.
GM Business Plan	Indicate the strategic priorities under GM's Business Plan the project best supports.
Current Project Phase	Indicate the phase (Study, Preliminary Design, etc.) as of the date proposal submitted.
Current Phase % Complete	Current phase percent complete as of the date proposal submitted.
Project Description	Describe the project scope of work.
Changes to Existing Project	For an existing project, describe any changes to the project scope, budget, or schedule over the past two years.
Justification	<p>Describe the nature of the issue to be addressed by the project. What is the problem? What is the function of the facility/component being addressed by the project? Why is the project needed? Why can't the project be postponed?</p> <p>Consider issues such as:</p> <ul style="list-style-type: none"> • Operational flexibility • New facility expansion • New water supply • Aging infrastructure deterioration/failure • Process improvement/failure • Maintenance capability • Seismic vulnerability • Obsolescence (vendor support, parts, technology, etc.) • Security • Regulatory Compliance (water quality, environmental, health and safety, etc.) • Cost savings • Revenue generation • Energy savings • Productivity <p>Include an explanation of how the project addresses any of the above issues and provide documentation, when applicable, to substantiate the need for the project.</p>

Section	Guideline
Directive	<p>Regulatory/Legal Settlement: Indicate if this is related to a written citation or directive, verbal/written directive, or in-house identification (includes environmental mitigation mandated by an MND or EIR).</p> <p>Special Initiative/Directive: Indicate if the project is specifically identified in one of the core or strategic initiatives; identified via Area Study, System Overview Study, etc.; and/or what phase(s) of the project have been authorized such as study, preliminary design, or final design.</p>
Service Disruption	Describe how Metropolitan's day-to-day operations could be impacted if the project is not approved. Consider business, as well as water system operations, including maintenance activities.
Cost/Productivity/Sustainability	Describe potential cost, water, and/or energy savings, waste reduction, revenue/energy generation, better customer service, etc., that justify the project. Include a pay-back period.
Alternatives	Provide a brief description of any potential project scope alternatives, including any opportunities to "stage" the work. Include if it is possible to only perform a portion of a project to meet foreseeable customer needs. Consider the possibility of new technology, changing demands, as well as environmental impacts and economies of scale. Describe any reasonable projects, processes, or other initiatives available as alternatives to the project. Discuss both positive and negative aspects of each alternative. If possible, explain what other similar agencies are doing about this or similar issue.
Additional Background Information	Provide any other supplemental information (e.g. detailed history of a problem, supporting technical information, shutdown constraints, etc.) that will help in evaluating the project. This can also be attached to the proposal.
Schedule	Indicate the proposed beginning and end dates for all appropriate phases.
Detailed Project Cost Estimate	<p>Include an itemized list of all costs for the project, as follows:</p> <ol style="list-style-type: none"> 1) Direct Labor with additives at the indicated rate 2) Equipment and Materials 3) Incidental Expenses 4) Professional/Technical Services (e.g., consultants) 5) Right-of-Way and Land Purchases (e.g., easements, fee title, escrow fees) 6) Operating Equipment Use and Rental 7) Contract Payments (e.g., construction contracts) 8) Administrative Overhead at the indicated rate 9) Contingency <p>All new project proposals and existing projects must include this estimate.</p>
Post-Implementation O&M Impacts	To the extent available/known, provide a description of the impacts, costs, and/or benefits this capital project is anticipated to have on Metropolitan's current and future O&M expenses and services upon completion (e.g. labor, maintenance, and equipment costs; enhanced reliability; improved water quality, etc. For example, "Ozone generators will substantially increase electrical consumption by approximately \$1 million annually and the number of new pieces of equipment will require periodic maintenance per the manufacturer's recommendations beginning in FY 2021/22. PDR and future studies will provide additional detail on the overall lifecycle costs"). This is required for projects greater than \$2 million and whose planned implementation date is within the next five fiscal years.
Approvals	<ol style="list-style-type: none"> 1) Person submitting the proposed project - Type name only 2) Team manager sponsoring the project 3) Unit manager sponsoring the project 4) Section manager sponsoring the project (e.g., all new and existing projects) 5) Group manager sponsoring the project (e.g., all new projects)

Evaluation Criteria

The evaluation criteria cover four characteristics or objectives for capital projects: Project Justification, Directive, Service Disruption, and Cost/Sustainability/Customer Service. In addition, a multiplier is applied to a project rating to factor in a risk assessment. Table 3 provides a description of the criteria and multiplier.

Table 3 - Evaluation Criteria and Multiplier

Criteria	Description
Justification	<p>Assessment of the overall importance of a project. Criterion looks at whether or not a project supports the following:</p> <ul style="list-style-type: none"> - Supply reliability - Infrastructure reliability - Regulatory compliance - Other goals (e.g., cost savings, revenue generation, energy savings, and increased productivity)
Directive	<p>Assessment of whether or not a project is specifically identified in one of the core or strategic initiatives, if any permitting agency such as the California State Department of Safety of Dams has issued a directive or citation to take corrective actions, the current authorized scope of work, and/or support the GM Business Plan:</p> <ul style="list-style-type: none"> - Regulatory/Legal Settlement - Special Initiative/Directive - GM Business Plan
Service Disruption	<p>Assessment of not doing a project. Criterion evaluates the following:</p> <ul style="list-style-type: none"> - Impact to Metropolitan's business operations - Impact to water system operations (e.g., system delivery and/or reliability, cascading impact on system due to failure, etc.)
Cost/Sustainability/Customer Service	<p>Assessment of whether or not a project improves the following:</p> <ul style="list-style-type: none"> - Cost efficiency - Sustainability - Customer service

Multiplier	Description
Risk Assessment	<p>Assessment of the probability of:</p> <ul style="list-style-type: none"> - Facility/component/process failure - Health, safety, water quality, or environmental impact - Missed opportunity (e.g., available resources, shutdown, revenue generation, cost savings, supply) - Not meeting service demands

Project Evaluation

A CIP Evaluation Committee comprised of staff from Water System Operations, Water Resource Management, Real Property, Engineering Services, Finance, Information Technology, Environmental Planning, and External Affairs evaluate and rate all project proposals. The evaluation criterion is designed to prioritize projects that directly support reliability, quality, and safety for inclusion in Metropolitan's proposed CIP.

An iterative process is employed to first score and rank every new and existing project, and then solicit feedback from project sponsors, customers, and resource providers in order to establish schedules and cash flow requirements. Those schedules, along with analyses of facility shutdown requirements, environmental permitting timeframes, and contracting process requirements, also enable resource managers to identify staffing needs. The final schedule and implementation plan for FY 2022/23 and FY 2023/24 are reflected in the budget and objectives summarized under each of the Individual Programs Summaries that appear later in this document.

Capital Investment Plan for Fiscal Years 2022/23 and FY 2023/24

Process Improvements

In October 2018, Metropolitan's Board amended the Administrative Code to allow for an appropriation of the total amount of planned biennial CIP spending following the approval of the biennial budget and authorize work on all capital projects identified in the CIP subject to the requirements of CEQA and limits on the General Manager's authority; and delegate responsibility to the General Manager to determine whether a project is exempt from CEQA. In order to be considered a planned project, the project must be included and described in this Capital Investment Plan Appendix for the two-year budget cycle. Consistent with this action, all requests to allocate appropriated CIP funds and proceed with planned capital projects are reviewed and approved by the Chief Engineer acting under the General Manager's authority. Upon approval, such requested funds are then transferred to the pertinent capital project. These transfers are based on both board actions and/or management decisions to initiate capital projects and/or proceed to the next phase of planned work.

In order to arrive at the spending plan for individual programs, the budget and schedule for each individual project is paired with project metadata (sponsor priorities, CIP scores, project status, etc.). The projects are then organized (or leveled) using an algorithm that combines anticipated capital spending with project prioritization. The resulting plan represents a spending model snapshot in time and is adjusted during the biennium as priorities and conditions change.

For this budget preparation cycle, we have deployed a new cloud-based CIP budgeting tool that performs the pairing and leveling work more efficiently. This new tool also makes it easier to create budget scenarios and to better maintain project and budget information, which helps with administration of CIP.

New to this budget cycle, in addition to the CIP scoring described above, each project is being reviewed against set risk criteria to evaluate the relative consequence and likelihood of failure. This data is used as a tool to assist in prioritizing projects.

In addition to the budgeting tool, two other web-based forms were deployed for this budget preparation cycle. One of the forms is a new web-based CIP proposal form, which streamlined the process.

Additions

Projects not described in this CIP Appendix are considered unplanned and are not included in the planned biennial spending. Unplanned projects require specific board authorization to add unplanned projects to the CIP Appendix before work can be initiated. Five unplanned projects totaling \$57.52 million were added to the FY 2020/21 and FY 2021/22 budget as authorized by the Board. These projects were identified after adoption of the budget and included projects such as Jensen, Skinner, & Weymouth Battery Energy Storage Systems, Gene Communication System Upgrade, Inland Feeder-Rialto Pipeline Intertie, Wadsworth Pump Discharge to Eastside Pipeline Bypass, and Inland Feeder-Citrus Reservoir and Pump Station Intertie. These projects are now included in this document and are considered planned projects for FY 2022/23 and FY 2023/24.

New Projects

Since the start of the current biennium, a total of approximately 100 new project proposals, including unplanned but excluding Minor Capital projects have been submitted and reviewed by the CIP Evaluation Committee to either proceed as proposed, or be staged to perform only a portion of the work in the biennial budget period, and have been incorporated into the current or the next CIP Appendix.

Major Objectives

Below, grouped by CIP Program, are descriptions of some of the capital project major activities anticipated to be underway or completed over the next two fiscal years.

Colorado River Aqueduct Reliability

Complete construction of the CRA Pumping Plant Sump System Rehabilitation and CRA Pumping Plants Crane Improvements projects. Continue construction of CRA 6.9 kV Power Cables Replacement for Pump Units 6 to 9, CRA Pumping Plants Water Treatment Systems Replacement, and CRA Pumping Plant Storage Buildings at Hinds, Eagle Mountain and Iron Mountain.

Cost Efficiency and Productivity

Deploy the new WINS Water Billing System. Complete the Jensen, Skinner, and Weymouth Battery Energy Storage Systems project. Start the Payroll-Timekeeping Reimplementation project.

Dams & Reservoirs Improvements

Complete design and begin construction of the Diamond Valley Lake Dam Monitoring System Upgrades project. Complete design of the Mills and Jensen finished water reservoir floating cover replacement projects. Complete preliminary investigations of the Lake Mathews and Lake Skinner spillways.

Distribution System Reliability

Complete construction of the Casa Loma Siphon Barrel No. 1 Seismic Retrofit, Orange County Feeder Relining - Stage 3, and Etiwanda Pipeline Lining Replacement - Stage 3. Begin design of the Lake Mathews Forebay Pressure Control Structure and Bypass project.

District Housing and Property Improvements Program

Complete final design and begin construction of District Housing Improvements and Employee Village Enhancement at Hinds, Eagle Mountain, Iron Mountain, and Gene.

Prestressed Concrete Cylinder Pipe Rehabilitation

Continue design, valve procurement, and construction to rehabilitate the remaining PCCP portions of the Second Lower Feeder. Continue preliminary design to rehabilitate the PCCP portions of the Allen-McColloch Pipeline, Calabasas Feeder, Rialto Pipeline, and Sepulveda Feeder. Continue annual electromagnetic inspections of all PCCP pipelines.

Regional Recycled Water Program

Complete design and initiate construction of Demonstration Plant Direct Potable Reuse Modifications.

Right-of-Way and Infrastructure Protection

Complete construction of pipeline protection and access improvements of San Bernardino County Region – Stage 1. Start construction of pipeline protection and access improvements of the Orange County Region – Stages 2 & 3 project. Continue efforts to develop and certify programmatic EIRs for the western San Bernardino, Los Angeles, Riverside and San Diego County regions.

System Flexibility/Supply Reliability

Complete construction of the drought-related projects such as Inland Feeder-Rialto Pipeline Intertie and Wadsworth Pump Discharge to Eastside Pipeline Bypass. Continue design of the Inland Feeder-Citrus Reservoir and Pump Station Intertie project. Begin construction of the Perris Valley Pipeline tunnel project.

System Reliability

Complete construction of La Verne Shops Improvements-Equipment Installation and Building Completion project. Complete deployment of Maximo Mobile Upgrade, Wifi Upgrade at La Verne, and Fuel Management System Upgrade projects.

Treatment Plant Reliability

Complete construction of the Jensen Electrical Upgrades – Stage 2 and Mills Electrical Upgrades – Stage 2 projects. Substantially complete construction of Weymouth Basins 5-8 and Inlet Channel Refurbishment project. Complete design of Diemer Filter Rehabilitation.

Water Quality

Complete the design for the Mills Bromate Control project.

Financial Projections

Planned capital spending for FY 2022/23 and FY 2023/24 is estimated to be \$300 million and \$300 million, respectively, and are planned to be funded by a combination of current operating revenues (R&R and PAYGO) and debt. Considerations for timing of nearby projects and facility shutdowns, urgency, aging infrastructure, updated service demand projections, and regulatory requirements are taken into account. Estimated capital spending is updated on a regular basis as new projects are added, other projects are completed, construction cost estimates are refined, or contracts awarded. From time to time, projects that have been undertaken are delayed, redesigned or deferred for various reasons and no assurance can be given that a project in the CIP will be completed in accordance with its original schedule.

The total planned spending for the FY 2022/23 and FY 2023/24 biennium is approximately \$600 million as shown in Figure 1 by Program. Planned spending has been estimated based on anticipated project progress and estimated costs for all ongoing and planned work for the new biennium budget period.

Figure 1 - Capital Investment Plan for FY 2022/23 and FY 2023/24 by Program

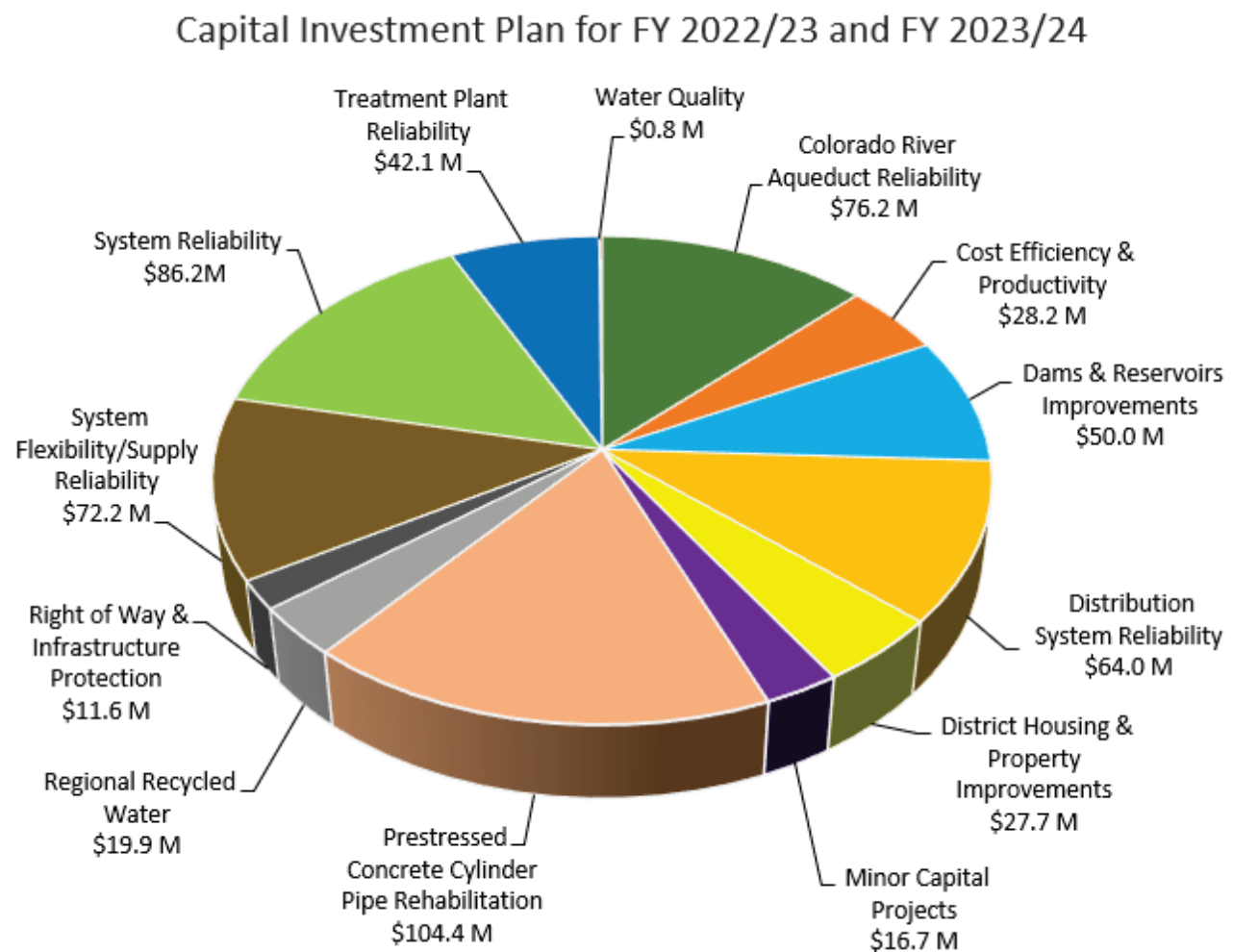


Figure 2 depicts the planned capital spending profile, including actual and projected cash flow, for the 15-year period from FY 2017/18 through FY 2031/32 and Table 4 provides a more detailed two-year outlook.

Figure 2 - CIP 15-year Window by Program FY 2017/18 through FY 2031/32

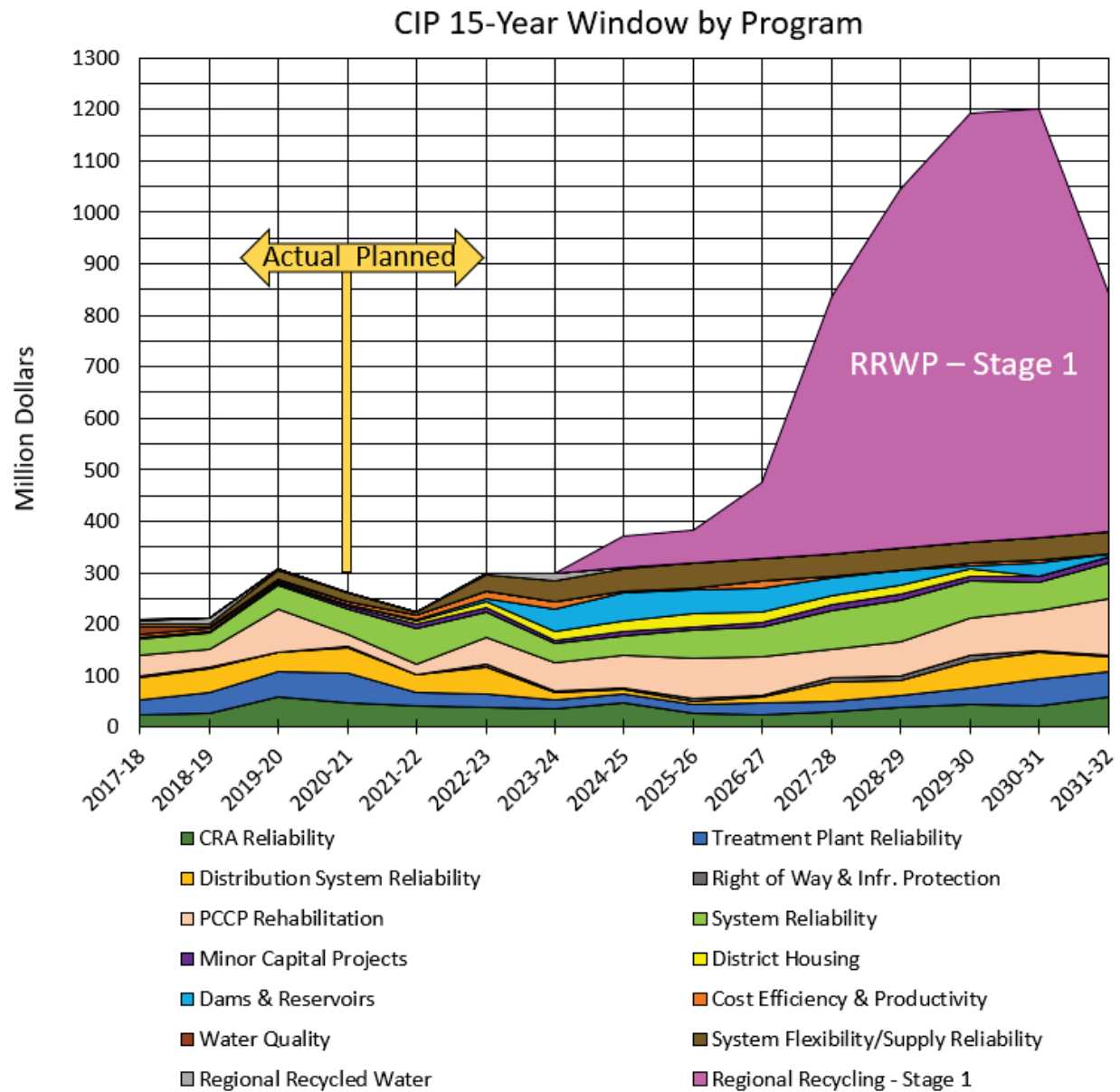


Table 4 - Two-Year Outlook

Capital Program and Project Groups	FY 2022/23	FY 2023/24
Colorado River Aqueduct Reliability	\$ 39,270,000	\$ 36,900,000
CRA - Conveyance	\$ 9,720,000	\$ 170,000
CRA - Electrical Systems	\$ 4,560,000	\$ 8,900,000
CRA - Pumping Plants	\$ 17,940,000	\$ 18,300,000
CRA - Other	\$ 7,050,000	\$ 9,530,000
Cost Efficiency & Productivity	\$ 15,610,000	\$ 12,630,000
Diamond Valley Lake Recreation - New/Improvements	\$ 2,660,000	\$ 4,000,000
Diamond Valley Lake Recreation - Refurbishment & Replacement	\$ 150,000	\$ —
IT - Business Support	\$ 5,100,000	\$ 1,230,000
Cost Efficiency & Productivity - Other	\$ 7,700,000	\$ 7,400,000
Dams & Reservoirs Improvements	\$ 5,300,000	\$ 44,700,000
Dams & Reservoirs - All	\$ 5,300,000	\$ 44,700,000
Distribution System Reliability	\$ 51,250,000	\$ 12,790,000
Pipelines, Tunnels, Canals	\$ 30,000,000	\$ 8,400,000
Pressure Control Structures/Hydroelectric Plants/Service Connections/Valves & Gates	\$ 12,400,000	\$ 4,300,000
Distribution System - Other	\$ 8,850,000	\$ 90,000
District Housing & Property Improvements	\$ 12,000,000	\$ 15,700,000
Housing & Property Improvements	\$ 12,000,000	\$ 15,700,000
Minor Capital Projects	\$ 8,700,000	\$ 8,000,000
Minor Capital Projects - All	\$ 8,700,000	\$ 8,000,000
Prestressed Concrete Cylinder Pipe Rehabilitation	\$ 51,210,000	\$ 53,180,000
Allen McColloch Pipeline	\$ —	\$ —
Calabasas Feeder	\$ —	\$ —
Rialto Feeder	\$ 3,300,000	\$ 5,900,000
Second Lower Feeder	\$ 43,500,000	\$ 46,900,000
Sepulveda Feeder	\$ 3,900,000	\$ 380,000
PCCP - Other	\$ 510,000	\$ —
Regional Recycled Water	\$ 3,860,000	\$ 16,030,000
Regional Recycled Water - All	\$ 3,860,000	\$ 16,030,000
Right-of-Way & Infrastructure Protection	\$ 7,770,000	\$ 3,790,000
Los Angeles Region	\$ 3,780,000	\$ 2,390,000
Orange County Region	\$ 630,000	\$ —
Riverside/San Diego Region	\$ —	\$ —
Western San Bernardino Region	\$ 1,800,000	\$ —
RWIPP - Other	\$ 1,560,000	\$ 1,400,000
System Flexibility/Supply Reliability	\$ 31,590,000	\$ 40,610,000
System Flexibility/Supply Reliability - All	\$ 31,590,000	\$ 40,610,000
System Reliability	\$ 48,500,000	\$ 37,700,000
IT/SCADA - Infrastructure	\$ 12,700,000	\$ 18,300,000
Operations Support	\$ 21,700,000	\$ 15,000,000

Capital Program and Project Groups	FY 2022/23	FY 2023/24
System Reliability - Security and Other	\$ 14,100,000	\$ 4,400,000
Treatment Plant Reliability	\$ 24,940,000	\$ 17,170,000
Diemer	\$ 7,100,000	\$ 320,000
Jensen	\$ 9,050,000	\$ 2,540,000
Mills	\$ 120,000	\$ 40,000
Skinner	\$ 1,470,000	\$ 250,000
Weymouth	\$ 7,200,000	\$ 14,020,000
Treatment - General	\$ —	\$ —
Water Quality	\$ —	\$ 800,000
Water Quality - All	\$ —	\$ 800,000

Potential Changes to the Proposed CIP

The program described below will require specific Board decisions prior to funding and authorization to proceed. Descriptions for proposed projects are included in the Individual Program Summaries section of this Appendix.

Regional Recycled Water Program (RRWP)

Currently, activities associated with the RRWP are limited to operations and testing at the Advanced Water Treatment Demonstration Plant (demo plant) and environmental permitting. Ongoing modifications to the demo plant are included in the CIP, while preparation of a Programmatic Environmental Impact Report is funded under the O&M budget.

The decision to proceed with the full-scale recycled water program is expected to be brought to the Board during FYs 2022/23 and 2023/24. At that time, the regulatory, operational, and financial impacts of developing the full-scale program will be presented to the Board to decide whether or not to proceed. If the full-scale recycled water program proceeds, the project will be added to the CIP at that time. Subsequent changes to that program such as consideration of direct potable reuse or expanding capacity will be treated the same way.

Diamond Valley Lake Recreation

The Diamond Valley Lake (DVL) Recreation Program is a unique appropriation. The program was fully funded with \$92.8M in 2004 with the intent of constructing recreational facilities at the East and West Dams. One condition placed on the appropriation was that proceeds from the sale of any surplus DVL properties would be used as additional funds to the program. In 2021, Metropolitan sold DVL land valued at \$4.5M and this amount was added to the DVL Recreation appropriation. Future sales will be addressed similarly.

Drought Projects

In response to the ongoing historic statewide drought, this CIP includes several projects that address decreasing water supplies both in specific parts of Metropolitan's service area and across the entire District (e.g., Wadsworth Pump Discharge to Eastside Pipeline Bypass project, Rialto Feeder and Mills Plant Pump Station). Engineering Services and Water System Operations are continuing to investigate capital improvements that mitigate drought impacts and more projects are expected to be brought to the Board during FYs 2022/23 and 2023/24.

Capital Investment Plan Detail

The core of this section is the Individual Program Summaries, which provide information for each capital project that has been proposed, evaluated, and included in the budget forecast to begin or continue during and after FY 2022/23 and FY 2023/24. Scope, accomplishments, objectives and financial projections are provided for each capital program. Every project with work planned for the two budget years and beyond is listed under the appropriate Program Summary by Project Group. The information provided reflects project details current as of the time of publication and is subject to change. The Individual Program Summaries are ordered alphabetically by program title. The information contained in the Individual Program Summaries is described in further detail below.

Key Information

For each program, key information is highlighted at the top of the Individual Program Summary page and includes the FY 2022/23 and FY 2023/24 biennial estimate. Table 5 provides an explanation of each item.

Table 5 - Key Program Information

Item	Description
Program Description	A brief explanation of the types of projects included in the Program
Fiscal Year 2022/23 Estimate	Estimate of planned spending from July 2022 through June 2023. It does not include a contingency amount.
Fiscal Year 2023/24 Estimate	Estimate of planned spending from July 2023 through June 2024. It does not include a contingency amount.
Accomplishments for FY 2020/21 and FY 2021/22	Listing of new projects initiated and major milestones achieved during the last biennium
Objectives for FY 2022/23 and FY 2023/24	Listing of key projects with major milestones planned during the budget biennium with the total project estimate, estimated construction completion, and the planned milestone for FY 2022/23 and FY 2023/24

Narratives

Each Individual Program Summary also contains a narrative portion that includes a description of each project planned to be underway during the two-year budget period and beyond.

Table 6 - Program Summary Index

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Individual Program Summaries

Colorado River Aqueduct (CRA) Reliability Program

Fiscal Year 2022/23 Estimate: \$39.3 million

Fiscal Year 2023/24 Estimate: \$36.9 million

Program Information: *The CRA Reliability Program is composed of projects to replace or refurbish facilities and components of the CRA system in order to reliably convey water from the Colorado River to Southern California.*

Accomplishments for FY 2020/21 and FY 2021/22

- New projects initiated:
 - Black Metal Mountain 2.4 kV Electrical Power Upgrade
 - CRA Conduit Protection & Lining – Stage 1
 - CRA Eagle Mountain 230 kV Local Breaker Failure Backup
 - CRA Pumping Plant 2.3 kV and 480 V Switchrack Rehabilitation
 - CRA Whipple Mountain Tunnel Flow Metering Equipment Upgrades
 - Eagle Lift and Eagle West Siphons Seismic Improvements
 - Eagle Mountain 230 kV Physical and Cyber Security Upgrades
- Major milestones achieved:
 - Construction completed:
 - CRA Radial Gates Rehabilitation
 - CRA Pumping Plants Discharge Line Isolation Bulkhead Couplings
 - CRA Pumping Plant Sump System Rehabilitation – Procurement
 - CRA Radial Gates Rehabilitation
 - Gene Wash Reservoir Discharge Valve Rehabilitation
 - Construction contracts awarded:
 - CRA Pumping Plants Crane Improvements
 - CRA Pumping Plants Water Treatment Systems Replacement
 - Mile 12 Flow and Chlorine Monitoring Station Upgrades

Objectives for FYs 2022/23 and 2023/24

Project	Total Project Estimate	Estimated Construction Completion	Major Milestones
Copper Basin Reservoirs Discharge Valve Rehabilitation	\$ 24,000,000	2025	Begin construction
CRA 6.9 kV Power Cables Replacement for Pump Units 6 to 9	\$ 25,000,000	2025	Begin construction
CRA Conduit Structural Protection	\$ 16,000,000	2024	Begin construction
CRA Desert Region Security Improvements	\$ 8,200,000	2024	Begin construction
CRA Main Transformer Refurbishment	\$ 41,000,000	2027	Begin equipment procurement and construction
CRA Pumping Plant Sump System Rehabilitation	\$ 43,000,000	2024	Begin construction
CRA Pumping Plants Crane Improvements	\$ 19,000,000	2023	Complete construction
CRA Pumping Plant Storage Buildings at Hinds, Eagle Mountain and Iron Mountain	\$ 9,000,000	2024	Begin Construction
Eagle Mountain Pumping Plant Village Utilities & Paving Replacement	\$ 7,600,000	2024	Begin construction
Gene Pumping Plant Village Utilities & Paving Replacement	\$ 24,000,000	2025	Begin construction
Hinds Pumping Plant Discharge Valve Pit Platform Replacement	\$ 8,400,000	2026	Begin construction
Hinds Pumping Plant Village Utilities & Paving Replacement	\$ 9,500,000	2024	Begin construction
Mile 12 Flow and Chlorine Monitoring Station Upgrades	\$ 6,000,000	2022	Complete construction

CRA - Conveyance Project Group

Cabazon Radial Gate Facility Improvements

The Cabazon Radial Gate facility is located on the CRA in the city of Cabazon within Riverside County and approximately one mile upstream of the San Jacinto Tunnel. The Cabazon Radial Gate facility was constructed in 1936 and consists of a 17-foot-wide by 16-foot-tall radial gate controlled by an electric motor actuator. The facility was designed to protect the downstream conduits and tunnels from becoming over-pressurized in the event of a blockage by diverting water into an 800-foot long, concrete-lined channel which flows into the San Gorgonio Wash. The existing radial gate, motor, and controls have reached the end of their service life and are no longer reliable. This project will replace the radial gate, motor, and controls.

CRA Conduit Structural Protection

The CRA has 55 miles of cut-and-cover conduits where vehicles and storm water flows can cross over the aqueduct. These conduits are unreinforced concrete horseshoe-shaped structures placed upon an invert slab. At some locations, these conduits are subject to heavy vehicle loading or over pressurization due to friction inside the conduits during high pump flow. Few locations include existing dirt roads that cross the aqueduct with insufficient soil cover over the conduit; including locations where heavy equipment must be placed over or near the conduit for access into tunnels or siphons. This project will install new protective structures such as reinforced concrete slabs that span over the unreinforced conduits and epoxy lining the conduits at specific locations. New pressure sensor systems will be installed to monitor the pressure inside the conduits during the high pump-flow operation. The slabs will protect the conduits from damage by distributing the equipment loading to the surrounding soil and epoxy liner will decrease internal friction to allow increased flow through the CRA conveyance system.

CRA Conveyance System High Flow Reliability Upgrades

With recent drought conditions and low State Project Water allocations, Metropolitan has needed to maximize flow through the CRA. With climate change impacting regional hydrology, this operational flexibility will continue to be a priority. This project will strengthen the conveyance portion of the CRA system and make other improvements to provide reliable flow through eight CRA pumps year-round. Some of the options that will be considered include: carbon fiber lining, polyurethane lining, epoxy lining, steel lining, and structural strengthening from the outside of the conduits. This project will also add new gauging stations along the conveyance system that will be tied into SCADA to provide flow data and information that will assist with maintaining uniform and steady state flow conditions through the CRA system. This is a new project for this budget cycle.

CRA Freda Siphon Barrel No. 1 Improvements

Like many of the CRA's 146 siphons, the Freda Siphon was constructed of cast-in-place reinforced concrete in the 1930s. And like many of these siphons, the Freda Siphon leaks measurably. This project will investigate methods to permanently address reoccurring leaks and will perform improvements that are cost-effective, long-term, and require minimal shutdown time and maintenance. This is a new project for this budget cycle.

CRA Freda Siphon Barrel No. 1 Leak Repairs

Surface investigations of the CRA Freda Siphon Barrel No. 1 conducted over the past two years revealed as many as eight leakage locations. This project will install internal seals along the siphon during the 2023 CRA scheduled shutdown, reducing the risk of future unplanned outages and costly emergency repairs. This is a new project for this budget cycle.

CRA Sodium Hypochlorite Injection Improvements

Sodium hypochlorite is added along the Colorado River Aqueduct (CRA) to control algal growth, which could damage downstream process equipment and reduce flow through the aqueduct. The existing process of providing weekly chlorine addition into the canal produces spikes in chlorine concentrations, which causes the Colorado River water to be more corrosive to conveyance systems and plant equipment, and produce higher concentrations of trihalomethanes (THMs). This project will construct new chlorine storage and injection facilities to provide a steady rate of chlorine addition at five locations along the CRA. Each new chlorine injection facility will be upgraded to include a sodium hypochlorite tank and pump skid, chemical storage building with climate control and spill containment, delivery driveway with spill containment area, piping, chlorine injection system, security cameras, fencing, electrical and Supervisory Control and Data Acquisition (SCADA) upgrades, and other appurtenances. This is a new project for this budget cycle.

CRA Tunnels - Seismic Resilience Upgrades

The CRA is a 242-mile-long conveyance system that transports water from the Colorado River to Lake Mathews in Riverside County, including 124 miles of tunnels which were constructed in the late 1930s and was placed into service in 1941. While the CRA was constructed in accordance with current seismic codes of that time, recent seismic risk assessments of the CRA identified that some tunnels are vulnerable to damage from a strong earthquake on the southern San Andreas Fault. The scope of this project includes detailed seismic evaluations and completion of upgrades to strengthen vulnerable tunnel sections.

Eagle Lift & Eagle West Siphons Seismic Improvements

The CRA was placed into service in 1941. As the aqueduct traverses the desert, it must cross numerous drainage channels, ravines, and other natural depressions. At each crossing, the aqueduct's open channel transitions into a buried conduit (an inverted siphon) which drops below ground and passes beneath the natural surface feature. At the downstream end of the siphon, water re-emerges into the open aqueduct. Typically, siphons are cast-in-place reinforced concrete conduits, which vary in length from 150 feet to 5 miles. An initial assessment of the Eagle Lift and Eagle West Siphons identified potential slope failure of the soil covering the siphons as a result of a strong seismic event. This project will perform a detailed slope stability analysis and evaluate and implement mitigation options.

Iron Mountain Tunnel Rehabilitation

The Iron Mountain Tunnel was constructed between 1933 and 1938 as part of the CRA system. The tunnel is located downstream of the Iron Mountain pumping plant, and is eight miles long. The tunnel's cross-section is horseshoe-shaped, with overall dimensions of 16 feet high by 16 feet wide. Longitudinal and transverse cracks up to 1 inch wide have developed along a 2,500-foot-long stretch of the tunnel. This project will mitigate the cracks with focus on tunnel strengthening and corrosion protection.

Mile 12 Flow and Chlorine Monitoring Station Upgrades

One of the CRA's critical points for monitoring flow rates and chlorine levels is located at Mile Marker 12 (Mile 12) along the aqueduct. Monitoring equipment includes a set of flowmeters with instrumentation, chlorine analyzers, communication equipment, solar panels, and batteries. Although the equipment has performed well, it has exceeded its life span and is beginning to fail. This project will replace the existing deteriorated flow meters, chlorine analyzers, transducers, and associated cabling; relocate the data and communications equipment from the underground manhole to a new aboveground monitoring station with air-conditioned cabinets to enable stable operation; construct a reliable power source by upgrading the solar power system and installing a propane generator; and install security system.

Whitewater Tunnel No. 2 Seismic Upgrades

The CRA consists of five pumping plants, 124 miles of tunnels, 63 miles of canals, and 55 miles of conduits, siphons, and reservoirs. One of the tunnels, CRA Whitewater Tunnel No. 2, is a 1.5-mile long; 16-feet-high by 16-feet-wide horseshoe-shaped tunnel that parallels closely to the southern San Andreas Fault and crosses a splay of the fault approximately one-third mile from its west portal. A recent seismic risk assessment of the CRA identified that this tunnel is vulnerable to major damage from a strong earthquake on the southern San Andreas Fault. This project will perform near-term upgrades to strengthen vulnerable tunnel sections at the east and west portals of this tunnel and will improve access at the west portal. Furthermore, in order to expedite post-earthquake repairs of damaged tunnel sections, the design of a new bypass tunnel will be prepared in advance, steel sets will be procured and stockpiled, and tunnel repair contractors will be prequalified so that specialized equipment and crews may mobilize rapidly.

CRA - Electrical Systems Project Group

Electrical Power Distribution Upgrades - Gene, Iron Mountain, Eagle Mountain and Hinds Pumping Plants

The 2.4 kV electrical power distribution system at all five Desert pumping plant facilities conveys power from the Metropolitan-owned 2.4 kV switchyard to all areas within the property confines, including the operations and maintenance (O&M) areas and the villages. The power is stepped down from 2.4 kV, typically by a pole-mounted transformer, to the required voltage based on the end-user's requirements, usually 120 V for houses and buildings, or 480 V for workshops. The existing breakers are no longer common in the power industry, and spare parts are difficult to obtain.

This project will replace the existing electrical power distribution systems at Gene, Iron Mountain, Eagle Mountain and Hinds Pumping Plants with new distribution systems. The work will include replacing existing 2.4 kV breakers with 4160 V breakers, and replacing associated cables, conduits, feeders, risers, wooden poles and transformers, and appurtenances. Underground power distribution will be used when feasible. This project will improve the reliability of water deliveries and will optimize maintenance.

Black Metal Mountain 2.4 kV Electrical Power Upgrade

Black Metal Mountain (Black Metal) Site No. 1 and Site No. 2 are two of Metropolitan's communication sites, located in the San Bernardino Mountains. The sites are situated on top of a mountain and provide line-of-sight propagation to subsequent communication sites. Given their prime location, the communication sites on Black Metal Mountain house communication equipment for Metropolitan, several state and local government agencies, and local radio stations and cellular service providers. The existing power line that serves the two communication sites is aging and deteriorated, and is located in rocky, mountainous terrain, with some poles on the edge of 600-foot cliffs. This project will design and construct the replacement of the existing 2.4 kV power line that serves MWD's Black Metal Mountain communication sites. The work will include installation of new power poles and larger conductors to increase the available power to the sites; and improvements to the service roads to improve access for maintenance and safety.

CRA 230 kV Transmission Line Rehabilitation and Improvements

The CRA has an extensive 230 kV transmission system that originates from Hoover Dam and supplies power to all five pumping plants. This 305-mile-long transmission system was installed in the 1930s and consists of approximately 75-foot-high steel towers with concrete and wood footings, aluminum and copper conductors and supports to attach the conductors and insulators to the towers. Spans between the towers average 1,200 feet with varying ground elevations. Vertical clearances between the lowest conductor and the ground in a span can vary with temperature, wind speeds, and power loads. Over the years, operating under maximum power loads and extreme desert temperatures has led to insufficient vertical clearances as required by the current electrical standards. This project will assess ground clearances of the conductor spans and increase clearances, as needed, by raising the heights of existing towers and/or adding new towers between spans, and construct tower refurbishment or replacement.

This project will also rehabilitate and improve substations, switching stations, and control rooms related to the CRA's 230 kV transmission system in order to comply with NERC (North American Electric Reliability Corporation) standards, increase system reliability, and reduce the risk of unplanned CRA outages. Rehabilitations and upgrades include new relays at Eagle Mountain Pumping Plant to mitigate potential cascading power outages from a stuck breaker scenario at Eagle and installation of physical and cyber security systems at Gene and Eagle Mountain pumping plants control rooms and switch yards (NERC requirements); replacement of outdated bank protection relays at Intake, Gene, Iron Mountain and Hinds pumping plants; replacement of outdated 230 kV disconnect switches at Camino Switching Station and at the Gene and Iron Mountain 230 kV transfer buses; installation of a new 230 kV circuit breaker at Iron Mountain to enable isolation of the Iron-Eagle 230 kV transmission line without disruption of CRA water deliveries; and, purchase of SCE circuit breakers which are integrated with the CRA's 230 kV system at Gene and Eagle Mountain pumping plants in order to give MWD greater flexibility without having to rely on SCE. Additional scope may be added as a result of the planned assessment of the existing system.

CRA 6.9 kV Power Cable Replacement for Pump Units 6 to 9

There are a total of 45 primary pumps and motors at the five CRA pumping plants. Power is transmitted to the motors via 3-inch-diameter cables which run through a tunnel that connects each switch house to each pump house. The quantity of cables varies from nine to 27 per plant. These cables were installed in four phases from 1939 through 1959. After 57 to 77 years of continuous service, the power cables have deteriorated and need to be replaced. Oil has begun to leak through cracks in the lead jacket, at the cable connection joints, and at the cable termination points. Frequent repairs are required to address the leaks and maintain the cables' insulating capacity. The cables for pump units 1 to 5 have been replaced. This project includes the replacement of the deteriorated main power cables for pump units 6 to 9 at each of the five CRA pumping plants. Final design for units 6 to 9 is underway.

CRA Auxiliary Power Systems

All five CRA pumping plants have medium and low voltage systems that were constructed to the design standards of the 1930s-1950s. They provide power for general lighting, cranes, computers, shop equipment, and critical equipment such as the pumping plant sump pumps and lubrication oil pumps. Over the years, numerous additional electrical loads have been added to the auxiliary power systems. As a result, the distribution panel capacity limits have been exhausted, and some wiring is now undersized. The scope of this project includes upsizing the distribution panels to allow additional capacity and space for future loads and replacing the cables and conduits to comply with current National Electrical Code and safety standards. Additional scope may be added as a result of preliminary assessment of each of the sites to make the auxiliary power systems reliable.

CRA Hinds Sand Trap & Wasteway Radial Gate Power Cable Replacement

The power cables that feed the Hinds sand trap and wasteway radial gate are installed in a shallow ductbank that is deteriorating due to heat, in a conduit that is overfilled. This project will construct a new ductbank with power conductors designed to address these deficiencies. This is a new project for this budget cycle.

CRA Main Transformer Rehabilitation

Seven transformers provide electrical power to each CRA pumping plant to maintain continuous operation. All existing transformer units are original equipment, with many dating from the 1940s. Recent inspections revealed oil leakage and other signs of aging for some of the transformers. Failure of an existing transformer would disrupt power supply to a pumping plant and interrupt water delivery. The scope of the project includes rehabilitation of existing transformers, replacement of transformers, or the addition of spare transformers along with spill containment structures. This work also includes rehabilitation of transformer cranes, upgrade of transformer monitoring and protection equipment, and replacement of leaky circulating oil pumps that are used to cool the transformers and construction of secondary spill containment for the transformer banks. Additional scope may be added as a result of preliminary assessment to ensure reliable and safe operation of the CRA pumping plants.

CRA Pumping Plants 2.3 kV and 480 V Switchrack Rehabilitation

All five CRA Pumping Plants have a 2.3 kV and 480 V switchracks that are the central power distribution for the 2.3 kV, 480 V and 120 V that feed multiple medium and low voltage critical equipment within the pumping plants. These switchracks have been in service since the original construction of the CRA. The equipment is old, obsolete and replacement parts are difficult to obtain. This project will rehabilitate or replace the 2.3 kV and the 480V switchracks and associated support systems at all five CRA pumping plants to ensure the equipment meets the current safety and electrical codes and provides a reliable power supply to the plants.

CRA Standby Diesel Engine Generator Replacements

Back-up power for critical auxiliary systems at the Iron Mountain, Gene, and Intake pumping plants is provided by stand-by diesel generators. The standby generators are over 50 years old, require frequent repairs, and have reached the end of their service lives. In addition, upgrades to the generators' ancillary equipment are planned to meet current fire codes and environmental regulations. This project will improve the reliability of emergency power for critical auxiliary systems at the pumping plants. The scope of the project includes relocation and installation of new generators. The replacement generator will include alarms, valves, meters, and a control system capable of automatic start-up upon loss of primary power, automatic transfer back to primary power once the normal source is reestablished, and remote status monitoring.

CRA - Pumping Plants Project Group**CRA Intake Pumping Plant Shore Protection**

The existing shore protection consisting of rocks and concrete was installed around the time the Intake Pumping Plant was constructed in the 1930s and has exceeded its service life. This project will improve the shore adjacent to the Intake Pumping Plant to protect the access road and facilities and mitigate against short and long-term coastal erosion due to wave attack, flooding, and water surface level changes in Lake Havasu. This is a new project for this budget cycle.

CRA Iron Mountain and Eagle Mountain Pumping Plant Reservoirs Floor Relining

The Iron Mountain and Eagle Mountain CRA Pumping Plants each have approximately 9.3-acre forebay reservoirs, constructed in the 1930s. Recent geotechnical investigations of the asphalt reservoir floor liners found them to be in poor condition. This project will replace the liners at each plant with a material that precludes seepage water loss and extends the life of the facility. This is a new project for this budget cycle.

CRA Main Pump, Motor & Discharge Valve Refurbishment

Each of the five CRA pumping plants has nine main pumps that lift the water to the required elevation necessary to continue flow down the aqueduct. The 45 main pumps rely on multiple auxiliary systems including lubricating oil systems, circulating water systems, controls and instrumentation systems, discharge valves, electrical and control panels, and individual equipment components. In the mid-1980s, a major rehabilitation project was undertaken on the 45 main pumps. As a result, the 45 main pumps have performed well over the nearly 30 years since the rehabilitation work was completed. However, the pumps are now showing signs of deterioration caused by continuous operation over that length of time. While that project successfully extended the service life of the pumps and increased their hydraulic capacity, the pump auxiliary systems were not addressed at that time. The pump auxiliary systems are from the original CRA construction and are now deteriorating and need to be replaced. An assessment of the main pumps, motors, and their auxiliary systems at all five CRA pumping plants will capture current operating conditions, create updated baseline documents of all existing equipment and systems, and provide replacement or rehabilitation recommendations for all pump and auxiliary system components. This project will refurbish the 45 main pumps and their auxiliary systems, including lubricating oil systems, circulating water systems, controls and instrumentation systems, discharge valves, electrical and control panels, and individual equipment components, as deemed appropriate by the assessment.

CRA Main Pumping Plants Sand Removal System

At each of the five CRA pumping plants, water is withdrawn from the CRA, filtered to remove large debris and sand, and then pumped through a circulating water system. The circulating water system feeds the pump house service water system, the cooling system at each pump unit, the fire water system, the irrigation water system, and the domestic water treatment system. The existing filtration system is not designed to strain out fine silts. Consequently, the fine silt has built up as sediment in the circulating water systems leading to excessive wear and failure of equipment such as pump packing, cooling water piping, and heat exchangers. This project will upgrade the filtration system to remove fine silt and eliminate sediment build up and refurbish or replace any identified damaged components.

CRA Main Pumping Plant Unit Coolers and Heat Exchangers

Each of the five CRA pumping plants has nine main pumps. Each main pump has a cooling system to cool various components of the pump system. At each pump house, water is pumped through a circulating water system, which feeds multiple unit coolers and heat exchangers for each individual main pump unit. Over the years, the unit coolers have developed many leaks. Lack of sufficient cooling water could cause equipment overheating, and the leaks could damage nearby electrical equipment. This project will replace, refurbish, or upgrade the cooling and heat exchange system at each pump unit.

CRA Pumping Plant Flow Meter Replacement

Acoustic flow meters are installed at each of the five CRA pumping plants on each 10-foot-diameter delivery lines. Flow measurements are used to adjust pumping rates and balance the flows from plant to plant. The existing meter units have begun to deteriorate due to their age and exposure to harsh desert conditions. Continued loss of accuracy could lead to incorrect flow adjustments or unsynchronized pumping rates, which could cause flooding at the plants or overtopping of the aqueduct. This project will install new acoustic flow meters on the delivery lines which will connect to nearby flow meter consoles housed inside new pre-fabricated equipment enclosures.

CRA Pumping Plant Sump System Rehabilitation

Each of the five CRA pumping plants has two independent main sumps that collect water leakage from the main pumps and discharge valves. Each main sump is approximately 9 feet wide, 20 feet long, and 35 feet deep, and can hold up to 48,000 gallons, or approximately one day's worth of leakage water. The sump system pumps this water back to the pumping plant's main intake manifold or to its forebay, depending on the plant. The 72-year-old sump piping systems and support structures are deteriorating and have exceeded their service lives. Failure of the sump piping systems has the potential to cause extensive flooding and damage to valves and pumps within the pumping plants. This project will rehabilitate the pumping plant sump systems, including replacement of corroded sump mechanical equipment, piping, and access structures at all five CRA pumping plants. Access features will be upgraded by replacing corroded catwalks, ladders and handrails within the sumps. This project will also rehabilitate circulating water equipment and piping systems, which are in the sump area. A construction contract was awarded by the Board in December 2018, but construction activities were suspended in March 2020 due to the COVID-19 pandemic, which led to cancellation of the construction portion of the contract. The delivered equipment and materials will be installed by another contractor.

CRA Pumping Plants Circulation Water Systems

Each of the five CRA pumping plants has nine main pumps. Each of these pump units use cooling equipment to cool various components of the pump system that feeds from the plant's circulating water system. This system has a loop with branch connections and an isolation valve at each unit. The piping and the valves that supply the circulating water systems run through the entire length of the plants and are all from the original CRA construction. The piping and the valves are now showing signs of deterioration. They are clogged, corroded and leaking. This project will replace and upgrade the circulation water systems for each pumping unit. Additional scope may be added as a result of preliminary assessment to ensure reliable operation of the CRA pumping plants.

CRA Pumping Plants Crane Improvements

All five CRA Pumping Plants have a single overhead bridge crane which spans the motor room floor and a portable bridge crane for the individual pump bay below the motor room floor. These overhead cranes were installed in the pumping plants during the original CRA construction and have been in operation since 1939. The cranes are used to raise, shift, and lower main pump components and motors for maintenance and replacement. These cranes were rehabilitated in the late 1980s. They have now reached the end of their service life where spare parts for the original crane components are difficult to obtain or no longer available. Parts which were replaced in the 1980s are outdated and the electronic features are no longer supported by vendors. This project will replace all the overhead bridge cranes on the motor room floor and the portable pump-bay cranes below the motor room floor at all five pumping plants. The replacement includes the bridges, trolleys, hoists, drive trains, the system controls, and other associated support systems.

CRA Pumping Plants Delivery Line Rehabilitation

Each of the nine main pumps at the five CRA pumping plants discharges the water into individual six-foot diameter discharge lines. The nine discharge lines then merge and transition into three 10-foot diameter pipelines, Delivery Line Nos. 1, 2 and 3, that convey flow to the top of the lift and then discharge into a headgate structure which empties the water into the next section of the aqueduct. These delivery lines vary in length from 500 feet to 1,400 feet up steep and rocky slopes. The five Delivery Line No. 1s were constructed in the 1930s and were lined with coal tar enamel to protect the interior of the pipe from corrosion. After 82 years of service, the existing coal tar enamel lining on Delivery Line No. 1 at each plant is cracking, flaking, and the steel is starting to corrode. The mortar linings for Delivery Line Nos. 2 and 3 are still in good condition and do not require repair.

Additionally, depending on the length of each delivery line, there are a total of three or four expansion joints located along the line. These expansion joints are deteriorated and showing signs of corrosion. A number of the most deteriorated joints have been rehabilitated recently. This project provides a comprehensive rehabilitation of the remainder of delivery lines at each of the five CRA pumping plants, including replacement of the coal tar enamel with a cement mortar lining, expansion joints, and minor coating repairs.

CRA Pumping Plant Public Address and Alarm Communication System Upgrades

The existing communication signals at each of the five CRA pumping plants are currently separated into different systems including: the public address system; plant alarms; evacuation, fire, and carbon dioxide alarms; and phones. The signals in these systems were originally installed to utilize the existing 1930's era phone line systems and is becoming increasingly difficult to maintain as replacement parts are becoming harder to find and troubleshooting is difficult. This project will replace the existing communication systems with a new integrated and modernized auditory communication system with alarms that are able to be identified based on different distinct alarm tones. Signal wires will be routed to a network enabled public address and general alarm system and new speakers will be added at each plant to improve ability to hear audible alarms throughout the plants, even when loud pumps are operating. This is a new project for this budget cycle.

CRA Pumping Plant Pump Lower Guide Access Improvements

At each of the CRA pumping plants, maintenance staff performs a monthly inspection of the lower guides below each main pump. The access hatch utilized for this inspection is located about twenty feet above the deck and situated where it is difficult for workers to reach and inspect the lower guides. This project will design, fabricate, and install a total of 45 new work platforms/mezzanines to improve safety and to facilitate the routine inspections. This is a new project for this budget cycle.

CRA Pumping Plant Rollup Door and Window Replacements

Over the past 80 years, the desert has taken its toll on the windows and rollup doors at all five CRA pumping plants. Many windows can no longer be opened, making it difficult to keep the main pump motors cool on 120-degree summer days. And the rollup doors in the pumphouses and head gate structures require continual maintenance to keep them operable. This project will replace these building features while remaining consistent with architectural standards. This is a new project for this budget cycle.

CRA Pumping Plants Water Treatment Systems Replacement

All five of Metropolitan's Pumping Plants are located in remote areas of Riverside and San Bernardino Counties where municipal water treatment systems are not available. Each plant is instead served by a community on-site water treatment system. These on-site treatment systems are skid-mounted membrane filtration units that include a strainer, a pair of activated carbon vessels, and a domestic water storage tank. These systems have been in continuous operation for almost 30 years and now suffer from frequent membrane and pipe failures. This project will replace the skid-mounted water treatment systems in its entirety including replacement of water quality monitoring instrumentation and laboratory equipment, upgrading electrical and instrumentation control systems for the disinfection system, construction of a temperature-controlled building to house GAC vessels and disinfection equipment, and construction of ancillary support systems.

CRA Pumping Plant Reservoir Spillway Auto Rejection - Iron Mountain and Eagle Mountain

The Iron Mountain and Eagle Mountain Reservoirs are located on the upstream side of the Iron Mountain and Eagle Mountain pumping plants, respectively. The reservoirs dampen fluctuations in flow between the five pumping plants. Each reservoir contains a spillway which allows discharge of water to the desert in the event of a power outage of the main pumps. The two spillways were designed in the 1930s to safely reject up to approximately 1,200 cubic feet per second (cfs). The pumping plants were expanded in the 1950s and the aqueduct can now operate up to approximately 1,750 cfs. Rejection of flows greater than 1,200 cfs would cause uncontrolled release of water at these two reservoirs, which could damage nearby facilities and public roads or property. This project will modify the reservoir spillways to allow safe rejection of up to 1,750 cfs of water in the event of a power outage of the main pumps.

Erosion and Drainage Control Protection for CRA Switchracks and Ancillary Structures

The five CRA pumping plants are located in remote areas of the California desert which are periodically subjected to flash floods that carry high volumes of water, silt, and debris. During major storm events, the pumping plants' pump houses and support facilities are susceptible to flooding and deposition of silt and debris. In recent years, at several of the plants, debris flows have affected various critical electrical facilities. This project will include site grading, addition of perimeter drainage channels to intercept offsite flows, upsizing of storm drain culverts and extension of patrol roads to access the new storm drain facilities for maintenance. Additional scope may be added as a result of preliminary assessment to ensure reliable operation of the CRA pumping plants.

Gene and Intake Pumping Plant Outlet Structure Gate Rehabilitation

Each of the five CRA pumping plants has nine main pumps that lift water from the pump house through a series of converging delivery lines that convey water from the pump house to a headgate structure located at the top of a hill. These structures then convey water to the downstream portion of the aqueduct. Flow from each headgate structure is regulated by three nine-foot square steel gates. Recent inspections at the Intake and Gene pumping plants have revealed that the protective coatings on various components of the gates have begun to crack and peel. This project will recoat the headgate structure outlet gates at the Intake and Gene pumping plants in order to prevent metal loss due to corrosion. Additional scope may be added as a result of preliminary assessment to ensure proper operation and maintenance of the outlet gates.

Hinds Pumping Plant Discharge Valve Pit Platform Replacement

At each of the CRA pumping plants, water is pumped from the plants' intake manifold through the main pumps and out of the discharge valves. From the discharge valves, water travels through the delivery lines and into the aqueduct. The discharge valves are located in small concrete pits below the pumping plant floor room. At the Hinds Pumping Plant, the concrete pit is equipped with a raised platform due to the deep pit. The platform is necessary to maintain the discharge valve's ancillary equipment. After over 77 years of service in a humid environment created mainly from the pump cooling water discharge, the metal platform has corroded significantly and needs to be replaced. This project will replace the discharge valve platform and relocate cooling water discharge piping in all nine discharge pits at the Hinds Pumping Plant. Additional scope may be added as a result of preliminary assessment to replace the platform that will ensure the safety of the workers as well as improving access to maintain the discharge valves.

Iron Mountain, Hinds & Eagle Mountain Hazardous Waste Containment

Hazardous wastes such as chemicals, oil, paint, paint thinners and antifreeze are generated through routine operations at the Iron Mountain Pumping Plant. Hazardous wastes are collected and placed into either metal or plastic drums ranging in size from five to 55 gallons. The existing hazardous wastes are then stored in a fenced temporary storage area. This project will replace the existing hazardous waste storage facility with a code-compliant hazardous waste storage facility.

Seismic Upgrades of CRA Support Facilities

A recent initial seismic risk assessment has revealed that several CRA support structures may be vulnerable from a major seismic event. These support structures include office and maintenance buildings, guest lodges, and dining and recreation halls located at Hinds, Eagle Mountain, Iron Mountain and Gene Pumping Plants. This project will perform detailed seismic assessments and retrofit the support structures if necessary.

CRA - Other Project Group**Copper Basin Reservoir Discharge Valve Rehabilitation & Meter Replacement**

The Copper Basin Reservoir provides critical storage that enables flowrates along the CRA to be stabilized and controlled. If the reservoir needed to be drained rapidly in the event of an emergency, the discharge valves located at the base of the dam would be opened to safely release the water. Following 72 years of continuous service, the valves have begun to leak and need to be replaced. The dam is under the jurisdiction of the California Division of Safety of Dams (DSOD), which requires that the discharge valves be fully operational at all times. The project scope includes replacement of the fixed cone valves at the base of the dams; refurbish hydraulically operated gate valve, repair pipes, upgrade of the electrical and control systems; install cathodic protection system, replace ladders on the dam, and improve access road to safely enable construction personnel, materials, and equipment to reach the work site.

In order to determine how much water is released to downstream pumping facilities, flow out of the Copper Basin Reservoir is measured at the entrance to Whipple Mountain Tunnel. Flow meters were installed at this location to collect information that is used to adjust the flow rate through the Copper Basin Reservoir outlet gate and the flow rates at each pumping plant, and to determine the amount of chlorine injected into the CRA to control quagga mussels. The existing flow transducers and meters were installed in 2007 and must be replaced to ensure reliable CRA water deliveries. This project will replace the flow meters, transducers, and cabling in the CRA's Whipple Mountain Tunnel.

CRA Copper Basin Road Improvements

The Copper Basin road provides operational access to the facility, and notably enables critical sodium hypochlorite deliveries used to disinfect the downstream CRA facilities, preventing growth of quagga and zebra mussels. This existing access road is commonly closed for maintenance after a storm event, so sodium hypochlorite tankers are unable to make deliveries. Among other improvements, this project will improve the 4.2-mile dirt road by providing an enhanced driving surface, erosion protection, and adding turn-out areas. This is a new project for this budget cycle.

CRA Desert Region Security Improvements

CRA facilities are critical components of Metropolitan's water delivery system. These facilities include five pumping plants and the El Camino Electrical Substation. These facilities have inadequate perimeter fencing. This project will install physical security improvements such as fencing, signage, cameras, motion detectors, remote speakers, card readers, and lighting at Metropolitan's CRA pumping plants and at the El Camino Electrical Substation. This project will also include road and access control improvements at the main entrances to the pumping plants and integration of security devices with Metropolitan's security system. Construction of permanent guard stations will be also considered.

CRA Erosion Protection

The CRA is comprised of 55 miles of cut-and-cover conduits. The cut-and-cover conduits are arch or horseshoe shape, unreinforced, cast-in-place concrete. In most locations along the CRA, the overlying soil protects the cut-and-cover conduits from rock and debris flows. However, at narrow ravine crossings, heavy storm events often erode the soil and expose the conduits making them vulnerable to structural damage from the rock and debris flows. This project will provide erosion protection features such as gabion structures or concrete slabs; including grading of the eroded areas to protect the conduit. In addition, diversion berms or concrete swales will be constructed to divert storm flows over the concrete slabs.

CRA Pumping Plant Storage Buildings at Hinds, Eagle Mountain and Iron Mountain

Between 1950 and 1955, several metal-sided buildings with timber frames were built at the CRA pumping plants to store equipment, spare parts, and maintenance supplies. Two of these buildings have been replaced at the Gene Pumping Plant; however, four original buildings still remain in service. These buildings have deteriorated after 67 years of service in the harsh desert environment and no longer seal properly to prevent rain and dust from entering the interiors. This project will replace the four remaining deteriorated storage buildings and add asphalt paving leading to and around each of the buildings. As part of the design considerations, an assessment will be conducted to determine space requirements for storage of equipment and parts to support ongoing maintenance activities and upcoming capital rehabilitation work at the pumping plants.

CRA Village Water, Sewer & Asphalt Replacement

All five of Metropolitan's pumping plants are located in remote areas of Riverside and San Bernardino Counties where municipal water distribution systems are not available. Each plant is instead served by a community on-site water treatment system. Water from the CRA is treated and conveyed to each village house and to the industrial portions of the pumping plants through a gravity-fed water distribution system which consists of distribution piping, isolation valves and valve boxes. Recent inspections of the distribution systems have found blockages, leaks, taste and odor problems, and root intrusion. This project will replace the domestic water distribution systems at all five CRA pumping plants which include the main line pipes, building laterals, new backflow prevention devices, valves, meters, remote water quality analyzers, and other appurtenances to deliver quality water reliably.

Municipal wastewater collection and treatment facilities are not available where the pumping plants are located. The pumping plants are served by community on-site wastewater systems. These on-site systems collect, treat, and dispose of domestic wastewater generated from bathrooms, kitchen facilities, maintenance buildings, guest lodges, and staff residences at the plants. The on-site systems consist of three primary components: community septic tanks and leach fields; collector lines located throughout the pumping plants which convey wastewater to the septic tanks; and sewer laterals which convey wastewater from individual buildings to the collector lines. The existing wastewater systems at the plants have deteriorated through continual use and need to be replaced. This project will replace the wastewater systems at the pumping plants. The systems will include new main-line pipes, building laterals, septic tanks and leach fields, and other appurtenances to reliably collect and treat wastewater.

The asphalt roadways at the pumping plants provide access between buildings and the villages for Metropolitan staff, residents, and visitors. There is a total of approximately 30 acres of asphalt-paved roadways and surfaces at all five pumping plants, and these asphalt surfaces are over 30 years old. Due to the harsh desert conditions and deterioration of the subgrade over time, potholes and cracks have developed throughout the villages. The planned upgrades to the roadway pavement include placement of a new layer of asphalt on less distressed areas throughout the CRA villages; removal and replacement of more heavily damaged roadways; and grading and installation of culverts to improve drainage.

Gene Wash Reservoir Discharge Valve Rehabilitation

The Gene Wash Reservoir provides critical storage that enables flowrates along the CRA to be stabilized and controlled. If the reservoir needed to be drained rapidly in the event of an emergency, the discharge valves located at the base of each dam would be opened to safely release the water. Following 70 years of continuous service, the valves have begun to leak and need to be replaced. The dam is under the jurisdiction of the California Division of Safety of Dams (DSOD), which requires that the discharge valves be fully operational at all times. The project scope includes replacement of the fixed cone valves at the base of the dam; refurbish hydraulically operated gate valve, repair pipes, upgrade of the electrical and control systems; install cathodic protection system, replace ladders on the dam, and improve access road to safely enable construction personnel, materials, and equipment to reach the work site.

Intake Pumping Plant Road Improvements

The 1.75-mile long asphalt access road into the Intake Pumping Plant travels between a large hill and Lake Havasu. At approximately the midpoint of the access road, it crosses a culvert that drains storm runoff from the hillside into the lake. This culvert is undersized, has partially collapsed, and fills with debris from an unlined wash during rain events. After rain events, Metropolitan staff must clear debris from the culvert in order to prevent rain water from overtopping the culvert and eroding the access road. This project will replace the existing culvert with a new culvert and deteriorated portions of the asphalt road. The project will also add traffic safety rails along the road to enhance safety.

Cost Efficiency and Productivity Program

Fiscal Year 2022/23 Estimate: \$15.6 million

Fiscal Year 2023/24 Estimate: \$12.6 million

Program Information: The Cost Efficiency and Productivity Program is comprised of projects to upgrade, replace, or provide new facilities, software applications, or technology, which will provide economic savings that outweigh project costs through enhanced business and operating processes. Projects that address climate change in addition to providing the economic savings are also included.

Accomplishments for FY 2020/21 and FY 2021/22

- New projects initiated:
 - Diamond Valley Lake Floating Wave Attenuator Expansion
 - Incident Reporting System
 - Jensen, Skinner, and Weymouth Battery Energy Storage Systems
 - Real Property Group Business System Replacement
 - Service Procurement Implementation
 - WINS Water Billing System Upgrade
- Major milestones achieved:
 - Budget System Replacement – deployment completed
 - Diamond Valley Lake Floating Wave Attenuator Rehabilitation – construction completed
 - Incident Reporting System – deployment completed
 - MWDH2o.com Redesign – main site redesign and deployment completed
 - Project Controls and Reporting System – deployment completed

Objectives for FYs 2022/23 and 2023/24

Project	Total Project Estimate	Estimated Construction Completion	Major Milestones
Diamond Valley Lake Floating Wave Attenuator Expansion	\$ 4,300,000	2024	Complete Construction
Digital Assets Optimization	\$ 1,500,000	2023	Complete implementation
Enterprise Content Management	\$ 11,000,000	2023	Complete deployment
Jensen, Skinner, and Weymouth Battery Energy Storage Systems	\$ 15,000,000	2023	Complete construction
MWDH2o.com Redesign	\$ 1,900,000	2022	Complete deployment
Payroll-Timekeeping Reimplementation	\$ 1,500,000	2024	Begin project
Real Property Group Business System Replacement	\$ 740,000	2022	Complete deployment
WINS Water Billing System Upgrade	\$ 3,600,000	2023	Complete deployment

Cost Efficiency & Productivity - Other Project Group

Jensen, Skinner, and Weymouth Battery Energy Storage Systems

In 2020, Metropolitan completed the Energy Sustainability Plan effort to identify new projects and initiatives within the Energy Management Policies' framework. The plan combined an analysis of Metropolitan's electricity charges and a holistic multi-criteria decision analysis framework, in which potential projects were vetted against a range of future scenarios based upon historical water and power demands and time-of-use tariff updates. Through this effort, battery energy storage systems (BESS) facilities at the Jensen, Skinner, and Weymouth plants were recommended for near-term implementation.

BESS is a peak-load reduction technology, which stores energy during off-peak hours and discharges stored energy for use during peak hours. This system will be paired with existing solar facilities of which the excess solar energy will be stored for later use instead of sending this energy to the nearby off-site electrical grid. The construction of the BESS facilities will enable Metropolitan to reduce exposure to energy price volatility, electrical supply reliability, improve operational reliability and resiliency, and support Metropolitan's Climate Action Plan by reducing greenhouse gas emission. The cost of this project will be offset by incentives from the Self-Generation Incentive Program, which is administered by California Public Utilities Commission.

Weymouth Energy Management Dashboard

In 2020, Metropolitan completed the Energy Sustainability Plan (ESP) proposing an adaptive energy management strategy to: contain costs and reduce Metropolitan's exposure to energy price volatility; increase operational reliability and flexibility; move Metropolitan towards energy independence and sustainability; and support Metropolitan's Climate Action Plan effort to reduce greenhouse gas emissions (GHG). In support of that effort, this new project will develop and implement a comprehensive energy monitoring system that will bring access, awareness, and knowledge to operations staff regarding energy usage and cost of the water treatment process, promote sustainable operational decision making, and reduce energy costs at Weymouth plant and other Metropolitan facilities at the La Verne site. This is a new project for this budget cycle.

Yorba Linda Power Plant Power Supply to Diemer Water Treatment Plant

This project will modify the Yorba Linda Power Plant to directly supply power to the Diemer Water Treatment Plant and sell excess power to the wholesale energy market. The scope of work includes installation of new 4.16 kV feeder between the power plant and the Diemer switchgear, breakers, power meters; reprogramming of programmable logic controllers; and modification of switchgears and auxiliary equipment.

DVL Recreation - New/Improvements Project Group

Diamond Valley Lake East Marina Utilities

Diamond Valley Lake (DVL) offers recreational opportunities to the region including boating, fishing, hiking, and biking. The facility supports 4,500 acres of on-water activity, 28 miles of trails, and 13,500 acres of protected open space. This project will extend the existing water, sewer, gas, and communication facilities from the intersection of Searle Parkway and Angler Avenue to the DVL East Marina to support existing operations and future development. The construction of the new infrastructure will replace existing failing tanks which are filled with trucked-in water to service the Marina store, enhance utility service reliability, and serve to comply with flows and pressures required to develop the Marina into a self-sustainable recreational facility.

Diamond Valley Lake-Lake Skinner Trails

This project will create a regional network of trails connecting DVL and Lake Skinner as identified in the DVL Memorandum of Intent. The Lakeview Trail and North Hills Trail at DVL and certain trails at Lake Skinner already exist. Metropolitan jointly funded a trails study with Riverside County Regional Park and Open-Space District to investigate trail alignments connection feasibility through a Consultant agreement. The proposed trail alignments minimize impacts to the Southwestern Riverside County Multi-Species Reserve and link DVL and Lake Skinner using existing roads to the greatest extent possible. Trail uses under consideration include hiking, bicycling, and horseback riding.

DVL Recreation - Refurbishment & Replacement Project Group**Diamond Valley Lake Boat Dock Anchoring System Replacement**

The boat dock anchoring system at the Diamond Valley Lake (DVL) marina is over 15 years old and past its service life. Recently, one cable failed and other cables are deteriorating rapidly. The anchor cables run from the top of the boat launch ramp, through the floating boat docks, and terminate at the anchor blocks on the lake floor to secure and stabilize the marina docks for individuals boarding and disembarking vessels. Some of the cables were replaced in 2015 due to the need to extend the boat launch ramps but the remaining system components such as the anchor blocks were not addressed. This project will redesign and replace the DVL marina boat dock anchoring system consisting of galvanized steel cables, associated connectors, anchor blocks, and associated dock components to ensure the continued operation of the boat launching facilities at the marina. This is a new project for this budget cycle.

Diamond Valley Lake Domestic Water System Improvements

Potable water used in the Diamond Valley Lake (DVL) facility is conveyed through a 16-inch water pipeline, sized to meet fire system demand. This configuration is oversized for domestic water usage and often results in low chlorine residual levels that requires regular flushing of the system. A volume of approximately 700,000 gallons of potable water is flushed into the DVL Forebay each month to ensure adequate disinfectant is available to inactivate pathogens and prevent recontamination. This project will install approximately 2,500 linear feet of 4-inch domestic water pipe to convey potable water to the DVL facility to address the ongoing low chlorine residual caused by high detention time in the existing larger diameter potable water line that currently serves the facility. This is a new project for this budget cycle.

Diamond Valley Lake Floating Restroom Replacement

The floating sanitation facilities at Diamond Valley Lake (DVL) are 18 years old and are at the end of their service life. Restroom equipment requires constant maintenance, particularly because failure of the holding tanks could lead to sewage leaking into the reservoir. New facilities would eliminate these concerns. This project is also needed for Metropolitan to continue to provide operable floating restroom facilities to recreational boaters in accordance with the Recreation Activity Plan approved by the Department of Drinking Water. This is a new project for this budget cycle.

Diamond Valley Lake Floating Wave Attenuator

The existing floating wave attenuator (FWA) has been operational since 2006 as part of a two-phase approach. Phase 1 was completed by installing one 800-foot FWA. Phase 2 was to provide an additional attenuation system but was not implemented. Water levels at Diamond Valley Lake have fluctuated with severity and frequency for the last several years due to draw-down activities during drought conditions, then rebounding during the rainy seasons. Due to age and changing conditions, the concrete sections of the FWA have significantly degraded and the reinforcing bars are exposed to the elements which have accelerated corrosion of the existing FWA system. The original FWA has been refurbished to original condition in Spring of 2021. This project will construct additional attenuation system.

IT - Business Support Project Group

Digital Asset Optimization

The Digital Asset Optimization project will remove redundant, obsolete and trivial (ROT) information from files on Metropolitan's network files shares (NFS). This work is being performed to allow for more effective and efficient searching and collection of information as it pertains to public requests, legal holds and other Metropolitan needs for information. Additionally, the data will be categorized, and metadata captured for easier retrieval capabilities.

Enterprise Content Management

The Enterprise Content Management (ECM) application will classify and manage electronic documents and other media to allow for easy retrieval, review, and destruction of information in accordance with Metropolitan's records retention schedule. In addition, the new ECM application will allow Metropolitan to more effectively and efficiently manage its digital asset needs for business needs to respond to requests under the California Public Records Act (CPRA), and for eDiscovery purposes, and will automate compliance with records retention policies. This project includes designing a taxonomy for storing unstructured data and the development of a thesaurus to support the implementation of Metropolitan's ECM application. Phase I has been initiated. Phase II of this project completes the design and delivers the initial deployment of the enterprise content management software into the Metropolitan environment. The system will allow for the organization, collaborations and automated enforcement of records retentions policies to non-structured electronic media. The final phase III will deliver the balance of the deployment of the enterprise content management software throughout Metropolitan.

HR Information System Improvements

With the future of Metropolitan's hybrid working environment (telecommute & onsite) initiatives, improved self-services are needed that require less printing, secured electronic transactions, and allowing proper approvals from managers, while working remotely. This project will enhance the current Human Resource (HR) interface with mobile interface capabilities, enhance the Manager Self-Service Module; and implement a new Performance Management Module. This system will provide employees and managers the tools and technology to improve business operations, promote collaboration, and enhance workforce productivity by simplifying access to HR information. This is a new project for this budget cycle.

MWD Intranet Upgrade

The Intranet is a restricted and internal network that enables Metropolitan employees to store, share, and organize information. Initially developed in 1997, the Intranet is built on technologies which have become obsolete. This project will replace Metropolitan's Intranet with newer technologies to serve as a central hub that performs a broad range of purposes which the current Intranet site is not able to. This includes cloud-based file sharing, document management, content management, inclusion of social technology, employee profiles, live messaging, forums, status updates, and Group sites coupled with published data catalogs to allow data sharing which is accessible from any type of device such as laptop, tablets, and mobile phones. This is a new project for this budget cycle.

MWDH2o.com Redesign

The existing website will be replaced with a new site offering more functionality and capability to spread Metropolitan's mission of providing water to Southern California.

MyWarehouse Shopping Cart Replacement Project

Staff currently uses an outdated system for checking availability and acquisition of Metropolitan owned inventory items that lacks an easy-to-use interface and integration with financial systems. The proposed innovative system will provide staff with a fully integrated, "Amazon-like" user experience to improve efficiency of field, warehouse, and financial staff in checking the inventory in real-time, advance ordering of items in low inventory, and by allowing mobile device capability. This is a new project for this budget cycle.

Oracle Database Upgrade

Metropolitan currently owns over 50 Oracle databases containing critical systems that will no longer be supported after December 2022. Any database affected by a performance or security issue would have to be removed from the production environment, rendering the associated application inoperable. This project will upgrade all the associated Oracle databases and update or reconfigure the connection points of all affected applications. This is a new project for this budget cycle.

Oracle EBusiness Suite Upgrade

Metropolitan's Oracle e-Business Suite (EBS) is an integrated set of business applications for automating Metropolitan's financials, procurement, project management, and grants management activities. Metropolitan's e-Business Suite was last upgraded in 2016 and since then, the technology has been superseded by newer hardware, operating systems, and Oracle database versions. This project will upgrade soon-to-be unsupported, end-of-life EBS to the newer version with more functionality and capabilities. This is a new project for this budget cycle.

Payroll-Timekeeping Reimplementation

This project will re-implement PeopleSoft payroll and will replace the current timekeeping software with a package that provides better integration with the payroll software and a better user interface. The current payroll and timekeeping applications both have deficiencies that have caused significant compensation issues for employees and have resulted in the need for excessive manual corrections by payroll staff. This project will enhance workforce productivity by simplifying access to business information and will maintain sound business practices and fiscal integrity.

Real Property Group Business System Replacement

This project will select and implement a new cloud-based solution for the Real Property Group (RPG). The new solution will replace existing software to streamline planning, tracking, execution, and compliance management of Real Property business processes for both the Planning and Acquisition, and Land Management Unit(s). RPG's goal is to centralize the disparate, stand-alone applications and processes, and migrate existing data into one integrated system to increase productivity and improve business processes.

Services Procurement Implementation

In the current Oracle Business Suite (EBS), it is difficult to automate and record certain transactions such as retention payments, Stop Notices, and Liquidated Damages. These transactions are tracked separately by Finance and Engineering. The Oracle on-premise Service Procurement Module is part of the Oracle E-Business Suite. The module automates retention transactions at the time of payment, and can, through customization, accommodate the need to hold other payments as liabilities in the General Ledger (GL).

This project will implement the Oracle Service Procurement Module, as part of the Oracle E-Business Suite, to automate retention or other withholdings required as liabilities in the GL.

Supplier Portal Implementation

This project will implement Oracle's web-based Supplier Portal, which provides self-service capabilities to Metropolitan's supplier community. Suppliers have access to a secure area that provides complete visibility to transactions, including purchase orders, payments and planned payments, offers collaboration with Metropolitan staff, and allows the electronic submission of invoices and other documents. The implementation of the portal will reduce repetitive inquiries from vendors, saving staff time and reducing vendor frustration.

Water Planning Application Upgrade

Water planning staff makes decisions every day that affect storage, cost, and movement of water within our system. The current software tool used is inefficient and obsolete, which was initially launched more than 20 years ago and last partially updated in 2008. This project will replace the existing water planning application with a new cloud-based application, which will build a foundation needed for innovative solutions addressing water supply and operational challenges. The new application will also be able to automate the process of gathering, categorizing, cleaning, validating, and reporting of critical data used by planners and meet today's cyber security standards. This is a new project for this budget cycle.

WINS Water Billing System Upgrade

The Water Information System (WINS) bills Metropolitan's member agencies, on a monthly basis, for approximately \$75 million. WINS is known as Metropolitan's "cash register". The custom application is over 10 years old and needs to be updated. The billing logic is complicated and "hard-coded" into the application, requiring assistance from Metropolitan's Information Technology to make even minor modifications, such as adding new meters or programs. Member agencies have also requested additional functionality. This project will replace the WINS to add needed enhancements to the system to add security and functionality for both Metropolitan and member agencies.

Dams and Reservoirs Improvements Program

Fiscal Year 2022/23 Estimate: \$5.3 million

Fiscal Year 2023/24 Estimate: \$44.7 million

Program Information: The Dams & Reservoirs Improvements Program is comprised of projects to upgrade or refurbish Metropolitan's dams, reservoirs, and appurtenant facilities in order to reliably meet water storage needs and regulatory compliance.

Accomplishments for FY 2020/21 and FY 2021/22

- New projects initiated:
 - Live Oak Reservoir Rehabilitation
 - Live Oak Reservoir Emergency Dewatering System Upgrade
 - Weymouth Finished Water Reservoir Rehabilitation
- Major milestones achieved:
 - Lake Skinner Butterfly Valve Replacement – preliminary field investigations completed
 - Mills Finisher Water Reservoir Rehabilitation – preliminary design completed

Objectives for FYs 2022/23 and 2023/24

Project	Total Project Estimate	Estimated Construction Completion	Major Milestones
Diamond Valley Lake Dam Monitoring System Upgrades	\$ 10,000,000	2025	Begin construction
Jensen FWR # 2 Floating Cover Replacement	\$ 8,600,000	2025	Complete design
Mills Finished Water Reservoir Rehabilitation	\$ 17,000,000	2026	Complete design
Lake Skinner Outlet Tower Seismic Upgrade	\$ 170,000,000	2022	Begin design
Live Oak Reservoir Rehabilitation	\$ 9,300,000	2026	Begin construction

Dams & Reservoirs - All Project Group

Dam Monitoring System Upgrades at Lake Mathews and Lake Skinner

Metropolitan relies on extensive instrumentation and regular inspections as a cornerstone of its dam monitoring program. The instrumentation provides warning signs of dam distress and provides real-time monitoring of the embankments and foundations. Extensive monitoring equipment has been installed at Lake Skinner and Lake Mathews over the last 46 years and 81 years, respectively. Recent inspections have noted that several of the piezometers and weirs at these facilities no longer function reliably and require rehabilitation or replacement.

Field surveys and condition assessments will be conducted at both dams to develop a staged replacement schedule. Based on the results of the assessments, installation of automated dam monitoring systems and upgraded communications system with remote monitoring units at each dam may be required. This project will also rehabilitate embankment surfaces to address erosion and surface drainage issues.

Diamond Valley Lake Dam Monitoring System Upgrades

The three rock-fill dams which form Diamond Valley Lake (DVL) are monitored continuously by the facility's geodetic deformation monitoring system, which transmits real-time displacement data to Metropolitan's Headquarters at Union Station and to the Operations Control Center at Eagle Rock. This data is collected to provide early indication of a potential problem within the dam embankments or foundations, and to prepare mandatory reports on the dams' performance for submission to DSOD. After 19 years of continuous operation, the existing monitoring equipment has deteriorated and needs to be replaced. The planned upgrades will maintain the capability to continuously monitor dam performance in compliance with the DSOD operating permit.

Upgrades to the dam monitoring network at DVL will be accomplished in three stages. Stage 1- procurement and installation of the weir level sensors and strong motion accelerographs; Stage 2 - design and preparation of procurement documents for the geodetic deformation monitoring system; and Stage 3 - design and procurement of automated data acquisition system, upgrades to the communication network, and replace remote monitoring units and ancillary equipment. Stages 1 and 2 have been completed. Stage 3 will be accomplished in two phases. Phase 1 will upgrade the West Dam area and Phase 2 will upgrade the East Dam and Saddle Dam areas.

Diemer FWR Slope Protection Improvements

The California Division of Safety of Dams' annual inspection of the Diemer Finished Water Reservoir (FWR) noted that the existing dense vegetation on the abutting slope was obscuring dam safety inspections and providing shelter for burrowing rodents. This project will remove the existing 2.5-acre dense vegetative ground cover on the embankment slopes of the Diemer FWR and rehabilitate the embankment surface with a new slope protection system that minimizes surface erosion, prevents rodent burrowing, and maintains the stability and integrity of the reservoir embankment slopes. This is a new project for this budget cycle.

Etiwanda Reservoir Rehabilitation

The Etiwanda Reservoir has been in operation for 28 years. The liner and appurtenances are in need of refurbishing to maintain their integrity and prevent excessive seepage as noted during periodic inspections. This project will rehabilitate the reservoir by replacing the reservoir liner with a geomembrane liner, replacing the sub-drain sump pump system, and installing new electronic monitoring instrumentation and equipment to better monitor operational status of the sump pump system. The project scope will also include inspection, evaluation, and rehabilitation or replacement of: (1) the asphalt pavement for the reservoir perimeter roads and parking lot; and (2) various valves and gates.

Garvey Reservoir Rehabilitation

Garvey Reservoir was placed into operation in 1954. It is located at the junction of the Middle Feeder and the Garvey-Ascot Cross Feeder in the city of Monterey Park. Garvey Reservoir provides hydraulic grade stabilization, pressure relief, and operational and emergency storage for the Central Pool portion of the distribution system. A flexible membrane liner and reservoir floating cover were installed in 1999. The service life of a reservoir floating cover is approximately 20 years. The existing floating cover at Garvey Reservoir has become increasingly difficult to repair and needs replacement.

This project will replace the reservoir's aging floating cover and flexible membrane liner. In addition, this project will remove the existing inlet/outlet tower and construct new inlet/outlet facilities; modify circulation piping; replace the standby generator and upgrade the electrical system; replace/repair perimeter and security fences; improve surface drainage and erosion controls; replace the outdated on-site water quality laboratory building; install additional sodium hypochlorite storage tank plus containment and appurtenances; replace valves at the junction structure; construct on-site storage building for equipment and tools; and other improvements necessary to rehabilitate the reservoir and support facilities.

Gene Wash and Copper Basin Dams Safety Monitoring Improvements

The Copper Basin and Gene Wash Dams are in a very remote area with difficult access requiring four-wheel drive vehicles and boats. Both dams are visually inspected twice per year by Engineering Services including the annual inspection by the California Division of Safety of Dams (DSOD). This project will improve the safety monitoring system at the Gene Wash and Copper Basin dams to maintain compliance with DSOD regulations and Metropolitan's ability to detect dam safety issues in a timely manner. The project scope includes installation and implementation of a modern dam monitoring system that utilizes automatic data acquisition system (ADAS) for continuous monitoring. This project also will perform dam concrete condition assessments, geological evaluations of dam abutments, inspection, survey, and stability analysis. This is a new project for this budget cycle.

Jensen Finished Water Reservoirs Refurbishment

The Jensen plant has two 50-MG finished water reservoirs. Reservoir No. 1 is a concrete structure with a concrete roof that was completed in 1972. The concrete roof of Reservoir No. 1 has a bituminous built-up roofing system and lightweight concrete cap made of perlite. Portions of the perlite cap have deteriorated over time due to weathering. Any further deterioration may result in ponded rainwater leaking into the reservoir, leading to the reservoir being removed from service in order to maintain treated water quality. The rehabilitation work will replace the damaged perlite with a thin concrete layer, which will extend the cover life for approximately 20 years. This project will also install bollards with daisy chain around the reservoir to prevent vehicles from entering the top of the reservoir and other improvements necessary to complete the refurbishment of the reservoir.

Reservoir No. 2 has a polypropylene floating cover that was installed in 1997. The floating cover at Reservoir No. 2 is showing significant signs of wear and needs to be replaced. In addition, modifications to the Reservoir No. 2 inlet are needed, as turbulent flow at the inlet has torn holes in the floating cover on several occasions near the corners of the fixed metal air vents. The rehabilitation work will include installation of a new finished water reservoir liner and floating cover with a rainwater removal system, improvement of the existing inlet configuration, modification of plant domestic water system connection, refurbishment of the effluent gate and dewatering system, replacement of instruments and flow meters, installation of diffuser system to enhance mixing, replace perimeter fence, and other improvements necessary to complete the refurbishment of the reservoir.

Within both reservoirs, inadequate mixing contributes to chloramine decay, which in turn increases the nitrite levels within the reservoirs and downstream distribution system. In accordance with the Water Quality Action Response Guidelines, elevated nitrite levels will require additional monitoring, as they may result in bacterial regrowth, and may require operational changes to mitigate chlorine decay. This project will conduct a study of the mixing characteristics of Reservoirs Nos. 1 and 2 and will test and implement solutions for mixing improvements to enhance mixing and reduce the occurrence of nitrification within the reservoirs.

Lake Mathews Reservoir Dredging and Emergency Dewatering Facilities Lake Skinner Outlet Tower

Sediment has accumulated in the reservoir since it was first built and filled in 1938. Sediment is a result of continual erosion within the Lake Mathews watershed and has led to increased turbidity at water treatment plants, reservoir storage loss, and plugged the main dam diversion tunnel into Cajalco Creek. In addition, the California Department of Water Resources, Division of Safety of Dams (DSOD), has specific outlet dewatering requirements for large dams/reservoirs that impound over 5,000 acre-feet of water. Although the current dewatering method at the forebay meets DSOD's requirement, there is a possibility that the Upper Feeder and Lower Feeder that take water from the forebay may be damaged and become unusable during a seismic event. It is now recommended to reestablish access to the diversion tunnel at the bottom of the main dam by dredging. This project will evaluate dredging options for Lake Mathews Reservoir. Dredging will remove decades of accumulated sediment that reduces reservoir storage capacity, contributes to decreased water quality, and blocks access to dewatering infrastructure at both Outlet Tower No. 1 and the main dam diversion tunnel. The evaluation will identify and prioritize dredging locations through bathymetric surveys and other remote methods, as well as identify mitigation options for the environmental hazards of dredging. The project will also determine the condition of the main dam diversion tunnel and all its mechanical equipment and perform a comprehensive refurbishment to restore its full function.

Lake Skinner Outlet Tower Butterfly Valve Replacement

The Lake Skinner Outlet Tower is a critical component of the Skinner plant and distribution system operations and is equipped with five tiers of submerged butterfly valves. The valves have been in operation for 45 years and are approaching the end of their service lives. Replacement parts are not available and must be custom fabricated. This project will replace or rehabilitate all the butterfly valves at the Lake Skinner Outlet Tower. Although there is a plan to potentially add a new outlet tower to Lake Skinner, improving the condition of the existing outlet tower valves will allow for operational flexibility and maintain operational reliability at the lake. This is a new project for this budget cycle.

Lake Skinner Outlet Tower Seismic Upgrade

Lake Skinner was constructed in the 1970s and is located in the city of Temecula, in Riverside County. Water is delivered from the lake through its outlet tower to the Skinner Water Treatment Plant. If the lake needed to be drained rapidly in the event of an emergency, the outlet tower would be used to safely release the water. The outlet tower is under the jurisdiction of the California Division of Safety of Dams (DSOD) which requires that the tower meet current seismic codes.

Metropolitan has an ongoing program to evaluate the seismic stability of its facilities in order to maintain reliable water deliveries and to meet current design practices and building codes. Under Metropolitan's seismic assessment program, staff conducted an initial assessment of the Lake Skinner Outlet tower. Seismic analyses of the Lake Skinner Outlet Tower have identified that the tower may be damaged during a major earthquake. This project will (1) replace two valves located at tier 5 of the outlet tower, which are currently not operational, (2) develop an emergency dewatering plan for DSOD's review and approval; and (3) conduct detail seismic evaluation of the tower, develop options to mitigate impacts to the tower, and to implement a preferred option to mitigate the seismic impact to the inlet/outlet operation.

Live Oak Reservoir Rehabilitation

The Live Oak Reservoir has a 2,500-acre-foot capacity and is located in the city of La Verne. The main purpose of the reservoir is to allow peaking of the Devil Canyon Power Plant and to provide for outages. The reservoir water surface controls the upstream hydraulic gradient for the San Dimas Hydroelectric Power Plant. An inspection identified the following: (1) several valves that are leaking; (2) the reservoir liner is damaged in several areas; (3) the emergency backup generator is no longer manufactured and parts are obsolete; (4) the existing HVAC system including the ductwork for the control room has exceeded its expected service life; (5) improvements to provide access control, intrusion alarm, and surveillance are needed; and (6) improvements to the grading, surface drainage, and paved roads adjacent to the Live Oak Reservoir are also needed. This project will replace leaking valves, reline the influent manifold with reinforced mortar, rehabilitate the fire loop, rehabilitate the existing asphalt concrete (AC) liner and install liner subdrainage system as necessary, replace the existing Emergency Standby Generator and hydraulic power pack unit, replace the existing Heating, Ventilation, and Air Conditioning (HVAC) system, improve surface drainage and erosion controls for the facility, identify and restore all electrical components to new condition or replace with new, including electrical, panel boards and grounding, sump pumps, and associated instrumentation, replace instruments in piezometer room, conduct a security assessment of the facility to reinforce or upgrade physical features and protect infrastructure, which includes replacement of the inner fencing for the reservoir with security type fencing, and other improvements necessary to rehabilitate the reservoir and support facilities.

This project will also improve the emergency dewatering system for Live Oak Reservoir. The project scope will include the design and construction of appurtenant structures such as gantry cranes for lifting spillway drop gates, an emergency generator to back up the crane power source, automation of valves, modification of spillway and blow-off structures, or addition of secondary discharge lines to provide a more direct, reliable, and efficient means to dewater Live Oak Reservoir in the event of an emergency.

Mills Finished Water Reservoir Rehabilitation

The Mills plant relies on two finished water reservoirs with floating covers and geomembrane liners to provide storage for the downstream distribution system. Their capacity is approximately 25 million gallons (MG) each. The Hypalon cover on Reservoir No. 1 was installed in 1997, while the polypropylene cover on Reservoir No. 2 was installed in 1996. Over the past five years, an increasing number of rips and pinhole leaks in the covers were discovered and repaired. Due to their deterioration, the floating covers and geomembrane liners at both reservoirs need to be replaced. The rehabilitation work will include installation of new finished water reservoir liners and floating covers with a rain removal system, refurbishment or replacement of existing reservoir gates, installation of a new drop gate, replacement of instruments and flow meters, evaluation of reservoir mixing and implementation of mixing improvements, installation of enhanced security features and rehabilitation of perimeter fences, and other appurtenances for both reservoirs.

Palos Verdes Reservoir Groundwater Management

This project will address long-term groundwater management at the Palos Verdes Reservoir. The project will evaluate monitoring and disposal options for groundwater seepage, install monitoring instrumentation, develop groundwater and stormwater handling systems, if needed, and provide a connection to the sewer.

Spillway Upgrades - Lake Mathews and Lake Skinner

Following the incidents at Oroville Dam in 2017, the California Division of Safety of Dams (DSOD) is now requiring that dam owners in California assess the condition of dam spillways to confirm that they meet minimum safety standards. In July 2017, DSOD issued an initial list of 93 dams requiring comprehensive spillway assessments to evaluate hydraulic capacity, geotechnical stability, structural integrity, and potential erosion from dam releases. Of the 20 Metropolitan facilities that are permitted by DSOD, two have been directed to undergo the comprehensive assessments: Lake Mathews and Lake Skinner.

Metropolitan submitted the required work plans for re-evaluation of the spillways at Lake Mathews and Lake Skinner and received approval of those plans in September 2017. For each dam, a comprehensive spillway assessment report was prepared and submitted to DSOD for review. As part of these comprehensive assessments, re-evaluation of the outlet tower and conduit at Lake Skinner were performed to identify potential risks and vulnerabilities of lowering the reservoir pool after a major seismic event. Due to its integral role in withdrawing water from the reservoir, the spillway work plan will be expanded to include the Lake Skinner outlet tower and conduit. Based on the input from DSOD, the dam spillway and underdrain system will be rehabilitated.

Weymouth Finished Water Reservoir Rehabilitation

The Weymouth plant's 50-million-gallon finished water reservoir was built in 1964 to meet then-current building code. Because the finished water reservoir's concrete roof was constructed with no expansion joints, numerous cracks in the roof slab continue to open and close with the expansion/contraction cycles caused by daily fluctuation in temperature. Repair is required to protect the concrete and to prevent corrosion of the exposed reinforcing steel. In addition, a rapid seismic assessment conducted in 2000, indicated that the reservoir was marginally stable under seismic loading conditions of that time. Since then, seismic evaluations for the Weymouth facilities and revised building codes have indicated that greater ground motions should be considered.

This project will repair cracked and spalling concrete on the underside of the finished water reservoir roof slab, support beam connections, and entry staircase. The project will also perform seismic evaluation and any needed seismic retrofit to meet the latest DSOD standards.

Distribution System Reliability Program

Fiscal Year 2022/23 Estimate: \$51.2 million

Fiscal Year 2023/24 Estimate: \$12.8 million

Program Information: *The Distribution System Reliability Program is comprised of projects to replace or refurbish existing facilities within Metropolitan's distribution system, including reservoirs, pressure control structures, hydroelectric power plants, and pipelines, in order to reliably meet water demands.*

Accomplishments for FY 2020/21 and FY 2021/22

- New projects initiated:
 - 108th Street Pressure Control Structure Valve Replacement
 - Appian Way Valve Replacement
 - Etiwanda Pipeline Lining Replacement – Stage 3
 - Garvey Reservoir Drainage & Erosion Control Improvements – Areas 6, 7, 8, 10 and 11
 - OC-88 Pumping Plant Chiller Replacement
 - Palos Verdes Feeder - Long Beach Lateral Turnout Structure Sta. 1442+15 Valve Replacements
 - Rehabilitation of Metallic and Concrete Pipelines Phase 1 - Select High Priority Feeders
 - Rio Hondo Pressure Control Structure Valve Replacements
 - Rialto Pipeline Rehabilitation at Station 2986
 - San Diego Pipelines 1 and 2/Rainbow Tunnel Improvements
 - San Diego Pipelines 3 & 5 Vacuum Valve Replacement
 - Upper Feeder Blow Off Structure Replacement
 - Washington Street Pressure Control Structure Valve Replacement & Security Upgrades
 - West Valley Feeder No. 1 - Access Road & Valve Structure Improvements
- Major milestones achieved:
 - Construction completed:
 - East Orange County Feeder No. 2 Service Connection A-6 Rehabilitation
 - Electrical Upgrades at 15 Structures in Orange County Region
 - Lake Perris Bypass Pipeline Relining
 - Lakeview Pipeline Improvements
 - Orange County C&D Team Support Facility
 - Orange County Feeder Cathodic Protection
 - West Valley Feeder No. 1 – De Soto Valve Structure Improvement

- Completed design:
 - Casa Loma Siphon Barrel No. 1 Seismic Retrofit
 - Etiwanda Pipeline Lining Replacement – Stage 3
 - Orange County Feeder Relining – Stage 3
 - Sepulveda Feeder/East Valley Feeder Interconnection Electrical Upgrades
 - Santa Monica Feeder Cathodic Protection

Objectives for FYs 2022/23 and 2023/24

Project	Total Project Estimate	Estimated Construction Completion	Major Milestones
Casa Loma Siphon Barrel No. 1 Seismic Retrofit	\$ 50,000,000	2023	Complete construction
Etiwanda Pipeline Lining Replacement	\$ 24,000,000	2023	Begin construction
Garvey Reservoir Drainage & Erosion Control Improvements - Zones 6, 7, 8, 10 & 11	\$ 2,100,000	2022	Complete construction
Garvey Reservoir Sodium Hypochlorite Feed System Upgrades	\$ 9,000,000	2022	Complete construction
Lake Mathews Forebay Pressure Control Structure and Bypass	\$ 110,000,000	2026	Begin design
Orange County Feeder Lining Repair - Reach 3	\$ 14,000,000	2023	Begin construction
Rialto Pipeline Rehabilitation at Station 2986	\$ 3,000,000	2024	Begin construction
San Gabriel Tower and Spillway Improvements	\$ 17,000,000	2026	Complete design
West Valley Feeder No. 1 - Access Road and Valve Structure Improvements	\$ 4,600,000	2024	Begin construction

PCSs/HEPs/Service Connections/Valves & Gates Project Group

108th Street Pressure Control Structure Valve Replacement

The 108th Street Pressure Control Structure (PCS) located on the Palos Verdes Feeder was constructed in 1941. The pipeline has a design capacity of 80 CFS in this area and provides the flexibility to deliver water through the Inglewood Lateral and Culver City Feeders to member agencies, including the city of Los Angeles, Central Basin Municipal Water District, and West Basin Municipal Water District. This project will rehabilitate the control structure including replacing valves, a corroded ladder, and catwalk grating; restoring electrical components to new condition; installing an emergency backup generator and security features; and refurbishing or replacing other appurtenances. Electrical components consist of electrical panel boards and grounding, sump pumps, and associated instrumentation.

Appian Way Valve Replacement

The Appian Way Sectionalizing Valve Structure on the Palos Verdes Feeder was constructed in 1937. The pipeline has a design capacity of 60 CFS in this area and delivers water to Metropolitan's member agencies, Central Basin Municipal Water District, and the city of Los Angeles. The sectionalizing valve provides Metropolitan the flexibility to isolate flows on the Palos Verdes Feeder between the Long Beach Lateral Turnout Structure and Appian Way Sectionalizing Valve Structure to perform preventive maintenance, planned shutdowns, and emergency activities if required. This operational reliability allows for continued delivery of water to Metropolitan's central pool. The failing sectionalizing valve is 82 years old. Over the past few years, the 24-inch valve has been rebuilt several times to extend its service life. This valve can no longer be rebuilt and has become extremely difficult to operate as it gets stuck and does not fully open or close. The body and cone have eroded, which prevents the valve from properly sealing. This project will replace failing valves, dresser couplings, corroded pipe spools, and install a new precast concrete roof slab at the Appian Way Sectionalizing Valve Structure. Additionally, the project would identify and restore all electrical components add 240-volt electrical service, provide for SCADA control of the valves, and refurbishment or replacement of other appurtenances. Electrical components include electrical panel boards and grounding system, sump pumps, and associated instrumentation.

Conveyance and Distribution System Electrical Structures Rehabilitation

Metropolitan's distribution system includes over 1,000 structures which house equipment used to measure pipeline flow, control pipeline flow and/or pressure, relieve pressure or vacuum, and isolate or sectionalize a pipeline. The conduits and electrical equipment inside the structures have corroded and no longer provide adequate grounding. In addition, the wiring inside the conduits may be compromised. These electrical components have been in continuous service in a damp, underground environment for over 50 years, and need to be upgraded. The rehabilitation for the Conveyance and Distribution System Electrical Structures has been prioritized and will be completed in five stages. Upgrades of the first 15 highest priority service connection structures within Orange County have been completed as Stage 1. Stage 2 improvements will upgrade the remaining 244 structures within Orange County. Stage 3 improvements will upgrade 258 structures in northern Los Angeles County. Stage 4 improvements will upgrade 258 structures in southern Los Angeles County. Stage 5 improvements will upgrade 301 structures in Riverside, San Diego, and San Bernardino Counties. The precise number of structures to be improved may vary depending on condition assessments. The planned work includes identification and restoration of all electrical components to new conditions including service panels, conduits, wiring lights, and receptacles; and providing new grounding systems, sump pumps, exhaust fans, remotely monitored flood alarms at each structure, and other appurtenances.

Conveyance and Distribution System Hydraulic Pilot Valve Standardization

There are approximately 265 pilot valves within the conveyance and distribution system, located at pressure relief or pressure control structures. A pilot valve works together with a control or relief globe valve to set pressures within the distribution system. Currently, several different types of valve and superstructure assemblies exist throughout the system and as they age, lack of a common design makes replacement difficult. This project will develop, fabricate, and install a standardized hydraulic control/relief pilot valve and superstructure at pressure control structures District-wide across the conveyance and distribution system. Utilizing a standardized valve and superstructure assembly will increase productivity and reliability. This is a new project for this budget cycle.

Covina Pressure Control Structure Rehabilitation

The Covina Pressure Control Structure (PCS) controls flow in the Middle Feeder North and multiple service connections. It has recently experienced numerous valve failures and pin-hole leaks. This project will replace valves, pipes, and control and electrical systems; rehabilitate the restroom and structural components; install security features and other work necessary to restore reliability of the pressure control structure. This is a new project for this budget cycle.

Coyote Creek Hydroelectric Plant/PCS Emergency Standby Generator Replacement

The existing emergency stand-by generator was installed when the Hydroelectric Plant/Pressure Control Structure (HEP/PCS) was constructed in 1982. The emergency generator is 39 years old and has deteriorated with age. This project will replace the existing emergency generator with a new 150 kW, 3-phase 480-volt, diesel engine driven generator and construct an additional manual transfer switch outside the stationary generator room to provide for a secondary portable generator hookup. This project will also upgrade electrical and mechanical system to the generator building to meet current emission and fire code regulations under the Environmental Protection Agency's Tier 3 Emission and Fuel Standards Program.

Dominguez Channel Pressure Relief Structure Improvements

The Dominguez Channel Pressure Relief Structure is located on the Palos Verdes Feeder near the Harbor Freeway and Hoover Street at the Dominguez Channel Crossing. Recent inspections have found leaking valves, inoperable needle valves, failed electrical services, and failed communication cables. This project will replace valves, modify piping and concrete, and construct new underground electrical and communication service as necessary to restore reliability of the relief structure. This is a new project for this budget cycle.

DVL Secondary Inlet Sleeve Valve Refurbishment

Diamond Valley Lake (DVL) is used for operational and dry-year, and emergency storage. The existing sleeve valve at the DVL Secondary Inlet is corroding, which will eventually make the valve inoperable. This is the only control valve for the secondary inlet, which is used to refill DVL. This project will remove, refurbish, and replace the existing sleeve valve; recoat existing appurtenant piping; and replace associated couplings. This is a new project for this budget cycle.

Eagle Rock Tower Distribution System Upgrades

Eagle Rock Tower diverts the flow of water from the Weymouth plant into the Palos Verdes Feeder, Santa Monica Feeder, and the Eagle Rock Lateral. The tower is also used to maintain the required hydraulic grade to the service connections upstream of the tower. This project will perform needed rehabilitation of various components of the Eagle Rock Tower distribution system. The project will include the following: (1) replace the leaking control and isolation valves at the interconnections to the Palos Verdes and Santa Monica Feeders, (2) replace corroded slide gate, and tower access ladder and cover, (3) repair slide gate rails and associated components, (4) fabricate and install new drop gate at inlet side of Eagle Rock Tower to improve isolation capability, (5) extend Santa Monica Feeder interconnection blow-off structure and install isolation valves to improve maintenance flexibility, (6) construct new access road from main access road to the Palos Verdes and Eagle Rock Interconnection Structure to facilitate safe access to the structure, (7) replace corroded work platforms and ladders in interconnection structures to improve worker safety, and (8) refurbishment and upgrades of other appurtenances as they are identified during the facility assessments.

East Orange County Feeder No. 2 Service Connection OC-44A Valve Replacement

The East Orange County Feeder #2 is a 25-mile-long pipeline which delivers treated water from the Diemer plant to the cities of Anaheim, Orange, Santa Ana, and Irvine. Service Connection OC-44A, which is located in Newport Beach, was constructed in 1967 and delivers water to the Municipal Water District of Orange County. Gradual corrosion and wear from over 52 years of operation has led to the deterioration of the 16-inch plug valve. The valve is currently leaking and needs to be replaced. The plug valve shaft was installed in the horizontal position to allow placement of the valve within the vault. This unconventional position may have accelerated the deterioration of the valve. This project will replace a 16-inch-diameter plug valve, flowmeter, and appurtenant piping and equipment as required in the Service Connection OC-44A Structure. This project will also identify and restore all electrical components to new condition. Electrical components consist of electrical panel boards and grounding system, sump pump, and associated instrumentation.

Flow Meter Replacement Project

Metropolitan has over 500 flowmeters used for water revenue metering at service connections, operation of the conveyance and distributions, and for process control. Many flowmeters have been in operation over 50 years. Some of these meters are exhibiting signs of deterioration. Spare parts for older meters are increasingly difficult to procure.

This project will be conducted in three stages. Under Stage 1, a comprehensive evaluation of the flowmeters will be conducted to assess their current condition and availability of spare parts. Under Stage 2, deteriorating meters in critical services will be replaced. Under Stage 3, a comprehensive, risk-based approach will be implemented to replace the remaining flow meters.

Foothill Feeder PCS Valve Replacement

Foothill Pressure Control Facility (PCF) is located at Castaic Lake Dam in northern Los Angeles County. The structure takes untreated water from the west branch of the State Water Project system and controls all untreated water flows into the Jensen plant. Foothill PCS consists of two turbines, two 60-inch inline sleeve valves, and three parallel trains of conical plug valves. Each plug valve train consists of three 48-inch conical plug valves in series, that are throttled to dissipate pressure. Although the conical plug valves are currently used to control flow, these types of valves are not well-suited for this application. In addition, recent valve inspections have identified leaks, cracks, and corrosion. This project will replace the conical valves with valves that are better suited for flow control and will replace all other valves that are at the end of their service life and other facility improvements.

Foothill Hydroelectric Plant Refurbishment

The Foothill Hydroelectric Plant was constructed in 1981. An assessment has identified that the facility is seismically vulnerable and should be upgraded. The scope of work also includes reinforcing the roof, replacing a cracked beam, and installing connectors and seismic restraints to the roof, columns, and walls. Retrofit work will also include upgrades for non-structural components such as equipment anchors, pipe/conduit supports, and crane rail bracing. In addition, the electrical and mechanical systems are exhibiting signs of normal wear and tear after 32 years of service. This project will refurbish control and electrical protection systems, mechanical piping for the generator cooling water systems, add a Programmable Logic Controller, install on-line data acquisition and monitoring system, refurbish runner, replace wicket gates, and refurbish or replace other deficient equipment.

Hollywood Tunnel North Portal Equipment Upgrades

Built as part of the Santa Monica Feeder in 1937, the North Portal of the Hollywood Tunnel is one of three control points along the feeder, which delivers water to the cities of Burbank, Beverly Hills, Los Angeles, and Santa Monica. The valves and mechanical control system at the North Portal of the Hollywood Tunnel are obsolete. Repair parts are not available and must be fabricated at a machine shop. This project will replace the existing sleeve valves and hydraulic actuators at the North Portal of the Hollywood Tunnel with new control valves with electric actuators. The upgrade includes replacing the mechanical controls with electronic, PLC/SCADA controls, which will allow the facility to be monitored and controlled from the Eagle Rock Operations Control Center, and replacement of the isolation valves. This project will also replace control valves for the bypass, install new electrical service to support the load necessary for the new control systems, and other improvements necessary to upgrade and rehabilitate the equipment and support systems.

Hydroelectric Plant Rehabilitation

Metropolitan owns and operates 15 hydroelectric power plants with a total installed capacity of 130 megawatts. Approximately 10% of Metropolitan's income is derived from these power plants. The first plant to be commissioned was the Greg Avenue Power Plant in 1979, and the last was the Wadsworth Hydroelectric Power Plant in 2002. Many of these plants have been in operation over 37 years and have not undergone refurbishment or upgrade. Several plants are beginning to show signs of deterioration and several have already been refurbished. A comprehensive approach to rehabilitation of the other hydroelectric plants is needed to protect Metropolitan assets and fortify infrastructure reliability.

This project will assess and evaluate Metropolitan's hydroelectric plants, determine the rehabilitation requirements for each plant, identify needed pilot efforts, prioritize the needed rehabilitation, and develop a multi-phase plan to complete the rehabilitation. New facilities or those that have already undergone rehabilitation will not be included in the evaluation. For the included hydroelectric plants, the assessment will evaluate the following equipment and systems: turbine, generator, power equipment and switchyard, control system, protection system, auxiliary systems such as lube oil and cooling water, and the overall facility. This project will also perform seismic evaluation and improvements as necessary to safeguard the hydroelectric plants from known seismic risk.

LADWP Connection in Magazine Canyon

The Los Angeles Department of Water and Power (LADWP) connection in Magazine Canyon is rated for 400 cfs and was designed to supply water to the Jensen plant from LADWP's aqueduct system. However, the connection is unreliable as the bar screen located in the LADWP piping builds up debris and clogs. This project will redesign and build new flow control equipment downstream of the LADWP turnout valve with the capability to collect and remove debris. This equipment would allow the LADWP bar screen to be removed and the LADWP turnout valve to be left in the fully open position during operation providing the Jensen plant with a reliable, back-up source water supply to limit disruptions during unforeseen events. This is a new project for this budget cycle.

Lake Mathews and Temescal Hydroelectric Plants Circuit Breaker and Oil Circuit Recloser Replacement

The Lake Mathews & Temescal Sulfur Hexafluoride (SF6) circuit breakers have operated for the last 40 years and are at their end of life. Sulfur Hexafluoride is an ozone depleting greenhouse gas with annual leakage reporting requirements. This project will replace the Temescal and Lake Mathews Hydroelectric plant electrical interrupting devices with vacuum circuit breakers and replace damaged switchyard disconnects which will satisfy Metropolitan's regulatory requirements under new proposed regulations to phase out SF6 gas insulated equipment. This is a new project for this budget cycle.

Lake Mathews Forebay Pressure Control Structure and Bypass

Lake Mathews is the terminus of Metropolitan's CRA and was constructed in the 1930's. Untreated water stored in the reservoir is withdrawn through the lake's forebay and hydroelectric plant and is then conveyed through the Upper Feeder and Lower Feeder to the Weymouth and Diemer plants, respectively. The Lake Mathews forebay discharge valves and outlet tower have gradually deteriorated over 77 years of operation. Portions of the facilities need to be replaced to maintain reliable deliveries from Lake Mathews into the Central Pool. The ten 32-inch-diameter Howell-Bunger valves that are used to withdraw water from the lake have gradually deteriorated through continuous use. The frequency of repairs is increasing, while replacement parts are difficult to obtain. These 62- to 77-year-old valves need to be replaced.

Upgraded facilities may include a new bypass system with pressure control structure, which includes new headworks regulating valves, upgraded outlet tower gates, and a new overflow spillway structure. This project will also include seismic retrofit of the existing forebay, forebay tower, and dike; and replacement of mechanical equipment including slide gates as these facilities are used with the existing turbine operation. The system is expected to provide full-service capacity and deliver water to the Upper and Lower Feeders year-round.

Lake Mathews Junction Shaft Gate Hydraulic Power Unit Study - Outlet Tower No. 2 Isolation

The roller gates at the Lake Mathews junction shaft do not operate consistently and reliably. The large isolation gates utilize hydraulic power units (HPUs) to operate under normal conditions and store energy for use in emergency conditions when electric power is not available. Although maintained in accordance with the manufacturer's recommendations, the gates no longer function as designed. This project will evaluate the two roller gate operators at the Lake Mathews junction structure that provide isolation for Outlet Tower No. 2 and rehabilitate the HPUs and support systems. This project also includes instrumentation and controls upgrade at Outlet Tower No. 2 to obtain accurate readings of the valve positions. The study will focus on the condition of hydraulic power unit equipment, safety elements related to pressurized hydraulic reservoirs/tanks, and operating procedures/practices.

Lake Mathews Outlet Tower No. 2 Valve Rehabilitation

The outlet tower valves operate intermittently and do not open and close completely. Without proper operation of the valves, tier selection and flow rates are impacted which may adversely affect system operations including raw water quality, water treatment processes at the downstream Weymouth and Diemer plants, and secure isolation of the tower from the lake needed for maintenance and inspection work. This project will complete a comprehensive study and implement recommendations on replacement or refurbishment of the butterfly valves on the Lake Mathews Outlet Tower No. 2, which may include replacement or refurbishment of 30 butterfly valves.

Oak St. Pressure Control Structure Rehabilitation

The Oak St. Pressure Control Structure (PCS) is one of two control facilities on the Second Lower Feeder (SLF) and provides water to the Palos Verdes Reservoir and several service connections. Recent inspections have identified various work to be performed to restore reliability of the pressure control structure. This project will replace valves, gratings, fasteners, and control and electrical systems; rehabilitate structural components; install security features; and other work necessary to restore reliability of the pressure control structure. This is a new project for this budget cycle.

OC-88 Pumping Plant Rehabilitation

The OC-88 Pumping Plant, consisting of the OC-88 and OC-88A pump stations, was constructed in 1990 and is located in the city of Lake Forest. Treated water from the Diemer plant is conveyed through the Allen McColloch Pipeline (AMP) to the OC-88 Pumping Plant, which in turn pumps water directly into the Municipal Water District of Orange County's (MWDOC's) South County Pipeline. The surge tank system protects the AMP and the South County Pipeline from pressure surges. Two new surge tanks were added when the OC-88 Pumping Plant modifications were completed in 2005. However, the air compressor was not upgraded at that time. A recently completed high-flow test at the OC-88 Pumping Plant identified that a second air compressor should be installed to adequately protect the AMP and the South County Pipeline. In addition, Southern California Edison performed an efficiency test on the three existing pump motors located at the OC-88A pump station and found that improvements in motor efficiency could result in annual savings of approximately \$25,000 in electricity costs, and an estimated 235 tons of CO₂ emissions. Lastly, the chiller units and ultrasonic flow meters have exceeded expected useful service lives and are in need of replacement. This project will upgrade the OC-88 Pumping Plant's surge tank system, install a second air compressor, replace flow meters and pumps with ones that have high-efficiency motors equipped with variable frequency drives, perform overhead crane improvements, fire protection, and HVAC systems; and perform other associated facility improvements.

Olinda Pressure Control Structure Valve Replacement

The Olinda Pressure Control Structure was constructed in 1969 to provide regulation of flows in the Lower Feeder between the Santiago Control Tower and Diemer Filtration Plant. This project will replace two conical plug valves to increase efficiency, reliability, and mitigate the vibrations caused by operating the valves. The structure's electrical and instrumentation components and other facility components will also be evaluated and refurbished or replaced. Replacing the existing 51-year-old valves will improve operational control of the Lower Feeder between the Santiago Control Tower and the Diemer plant. If cost effective, relocation of the PCS will also be considered.

Orange and Riverside/San Diego County Operating Regions Valve Replacement

Metropolitan's distribution system includes over 830 miles of pipelines and 5,400 individual structures that require regular maintenance and monitoring. The system is comprised of four regions: the Los Angeles County, Orange County, Riverside/San Diego County, and Western San Bernardino County regions. The subject project will replace valves within the Orange and Riverside/San Diego County operating regions. Replacement of these valves is a priority due to the age of the feeders and the number of critical valves that need to be replaced.

The valves on the Second Lower Feeder, Orange County Feeder, East Orange County Feeder, Lower Feeder, Santiago Lateral, the Allen-McColloch Pipeline, Lakes Skinner Outlet Conduit, San Diego Pipelines Nos. 3, 4, and 5 have been in service up to 52 years and have reached the end of their useful and expected service life. Failure of these valves or their associated components may result in an unplanned emergency shutdown of one of these pipelines impacting delivery to our member agencies. The valves to be replaced include air release/vacuum valves that are installed at high points in the lines to exhaust or admit air during pipeline filling or dewatering operations, and small globe, plug, and butterfly valves. The latter valves are used for isolation of air release/vacuum valve assemblies, blow-off structures, and pressure control structures. Closing these isolation valves allows inspection and maintenance activities to proceed without requiring a shutdown of the feeder. The scope of work is to replace approximately 120 deteriorated valves ranging in size from 1 to 12 inches in diameter on various pipelines in the Orange, Riverside, and San Diego County Operating Regions. This project will also include relocation of air release/vacuum valves from underground to above-ground structures.

Palos Verdes Feeder - Long Beach Lateral Turnout Structure Sta. 1442+15 Valve Replacements

The Palos Verdes Feeder - Long Beach Lateral turnout structure, located in the County of Los Angeles, was constructed in 1938. The Long Beach Lateral turnout structure consists of seven valves that allows Metropolitan to continue delivering water upstream and downstream to member agencies during preventive maintenance, shutdowns, and emergencies. This project will replace the seven valves on the Palos Verdes Feeder/Long Beach Lateral Turnout Structure that are 82 years old. The structure will also be refurbished and include replacing the existing catwalk grating, a new precast concrete roof slab, lifting mechanism, security type entry hatches, and identify and restore all electrical and instrumentation components to like new condition. Electrical components consist of electrical panel boards and grounding system, sump pump and associated instrumentation.

Rio Hondo Pressure Control Structure Valve Replacements

The Rio Hondo Pressure Control Structure (PCS) on the Middle Feeder pipeline was constructed in 1983. Construction of the Rio Hondo PCS incorporated an existing valve structure, so the valves at this location have been in operation since 1953 as part of the original underground valve structure. The existing valves have been in continuous service for approximately 67 years, and over time have required frequent repairs/rebuilding.

The Eagle Rock Operations Control Center utilizes the Rio Hondo PCS to maintain the lower pressure zone on the southern half of the Middle Feeder, and to assure deliveries to member agency water demands in the southwestern service area. This project will replace failing valves at the Rio Hondo PCS. The work will include replacing dresser couplings, pipe spools and fittings, and pipe supports; providing improved ventilation, insulation, equipment access, and structural resiliency for the structure; rehabilitating the existing wastewater system; upgrading various security features, and identifying and restoring all electrical components to new condition. Electrical components consist of electrical panel boards and grounding system, sump pumps, and associated instrumentation. This project will also perform condition assessment of inlet and outlet manifold piping as well as remaining control lines to identify rehabilitation needs and evaluate hydraulic impact on the adjacent hydroelectric plant resulting from this project.

San Diego Canal Radial Gates Rehabilitation (V-06 & V-08)

The protective coatings on the radial gate at the San Diego Canal and the operating components of the gates have begun to fail, and significant metal loss has occurred. In addition, the performance of the existing motor actuators used to open and close the gates has diminished. Should this gate fail, there would be loss of control to regulate flow into Lake Skinner from the San Diego Canal, along with loss of control in surface elevation that regulates flows through the Lake Skinner Bypass screening structures. The bypass structures supply the Skinner area raw water pipelines and the Skinner plant when Lake Skinner is being bypassed, typically due to a taste and odor issue in the lake. This project will rehabilitate or replace the San Diego Canal Radial Gates V-06 and V-08. The rehabilitation may include strengthening or replacing steel members as needed, replacing the radial gate actuator and controls, modifications to the seals and guide rails, and preparing and coating steel surfaces with an approved coating, such as a galvanic metalized coating. This project will also add sensors and software to report the elevation of the gates relative to the water elevation and percent opening of the gates.

San Diego Pipelines 3 & 5 Vacuum Valve Replacement

This project will remove and replace 73 existing vacuum valves on San Diego Pipeline No. 3 (SDPL3) and San Diego Pipeline No. 5 (SDPL5). The existing valves on SDPL3 have been in service for almost 62 years, while those on SDPL5 have been in use for almost 42 years. All the valves have reached the end of their service lives, and the majority are not in a condition to be rehabilitated. All valves will be replaced in-kind. This project will lower corrective maintenance costs, and the risks of valve failures resulting in property or pipeline damage or unscheduled pipeline outages.

San Dimas and Red Mountain Power Plants Standby Diesel/Engine Generator Replacements

The emergency generator at Red Mountain Hydroelectric plant was installed during the original plant construction in 1983. The generator at the San Dimas Hydro Electric Power Plant was installed during original Pressure Control Structure construction in 1975. These generators are necessary to ensure all operating equipment performs the required flow transfers between the Hydroelectric Power Plant (HEP) and the Pressure Control Structure (PCS) during un-scheduled HEP interruptions and SDGE station-power failures. The scope of work is to design, procure, and construct two standby diesel engine generators, one each at the San Dimas and Red Mountain Power Plants. The project scope includes removal of the existing generators and fuel tanks, construction of a new unloading facility with spill containment, steel overhead canopies, and electrical and mechanical system upgrades to the replacement generator to meet current emission and fire code.

San Dimas Hydroelectric Plant Rehabilitation

The San Dimas Hydroelectric Plant was constructed in 1981, and the electrical and mechanical systems are exhibiting signs of normal wear and tear after 41 years of service. The scope of work is to rehabilitate the electrical and mechanical systems including turbine, generator, generator cooling system, all bearing and bearing lubrication systems, switchgear, protection and control relays, speed controller, data logger, annunciator, vibration and exciter systems, and to provide associated controls. This project will also include seismic evaluation and upgrades consistent with current building and safety codes and other facility upgrades.

San Jacinto Diversion Structure Slide Gates Rehabilitation

The San Jacinto Diversion Structure, located at the base of the San Jacinto Mountains, was completed in 1939. The diversion structure divides incoming flow from the CRA to three different outlets, using slide gates to control each flow. Although the existing gates were originally designed for open/close operation only, they had historically also been used for throttling the flow, which had caused substantial damage to the gates. This project will replace the existing V-01 and V-02 cast iron slide gates with a single stainless-steel slide gate designed for throttling, replace existing V-03 cast iron slide gate designed for throttling, install a new stainless-steel drop gate at the valve structure V-04, and appurtenances at the both facilities. This project will increase the operational reliability of the structure and the connection to the Casa Loma Siphon No. 1 and CRA.

Santa Monica Feeder and East Valley Feeder Bypass for Sectionalizing Valves

The lack of a bypass line at the Santa Monica Feeder and East Valley Feeder creates the potential for damage to the valves and their operators due to the inability to equalize pressure across the valves before operating. Further operation of these valves, without installing a bypass, will continue to place the valves and pipeline at risk for damage and potentially emergency or unplanned shutdown. This project will design, fabricate, and install bypass lines at three sectionalizing valve locations that currently do not have a bypass line, and replace existing sectionalizing valves

Santiago Lateral Station 216+40 Butterfly Valve Replacement

The Santiago Lateral is a pre-cast concrete pipeline, ranging in size from 60-inch to 72-inch, and was constructed in 1955. It extends southerly from the Santiago Control Tower in the Anaheim Hills approximately 7.4 miles to Irvine Lake. The pre-cast concrete pipeline provides raw CRA water to Anaheim, IRWD and Irvine Lake. The 42-inch sectionalizing butterfly valve currently leaks resulting in unwanted flows to the south portion of the Santiago Lateral. This project will investigate alternatives to replace existing sectionalizing butterfly valve, which could also be able to handle lower flow rates. The options may include replacing with same type of valve and motor with construction of a bypass or expansion of the existing valve vault or construction of a new vault to accommodate a multi-orifice valve with a knife gate valve for better flow control.

Sepulveda Canyon Control Facility Electrical and Mechanical Rehabilitation & Seismic Upgrades

The Sepulveda Canyon Facility consists of a pressure control structure, hydroelectric plant, and two water storage tanks. The pressure control structure was constructed in the early 1970s to reduce pressure in the 9-foot-diameter Sepulveda Feeder as it conveys treated water from the Jensen Plant. The two water tanks have a combined capacity of 18 million gallons of water and are used to regulate flows through the pipeline. The hydroelectric plant, which was constructed in 1982, takes advantage of excess pressure in the Sepulveda Feeder to generate up to 8.6 megawatts of electricity with its single turbine. The facility is located on top of a large pad that was constructed by filling a steeply sloped V-shaped ravine. The pad is approximately 120 feet above the toe of the slope. The site is located within one mile of the Santa Monica Fault, which is capable of generating a 6.8 magnitude earthquake. Preliminary slope analyses indicate that the fill could slide down the slope during a major earthquake, causing significant damage to the pressure control structure, the water tanks, and the hydroelectric plant. This project will consolidate all seismic upgrade efforts for the entire Sepulveda Canyon Control Facility and seismically upgrade the facility. This project will also consider construction of a 96-inch diameter bypass line and new pressure control structure at the Sepulveda Canyon Facility to continue water deliveries if the existing facility is out-of-service due to a major earthquake.

The Sepulveda Canyon Hydroelectric Plant was constructed in 1982, and the electrical and mechanical systems are exhibiting signs of normal wear and tear after 30 years of service. The scope of work is to perform an investigation and survey of the facility, and rehabilitate the electrical and mechanical components including the turbine/generator and upgrades to the protection and control systems. The project also includes replacement of cooling water piping for the generator enclosure, rehabilitation and structural improvements to the switchyard, and rehabilitation of other facility components.

Sepulveda Feeder/East Valley Feeder Interconnection Electrical Upgrades

The East Valley valve structure is located on the north sidewalk of the Rinaldi Street and Hayvenhurst Avenue intersection in Granada Hills. During the wet season, this structure receives intrusive storm water leakage causing the junction boxes, electrical enclosures, and conduits to corrode and short circuit. The extent of damage has accelerated, and storm water now enters the structure. This project will install new wiring and control panels for operation of the existing valve, remove the existing aboveground disconnect switch and install a new power distribution panel, install new duct banks and conduits to supply power to each of the critical structures, install additional bollards around the distribution panel to minimize damage from vehicles, repair damaged sidewalk, and assess potentially relocating the existing metering structures. This project will also replace access ladder, modify stairs and install a platform to meet current Cal OSHA requirements, install guardrail at the upper landing of the ladder, install a swing-gate for the catwalk, and mitigate water infiltration into the vaults by replacing curbs and gutters around the valve structures, sealing the interior of the manway riser joints, and implementing other mitigation measures.

Sepulveda-West Basin Interconnection Valve Replacements

The Sepulveda-West Basin Interconnection was constructed in 1970. The interconnection allows Metropolitan's Sepulveda Feeder pipeline the flexibility to convey supplemental flow to the West Basin Feeder. The structure includes two 16-inch lines with sleeve valves and one 12-inch line with a globe valve. Each line may be isolated at the either end with plug valves. This project will replace failing valves at the Sepulveda-West Basin Interconnection structure. The work will include replacing associated dresser couplings, pipe spools, and pipe supports. Additionally, work on the structure will include installing a new precast concrete roof slab, providing adequate ventilation for the structure, replacing a sump pump, structure modifications to address algae accumulation on adjacent sidewalk due to frequent water discharge from the sump pump, identifying and restoring all electrical components to new condition, and refurbishing other facility components. Electrical components will consist of electrical panel boards and grounding, sump pumps, and associated instrumentation.

Service Connection A-02 Rehabilitation

A recent inspection of service connection A-02 in the City of Anaheim, revealed that piping in the meter vault had displaced, resulting in misalignment of a coupling and damage to the check valve support pedestal. If not addressed, continued movement of the piping could result in a leak, flooding, disruption of service, and costly repairs. This project will refurbish or replace the Service Connection A-02 Meter Vault piping, thrust restraint(s), meter, coupling, check valve, and plug valve in adjacent isolation valve vault. This is a new project for this budget cycle.

Service Connection LA-17 Rehabilitation

Service Connection LA-17 is located in the city of Los Angeles at the terminus of the Eagle Rock Lateral. It includes three lines: (1) 17A is a 24-inch line with a capacity of 30 cfs, (2) 17B is a 48-inch line with a capacity of 100 cfs, and (3) 17C is an 85-inch line with a capacity of 310 cfs. Three venturi tubes at the LA-17 service connection have been in service for more than 62 years and require significant rehabilitation or replacement.

Significant coating deterioration and metal loss with extensive pitting and corrosion were identified on the bottom side of the 48-inch venturi tube. The wall thickness of this venturi tube is approximately 30% of its original thickness. Failure to replace this venturi tube will lead to eventual leakage, flooding the structure, and impacting water deliveries to the member agency. This project will replace the deteriorating LA-17B welded steel venturi tube located at the Service Connection LA-17 structure along with installation of new 24" piping and a mechanical coupling. The work will also recoat the LA-17A and LA-17C venturi tubes within this structure. Additionally, work will include replacing the sump pump and identifying and restoring all electrical components to new condition. Electrical components will consist of electrical panel boards and grounding, and associated instrumentation.

Upper Feeder Raw Water Vacuum Valves and Blowoff Improvements

Isolation valves along the Upper Feeder Raw have failed to isolate due to a service life of nearly 80 years and there is a need to install sectionalizing valves in strategic locations along the feeder to facilitate isolation and access to the feeder for internal inspections and repairs without having to shut down the Weymouth plant. Further, a higher hydraulic grade is required to pass Upper Feeder flows through the ozone contactors since the ozone facility at the Weymouth plant was commissioned. The grade difference has impacted various systems and operations along the Upper Feeder. This project will study the hydraulic grade elevation changes and impacts to the Upper Feeder and associated systems (Etiwanda and La Verne Pipelines, and Glendora Tunnel); update feeder operations manual, dewatering profiles, and plan and profile drawings; replace various vacuum valves with improved self-closing units; identify new design flow rates at Upper Feeder service connections; replace isolation valves with regulating type valves; install sectionalizing valves to isolate flows to the Weymouth plant; install inflatable rubber dam on the Etiwanda bypass channel to restore bypass channel flow capabilities; and replace failed blow off and vacuum valve isolation valves. This is a new project for this budget cycle.

Upper Newport Bay Blow-off Structure Rehabilitation

The existing blow-off structure on the Orange County Feeder enables the pipeline to be dewatered in the event of an emergency and provides access for routine maintenance and inspection. Following 75 years of continuous operation in a moist environment near Upper Newport Bay, the blow-off valves and piping inside the structure have corroded and need to be replaced. In addition, due to ongoing erosion, the only road available to access the blow-off structure has been damaged and requires repairs. This project will restore access to the structure and replace its internal valves and piping. The planned repairs include regrading of the existing access road and reinforcement of crossings where the road intersects drainage channels; strengthening of the existing turn-around area adjacent to the blow-off structure, which will allow maintenance vehicles to set up for repair activities; installation of new valves and replacement of corroded piping; and modification of piping to ensure continued compliance with current California Division of Drinking Water regulations to prevent potential cross connections.

Venice Hydroelectric Plant Rehabilitation

The Venice Hydroelectric Plant (HEP) was constructed in 1982, and the electrical and mechanical systems are exhibiting signs of normal wear and tear after 32 years of service. The scope of work is to rehabilitate the electrical and mechanical components including the turbine generator, the protection and control systems, and other facility components. The project also includes rehabilitation and structural improvements to the switchyard.

Venice PCS Valve and Security Upgrades

Venice Pressure Control Structure (PCS) is the second of two pressure control structures located along the Sepulveda Feeder. Venice PCS performs the critical operational functions of reducing grade and controlling flows in the Sepulveda Feeder. The PCS consists of multiple control valves and associated piping. The valves are almost 49 years old and have been experiencing increased failures over the last 12 years. This project will refurbish valves and other appurtenances. This project will also install multi-hazard security features for facility infrastructure protection.

Wadsworth Pumping Plant Sleeve Valve Refurbishment

Recent inspections have identified numerous deteriorated sleeve valves at the Wadsworth Pumping Plant. The sleeve valves originally installed in 1999 control the flow of water from DVL to the San Diego Canal. While operation of the pumping plant has not yet been impacted, failure of the valves could lead to an unplanned shutdown and interruption of water delivery to member agencies. This project will refurbish seven 66-inch by 42-inch sleeve valves at the Wadsworth Pumping Plant at DVL.

Washington Street Pressure Control Structure Valve Replacement & Security Upgrades

The Washington Street Pressure Control Structure (PCS) located on the Palos Verdes Feeder was constructed in conjunction with the Palos Verdes Feeder pipeline in 1941. The pipeline has a design capacity of 100 CFS in this area. This project will replace two failing hydraulically operated and three electronically operated globe valves at the Washington Street PCS. The work will also include replacing all block valves, identifying and restoring all electrical components to new condition, and moving electric meter from outside to inside the structure. Electrical components consist of electrical panel boards and grounding, sump pump, and associated instrumentation. Additionally, a security assessment of the facility will be conducted to determine the need to reinforce or upgrade physical features for enhanced infrastructure protection.

West Orange County Feeder OC-09 Rehabilitation

The West Orange County Feeder was constructed in 1956 as a component of the Lower Feeder system. It delivers treated water from the Robert B. Diemer Water Treatment Plant in Yorba Linda to the northwestern portion of Orange County. Service Connection OC-09 on the West Orange County Feeder consists of a turnout tee, a venturi meter, and a shutoff valve. The turnout tee is encased in concrete and is located beneath the traffic lanes of Katella Avenue in the city of Garden Grove, adjacent to the boundary line with the city of Stanton. The meter vault is located below Dale Street. This structure contains a 14-inch conical plug valve, a venturi meter, and associated piping and electrical systems. Gradual corrosion from over 62 years of operation in a damp underground environment has led to deterioration of the equipment within the vault. This equipment needs to be replaced and other facility components rehabilitated to maintain reliable deliveries from the service connection.

West Orange County Feeder Valve Replacement

The West Orange County Feeder was constructed in 1956 as a component of the Lower Feeder system. It delivers treated water from the Diemer plant in Yorba Linda to the northwestern portion of Orange County. A recent condition assessment identified that 13 structures require rehabilitation, including the replacement of air release/vacuum valve assemblies and adjacent plug valves. These valves were installed during the original construction of the feeder and have been in service for over 62 years. Six of the air release/vacuum valves will also be relocated from a manhole to an above ground cabinet within the street-side parkway zone to prevent the potential of treated water in the distribution system becoming exposed to stormwater under certain operating conditions. Refurbishment or replacement of other facility components, including meter replacement or relocation, may be implemented based on the additional site evaluations.

West Valley Feeder No. 1 - Access Road & Valve Structure Improvements

The West Valley Feeder No. 1 and appurtenant valves were constructed and installed by Calleguas Municipal Water District in 1962. Metropolitan acquired the feeder in 1970. Most of the deteriorated valves were replaced and valve structures improved between 2006 and 2012. This project will replace the remaining deteriorated valves located in Chatsworth Park, add new valve structures to house isolation valves that are presently directly buried, install enclosures for air release/vacuum valves, and perform grading of an all-weather access road to support maintenance activities.

Valley View Hydroelectric Plant Rehabilitation

The Valley View Hydroelectric Plant was constructed in 1986. The mechanical components were rehabilitated in 2019. The electrical and control systems are yet to be rehabilitated and have been requiring increased maintenance. Many of the components are no longer manufactured or supported. This project will replace the electrical protection and control relays, data acquisition equipment, electrical panels, annunciator, vibration system, automated voltage regulator, governor and speed controller, switchyard circuit breakers, and other improvements to extend the service life and improve reliability.

Willits Street Pressure Control Structure

The Willits Street Pressure Control Structure (PCS), located in the city of Santa Ana, was built in 1944. This pressure control structure located on the Orange County feeder regulates pressure and conveys treated water to the Irvine Regulating Structure. This PCS is an underground structure consisting of three parallel trains of pressure control valves. At full capacity, two trains are in operation while the third train acts as a stand-by. The existing structure is congested and does not provide suitable access for maintenance, repairs or the replacement of valves. The maintenance access was impacted during street widening that required the size of the structure to be reduced. The modified structure configuration does not have a lifting mechanism to remove or transport these valves out of the structure for replacement or repairs. Additionally, the existing catwalk does not have adequate coverage. This project will construct a new pressure control structure to replace the existing Willits street PCS located on the Orange County Feeder. The work includes a new concrete substructure, relocating and replacing the control and isolation valves, new sampling connections for water quality, and all necessary electrical and ventilation equipment. Once the new structure is complete, the older structure will be abandoned, and the pipeline will be attached to the new structure during a brief outage.

Yorba Linda PCS Rehabilitation

The Yorba Linda Pressure Control Structure (PCS) was constructed in 1975 and controls pressure on the Yorba Linda Feeder prior to the influent flow reaching the Diemer plant. A recent inspection of the facility revealed extensive corrosion at the sleeve valves, damage and failure of mortar lining in appurtenant piping, observed damage to the valve body seat on the butterfly valves, and inadequate cathodic protection. This project will rehabilitate this PCS to restore reliability. This is a new project for this budget cycle.

Yorba Linda Power Plant Improvements

The Yorba Linda Power Plant is located on the Yorba Linda Feeder at the inlet to the Diemer plant and can generate up to 5 megawatts. Installation of a new turbine generator was completed in November 2015, and generator enclosure in May 2020. This project will improve emergency shutdown, alarm, and public address systems; and upgrade Human Machine Interface (HMI) panel to improve reliability and safety of the plant operation by replacing the existing shutdown system that requires operator intervention that could cause undesired pipeline pressure surges to a redundant and automated system that will engage in the event of wicket gate closing system failure. Extension of the Diemer plant's public announcement system into the Yorba Linda Power Plant and addition of a new alarm system in key locations will enhance personnel safety and improve operator's response time. This project will also install a new wicket gate drive system and rehabilitate the turbine shutoff valve actuator system.

Pipelines, Tunnels, Canals Project Group

Casa Loma Siphon Barrel No. 1 Seismic Retrofit

In November 2016, leaks were detected on Barrel No. 1 of the Casa Loma Siphon. It was determined that the pipe has had significant horizontal and vertical movements. The leaks do not immediately jeopardize the structural integrity of the aqueduct but if repairs are not performed, the continued leakage over time could erode soil, undermine the siphon, and cause damage to the siphon structures. The Casa Loma Siphon Barrel No. 1 is vital to Metropolitan's conveyance system moving water from the desert pumping plants to Lake Mathews. The work is conducted in two stages. Under Stage 1, internal seals were installed on 13 joints as an interim measure to address the leaks. These repairs were completed in February 2017, during a planned shutdown of the CRA. Stage 2 will permanently repair the pipe joints within the siphon by replacing 148-inch diameter steel and concrete pipe segments that cross the Casa Loma Fault zone with two parallel barrels of 104-inch diameter earthquake resistant ductile iron pipe segments and steel pipe, which will accommodate relatively large ground displacements from an earthquake and the ongoing ground settlement.

Casa Loma Siphon No. 1 and San Jacinto Pipeline Protection

The Casa Loma Siphon No. 1 and the San Jacinto Pipeline cross the San Jacinto River in Hemet, CA. The river experiences periodic high flows during severe storms, exposing the pipelines at the river crossing to damage due to exposure, undermining, or flotation. The scope of the project is to construct a weighted protective cover system, consisting of cable-connected articulated concrete blocks, spanning approximately 200 feet in length over Casa Loma Siphon No. 1 and the San Jacinto Pipeline. This project will enhance infrastructure safety, security, and resiliency, and will improve the reliability of water deliveries.

Etiwanda Pipeline (South) Protection - Sta. 332+00 to 349+00

The City of Rancho Cucamonga is planning to construct a grade separation on Etiwanda Avenue where the Etiwanda Pipeline is located, south of the Etiwanda Reservoir near the tie-in point to the Upper Feeder. Metropolitan is required to either relocate or protect its pipeline, at its own expense, to allow for improvements by the City. The option to protect the pipeline was selected over the relocation option due to time constraints imposed by the grade separation project. The City will install cast-in drilled hole piles (CIDH) in isolation casing within the main bridge span to protect the pipeline. Metropolitan is responsible for the cost of the City's relocation of rectifier and electrical service cabinets, underground conduits, electrolysis test stations, anode well, and patrol road to access manholes; modification of manholes and vent piping for flowmeters and air release vacuum valves, and sump discharge lines.

Etiwanda Pipeline Lining Replacement

The Etiwanda Pipeline was constructed in 1993 to convey untreated water from the Rialto Pipeline to the Upper Feeder. This 6.4-mile-long welded steel pipeline is 144 inches in diameter. The northern portion of the pipeline, which is 5.4 miles long, conveys high-pressure water to the Etiwanda Power Plant. From that facility, the southern portion of the pipeline continues for one mile to an interconnection with the Upper Feeder. During an internal inspection, staff discovered that approximately 37 percent of the northern portion of the line has missing or delaminated mortar lining. At the present time, the structural integrity of the pipeline remains sound. Over time, however, the loss of mortar lining will expose the pipeline to accelerated rates of corrosion and eventual leakage. This project will remove existing and failing cement mortar lining and install a flexible polyurethane lining system. Stages 1 and 2 of this three-stage project have been completed, and rehabilitation of the remaining 2.5 miles of the middle reach of the feeder will be completed under Stage 3, which will also include installation of 1,200 feet of steel liner.

Lakeview Pipeline Relining

The Lakeview Pipeline was constructed in 1973 to provide water from the East Branch of the State Water Project (SWP) to the Skinner area. Since it was completed, the Lakeview Pipeline has been shut down on numerous occasions to repair leaking joints. The line has experienced significant deformation which has caused leaks at pipe joints and loss of mortar lining. Due to the significant potential for corrosion of the pipeline, and the lack of structural integrity in many locations, permanent repairs should proceed expeditiously. In March 2015, in response to the ongoing state-wide drought, the Stage 1 repairs were completed. This work included lining a one-mile portion of the Lakeview Pipeline known as the Bernasconi Tunnel with a steel liner. In conjunction with the recently completed Lakeview Pipeline/Inland Feeder intertie, this improvement enables up to 200 cubic feet per second (cfs) of water stored in Diamond Valley Lake to be delivered to the Mills plant. Stage 2 construction was completed in May 2021, which relined a 133-inch diameter section of pipe referred to as a "wye" branch near the east portal of the Bernasconi Tunnel and replaced a 60-inch diameter "tee" section of pipe located at the Lake Perris Control Facility. Completion of this stage, up to 120 cfs of water stored in Diamond Valley Lake can be reliably delivered to the Mills plant, while maintaining overall pipeline structural integrity. The Stage 3 work includes lining 3.7 miles of the Lakeview Pipeline between the Inland Feeder's PC-1 control structure and the Perris Control Facility, along with installation of a 1,000-foot-long reach of 9.5-foot-diameter pipe to bypass the Perris Control Facility. Upon completion of the Stage 3 work, the Lakeview Pipeline will be capable of delivering up to 340 cfs from Devil Canyon through the Inland Feeder to the Mills plant, providing an alternate delivery route to the plant as backup to the Santa Ana Valley Pipeline. The Stage 4 work will include lining the remaining 6.7 miles of the Lakeview Pipeline that extends from PC-1 to the San Diego/Casa Loma Canal junction structure.

Orange County Feeder Relining

The Orange County Feeder conveys treated water from the Weymouth Water Treatment Plant in La Verne to six member agencies in Los Angeles and Orange Counties. Recent internal inspections of the feeder have identified significant deterioration of the existing coal-tar enamel lining, which is 77 years old. While the pipeline's structural integrity remains sound at present, the interior lining displays blistering and disbonding, which expose the pipeline to accelerated rates of corrosion and eventual leakage. The lining needs to be repaired in order to maintain long-term reliability of the pipeline.

This project repairs the lining on the 11-mile-long Feeder, which is being accomplished in three stages. Stages 1 and 2 of this three-stage project have been completed. Stage 3 will reline the remaining four miles of the middle reach of the feeder. Stage 3 work includes replacement of the lining, welding of corroded pipe joints, and replacement of deteriorated valves along the feeder.

Rehabilitation of Metallic and Concrete Pipelines Phase 1 - Select High Priority Feeders

Metropolitan's water delivery system consists of 830 miles of pipelines, of which 670 miles are comprised of reinforced concrete, welded steel, and cast-iron pipe. The majority of Metropolitan's non-PCCP lines were installed over 50 years ago. Experience has shown that degradation from corrosion of reinforced concrete and metallic pipelines can often develop undetected. Some of these pipelines are also showing signs of deterioration, as evidenced by several recent lining and joint repair projects (e.g., Etiwanda Pipeline, Orange County Feeder, and Lakeview Pipeline).

Phase 1 for high priority pipelines, including Santa Monica Feeder, Upper Feeder, Lower Feeder, and Middle Feeder, will include a complete risk assessment and prioritization of pipeline inspections, condition assessment of these high priority pipelines using prequalified inspection technologies, and recommendations for inspection technologies to be used for future condition assessments. This project also includes installation of permanent pipeline appurtenances required to access the pipeline and rehabilitation of pipelines to reduce the risk of failure, minimize repair costs, and prevent unplanned shutdowns. During the course of this project, other feeders may be identified and added to the high priority list.

Rialto Pipeline Rehabilitation at Station 2986

The Rialto Pipeline conveys untreated water from Lake Silverwood to the Live Oak Reservoir in La Verne. The pipeline supplies water from the East Branch of the State Water Project to the Weymouth Water Treatment Plant, and directly services three member agencies through 11 service connections. The size of the pipeline ranges in diameter from 96 to 120 inches and is part of the greater Rialto Pipeline System, which includes the Rialto Pipeline, Etiwanda Pipeline, and La Verne Pipeline.

In February 2010, an internal condition assessment of the pipe mortar lining and remote field eddy current inspection of prestressed concrete cylinder portions were performed. One pipe section with significant mortar damage was observed at Station 2986+09 through Station 2986+44, exposing roughly 26 linear feet of steel. This pipe segment was again inspected in December 2018 and 2020 where it was discovered that an entire 30-foot segment of pipe was completely devoid of mortar lining with a significant amount of the exposed steel needing immediate weld repair. This project will perform extensive weld repair of pipe wall and replacement of missing mortar lining. This project will also replace failed pipe spool and isolation valve at CB-11 service connection, eight 72-inch butterfly valve seats at San Dimas Pressure Control Structure, and six lubricated plug valves ranging in size from 4 inches to 16 inches; reconfigure CB-15 service connection to allow blow off discharge and provide access to one blow off and one pump well structure; and install internal pipe seals at San Dimas Pressure Control Structure.

San Diego and Auld Valley Canals Concrete Repairs

The scope of this project is a comprehensive repair of damaged concrete liner within the San Diego and Auld Valley Canals. The repair work will need to be performed during an extended shutdown of the two canals, to the extent that demands, and storage can be accommodated. An extended outage of approximately 30 days will facilitate repair to priority areas and reaches of the canals, will shorten the overall repair timeline, and will reduce the risk of further deterioration. Failure of the liner in either canal will interrupt or reduce raw water deliveries to the Skinner plant and to various downstream member agencies and sub-agencies. The canals are the sole conveyance route for Colorado River water and State Project water to the Skinner plant.

San Diego Pipelines 1 and 2/Rainbow Tunnel Improvements

The San Diego Pipelines 1 and 2 were built in the 1940s and have multiple diameters and pipe materials consisting of steel, precast concrete cylinder pipe, and precast non-cylinder pipe. Some of the steel section have cement mortar lining, the remaining sections all have coal tar lining. The Rainbow Tunnel has an approximate 72-inch diameter, and is horseshoe-shaped. A recent inspection identified sections where the lining needs replacement. Several valves at turnout structures have reached the end of their service lives and require replacement. This project will perform a detailed evaluation of the pipelines and tunnel and appurtenant structures, replace damaged lining, and refurbish or replace other components as needed.

San Diego Pipeline 1 and 2 Station 1214+00 Exposure Repair

On February 14, 2019, the Temecula area experienced heavy and sustained precipitation followed by additional storm events over the 2019-2020 storm season. The resulting accelerated stream flows exposed the buried San Diego Pipeline Nos. 1 and 2 where the pipelines cross an ephemeral stream channel. Emergency repairs were made in October 2020 under an emergency permit from the Regional Water Quality Control Board. As a condition of the permit, a permanent solution for the site must be constructed within two years of the authorization of the emergency permit. This project will develop and construct a permanent erosion control solution for the pipeline exposure on San Diego Pipeline Nos. 1 and 2. This is a new project for this budget cycle.

Santa Monica Feeder Cast Iron Pipe Rehabilitation

The Santa Monica Feeder was constructed in 1941 as part of Metropolitan's original distribution system. The feeder is approximately 25 miles long, with a diameter ranging from 28 inches to 120 inches. The feeder has various reaches comprised of cast iron, welded steel, and reinforced concrete pipe. The Santa Monica Feeder delivers treated water from the Eagle Rock Control Facility in the city of Los Angeles to four member agency service connections before reaching its terminus in the city of Santa Monica. This project will assess the condition of the cast iron portion of the Santa Monica Feeder using emerging inspection technologies. The cast iron portion of the pipeline is eight miles in length and located between the Hollywood Tunnel North Portal to the Santa Monica Feeder terminus near the Santa Monica Service Connection SMN-01. This is the last section of cast iron pipe in Metropolitan's distribution system. The assessment is anticipated to include leak detection, pipe wall thickness inspection, and internal seal installation by contractor for joint repairs as needed. Following the condition assessment, a long-term plan will be prepared to monitor, and replace and/or rehabilitate the Santa Monica Feeder cast iron pipe. In anticipation of potential prolonged outages, various operational modes will be investigated and designed to maintain reliable flow to service connections. Also, hydraulic and structural analyses will be performed on the pipeline with design recommendations to address various operational conditions and scenarios such as, seismic events and pressure surge episodes.

Upper Feeder - Lining Replacement at the Santa Ana River Bridge

The Upper Feeder was constructed between 1933 and 1941 with a 116-inch-diameter steel pipe and lined with coal tar enamel liner (CTE). This portion of the Upper Feeder is located above ground and crosses the river bed via a bridge. Exposure to the sun subjects the pipeline to a thermal cycle that is continuous heating and cooling of the pipe material. Over the past seven years, staff have performed inspections on this segment of the Upper Feeder and determined that approximately 90% of the pipe's internal lining has failed. Mild to moderate pitting on the interior of the pipe indicate rust tuberculation and corrosion. This project will reline approximately 1,000 feet of the 116-inch diameter pipeline with an approved liner material.

Distribution System - Other Project Group**Chloramine Booster Station at Three Locations within the Treated Water Distribution Systems**

Metropolitan uses chloramines, formed by combining chlorine and ammonia, as a disinfectant in our distribution systems. Internal research has determined the most effective chloramine concentration to prevent microbial growth at low flow conditions. Addition of chlorine and liquid ammonium sulfate (LAS) in the treated water distribution systems will allow the total chlorine residual within the distribution system to be maintained at or above 1.8 mg/L, especially during low demand periods. LAS is recommended instead of aqueous ammonia because LAS has fewer regulatory requirements, as well as lower construction and operating costs. The project will determine the three optimum locations to install: (1) sodium hypochlorite and LAS tanks, (2) feed pumps and appurtenances, (3) piping, and (4) instrumentation and control systems to ensure the safety and reliability of the feed systems.

Cone Camp Intertie Bypass Rehabilitation

This project will rehabilitate the Cone Camp Intertie including the existing 24-inch bypass pipe around the 78-inch butterfly valve. Work may include replacement of the 24-inch bypass pipe and associated valves, and other features necessary to support the bypass operation. The Cone Camp Intertie was constructed in 2002 as a part of the Inland Feeder Highland Pipeline to allow the Inland Feeder to receive State Project Water (SPW) through San Bernardino Valley Municipal Water District (SBVMWD) Foothill Pipeline. At the intertie, a bypass pipeline is used to equalize pressure on both sides of the 78-inch butterfly shutoff valve prior to operating the valve. This bypass pipeline has been taken out of service due to pinhole leaks caused by microbiological corrosion due to stagnant water. Although normal operation of the Inland Feeder does not require the intertie, the intertie may be used to convey water for the Inland Feeder when Devil Canyon 2nd afterbay is offline. This is a new project for this budget cycle.

Diamond Valley Lake and Skinner Area Flow Meter Replacement

The flow meters at the Diamond Valley Lake (DVL) Inlet/Outlet Tower, DVL Connection Canal, DVL Secondary Inlet, Cabazon Radial Gate Facility, Lake Skinner Inlet, and DVL North and South siphons are critical to operation of Metropolitan's distribution network in the vicinity of DVL and the Skinner Plant. This project will either replace or refurbish these aging flow meters making them either new or like-new. This is a new project for this budget cycle.

Diamond Valley Lake Crane Rehabilitation

The scope of the project is to rehabilitate the 25-ton gantry crane at the Diamond Valley Lake Inlet/Outlet Tower. The project will also include a study to evaluate the possibility of increasing the crane capacity to enable it to be used as an alternative lifting device for the emergency drop gate in the event of a failure of the drop gate's normal hydraulic lifting system. This project will enhance infrastructure safety, security, and resiliency, and will enhance the reliability of water deliveries.

Diamond Valley Lake Oxygenation System

This project will construct a liquid oxygen (LOX) storage and feed system at Diamond Valley Lake to improve water quality, reduce impacts of cyanobacterial blooms, and maintain operational flexibility to ensure reliable and high-quality water deliveries under drought and emergency conditions. The LOX system will maintain oxygenated conditions in the deeper waters of DVL and prevent the formation of reduced compounds (sulfides, metals) that interfere with water treatment processes. This will allow for high-quality water to be released from the reservoir year-round. The system consists of: (1) a LOX tank; (2) evaporators to convert LOX to gas; (3) supply lines to deliver oxygen; (4) diffusers to mix the oxygen; and (5) a control system to regulate oxygen flow. Also, a cost benefit analysis will be performed during the early stage of the project to compare the life-cycle cost of purchasing LOX from a vendor versus installing a LOX generation facility at DVL.

Diamond Valley Lake Forebay Concrete Joint Seal Replacement

The concrete joint seals in the Diamond Valley Lake (DVL) Forebay have been in service for over 20 years and have far exceeded the typical service life of two to five years. Division of Safety of Dams (DSOD) had previously directed Metropolitan to address seal replacement at the DVL Spillway; that replacement was completed in 2018. Based on a Metropolitan inspection in July 2018, the Forebay seals are in similar condition to the Spillway seals. This project will remove deteriorated and de-bonded joint seals at the DVL Forebay (approximately 150,000 linear feet), and replace with a new, cost-effective and high-performance MWD-approved sealant.

East Lake Skinner Bypass & Bypass No. 2 Screening Structure Upgrade

The East Lake Skinner Bypass Slide Gates were built 54 years ago in 1967 and are in need of rehabilitation. The gates are binding during operation which is rendering them inoperable. In addition, the East Lake Skinner Bypass Afterbay Trash Rack needs to be replaced with a new stainless-steel rack to minimize the corrosion which caused the existing galvanized material to collapse under the weight of a severe algae bloom during bypass operations. The scope of work consists of reconditioning three of the East Lake Skinner Bypass Slide Gates, and to replace the East Lake Skinner Bypass Afterbay trash rack which is severely corroded and partially collapsed. In addition, this project will modify the East Lake Skinner Bypass Algae Screening Mechanisms Discharge Piping to bypass the Algae Shakers and upgrade the Lake Skinner Bypass No. 2 Forebay Trash Rack Lifting Mechanisms.

East Orange County Feeder No. 2 Seismic Retrofit at Diemer Water Treatment Plant

A recent assessment identified a slope near the south-western pad at the Diemer plant as having the potential to damage the East Orange County Feeder No. 2 pipeline during a significant earthquake. This structure requires further analysis to ensure that it meets Metropolitan's current structural standards and the facility is reliable in the event of seismic activity. This project will assess, design, and complete seismic retrofit construction near the south-western pad at the Diemer plant.

Garvey Reservoir Drainage & Erosion Control Improvements

Garvey Reservoir was constructed in 1954 as a component of the Middle Feeder system. The reservoir receives treated water from the Weymouth plant and has a maximum storage volume of 1,600 acre-feet. The reservoir is located within the city of Monterey Park on a hill that is surrounded on the west and south by residential properties that are lower in elevation. During significant storm events, surface runoff collects and flows downhill through improved drainage systems and natural drainage courses to Metropolitan's property boundaries. Connecting off-site drainage systems that were constructed by developers more than 52 years ago do not meet current minimum design standards and have deteriorated over time. Recognizing the mutual benefit of addressing runoff issues from the reservoir, Metropolitan entered into an agreement with the city of Monterey Park to implement drainage and erosion control improvements both within Metropolitan's property, and improvements to drainage in city streets. There are 11 geographically defined drainage zones at Garvey Reservoir to be mitigated. Zones 1 to 5 have been completed and zones 6, 7, 8, 10, and 11 are in construction. Improvements for drainage zone 9, the final drainage zone, are under discussion with the city.

Garvey Reservoir Sodium Hypochlorite Feed System Upgrades

Upgrades to the sodium hypochlorite feed system at Garvey Reservoir are needed to maintain treated water quality within the Central Pool portion of Metropolitan's distribution system. The existing hypochlorite system has exceeded its expected service life and has deteriorated over time, requiring frequent repairs. Failure of the chemical feed system would negatively affect water quality within the distribution system by not maintaining minimum chlorine residual. This project will replace the current hypochlorite system with new valves, piping, electrical systems, and instrumentation and updated controls that will allow both automated and remote control of the chemical feed system.

Lake Mathews Aboveground Storage Tank Replacement

The Lake Mathews existing diesel aboveground storage tank does not conform to current regulations and needs to be removed from service. In its present condition, the tank cannot be operated in a safe manner. The Lake Mathews Spill Prevention Countermeasure and Control Plan cannot be certified as long as the diesel aboveground storage tank remains in service. This project will replace the existing 10,000-gallon diesel fuel aboveground storage tank (AST) with its associated containment dike, venting, fill system, level monitoring, fuel dispensing system, catwalk, and continuous release detection system with a new 6,000-gallon AST system, and design and construct a roof over the storage tank containment and unloading area. This project will also install an eyewash station.

Lake Mathews Electrical Reliability

The existing electrical distribution system at Lake Mathews constructed during the 1930s needs to be upgraded for reliability. This system has been in service for over 77 years and serves the lake's outlet towers and junction shaft, hydroelectric plant, forebay, chlorination system, administrative offices, and maintenance and repair shops. The electrical distribution system is outdated, has experienced numerous overloads, and lacks capacity for planned additional equipment. The system needs to be upgraded to maintain reliability and meet future power demands. This project will evaluate and upgrade power distribution system, which may include use of alternate medium power distribution voltage (4.16 kV) in line with other Metropolitan facilities, underground and overhead power lines and condition of electrical poles, voltage stability for all facilities, the ability to isolate feeders to provide selective isolation and safer maintenance, and emergency generators capability to provide adequate backup. This project also plans to integrate the upgraded electrical system with Metropolitan's system-wide supervisory control and data acquisition system.

Lake Mathews Perimeter Fencing Upgrade

Lake Mathews is the terminus of the CRA. Water is stored in Lake Mathews Reservoir; withdrawn through the lake's main outlet towers into the forebay, and is then conveyed through the Upper Feeder and Lower Feeder to the Weymouth and Diemer plants, respectively. The existing chain link fencing along the approximately 15-mile perimeter of the Lake Mathews facility has deteriorated and is ineffective at preventing intrusions. The fencing can be easily cut, resulting in an increase in break-ins and illegal dumping through the fencing. This project will replace the existing five-foot tall chain link fencing with eight-foot tall, anti-cut, anti-climb security fencing, constructed of steel or wrought iron. This project will enhance infrastructure safety, security, and resiliency, and will improve security and emergency response.

Lake Mathews Sodium Hypochlorite Injection System

Update and redesign the Lake Mathews sodium hypochlorite injection system to relocate the injection point to a location that will minimize the impacts of chlorine injection on the forebay and appurtenant structures. The design will also consider effective Quagga Mussel control, enhancing safety and reliability of the injection system, and adherence to water quality goals and requirements. The project will develop options to replace the existing interim sodium hypochlorite system at the Lake Mathews Forebay with a system at Lake Mathews Outlet Tower No. 1 and Outlet Tower No. 2, and to provide continuous chemical injections from the towers through the Lake Mathews Forebay, Power Plant, and into the Upper and Lower Feeders.

Lake Skinner Oxygenation System

Lake Skinner is subject to seasonal thermal stratification when the lake water temperature prevents mixing of vertical layers resulting in anaerobic conditions and cyanobacteria blooms. These conditions in the lake can ultimately affect water treatment operations and the quality of the finished drinking water due to taste and odor compounds and sometimes cyanotoxins produced by the cyanobacteria. Lake Skinner currently has a compressor-based aeration system that pumps air to the bottom of the lake in an attempt to mix the water and prevent the thermal stratification but the system is undersized and has been at times, ineffective. This project will construct a hypolimnetic oxygenation system at Lake Skinner including an oxygen supply or liquid oxygen facilities, an anchored diffuser piping assembly in the lake, and associated electrical modifications to improve water quality conditions in Lake Skinner and ensure water supply reliability. This is a new project for this budget cycle.

Lake Skinner West Bypass Screening Structure Rehabilitation

The San Diego Canal West Bypass Screening Structure is located at the terminus of the San Diego Canal and is the starting point for water which bypasses Lake Skinner to downstream users. The bypass screening structure is fitted with an electrically powered revolving screen extending across the channel, which dips into the channel to intercept and collect algae mats and other floating debris. This system prevents algae mats and other debris from entering the treatment plant or member agency water systems via the bypass pipelines. The screening equipment was installed in the 1960s and has now been removed due to operational difficulties. The concrete support structure for the screening equipment constricts flow entering the bypass pipeline and canal must be operated near spill elevation in order to achieve the maximum flow of 280 cfs in the canal/pipeline under current conditions. This project will demolish the concrete support structure for the bypass screening structure to remove the flow constriction point and replace the deteriorated trash rack located upstream of the bypass pipeline entrance.

Live Oak Reservoir Bypass Pipeline Cathodic Protection

Constructed in 1973, the Live Oak Reservoir Bypass, Inlet, and Outlet Pipelines are dielectrically coated welded steel pipelines with a diameter of 97 inches and are approximately 0.6 miles long. The 24-inch dielectrically coated Desilting pipeline ties in to the Outlet pipeline, crosses the Bypass pipeline and is approximately 800 feet long. The Live Oak Reservoir Bypass connects the prestressed reaches of the Rialto Pipeline to the east and the west. The pipeline is one of the few reaches of welded steel pipe that is not yet cathodically protected. A failure of the Live Oak Reservoir Bypass would inhibit Metropolitan's ability to convey water through its system and potentially disrupt Metropolitan's ability to deliver water to several member agencies. The scope of work is to design and install a comprehensive cathodic protection system in the Live Oak Reservoir Bypass.

Lower Feeder Air Entrainment Improvement

When operated at flows higher than 300 cfs, air becomes entrained in the water traveling through the Lower Feeder due to large elevation drops within the conveyance system. When coagulant is added to this inflowing water in the rapid mixers at the Diemer plant, the result is clusters of floating foam mats on the water surface in the coagulation and sedimentation basins which causes operational, maintenance, and aesthetic concerns. Entrained air also increases filter run time. This project will reduce or eliminate entrained air through modifications and addition of components along the Lower Feeder including at the Corona and Temescal power plants, pressure control structures, pipelines, air stacks, and air release/vacuum valves. This is a new project for this budget cycle.

Lower Feeder Cathodic Protection System Rehabilitation

The existing cathodic protection systems for the Lower Feeder were installed in 1995. Recent surveys of the existing systems have indicated that they are no longer providing adequate protection due to gradual deterioration of their anodes. This project will rehabilitate or replace the equipment, such as impressed-current anode wells and rectifiers; and remove existing equipment as required by law. This is a new project for this budget cycle.

Middle Feeder North Drainage and Protection Restoration

The Middle Feeder North from Station 1067+00 to Station 1071+00 lies within both a Metropolitan fee parcel and easements between Graves Avenue and Mooney Drive in the unincorporated Los Angeles County community of South San Gabriel. A recent visual inspection and survey of the area determined that the current soil cover over the feeder has eroded to less than design minimums. This project will restore the design soil cover over Middle Feeder North conduit and improve drainage features to preclude this problem in the future. This is a new project for this budget cycle.

Orange County Feeder Cathodic Protection System Rehabilitation

The Orange County Feeder conveys treated water from the F. E. Weymouth Water Treatment Plant in La Verne to its terminus at service connection CM-1 in Newport Beach. The feeder is approximately 41 miles long and was installed in 1942. The feeder consists of approximately 21 miles of welded and un-bonded steel pipe, 19 miles of precast concrete pipe, and one mile of prestressed concrete cylinder pipe. Previously, cathodic protection could not be effectively applied to the subject reach; however, recent pipeline rehabilitation has made cathodic protection a viable option to prevent external corrosion and thus prevent future pipe leaks. The first three locations that were identified during the routine testing, which were no longer providing corrosion protection to the pipeline, have been replaced. This project will install a new cathodic protection system on the remaining portion of Orange County Feeder to protect approximately 11.2 miles of feeder. The scope of work includes design and installation

Orange County Feeder Dewatering Improvements

The Orange County Feeder originates at the Weymouth plant in La Verne and extends south for 41 miles to its terminus in the City of Newport Beach. Operations staff struggles with dewatering the pipeline due to development-driven relocations and aging infrastructure. This project will perform the analyses, equipment and facility modifications, and documentation to facilitate future pipe dewatering operations. This is a new project for this budget cycle.

Palos Verdes Reservoir Sodium Hypochlorite Storage and Chemical Feed System and Security Upgrades

This project will replace the 12,000-gallon fiber-reinforced plastic (FRP) sodium hypochlorite (NaOCl) storage tank and appurtenant fittings at the Palos Verdes Reservoir (PVR). The existing FRP tank, manufactured in 1992, is well past its recommended service life of 6-10 years. The FRP tank will be replaced with two 6,000-gallon titanium tanks, which are designed to last 50-70 years and do not corrode in the presence of sodium hypochlorite. Further, modifications to the tank farm feed systems are required to meet revised minimum flow and dosage requirements recently directed by Water Quality and Member Agency demands. Lastly, security cameras will also be added around the PVR facility in order to provide increased security monitoring.

Prevention of CRA Water Migration to SPW at Weymouth Junction Structure

Recently, quagga mussel veligers were discovered at the USG-03 service connection necessitating coordination with local water agencies and implementation of a control and mitigation plan. The affected areas were flushed and chlorinated, groundwater recharge basins were desiccated, and no additional veligers were found. It was determined that Colorado River Water (CRW) was able to inadvertently migrate through the Weymouth Water Treatment Plant (WTP) Junction Structure's sectionalizing valves into the La Verne Pipeline and travel through the Glendora tunnel to service connection USG-03. This project will install pressure monitoring devices connected to nearby existing Remote Terminal Units at key locations along the La Verne Pipeline. Pressure ranges and set points for alarms will be determined in order to provide adequate time for operations and field staff to respond to abnormal conditions in the system to detect CRA water intrusion. This project would minimize the potential for CRW to enter unaffected facilities that normally move State Water Project (SWP). This is a new project for this budget cycle.

Rialto Pipeline Cathodic Protection System Rehabilitation

The existing cathodic protection systems for Rialto Pipeline were installed between 1988 and 1995. Recent surveys of the existing systems have indicated that they are no longer providing adequate protection due to gradual deterioration of their anodes. This project will rehabilitate or replace the equipment such as impressed-current anode wells and rectifiers; and remove existing equipment as required by law. This is a new project for this budget cycle.

Santa Ana River Discharge Pad - Upper Feeder

Severe storm events eroded the north slope of the Santa Ana River near the Upper Feeder crossing. This damage resulted in large voids in the riverbank to the footing supporting the bridge span and the foundation of the emergency discharge bunger valve. The damage was repaired, and a recommendation was made during the repair to construct a concrete pad to prevent a reoccurrence of this type of damage. This project will construct a concrete discharging pad to prevent erosion from storms and discharge from the bunger valve.

San Gabriel Tower and Spillway Improvements

The San Gabriel Tower (SGT), 86-foot-tall free-standing with a 24-foot by 14-foot rectangular base, was constructed in 1936, north of the city of Azusa. It sits at the base of the steep and weathered San Gabriel Mountains, between the west portal of Monrovia Tunnel No. 1 and the east portal of Monrovia Tunnel No. 2. The tower is surrounded by Angeles National Forest and is adjacent to Morris Reservoir. The function of the SGT is to regulate and isolate flows from the Weymouth plant via the Upper Feeder pipeline to the Eagle Rock Control Facility located in the city of Los Angeles. It is situated between two active faults, the Sawpit and the Sierra Madre faults, which are both capable of generating a magnitude 6.5 earthquake. While the tower was designed and constructed to the codes and standards in place during the 1930s, significant advancements have been made since that time in predicting the response and performance of structures as a result of seismic ground shaking. Planned upgrades to the San Gabriel Tower include: (1) reducing the height of the tower to increase its structural stability; (2) replacing the slide gates and actuators to restore isolation capability for the Upper Feeder; (3) improving access to the tower and spillway, including the river crossing; (4) repairing the spillway's concrete; (5) stabilizing the adjacent rocky slope; and (6) installing a barrier such as new fencing or protective screen to prevent animal entry into the spillway. This project will also evaluate and repair the Morris Dam connection, which includes large needle and isolation butterfly valves, and evaluate condition of the conical plug valve at groundwater replenishment connection USG-03 before deciding to upgrade to control valves or installation of a crane system that allows safe installation of the various orifice plates to control flow.

Santa Monica Feeder Cathodic Protection

The Santa Monica Feeder is a mortar coated welded steel pipeline with a diameter of 49-inches and is approximately 4.25 miles long. The pipeline is one of the few reaches of welded steel pipe that is not yet cathodically protected. A failure of the Santa Monica Feeder would inhibit Metropolitan's ability to convey water through its system and potentially disrupt Metropolitan's ability to deliver water to several member agencies. The scope of work is to design and install a comprehensive cathodic protection system in the Santa Monica Feeder.

Santiago Control Tower Seismic Improvements

The Santiago Control Tower acts as a control and diversion facility for water supplied to the Santiago Lateral pipeline, the Santiago Lateral Spillway Discharge Pipeline, and the Lower Feeder pipeline. This project will evaluate the Santiago Control Tower's ability to resist expected seismic forces based on the latest geotechnical and geological considerations and retrofit the tower. A detailed geotechnical analysis is required to determine the structure's interaction with surrounding soil and analyze the soil stability of the structure. The structure is located close proximity to the Whittier Fault on a raised area adjacent to a slope.

Skinner Bypass Pipelines Cathodic Protection

The Lake Skinner Bypass Pipeline # 1 (97-inch diameter), Lake Skinner Bypass Pipeline #3 (49-inch diameter), and Skinner Plant effluent Conduit # 1 (7-inch diameter) alignments have portions traversing inside and outside of the Skinner Treatment Plant property. The three pipelines are dielectrically coated steel pipelines. The original impressed current cathodic protection system was installed in 1980. The system was turned off as concerns emerged about exposing prestressed pipelines to cathodic protection. In addition, several modifications to the pipelines made the existing system unsuitable for the present pipeline configurations. The existing cathodic protection system requires full rehabilitation to adequately protect the pipeline from corrosion. A failure of the feeders would inhibit Metropolitan's ability to convey water through its system and potentially disrupt Metropolitan's ability to deliver water to several member agencies. The scope of work is to design and install a comprehensive cathodic protection system in the feeders.

Soto St. Facility - Security & HVAC Replacement

The Soto Street Facility serves as the main headquarters for staff and equipment that support the Western Region Unit (WRU) Conveyance and Distribution System. The WRU Incident Command Post, located in the Administration Building, also serves as the backup Emergency Operations Center for the Eagle Rock Operations Center. The Soto Street Facility currently has two layers of access control protection during business hours: a single card reader at the outer vehicle gate, and a single contracted security guard. During periodic foot patrols of the facility, the access gate is left unmanned. In addition, the alarm system is currently inoperable, and there are no access card readers on any of the exterior building doors, which remain unlocked during business hours. There have been recent multiple security events at this facility. Finally, the existing air handling unit that serves the Soto Street Administration Building has been in service since the 1960s, when the building had a different configuration. The current HVAC system does not provide adequate airflow to all parts of the building.

This project will improve the security of the Soto Street Facility by adding access card readers and security cameras, providing security lamination to glass doors and windows, providing a fenced secure outdoor storage yard, replacing the alarm system, and upgrading the HVAC system for the Administration Building.

Upper Feeder Blow Off Structure Replacement

Blow-off structures provide a means to completely drain a pipeline for emergencies, inspections, repairs, and general maintenance. The Upper Feeder Blow-Off Structure, located in the city of Sierra Madre, discharges the Upper Feeder directly into the Little Santa Anita Wash. The valves and piping in this structure have been in service for almost 80 years and have reached the end of their service life. One valve is stuck in the closed position, and another is experiencing leakage. In addition to a variety of different sizes and configurations of pipe within the structure, the structure itself does not comply with some of the safety and design features of more modern structures. This project will replace and enhance the Upper Feeder Blow-Off Structure in order to ensure reliable dewatering capability and comply with OSHA standards. The work includes but is not limited to replacement of manhole, access ladder, and various valves and valve stem extensions; and addition of various pipe couplings, various valves, pumps, pipes, and catwalk platforms.

Wadsworth Pumping Plant Stop Logs

The Wadsworth Pumping Plant was built with 12 pump/generation units. Units 1, 5, and 9 were decommissioned to allow DVL generation to be certified as "renewable energy" by the California Energy Commission. Hydroelectric plants are required to have a nameplate capacity of 30 MW or less to be certified. At 3.3MW per unit, the nine remaining units provide a generation capacity of 29.7MW. Generated energy must be certified renewable for electric utilities to meet the requirement that 33% of their energy come from renewable resources by 2020. The stop logs would provide a means to isolate the three decommissioned pumps from the DVL forebay keeping them out of the water and dry. Isolating the pumps from water contact reduces corrosion damage to the pumps and provides flexibility in the event pump/generation units need to be re-commissioned or repaired. This project will fabricate three sets of stop logs to isolate three decommissioned Wadsworth plant generation/pumping units from the forebay. Each set of stop logs consists of three stop log sections, for a total of nine sections of stop logs to isolate three pump units.

Wadsworth Pumping Plant Fire Protection System Upgrades

The Wadsworth Pumping Plant is located near Hemet at Metropolitan's Diamond Valley Lake (DVL). The pumping plant includes 12 vertical turbine pumps that are used to pump water into DVL or to generate electricity when water flows out of DVL into the forebay/San Diego Canal. Each pump/generator has a dedicated CO2 fire suppression system to prevent fires from spreading from one unit to another. However, the system is designed so that if the fire suppression system is inactive, the pump/generator will not operate. Some components of the current fire suppression system and control panels have been in service for almost 22 years and need to be replaced. In addition, the fire alarm system for the Wadsworth building is antiquated, and replacement parts are no longer available. This project will upgrade Wadsworth's fire suppression system by: (1) replacing the existing individual CO2 fire suppression systems for the operational vertical turbine pumps, and (2) upgrading the Wadsworth building fire alarm system.

West Orange County Feeder Cathodic Protection

The West Orange County Feeder (WOCF) was constructed in 1956, and is mortar and dielectrically coated welded steel pipeline with a diameter of 43-inches and 55-inches. The pipeline is approximately 13 miles long. The WOCF connects to the cathodically protected Orange County Feeder (OCF), prestressed and steel reaches of the Second Lower Feeder (SLF), and the cathodically protected Lower Feeder (LF). The pipeline is one of the few reaches of welded steel pipe that is not yet cathodically protected. A failure of the WOCF would inhibit Metropolitan's ability to convey water through its system and potentially disrupt Metropolitan's ability to deliver water. The scope of work is to design and install a comprehensive cathodic protection system in the WOCF.

Western Conveyance and Distribution Region - Blind Flange Structures Washdown Improvements

Currently, a substantial number of blind flange pipeline access and turn-out structures in the western conveyance and distribution region do not have an accessible and reliable water connection for washdown of piping, valves, and equipment during preventive maintenance. This project will modify or enhance structures that contain blind flanges to provide washdown capabilities. This is a new project for this budget cycle.

District Housing and Property Improvements Program

Fiscal Year 2022/23 Estimate: \$12.0 million

Fiscal Year 2023/24 Estimate: \$15.7 million

Program Information: The District Housing & Property Improvements Program is comprised of projects to refurbish or upgrade workforce housing at Metropolitan to enhance living conditions to attract and retain skilled employees.

Accomplishments for FY 2020/21 and FY 2021/22

- New projects initiated:
 - CRA Kitchen and Lodging Improvements
- Major milestones achieved:
 - CRA Kitchen and Lodging Improvements – conceptual study and preliminary design completed
 - District Housing Property Improvements – assessments, conceptual and relocation studies, and preliminary design completed
 - Employee Village Enhancement - master planning, study and preliminary design for Gene, Iron Mountain, Eagle Mountain, and Hinds Pumping Plants completed

Objectives for FYs 2022/23 and 2023/24

Project	Total Project Estimate	Estimated Construction Completion	Major Milestones
CRA Kitchen and Lodging Improvements	\$ 19,000,000	2027	Begin construction at Eagle and Iron Mountain pumping plants
District Housing Improvements	\$ 72,000,000	2027	Begin construction at Gene, Iron Mountain, Eagle Mountain, and Hinds pumping plants
Employee Village Enhancement	\$ 44,000,000	2027	Begin construction at Gene, Iron Mountain, Eagle Mountain, and Hinds pumping plants

Housing & Property Improvements Project Group

CRA Kitchen and Lodging Improvements

Eagle Mountain and Iron Mountain Pumping Plants have kitchens and guest lodges that are used by staff during shutdowns and construction projects, and during extended periods of condition assessments and design of rehabilitation work. These facilities will be used frequently over the next decade as the planned rehabilitation of the 45 main CRA pumps moves forward.

The kitchen at Iron Mountain Pumping Plant has been in service for decades and while still functioning, its equipment is deteriorated and obsolete. The kitchen at Eagle Mountain Pumping Plant does not currently meet San Bernardino County Health Services' requirements for large-scale food storage, refrigeration, or handling. As a result, it has been removed from service. The 10-room guest lodge at Eagle Mountain Pumping Plant and the 16-room guest lodge at Iron Mountain Pumping Plant have both deteriorated after more than 42 years of service and require frequent short-term repairs.

An initial assessment discovered that replacement of these facilities would be more economical since renovation would require significant seismic, electrical, plumbing, and roofing upgrades to meet current codes. This project will replace the kitchen and lodge facilities with new buildings with higher capacity in preparation of increasing work to upkeep the facilities out in the desert to maintain the CRA conveyance system reliability.

District Housing Improvements

Metropolitan owns 99 houses throughout the five CRA pumping plants and rents to employees involved in operation and maintenance of the CRA. A pilot renovation of 11 houses was completed in 2019 and construction of ten new houses was completed in 2018. In the same year, the Board authorized an assessment to determine whether the best course forward was to replace or renovate the remaining 78 houses. The assessment revealed that replacement of the houses was the best option. In addition, a recent housing analysis determined that only 75 of 78 remaining houses need to be replaced at four of the five pumping plants along with construction of two maintenance and two storage buildings, one each at Eagle Mountain and Iron Mountain Pumping Plants, to support the long-term corrective and preventative maintenance activities after the houses have been replaced.

Employee Village Enhancement

Metropolitan owns houses throughout the five CRA pumping plants and rents to employees involved in operation and maintenance of the CRA. In addition, due to the remote location of the pumping plants, each of the pumping plants has an employee village to provide a sense of community and offer the residents a space away from the work areas. Amenities such as swimming pool and tennis courts are also part of these villages.

These villages and their current amenities are deteriorating due to the age and exposure to the harsh desert environment. This project will replace and enhance the village amenities at four CRA pumping plants (Hinds, Eagle Mountain, Iron Mountain, and Gene) that would focus on building a vibrant, healthy, and sustainable community for Metropolitan's staff.

Minor Capital Projects Program

Fiscal Year 2022/23 Estimate: \$8.7 million

Fiscal Year 2023/24 Estimate: \$8.0 million

Program Information: The Minor Capital Projects (Minor Cap) Program is comprised of projects, with an estimated cost of less than \$400,000, that require rapid response to address unanticipated failures, safety or regulatory compliance concerns, or to take advantage of shutdown opportunities. The Minor Cap Program authorizes the General Manager to execute projects that meet defined criteria without seeking additional Board approval.

Accomplishments for FY 2020/21 and FY 2021/22

- New projects initiated thru December 2021:
 - Forty-two projects were initiated
- Major milestones achieved thru December 2021:
 - Thirty-five projects were completed

Objectives for FYs 2022/23 and 2023/24

Project	Total Project Estimate	Estimated Construction Completion	Major Milestones
Various projects costing less than the Board approved maximum project cost * *Prior to Fiscal Year 2018/19 - \$250,000 Currently - \$400,000	\$56,000,000 for projects in open and new Minor Cap Appropriations	2027	Complete all projects within 3 years of initiation

Prestressed Concrete Cylinder Pipe (PCCP) Rehabilitation Program

Fiscal Year 2022/23 Estimate: \$51.2 million

Fiscal Year 2023/24 Estimate: \$53.2 million

Program Information: The PCCP Rehabilitation Program is composed of projects to refurbish or upgrade Metropolitan's PCCP feeders to maintain water deliveries without unplanned shutdowns.

Accomplishments for FY 2020/21 and FY 2021/22

- New projects initiated:
 - Allen-McColloch Pipeline PCCP 2021 Relining
- Major milestones achieved:
 - Completed construction
 - Allen-McColloch Pipeline PCCP 2021 Relining
 - Second Lower Feeder Reach 2
 - Second Lower Feeder Reach 8
 - Completed design
 - Allen-McColloch Pipeline PCCP 2021 Relining
 - Second Lower Feeder Reach 3A
 - Second Lower Feeder Reach 8

Objectives for FYs 2022/23 and 2023/24

Project	Total Project Estimate	Estimated Construction Completion	Major Milestones
Electromagnetic Inspections of PCCP Lines	\$ 10,000,000	Ongoing	Continue inspections in conjunction with pipeline shutdowns
Second Lower Feeder PCCP Rehabilitation - Reach 3A	\$ 26,000,000	2023	Complete construction
Second Lower Feeder PCCP Rehabilitation - Reach 3B	\$ 67,000,000	2024	Begin construction
Sepulveda Feeder PCCP Rehabilitation – Reach 1	\$ 130,000,000	2025	Complete preliminary and final design

Allen McColloch Pipeline Project Group

Allen-McColloch Pipeline PCCP Rehabilitation

The planned rehabilitation work involves lining the existing PCCP segments with steel liner pipe designed as a stand-alone pipeline which can accommodate full internal and external pressures on the line. The project includes restoring the Allen McColloch Pipeline to "As Like New Conditions" as possible. This would include relocation of all air release and vacuum valves (AR/VV) that have not already been relocated above ground and evaluating and possible replacement of sectionalizing, service connection turnout, pumpwell, AR/VV, shutoff, and blowoff valves, etc. In addition, the project includes procurement of any needed permanent or temporary right of way and evaluation and possible replacement or modification of all pressure control structures, master meters, and meter structures.

Calabasas Feeder Project Group

Calabasas Feeder PCCP Rehabilitation

The planned rehabilitation work involves lining the existing PCCP segments with steel liner pipe designed as a stand-alone pipeline which can accommodate full internal and external pressures on the line. The project includes restoring the Calabasas Feeder to "As Like New Conditions" as possible. This would include relocation of all air release and vacuum valves (AR/VV) that have not already been relocated above ground and evaluating and possible replacement of sectionalizing, service connection turnout, pumpwell, AR/VV, shutoff, and blowoff valves, etc. In addition, the project includes procurement of any needed permanent or temporary right of way and evaluation and possible replacement or modification of all pressure control structures, master meters, and meter structures.

Rialto Feeder Project Group

Rialto Pipeline PCCP Rehabilitation

The planned rehabilitation work involves lining the existing PCCP segments with steel liner pipe designed as a stand-alone pipeline which can accommodate full internal and external pressures on the line. The project includes restoring the Rialto Pipeline to "As Like New Conditions" as possible. This would include relocation of all air release and vacuum valves (AR/VV) that have not already been relocated above ground and evaluating and possible replacement of sectionalizing, service connection turnout, pumpwell, AR/VV, shutoff, and blowoff valves, etc. In addition, the project includes procurement of any needed permanent or temporary right of way and evaluation and possible replacement or modification of all pressure control structures, master meters, and meter structures.

Second Lower Feeder Project Group

PCCP Rehabilitation Valve and Equipment Storage Building

For the PCCP Program, staff procures large-diameter isolation valves and other long-lead, critical equipment and material in advance of the start of construction. Advanced procurement helps to prevent potential manufacturing or logistical delays from impacting future construction contracts. These contracts are typically scheduled with pipeline shutdowns that are coordinated with member agencies and local cities years in advance. Procuring valves in advance also ensures that the valves are available in the event of material shortages or to address an unanticipated repair. Suitable facilities are needed to store and maintain the large equipment as they will be delivered to the region over the next two to three years. This project will construct an approximately 18,200 square-foot pre-engineered metal building with a reinforced concrete slab foundation and motorized roll-up doors to protect Metropolitan's assets, enhance operational flexibility, and reduce risk of project delays for the PCCP Program.

Second Lower Feeder PCCP Rehabilitation

The planned rehabilitation work involves lining the existing PCCP segments with steel liner pipe designed as a stand-alone pipeline which can accommodate full internal and external pressures on the line. The project includes restoring the Second Lower Feeder to "As Like New Conditions" as possible. This would include relocation of all air release and vacuum valves (AR/VV) that have not already been relocated above ground and evaluating, installation of new isolation valve structures, construction of bypasses, and possible replacement of sectionalizing, service connection turnout, pumpwell, AR/VV, shutoff, and blowoff valves, etc. In addition, the project includes procurement of any needed permanent or temporary right of way and evaluation and possible replacement or modification of all pressure control structures, master meters, and meter structures.

Second Lower Feeder Rehabilitation Reach 3 Acoustic Fiber Optic PCCP Monitoring System

Prestressed concrete cylinder pipe (PCCP) is well-known in the waterworks industry to be at risk of sudden failure from loss of strength due to the breaking of pre-stressed wires. The Second Lower Feeder is included in Metropolitan's list of five PCCP pipelines slated for rehabilitation. Rehabilitation is scheduled to occur over several years to reduce the duration that a portion of the pipeline is out of service, and the work is prioritized based on the condition of the pipe. Shutdown procedures for inspections, such as complete dewatering of Second Lower Feeder, have become increasingly difficult because of operational constraints. This project will design, install, start-up, an innovative monitoring system for wire breaks using an acoustic fiber optic PCCP monitoring system on approximately 5 miles of Second Lower Feeder thereby eliminating the need for staffed pipe inspections. The fiber optic cable system is sensitive to sound that will detect wire breaks. The cable extends to a data acquisition computer that continuously "listens" for the distinct sound of wires breaking. This is a new project for this budget cycle.

Sepulveda Feeder Project Group

Sepulveda Feeder PCCP Rehabilitation

The planned rehabilitation work involves lining the existing PCCP segments with steel liner pipe designed as a stand-alone pipeline which can accommodate full internal and external pressures on the line. The project includes restoring the Sepulveda Feeder to "As Like New Conditions" as possible. This would include relocation of all air release and vacuum valves (AR/VV) that have not already been relocated above ground and evaluating and possible replacement of sectionalizing, service connection turnout, pumpwell, AR/VV, shutoff, and blowoff valves, etc. In addition, the project includes procurement of any needed permanent or temporary right of way and evaluation and possible replacement or modification of all pressure control structures, master meters, and meter structures.

PCCP - Other Project Group

Electromagnetic Inspections of PCCP Lines

All PCCP lines within the distribution system are inspected every three to seven years. The frequency is based on the condition and history of repairs for each feeder. Three cycles of electromagnetic testing have been completed to date on Metropolitan's PCCP feeders. This project will perform the fourth cycle of inspections over the next eight years. Planned activities for the inspections include: scheduling and coordination of shutdowns; conducting the electromagnetic inspections; conducting internal visual inspections; shutting down and dewatering the feeders and returning them to service; analyzing the inspection results; and preparing comprehensive inspection reports.

Foothill Feeder Acoustic Fiber Optic PCCP Monitoring System

Prestressed concrete cylinder pipe (PCCP) is well-known in the waterworks industry to be at risk of sudden failure from loss of strength due to the breaking of pre-stressed wires. Currently, staff must dewater the Foothill Feeder in order to inspect the pipeline's condition manually. The proposed project installs an innovative acoustic fiber optic system that will provide continuous condition monitoring over approximately 11 miles of the Foothill Feeder without having to dewater and enter the pipeline, along with other associated monitoring work. This is a new project for this budget cycle.

West Valley Feeder No 1 PCCP Rehabilitation

An electromagnetic inspection conducted in April 2021 identified an increase in wire breaks since the previous 2014 inspection of the 54-inch Prestressed Concrete Cylinder Pipe (PCCP) portion of the West Valley Feeder No. 1. The planned rehabilitation work involves lining the existing PCCP segments with steel liner pipe designed as a stand-alone pipeline which can accommodate full internal and external pressures on the line and replacing any identified damaged lining in non-PCCP segments. The project includes restoring the West Valley Feeder No. 1 from approximately Station 1277+27.68 to the De Soto Avenue Sectionalizing Structure at Station 1290+16.70 to "as like new condition." This is a new project for this budget cycle.

Regional Recycled Water Program

Fiscal Year 2022/23 Estimate: \$ 3.9 million

Fiscal Year 2023/24 Estimate: \$16.0 million

Program Information: The Regional Recycled Water Program includes the design and construction of the Advanced Water Treatment Demonstration Plant, which represents the initial step in development of a potential regional recycled water system for recharge of groundwater basins within Southern California. The biennial budget separately includes \$15 million per year for RRWP planning and design costs.

Accomplishments for FY 2020/21 and FY 2021/22

- Major milestones achieved:
 - Demonstration Plant Direct Potable Reuse Modifications – design initiated

Objectives for FYs 2022/23 and 2023/24

Project	Total Project Estimate	Estimated Construction Completion	Major Milestones
Demonstration Plant Direct Potable Reuse Modifications	\$ 18,000,000	2025	Complete preliminary and final design

Regional Recycled Water - All Project Group

Demonstration Plant Direct Potable Reuse Modifications

Metropolitan's Advanced Water Treatment Plant (AWT) at the Joint Water Pollution Control Plant (JWPCP) in Carson was designed to demonstrate testing of potential treatment processes for Indirect Potable Reuse (IPR) applications. This project will expand Metropolitan's existing process train to accommodate testing of potential Direct Potable Reuse (DPR) treatment options for regulatory acceptance of a DPR treatment train for full-scale implementation, as part of the Regional Recycled Water Program (RRWP). Additional treatment processes will be implemented for chemical use, pathogen inactivation, and testing in accordance with the latest DPR framework provided by the California Division of Drinking Water.

Right-of-Way and Infrastructure Protection Program

Fiscal Year 2022/23 Estimate: \$7.8 million

Fiscal Year 2023/24 Estimate: \$3.8 million

Program Information: The Right-of-Way Infrastructure Protection Program (RWIPP) is comprised of projects to refurbish or upgrade above-ground facilities and right-of-way along Metropolitan's pipelines in order to address access limitations, erosion-related issues, and security needs.

Accomplishments for FY 2020/21 and FY 2021/22

- Major milestones achieved:
 - Completed preliminary design:
 - Los Angeles Region – Stage 1 Improvements
 - Orange County Region – Stage 3 Improvements
 - Completed final design:
 - Orange County Region - Stage 1 Improvements
 - Western San Bernardino Region – Stage 1 Improvements
 - Completed construction
 - Orange County Region - Stage 1 Improvements

Objectives for FYs 2022/23 and 2023/24

Project	Total Project Estimate	Estimated Construction Completion	Major Milestones
Right-of-Way Infrastructure Protection Program - Western San Bernardino County Operating Region (Stage 1)	\$ 6,700,000	2023	Complete construction
Right-of-Way Infrastructure Protection Program – Los Angeles County Operating Region	\$ 9,300,000	2025	Begin construction of Stage 1

Los Angeles Region Project Group

Right-of-Way & Infrastructure Protection - Los Angeles County Region

This project identifies and addresses right-of-way and security issues; identifies and executes needed improvements within the Los Angeles County Operating Region; prepares environmental documentation; acquires regional programmatic environmental permits; and monitors and reports to permitting agencies for ten years following completion of construction. In order to expeditiously complete this project, sites within this region are grouped and prioritized and staged for construction depending on the site requirements.

Orange County Region Project Group

Right-of-Way & Infrastructure Protection - Orange County Region

This project identifies and addresses right-of-way, access, and security issues; identifies and executes needed improvements within the Orange County Operating Region; prepares environmental documentation; acquires regional programmatic environmental permits; and monitors and reports to permitting agencies for ten years following completion of construction. In order to expeditiously complete this project, sites within this region are grouped and prioritized and staged for construction depending on the site requirements.

Riverside/San Diego Region Project Group

Right-of-Way & Infrastructure Protection Program - Riverside and San Diego County Region

This project identifies and addresses right-of-way, access, and security issues; identifies and executes needed improvements within the Riverside and San Diego County Operating Region; prepares environmental documentation; acquires regional programmatic environmental permits; and monitors and reports to permitting agencies for ten years following completion of construction. In order to expeditiously complete this project, sites within this region are grouped and prioritized and staged for construction depending on the site requirements.

Western San Bernardino Region Project Group

Right-of-Way & Infrastructure Protection Program - Western San Bernardino County Region

This project identifies and addresses right-of-way, access, and security issues; identifies and executes needed improvements within the Western San Bernardino County Operating Region; prepares environmental documentation; acquires regional programmatic environmental permits; and monitors and reports to permitting agencies for ten years following completion of construction. In order to expeditiously complete this project, sites within this region are grouped and prioritized and staged for construction depending on the site requirements.

RWIPP - Other Project Group

Right-of-Way & Infrastructure Protection Program - Colorado River Aqueduct

The Right-of-Way Infrastructure Protection Program (RWIPP) identifies, prioritizes, and executes site improvements throughout Metropolitan's service area. This project encompasses site improvements along the CRA and addresses access limitations, erosion-related improvement work, and security needs along the surface of the CRA's rights-of-way. Under the initial stage of the program, site improvements needed along the CRA will be identified, a comprehensive regional compliance and permitting program will be developed, and a programmatic environmental document will be prepared to secure environmental approval for multiple projects along the CRA rather than pursuing individual approvals on a project-by-project basis. This project will add the CRA to the RWIPP, which already includes the Orange County, Western San Bernardino, Riverside/San Diego, and Los Angeles operating regions.

Right-of-Way & Infrastructure Protection Program - Property Acquisition

The scope of this project includes procurement of right-of-way or property to support access or needed repairs to pipelines and facilities. Activities include developing conceptual solutions, layout drawings, and final design criteria of needed improvements; preparing pre-appraisal documentation for acquisition of easements and right-of-way; conducting field surveys and topographic mapping; ordering and reviewing title reports and supporting recorded documents; initiating consultations with permitting agencies for required permits; preparing legal descriptions, exhibit maps, and other exhibits as needed for acquisition planning, permits, and real estate negotiations; completing right-of-way mapping and preparing Record of Survey maps to be filed with the county of origin; and setting monuments and witness posts.

System Flexibility/Supply Reliability Program

Fiscal Year 2022/23 Estimate: \$31.6 million

Fiscal Year 2023/24 Estimate: \$40.6 million

Program Information: The System Flexibility/Supply Reliability Program is comprised of projects to increase the capacity and flexibility of Metropolitan's water supply and delivery infrastructure to meet service demands. Projects under this program address climate change affecting water supply, regional drought, and alternative water sources for areas dependent on State Project Water.

Accomplishments for FY 2020/21 and FY 2021/22

- New projects initiated:
 - Delta Properties Infrastructure Improvements
 - Inland Feeder - Citrus Reservoir and Pump Station Intertie
 - Inland Feeder - Rialto Pipeline Intertie
 - New Westside Pump Stations
 - Wadsworth Pump Discharge to Eastside Pipeline Bypass
- Major milestones achieved:
 - Completed construction:
 - Greg Avenue Pump Station Rehabilitation
 - Delta Properties Infrastructure Improvements - Completed installation of first eight flow meters
 - Completed design
 - Perris Valley Pipeline - Tunnels

Objectives for FYs 2022/23 and 2023/24

Project	Total Project Estimate	Estimated Construction Completion	Major Milestones
Delta Islands Pump Station Rehabilitation	\$ 5,600,000	2024	Complete design
Delta Properties Infrastructure Improvements	\$ 960,000	2024	Complete construction
Delta Smelt and Native Species Preservation Wetlands	\$ 2,700,000	2024	Complete design and construction
Inland Feeder – Citrus Reservoir and Pump Station Intertie	\$ 23,700,000	2026	Complete design
Inland Feeder – Rialto Pipeline Intertie	\$ 2,200,000	2023	Complete construction
Perris Valley Pipeline - Tunnels	\$ 79,000,000	2025	Begin construction
Wadsworth Pump Discharge to Eastside Pipeline Bypass	\$ 11,400,000	2023	Complete construction

System Flexibility/ Supply Reliability - All Project Group

Delta Islands Pump Station Rehabilitation

In 2016, Metropolitan purchased four islands/tracts (about 20,000 acres) in the central Delta: Bacon and Bouldin Islands, and Holland and Webb tracts islands. Collectively, these lands represent a crucial part of the Delta for multiple potential values that are consistent with the State's co-equal goals of ecosystem restoration and water supply reliability for California. As part of this purchase, each property has an existing infrastructure that contains a system of individual siphons that bring diverted river water onto the property irrigation canals that conveys excess water by gravity to pump stations to be pumped off the property to prevent flooding. This project will rehabilitate and upgrade aging pump stations to increase system reliability and minimize the service disruption that could result in loss of revenue if tenant operations are impacted. This is a new project for this budget cycle.

Delta Properties Infrastructure Improvements

California State Senate Bill (SB 88) requires monitoring and reporting of certain diversions within the Delta. Metropolitan's Delta properties will need to comply. This project will investigate existing diversion points, identify permanent flow meter locations, coordinate with the Delta Watermaster, and install approximately 88 or more meters with telemetry and support equipment. First eight flow meters were installed during FY 2020/21. Next set of 25 flow meters are planned to be installed during FY 2021/22, and rest of the flow meters are planned to be installed during the following two years.

Delta Smelt and Native Species Preservation Project

The Delta Smelt is a small, euryhaline fish species endemic to the San Francisco Estuary. Since the 1980s, the Delta Smelt population has exhibited a decline in abundance leading to it being listed as endangered under the California Endangered Species Act, which may potentially create additional regulatory operational constraints on water exports for state and federal water contractors. Metropolitan will work with multiple state and federal government agencies and researchers from UC Davis to advance research objectives through multiple collaborative study efforts. This project will utilize natural pond habitats located on tracts of land within the Delta to construct tule marsh wetlands, supplementation ponds, and associated hydraulic water conveyance systems including irrigation ditches and potential groundwater wells to address issues and questions including methods for successful reintroduction. This project also includes an evaluation to determine which of Metropolitan's Delta Islands would be the most suitable location for the project. Other goals related to this project could involve use of floating peat wetlands, setting back the existing levee, and reintroduction of tidal energy gradients. This is a new project for this budget cycle.

Etiwanda Pump Station

This project will construct a pump station to enable Metropolitan to pump CRA water from the Upper Feeder to the Rialto Pipeline in case of a disruption of supplies from the East Branch due to severe drought or earthquake. This project will include construction of new interconnecting pipeline, new suction and discharge manifolds, valves, electrical power and control facilities, and other features necessary to support the pump station. The Etiwanda Pipeline extends in a north-south direction for approximately 6.5 miles and connects the Rialto Pipeline with the Upper Feeder to provide the feeder with State Project Water (SPW). The Etiwanda Reservoir and Hydroelectric Plant (HEP) were constructed to generate power as the water is conveyed. This is a new project for this budget cycle.

Groundwater Well Rehabilitation and Treatment

This project will take groundwater wells owned and operated by Metropolitan's member agencies or their sub-agencies and rehabilitate them and/or to construct new groundwater wells to increase local groundwater production in Metropolitan's service area. Local groundwater supplies within Metropolitan's service area are currently underutilized due to contamination, political constraints, or cost concerns. This project will also add water treatment systems where needed to treat contaminated groundwater. Addition of the treatment systems will be primarily focused for State Project Water (SWP) dependent areas. This project will improve resiliency against severe drought or earthquake and reduce dependency on imported water supplies. This is a new project for this budget cycle.

Hayfield Groundwater Storage and Extraction

This project will improve the spreading basin and construct a well field extraction and conveyance system to withdraw stored CRA water and discharge it back into the CRA at the Hinds Pumping Plant. The initial stage of the project will focus on installing a limited conveyance system capable of extracting the 100,000 acre-ft stored in the Hayfield Groundwater Basin. This stage will include a groundwater well installation, pump and motor, and approximately 1,500 feet of small diameter pipe. The Hayfield basin is located south of the Julian Hinds Pumping Plant, adjacent to the CRA. The project will improve drought resilience and enhance reliability of CRA operation. This is a new project for this budget cycle.

Inland Feeder-Citrus Reservoir and Pump Station Intertie

This project will construct an intertie between the Inland Feeder and a San Bernardino Valley Municipal Water District (SBVMWD) and Department of Water Resources (DWR) pump station. The intertie will include pipelines, valve vaults with valves, electrical and control systems, and other features necessary to support the intertie operation. Construction of an intertie between the Inland Feeder and a SBVMWD and DWR pump station would enable Metropolitan to deliver water from DVL to the Rialto Pipeline service area. After completion of this project along with completion of Inland Feeder-Rialto Pipeline Intertie and Wadsworth Pump Discharge Eastside Pipeline Bypass, up to 160 cfs will be able to be delivered from Diamond Valley Lake to the Rialto Pipeline. This project will improve resiliency against severe drought or earthquake by providing the Rialto Pipeline region a second source of water besides State Water Project (SWP) supplies.

Inland Feeder-Rialto Pipeline Intertie

This project will construct an intertie pipeline between the Inland Feeder and the Rialto Pipeline south of Department of Water Resources (DWR) Devil Canyon. The intertie will be approximately seven feet in diameter and 200 feet long, and will include a large diameter valve, meter, and valve and meter structures, and other features necessary to support the intertie operation. Currently flows from the Inland Feeder must pass through higher elevation DWR facilities which reduces flow and expends more energy. An intertie will allow delivery of up to 60 cfs of water from San Bernardino Valley Municipal Water District (SBVMWD) and DWR via a water exchange program. After completion of this project along with completion of Wadsworth Pump Discharge Eastside Pipeline Bypass and Inland Feeder-Citrus Reservoir and Pump Station Intertie, up to 160 cfs will be able to be delivered from Diamond Valley Lake to the Rialto Pipeline. This project will improve resiliency against severe drought or earthquake by providing the Rialto Pipeline region a second source of water besides State Water Project (SWP) supplies.

La Verne Pipeline & Weymouth Plant Intertie and Upper Feeder Modification

This project will provide an alternate source of supplies for groundwater replenishment at Service Connection USG-03. USG-3 is a replenishment connection located at the end of the Glendora Tunnel and is typically fed by the Rialto Feeder/Live Oak Reservoir, which is untreated State Project Water (SPW). In times of low SPW supplies, an alternative connection from CRA supplies will allow continued delivery of supplies. This project may include an intertie between the Weymouth plant and the La Verne Pipeline, and modification of a blow-off and/or air release & air vacuum valve on Upper Feeder near Azusa Canyon, and other features necessary to provide an alternate source of supplies at USG-3. This project will improve resiliency against severe drought or earthquake. This is a new project for this budget cycle.

Lake Perris Seepage Water Conveyance Pipeline

Metropolitan and Department of Water Resources (DWR) have partnered to design and construct facilities to capture and convey Lake Perris leakage water to the CRA. DWR will design and construct a seepage collection wellfield near the foot of the Lake Perris Dam, and this project will design and construct a conveyance pipeline extending from the DWR wellfield to the CRA.

New Westside Pump Stations

This project will construct a new or expand existing pump stations to convey approximately 100 cfs of CRA water into areas reliant on State Project Water (SPW). This may involve constructing two new pump stations, one at Venice PCS and one at Sepulveda Canyon PCS or expanding pumping capacity at the Greg Avenue Pump Station or some other facilities. Project elements will include pipelines, vertical or horizontal pumps, motors, interconnection piping to the Sepulveda Feeder; valve control structures; mechanical equipment for surge control; electrical modifications; and a small building at each site. This project will improve resiliency against severe drought and seismic events in the west side of Metropolitan's service area by mitigating the reduction in State Water Project (SWP) supplies.

Perris Control Facility & Hydroelectric Plant Upgrades

The Lake Perris Control Facility (LPCF) includes a pressure control structure, pump back system with four electric and two diesel pumps, and a hydroelectric plant. This facility controls flows from delivered from the Department of Water Resources Silverwood Reservoir located at Devil's Canyon, and Lake Perris to the Lakeview Pipeline. To improve Mills Plant reliability, water from Diamond Valley Lake and Inland Feeder can be delivered to Mills plant by gravity flow but would require some modifications to the Lake Perris Control Facility's pressure control structure and HEP. The project will upgrade the LPCF systems to handle the maximum head of 1934 feet (from the Inland Feeder) by upgrading components of the pressure control structure and replacement of the hydroelectric plant.

Perris Valley Pipeline – Tunnels

The objective of the Perris Valley Pipeline is to supply additional water deliveries from Mills plant to EMWD and WMWD per their request. Construction of this 6.5-mile-long pipeline was initiated in 2007, to be implemented under two contracts: the North Reach consisting of 2.7 miles of pipeline and two service connections (WR-24 and EM-23), and the South Reach consisting of 3.8 miles of pipeline and two additional service connections (WR-35 and EM-24). In 2009, the North Reach was completed and placed in service. In 2010, 3.3 miles of the South Reach were completed. The Perris Valley Pipeline Interstate 215 Crossing project will complete a remaining half-mile-long section approximately midway along the South Reach and enable placing the South Reach in service. This project consists of construction of an approximate 1,700-foot-long tunnel and tie-ins to the previously constructed reaches.

Rialto Pipeline and Mills Plant Pump Station

Several service connections within Metropolitan's service area rely on State Water Project water supplies to deliver water. One such area is along the Rialto Pipeline. This project will enable backup water supply deliveries from the Colorado River Aqueduct (CRA) or Diamond Valley Lake (DVL) to these areas. It will allow more operational flexibility by enabling DVL or CRA water to be delivered to the Rialto Pipeline as well as the Mills plant, and will also enhance reliability in a seismic event or during planned shutdowns. This new pump station at PC-1 control structure, which will include pumps, valves, suction and discharge manifolds, interconnection pipelines, and electrical power and control facilities, may be constructed to also serve as a power generation facility. After completion of this project along with the Wadsworth Pump Discharge to Eastside Pipeline Bypass and the Inland Feeder-Rialto Pipeline Intertie, water from both the CRA and from DVL can be delivered to both the Rialto Pipeline and to the Mills plant. The Pump Station will meet the future demands of both Mills and Rialto Pipeline service areas. This is a new project for this budget cycle.

Service Area Interconnection Enhancement

This project will construct new or enhance existing water delivery and treatment infrastructure between Metropolitan and its member agency systems and between the member agency and sub-agency systems to reduce SWP reliant areas and provide increased flexibility for future long-term shutdowns. This infrastructure may include but are not limited to service connections, pipelines, pump stations, and treatment facilities. This project will improve resiliency against severe droughts or earthquakes. This is a new project for this budget cycle.

Wadsworth Pump Discharge to Eastside Pipeline Bypass

This project will construct a bypass pipeline connecting the Wadsworth Pumping Plant discharge pipeline to the Eastside Pipeline to allow continuous pumping from the Diamond Valley Lake (DVL) forebay to supply DVL water to the Mills plant and the Rialto Pipeline via PC-1 Pump Station in case of a supply disruption from the State Water Project's (SWP) East Branch due to severe drought or earthquake. The bypass will be approximately seven feet in diameter and 700 feet long and will include a large diameter valve with a valve structure, and other features necessary to support the bypass operation. In addition, a surge tank system will be installed to protect the Inland Feeder from pressure surges. After completion of this project along with completion of Inland Feeder-Rialto Pipeline Intertie and Inland Feeder-Citrus Reservoir and Pump Station Intertie, up to 160 cfs will be able to be delivered from Diamond Valley Lake to the Rialto Pipeline. The Wadsworth Pumping Plant is located near Hemet at DVL. The pumping plant includes 12 vertical turbine pumps that are used to pump water into DVL or to generate electricity when water flows out of DVL into the forebay/San Diego Canal.

System Reliability Program

Fiscal Year 2022/23 Estimate: \$48.5 million

Fiscal Year 2023/24 Estimate: \$37.7 million

Program Information: *The System Reliability Program is comprised of projects to improve or modify facilities located throughout Metropolitan's service area in order to utilize new processes and/or technologies and improve facility safety and overall reliability. These include projects related to Metropolitan's Supervisory Control and Data Acquisition (SCADA) system and other Information Technology projects.*

Accomplishments for FY 2020/21 and FY 2021/22

New projects initiated:

- Applications-Servers Upgrade from Old Windows OS
- Arc Flash Software Model Development
- Enterprise GIS Disaster Recovery
- Etiwanda Test Facility
- Headquarters Building Physical Security Improvements - Stage 2
- HQ HVAC System Equipment Upgrades – Phase 1
- Information Technology Service Management System
- Two-Way Radio System Upgrade
- Weymouth Area Paving

Major milestones achieved:

- Business Systems Disaster Recovery Upgrade – deployment completed
- Control System Upgrade – Phases 1 & 2 - completed
- Data Center Modernization Upgrade Phase I – backup data center completed
- Information Technology Service Management System – deployment completed
- Information Technology System – Communication Infrastructure Reliability Upgrade – deployment completed
- IT Network Reliability Upgrades – deployment completed
- La Verne Shops Improvements – Equipment Installation and Building Completion – design completed
- Lake Mathews Facility Wastewater System Replacement – construction started
- Lake Mathews IT Disaster Recovery Facility Upgrades – deployment completed
- Maximo Upgrade – deployment completed
- MWD HQ Boardroom Technology Upgrade – deployment completed
- Skinner Area Paving– construction started
- Water Ordering and Energy Scheduling System – deployment completed

Objectives for FYs 2022/23 and 2023/24

Project	Total Project Estimate	Estimated Construction Completion	Major Milestones
AMR System RTUs and Radio Modem Upgrade Project	\$ 13,000,000	2023	Complete deployment
Applications-Servers Upgrade from Old Windows OS	\$ 2,800,000	2024	Complete deployment
Control System Upgrade - Phase 4	\$ 6,400,000	2024	Begin Phase 4
Data Center Backup Infrastructure Upgrade	\$ 1,600,000	2022	Complete deployment
Data Center Modernization Upgrade	\$ 8,800,000	2022	Complete Phase 2 deployment
Desert Microwave Tower Site Upgrades	\$ 8,100,000	2024	Complete design and begin construction
Enterprise Data Analytics	\$ 3,300,000	2022	Complete deployment of pilot
Enterprise GIS Disaster Recovery	\$ 300,000	2022	Complete deployment
Fuel Management System Upgrade	\$ 1,300,000	2022	Complete deployment
La Verne Shops Improvements - Equipment Installation and Building Completion	\$ 14,000,000	2023	Complete construction
Maximo Mobile Upgrade	\$ 500,000	2022	Complete deployment
Security Operation Center	\$ 4,500,000	2022	Complete construction
Two-Way Radio System Upgrade	\$ 7,700,000	2022	Complete deployment of pilot
Headquarters Building Improvements	\$ 78,600,000	2022	Complete construction
WiFi Upgrade	\$ 5,300,000	2022	Complete deployment at Headquarters

IT/SCADA - Infrastructure Project Group

AMR System RTUs and Radio Modem Upgrade

The Automatic Meter Reading (AMR) system is a critical component for transmitting meter information to allow for billing of member agency water deliveries and analysis of official meter instrumentation. The current system was mostly installed between 2008 and 2009. Portions of the AMR System must be updated because of equipment obsolescence and diminishing vendor support, as they are approaching their end of life. This project is planned to be completed in three phases. The first phase consists of a pilot study to evaluate various communication technologies, field test each of the selected communication technologies, and installation of 900 MHz radio modems and master radio station near Garvey Reservoir. The second phase consists of replacement of the remaining radio modems and radio master stations. The third phase consists of replacement of the AMR Remote Terminal Units (RTUs), operator interface terminals, digital displays, configuration laptops, battery chargers for Uninterruptible Power Supply (UPS), associated networking equipment and servers, and other appurtenances to complete the upgrades. It is anticipated that the Control System Upgrade Conceptual Design project (Phase 2 of the Control System Upgrade) will recommend that the technology used in the AMR system be made consistent with the technology used in the SCADA (Supervisory Control and Data Acquisition) system. Thus, the third phase (AMR RTUs) will be started after the Control System Upgrade Phase 4 (final design) is initiated.

Applications-Servers Upgrade from Old Windows OS

A significant number of Metropolitan's systems, including a number of critical enterprise-level business and water applications, are currently running on outdated Microsoft Windows platforms (e.g., Windows 2003, 2007, and 2008). These platforms are either already no longer being supported or will shortly cease to be supported by the Microsoft Corporation. Microsoft's support includes software updates and security-related patches to fix technical issues and mitigate potential new security risks. Losing these software and security updates will increase cyber-security risks for the unsupported platforms. This project will upgrade all older application environments to Windows 2016. Phase 1 of the project will identify and document required changes, and will group applications into four deployment waves. Phase 2 will deploy the upgrades on each of the four groups identified in Phase 1.

Arc Flash Software Model Development

An arc flash is the light and heat produced from an electric arc supplied with enough electrical energy to cause substantial damage, harm, fire, or injury. Arc flash risk analysis is required per National Fire Protection Association (NFPA), National Electrical Code (NEC), and Occupational Safety and Health Administration (OSHA) standards. Metropolitan currently uses a generic tabular approach to quantify the arc flash hazard; this approach is no longer in compliance with the latest NFPA 70E standards. Comprehensive modeling that considers the effects of the surrounding equipment and accurately identifies the arc flash hazards is now required. This project will develop software models for Metropolitan facilities that are susceptible to arc flash hazards. The models will provide complete and consistent information that will identify equipment improvements to improve safety and to meet regulatory compliance. This project will also install arc flash labels for all equipment required to be labeled per the NFPA standards.

Asset Monitoring and Management System

This project will establish the foundation for leveraging data already maintained by Metropolitan (under multiple different software platforms) into a common framework in order to efficiently conduct future infrastructure reliability projects and assessments across Metropolitan. This project is needed to support a common condition monitoring framework across Engineering Services (ESG) and Water System Operations (WSO) groups, as well as to support condition-based maintenance initiatives as part of General Manager's initiatives and WSO's business plan.

This project includes building software tools to access and aggregate ESG, WSO, and other asset-related data, such as data from finance, to facilitate infrastructure reliability investigations on one class of assets (revenue meters). Eventually, the software tools developed as a part of this project will be used for future condition assessments in ESG and WSO.

Asset Monitoring System Stage 1 Conveyance and Distribution

Currently, asset condition and performance data are maintained in multiple data systems. At times, data is redundant, not consistent, or missing resulting in delays in decision making and increased uncertainty. This project will create an integrated dashboard interface inter-connected with existing disparate data systems and utilize geographic information system (GIS) functionality to visualize key information related to asset health, condition, performance, location, and other key data in the conveyance and distribution system. Subsequent stages will address treatment plants, reservoirs, power transmission lines, support facilities, communication sites, fleet, real property, and advanced water purification. This is a new project for this budget cycle.

CIP Budgeting System Improvements

The Capital Investment Plan (CIP) process has been in place for over 20 years and since inception, the process has been largely manual. The scope of this project is to consolidate the CIP proposal, risk form, and cash flow form into one seamless single proposal form. This project will also create a new evaluation form, which will be designed to leverage the available historical evaluation data, new scores suggested by the proposal form, and risk/consequence data to provide a clearer reference of information when evaluating projects. This project will reduce staff time to generate proposals and required CIP documents, and also reduce the scoring efforts. This is a new project for this budget cycle.

Control System Upgrade

Metropolitan's control system spans the CRA, Metropolitan's five water treatment plants, and the entire conveyance and distribution system. The system-wide control system upgrade is planned to be implemented in a phased approach through the following projects to upgrade hardware, software, and a communications network. Currently, the phases are planned to consist of the following projects:

- Phase 1 - Preliminary investigations
- Phase 2 - Conceptual design of the new control system
- Phase 3 - Selection and demonstration testing
- Phase 4 - Final Design of Mills Area
- Phase 5 - Implementation Mills Area
- Phase 6 - Final Design of Skinner Area
- Phase 7 and later - Continued final design and installation/construction of the new control system in multiple staged contracts

Data Center Backup Infrastructure Upgrade

Critical business and water applications rely on backup processes to restore the applications as soon as possible in an emergency. As Metropolitan's data volume progressively increases, so does the duration of the processes to backup, restore, and recover operations. Metropolitan's current backup software was deployed 15 years ago and uses magnetic tape as the storage medium. This project will replace the backup infrastructure with newer and faster technology and will redesign the backup/restore processes and procedures using the latest components of the backup software.

Data Center Modernization Upgrade

The purpose of this project is to assess, redesign, and upgrade the MWD Headquarters (HQ) and Lake Mathews data centers to provide sufficient computing power and modernize the data centers to meet current and future capacity, security, and reliability needs. This project will conduct a detail assessment, design, and relocate the HQ and Lake Mathews data centers to improve security and reliability.

Desert Microwave Tower Site Upgrades

This two-phase project will improve the reliability, performance, and capacity to Metropolitan's microwave radio wide-area-networks (WANs). Phase 1 will address the most critical components that need to be replaced or upgraded in the Desert Region microwave tower sites. Phase 2 will upgrade the remainder of the sites throughout Southern California. Lessons learned from the Diamond Valley Lake (DVL) microwave proof-of-concept will be used in this project. The microwave network uses wireless transmission over radio frequency energy in the 6-18 Giga Hertz range.

Distribution System Online Analyzers Replacement

Online analyzers continuously monitor water quality in the treated water distribution system and help ensure that safe reliable water reaches our member agencies. They provide prompt indication of water quality issues and an early warning to allow actions to be taken to minimize impacts. The existing online analyzers are almost 20 years old and have exceeded their typical service life. They are outdated, no longer sold or supported by vendors, and replacement parts are becoming increasingly difficult to obtain. At approximately 23 locations, this project will (depending on the location): decommission existing analyzers; install chlorine, turbidity, UV and total ammonia analyzers; install conductivity and pH probes; and install prefabricated sheds. This is a new project for this budget cycle.

Engineering Information System Upgrade

The goal of this project is to upgrade ProjectWise (Engineering's Information System) to the latest version, install and configure additional ProjectWise modules, and integrate ProjectWise with other Metropolitan systems such as DocuSign, Outlook, SharePoint, and Deliverables Management to implement additional functionalities in ProjectWise. The intent is to streamline the workflow in Engineering design and improve access to information and documents in ProjectWise.

Enterprise Asset Planning System

Currently, short-term asset renewals are addressed by staff submitting Capital Investment Plan (CIP) proposals that identify upcoming needs to maintain a reliable system. This project will acquire a software application and implement a comprehensive solution to forecast long-term asset lifecycle costs. The resulting decision support tool will support the strategic planning for renewal of Metropolitan assets based on condition, performance, outage constraints, staff resource limitations, planned budget, shutdown schedules, relative value, and risk. This is a new project for this budget cycle.

Enterprise Data Analytics

Building an Enterprise Data Warehouse & Analytics to answer both operational and strategic questions facing Metropolitan. The Data Warehouse will be built of individual data marts modeling a specific business area providing integrated reporting through Extract/Transform/Load (ETL) procedures and common dimensions. This Enterprise Data Warehouse will contain both business and operational data. It will be designed to combine these two data types in order to provide a financial dimension to operational data. By linking data like EBS (Financial), SCADA, GIS and Water Supply/Demand, staff can model different scenarios to answer questions and to discover trends and anomalies previously not visible due to isolated reporting.

Enterprise GIS Disaster Recovery

This project will add the Enterprise GIS (EGIS) infrastructure to the Metropolitan IT Disaster Recovery Facility (DRF) in Riverside County. This includes the purchase, installation, and configuration of new hardware and software to meet Business Impact Analysis (BIA) study requirements for the EGIS infrastructure. The current recovery time for EGIS infrastructure is estimated at greater than a week. The BIA Recovery Time Objective (RTO) for the EGIS infrastructure is less than 72 hours, meaning that the EGIS infrastructure should be functional within 72 hours after an outage. This project will reduce the RTO for the EGIS infrastructure from 72 hours to 1 hour, so that EGIS data could potentially be used to assist in emergency operations.

Fiber Installation at Iron Mountain, Eagle Mountain, and Hinds Pumping Plants

Metropolitan currently relies on microwave radio equipment to provide a voice and data communication backbone for the business network, the Supervisory Control and Data Acquisition (SCADA) network, Automated Meter Reading (AMR), and two-way radio network. Information Technology Group's strategic vision is for more reliable fiber optic cables to become the primary communications path connecting all desert sites. This project will connect Iron Mountain, Eagle Mountain, and Hinds Pumping Plants to the public telecommunications network using fiber optic cable thereby enhancing reliability and increasing bandwidth of communications for desert facilities. The fiber optic would follow the paths of existing power transmission lines and terminate in the areas near switchyards and will require repeater stations. A separate project to install a fiber optic line from Gene Pumping Plant to Parker Dam is scheduled for completion in 2023. This is a new project for this budget cycle.

Fuel Management System Upgrade

This project's objective is to upgrade the twelve-year-old Fuel Management System (FMS), which is no longer supported by the manufacturer. The FMS provides essential management controls over fuel inventories, dispensing, and security. It identifies and authorizes the dispensing of fuel and records fuel transactions and fuel tank data in a centralized database. This project will replace the necessary hardware and software to upgrade the FMS and to integrate it with Metropolitan's Computerized Maintenance Management System (CMMS), Maximo.

Gene Communication System Upgrade

Metropolitan's microwave radio wide-area network (WAN) was constructed in the late 1990s and is approaching the end of its useful service life. The network is comprised of 72 transmission tower sites located throughout Southern California, including 24 which support the CRA. It transmits telephone, voice, data, and video communication between all Metropolitan facilities, utilizing point-to-point microwave transmission. While microwave transmission is highly effective, it is limited to line-of-sight propagation; thus, it cannot pass through mountains or other similar obstacles.

Gene Pumping Plant relies on a microwave tower at Black Metal Mountain and does not have a redundant site to support the plant if the system at Black Metal Mountain were to fail. Furthermore, the desert region now requires high-capacity carrier-grade communication links to provide reliable data, voice, and video transmission to support the need of new IT and supervisory control and data acquisition system (SCADA) infrastructures. The type of information that rely on this network are real-time data from the supervisory control and data acquisition system, automated meter reading system, security cameras and teleprotection, and system alarms to Metropolitan's control facilities, and provides access at remote sites to the email, geographical information system, Oracle financial, timekeeping, and PeopleSoft applications. This project will install approximately 22 poles and two miles of fiber optic cable from Parker Dam to Gene Pumping Plant administration building to connect to high-quality, high-speed data system to improve a variety of technological challenges at the desert facilities.

Hydraulic Model Enhancements

Metropolitan uses its current state-of-the industry hydraulic model daily in support of operational and facility planning requests. While the model has significant hydraulic simulation capabilities, this project proposes to enhance the software to better address water quality analyses, hydroelectric power plant power production estimating, hydraulic surge transient analysis, flood simulations, and other studies. The proposed enhancements also include storing this information on the cloud for improved data access. This is a new project for this budget cycle.

Hydraulic Modeling Analysis Toolkit and Water Quality Calibration

Metropolitan's Engineering Services Group completed development of a system-wide hydraulic model in January 2017 after a multi-year development effort. Even while model development was still underway, many uses for the hydraulic model were identified. This project includes developing tools to support hydraulic model analysis to increase efficiency and enhance productivity while using the hydraulic model for analysis. The project also includes development and calibration of water quality modeling capabilities.

Maximo Mobile Interface Software

Metropolitan uses Maximo software to schedule, plan, and execute maintenance work. Currently, Maximo web-based software is not designed for mobile use and desktop or laptop computers are used to generate work orders as the primary method to distribute and plan work for field staff. This project will install and configure a mobile software system that will allow field employees to interact with the Maximo Computer Maintenance Management System from iPad mobile devices. The new system will maximize the value of the new mobile devices, increase the options and opportunity to implement a proactive data driven maintenance strategy, improve response time for corrective actions, and improve timely access to information such as manuals, construction plans, and work plans. This is a new project for this budget cycle.

Maximo Mobile Upgrade

The goal of this project is to replace existing mobile devices used in WSO with latest tablet technology. The project will enable the use of capabilities of the existing mobile software system that are not available on the existing hardware devices. The project includes an initial pilot evaluation with a purchase of 30 units to evaluate different models and test features. The overall goal will be to purchase several hundred devices following the completion of the pilot evaluation. The new devices will eliminate or reduce the need for desktop computers at field sites and vastly increase the functionality of the existing Maximo mobile devices.

Replacement of Network Switches at MWD Headquarters Building

Network switches are the backbone of the Information Technology (IT) network and connect all IT systems and infrastructure components. There are currently 12 network switches that were installed at Metropolitan Headquarters in 2014 which have reached end of their life cycle and are going out of support. Replacement of these network switches is needed to mitigate risks presented by old and out of support switches. This project will consist of multiple deployments of 12 new network switches at Metropolitan Headquarters. This is a new project for this budget cycle.

Security Operations Center

This is the second phase of the Cyber Security Upgrades project. The first phase concluded that additional cyber projects were needed to mitigate evolving threats. This phase will assess and remediate exposures and cyber security threats throughout Metropolitan with special emphasis on the business and SCADA networks. Maintaining a secure computing infrastructure requires application of ongoing cyber countermeasures to protect against new cyber threats that are identified on a continual basis. The scope of this project includes engaging a security consultant to perform an independent assessment of Metropolitan's IT infrastructure and environment to identify potential vulnerabilities and deploy effective solutions to strengthen our cyber security.

Security Operations Center - Cyber Security Upgrade Phase 2

Cyber security remains a high priority and is a key part of the Information Technology Strategic Plan. Cyber criminals, including cyber terrorists from rogue nations, are launching increasingly sophisticated threats targeting critical infrastructure agencies such as water utilities. This project will assess and remediate exposures and cyber threats throughout Metropolitan with special emphasis on the business and Supervisory Control and Data Acquisition (SCADA) networks. The proposed security measures will enhance incident response times, protect against social engineering attacks, enhance SCADA security, and protect the rapidly growing network of Metropolitan's connected objects including SCADA sensors and telemetry data. This is a new project for this budget cycle.

Standby Generator Relocation at Six WAN Sites

Metropolitan's Wide Area Network (WAN) provides a critical communication and data link between facilities across the distribution system. The Standby generators at six WAN sites must be relocated for consistency with the current fire codes and to enhance safety. These generators are needed to provide backup power in the event of loss of primary power. The planned improvements will reduce the risk of damage to communication equipment and the buildings in the event of a fuel leak. Metropolitan forces will relocate the standby generators at six WAN sites to reduce the risk of fire damage to Metropolitan's communication systems. The standby generators will be moved to new locations in separate outdoor enclosures, consistent with current fire codes.

Two-Way Radio System Upgrade

Metropolitan's current Two-Way Radio system is approaching the end of its service life, and both vendor and after-market support will cease in the next few years. The existing Two-Way Radio system is Metropolitan's essential communication system for public/employee safety, and for communications when Metropolitan performs tasks involving member agencies. This project will upgrade or replace specific components of the Two-Way Radio system, reusing the majority of the infrastructure; replace some unsupported radios; and will provide improvements to address poor reception at some locations. The upgraded Two-Way Radio system will include features anticipated to provide higher capacity, higher levels of cybersecurity, additional management and monitoring features, and multi-level resiliency.

Water Quality Laboratory Instrumentation Modernization and Data Acquisition Automation

Metropolitan's La Verne Water Quality Laboratory houses a significant number of analytical and water sampling instruments that support many of Metropolitan's business functions, including demonstrating regulatory compliance with drinking water standards and water treatment optimization. Historically, Metropolitan has approached replacement of obsolete instrumentation through individual purchases. This strategy has limited the rate of upgrades or replacement. In addition, many of the laboratory's instruments include vendor-provided dedicated computer workstations, loaded with software that is sometimes maintained by the vendor, and sometimes by Metropolitan's IT staff. This has resulted in cybersecurity vulnerability, as well as multiple non-standard computer images, operating systems, and software versions. Finally, the diversity of instrumentation in the laboratory has made it difficult to acquire data from the various instrumentation systems. This project will upgrade laboratory instrumentation to accommodate cybersecurity issues, prevent obsolescence of laboratory instrumentation, and allow integration of data acquisition efforts.

Western Region Microwave Tower Sites Upgrade Project

The western region microwave network consists of 52 sites with microwave radios that provide a voice and data communication backbone for the business network, the Supervisory Control and Data Acquisition (SCADA) network, Automated Meter Reading (AMR), and the two-way radio network. A majority of Metropolitan's current microwave radios are over twelve years old and have reached the end of their service lives, are no longer supported by the manufacturer, and replacement parts and software updates are no longer available leaving microwave infrastructure vulnerable to equipment failure. Also, inspection of the electrical grounding systems has revealed deficiencies in grounding requirements of some sites and, due to regulatory changes, some propane generators may require upgrades. This project will decrease the frequency of microwave system troubleshooting and repair activities and increase in network service reliability. The scope is to procure microwave radio equipment and associated antennas with waveguides; design microwave network and system infrastructure; install equipment on towers and inside buildings; design and install battery backup systems; rectify any grounding issues; and review the condition and level of code compliance of the propane generator systems and upgrade as necessary. This is a new project for this budget cycle.

WiFi Upgrade

This WiFi Upgrade project will improve the reliability, performance, and capacity to Metropolitan's wireless access point (WAP) local-area-networks (LANs) at Headquarters and various field facilities. It will also provide a secure, reliable and robust WiFi System to support increasing business demands and reliance on Metropolitan's wireless infrastructure. The scope for this project includes (1) migration and implementation design plan, (2) removal of obsolete access points and controllers, (3) installation of cable in building ceiling for access points, (4) installation of new access points, and (5) configuration and installation of new controllers.

Operations Support Project Group**Apprentice Training Center Facility**

The current apprentice training center (ATC) has come to the end of its useful life and lacks the needed space for break rooms and training without reconfigurations. As a result, some training modules are outsourced to other vocational training colleges and programs. This project will refurbish and make modifications to the former Diamond Valley Lake (DVL) Visitor Center building to enable its use as Metropolitan's apprentice training center facility. The former visitor center building was completed in 2008 and shares several building components with the adjacent Western Science Center Museum. The project will address the need for additional space dedicated to individual apprentice training center functions such as break rooms, classrooms, restrooms with added capacity and ample space for library and storage areas. The project will also address the aging and obsolete building systems that are currently shared with the adjacent Western Science Center Museum. To meet Metropolitan building standards, upgrades will be made to security, access, architectural, mechanical, electrical, plumbing systems, and other building features and equipment. Completion of this project will provide the necessary facilities for apprentice training well into the future for the development of the workforce that will operate and maintain Metropolitan's conveyance, distribution, and treatment systems. This is a new project for this budget cycle.

CRA Aircraft Facility Improvements

Metropolitan owns and operates several airstrips along the Colorado River Aqueduct (CRA) that are deteriorating with age. There is also no designated landing area for helicopters or an enclosed area to store aircraft. Currently, planes must be taken offsite for hangar storage in Lake Havasu. The project will design and construct various improvements to runway pavement and landing communication systems at the four aircraft facilities located near the CRA Pumping Plants (Gene, Iron Mountain, Eagle Mountain, and Hinds). This includes (1) rehabilitation of the existing asphalt paved runway, (2) rehabilitate the existing asphalt paved access road leading to the runway and construct new asphalt paved access road to replace the existing access road without asphalt pavement, (3) replacement of the existing incandescent bulb lighting along the runways at Iron Mountain and Eagle Mountain with energy efficient Light Emitting Diode (LED) bulbs, (4) installation of a weather reporting station at Eagle Mountain and Hinds Pumping Plants, (5) construction of a new helipad at Eagle Mountain Pumping Plant and, (6) construction of a new aircraft hangar and parking area at the runway facility near Gene Pumping Plant. This is a new project for this budget cycle.

CRA Pumping Plant Access Road Rehabilitation

The Colorado River Aqueduct (CRA) pumping plant access roads must accommodate heavy traffic loads for deliveries of chemicals, materials, equipment, and staff. The existing asphalt roads are distressed and show numerous areas of longitudinal and alligator cracking. The harsh desert climate conditions have caused the pavement to age and become distressed more quickly. These roads are the sole means of access to the pumping plants, making reliable use of the roads critical to allow equipment, chemical, and material deliveries, ingress for first responders, and general access. This project will rehabilitate approximately 11 miles of the existing access roads leading to the Intake, Iron Mountain, Eagle Mountain, and Hinds Pumping Plants using a combination of pavement overlay and pavement replacement with new aggregate base subgrade. This project will also include pavement markings. This is a new project for this budget cycle.

District-wide Fall Protection Improvements

Working at elevated areas within 6-feet of an edge that have 6-feet falling height, requires fall protection per California Occupational Safety and Health Administration (Cal-OSHA) regulations. The current procedures require that when employees need to enter a rooftop area to service equipment, they must develop and implement a specific plan for safe access; complete a job safety hazard checklist to address all fall hazards; and utilize safety belts, lanyards, or other approved fall protection systems as required. This project will construct guardrail and skylight fall protection on building rooftops, and other types of fall abatement projection for other serviceable areas on facilities with fall protection deficiencies at the District's five Colorado River Aqueduct pumping plants, five water treatment plants, and other miscellaneous facilities throughout the service area per Cal-OSHA Title 8 requirements. Engineered controls such as guardrails and skylight screens will provide the highest level of protection ensuring safety, limiting District liability, improving staff productivity, and ensuring compliance with Cal-OSHA requirements. This is a new project for this budget cycle.

District-wide Zero and Near-Zero Emissions Fleet Infrastructure

Identifying new ways to reduce greenhouse gas (GHG) emissions and reduce Metropolitan's carbon footprint is essential to the implantation of Metropolitan's Climate Action Plan (CAP). This project will design and construct infrastructure to meet mandated Zero Emission (ZE) and Near-Zero Emission (NZE) state and local regulations and comply with California Environmental Quality Act (CEQA) GHG reductions identified in CAP. This project would be implemented in phases, starting with development of a comprehensive transition plan to a ZE and NZE fleet, implementation of transition plan that includes interim and long-term infrastructure design, installation of recommended infrastructure (e.g., charging and/or dispensing stations), and installation of infrastructure related to solar and/or battery energy storage and other sustainability opportunities. The fleet includes passenger vehicles; light-, medium-, and heavy-duty on-road vehicles, off-road construction vehicles/equipment; forklifts; and employee and rideshare vehicles.

Eagle Rock Security Upgrade

The Eagle Rock Operations Control Center (OCC) was built in 1995 in the City of Pasadena. The OCC coordinates and controls Metropolitan's water conveyance and distribution system throughout its entire service area. As the main hub of this system, the OCC is pivotal for the management of water deliveries through Metropolitan facilities. The site currently consists of (1) a two-story building that houses the OCC, the Emergency Operations Center, and several staff offices, (2) a two-story older structure that holds the Business Incident Command Post, Security Water Center, several offices, and a Control Systems shop, and (3) several concrete structures used for transporting water. A vulnerability assessment of the OCC site was conducted in 2017. This assessment identified several security issues of concern as a result of trespassing onto the property. A security assessment identified the site's use by hikers in the area, site accessibility by individuals who have established homeless encampments in the area, and illegal dumping. Proposed site improvements include replacement of the main and lower entrance gates, and existing intercom system at the gates; and installation of additional security cameras, lighting fixtures, flood lights with motion detectors, fencing, gates around the perimeter of building, signage, new electrical and communication conduits, and other related security features.

HVAC System Assessments & Upgrades - Field Facilities

Metropolitan's facilities include nearly 700 structures with over 2,000 pieces of heating, ventilation, and air conditioning (HVAC) equipment. Approximately 80% of the HVAC equipment used by Metropolitan supports process systems that are required to treat or distribute water, and for regulatory compliance. The majority of Metropolitan's HVAC equipment is over 32 years old, requiring more corrective maintenance to remain operational, and consuming more electricity than newer, more energy efficient units. This project consists of a five-year, phased replacement of outdated HVAC infrastructure with certified energy efficient equipment, and will address regulatory changes in EPA guidelines, which are phasing out the refrigerants currently used in most of MWD's HVAC systems. The project will also (1) modernize HVAC controllers into a cohesive building automation network to allow Metropolitan staff to more efficiently respond to HVAC interruptions, more quickly troubleshoot problems, provide early detection of problems before catastrophic failures, and ensure optimal performance of the HVAC systems; and (2) upgrade existing or install new air filtration systems with high efficiency particulate air (HEPA) filtration and germicidal equipment such as UV disinfection to occupied buildings to provide enhanced protection from airborne viral and bacterial particulates.

La Verne Shops Improvements

The La Verne Shops are located on the grounds of the Weymouth plant and have been in service since 1941. The shops were expanded in the 1960s, and were expanded again in the 1980s to support a major rehabilitation of the pumps along the CRA.

A shop modernization program was started in 2002, and included building expansions and upgrades, and shop equipment replacement or refurbishment. Most of the shop equipment is 27 to 37 years old, with a few pieces close to 47 years old, and a 20-year-plan to replace and refurbish the shop equipment has been developed. The building expansions and upgrades included expanding the existing shop buildings, upgrading portions of the existing buildings, and replacing and refurbishing shop equipment. The first four stages of this project are complete, which included building expansion and refurbishment/replacement of most of the equipment.

The fifth and final stage focuses on the procurement and installation of new fabrication and machine shop equipment, including a hydraulic shear, hydraulic press brake, waterjet cutting system, horizontal band saw, and vertical machining center. This new equipment will replace existing equipment that is up to 35 years old and is not viable to refurbish. This last stage will also include refurbishment of various remaining existing machines; safety upgrades to roof ladders and walkways; and installation of new electrical circuit, unit power center for an uninterruptible power supply, ductbanks for various utilities, shop heaters, air compressors, various utilities, and other appurtenances to support the shop operations.

La Verne Field Engineering Building Replacement

This project provides a new Field Engineering Building to replace the existing one, which does not meet Metropolitan's current seismic building standards, and is limited in function due to HVAC deficiencies and work space constraints. The Field Engineering Building, located at Metropolitan's La Verne Facility, was designed and built over 52 years ago in accordance with building codes current at that time.

This project will include a detailed value engineering study to confirm the recommended approach to construct a new building in lieu of retrofits to the existing structure. This project will also include a comprehensive siting study to ensure that the proposed footprint of the new building does not interfere with the current and future requirements of Metropolitan's La Verne Facility. This project will enhance infrastructure safety, security, and resiliency.

La Verne Support Buildings Seismic Improvements

As part of Metropolitan's seismic upgrade program, a rapid evaluation was conducted and identified seismic deficiencies in Weymouth Softener Buildings Nos. 1, 2, and 3, Weymouth Central Stores Storage/Paint Shop - Building 32/32A, and the Weymouth General Storage Building - Building No. 33. This project will evaluate future uses of these structures, construct improvements to address these deficiencies, as well as, should it provide value to the District, improve non-structural features in each building such as roofing, insulation, and other building characteristics. This is a new project for this budget cycle.

Lake Mathews, Garvey and CUF Support Facilities Seismic Upgrade

As part of Metropolitan's seismic upgrade program, a rapid evaluation was conducted and identified seismic deficiencies in the Garvey microwave station; the Lake Mathews Hazardous Materials Building, meter shop, auto shop, and heavy equipment shop; the Chlorine Unloading Facility Main Office; and other buildings at these locations. This project will construct improvements to address these deficiencies, as well as, should it provide value to the District, improve non-structural features in each building such as roofing, insulation, and other building characteristics. This is a new project for this budget cycle.

Lake Mathews Facility Wastewater System Replacement

The wastewater system at Lake Mathews has been in operation for nearly 82 years and is no longer reliable. Despite receiving regular maintenance, the system is exhibiting signs of failure including plumbing and septic tank backups, clogged leach fields, and slow-draining collection pipes. On-site treatment of the wastewater via septic tanks will be discontinued, and new collector lines will be connected to the local sewer system that was installed in the early 2000s. Western Municipal Water District has a nearby sewer main that includes a connection point specifically installed for Metropolitan's future use. This connection can accept wastewater by gravity from the entire on-site system. This project will remove the on-site wastewater system and construct wastewater system that ties into the Western Municipal Water District's sewer line to reduce the risk of costly unplanned repairs and to maintain system reliability.

Etiwanda Test Facility

Metropolitan had previously used its Yorba Linda Facility to evaluate and equipment, test operational concepts and qualify equipment. The water used for testing was obtained from the Santiago Lateral and discharged into the Santa Ana River. Environmental constraints on the discharge of water made the facility's use impractical, and the test facility was shutdown. This project constructs a new test facility at Etiwanda Reservoir in order to test new emerging technologies, emerging regulations related to metering, and to validate non-standard service connections. Specifically, a new facility would allow staff to test equipment such as valves, meters, coatings, and other treatment and distribution devices; conduct expedited test to maintain a pre-approved equipment list for low bid procurement; simulate problematic flow meter installations and low flow conditions; and test the accuracy of existing flow meter installations.

New La Verne Warehouse

The Central Stores Warehouse at La Verne is Metropolitan's main warehouse for storing materials, supplies and equipment used by field personnel to support Metropolitan's operations. It is comprised of four main buildings (Buildings 30, 31, 32A, and 33). A recently completed seismic evaluation found that the buildings may be damaged from a maximum credible earthquake. The cost to retrofit the all four buildings is cost prohibitive. In addition, the buildings lack the storage space necessary to house Metropolitan's materials, supplies and equipment. The buildings also are not suitable to safely store adequate supplies of medical grade supplies and essential commodities for emergency preparedness such as for pandemics. Furthermore, they lack equipment to handle large assets like the large diameter specialty valves. This project will construct a new warehouse, which will provide approximately 55,000 square feet of indoor floor space with approximately 30,000 square feet of outdoor storage yard covered under canopies. This project will also demolish Buildings 30 and 31 and restore and seismically retrofit the Buildings 32A and 33 to meet the current building code. The new warehouse and retrofitted buildings will support Metropolitan's ongoing operations and maintenance, capital construction efforts, and emergency preparedness.

System-wide Paving & Roof Replacements

Similar to infrastructure throughout Metropolitan, pavements and roofs deteriorate over time due to wear and tear from use, weathering and precipitation. The planned pavement and roofing rehabilitation projects will encompass water treatment plants, pumping plants, various maintenance facilities and access roads within Metropolitan's service areas. These projects will also improve the subgrade and drainage systems as required.

This project will allow various paving and roof replacements throughout Metropolitan's facilities to be authorized by the General Manager similar to the Minor Capital Projects Program. Establishing a project to fund a limited amount of paving and roof replacement on an annual basis will allow these needed replacement projects to proceed expeditiously.

Water Quality Laboratory Building Seismic & HVAC Upgrades

This project addresses seismic upgrades, building expansion, and other building improvements for the Water Quality Laboratory. The Water Quality Lab was constructed in accordance with the building codes at the time of construction and is treated as an essential facility. However, industry knowledge of earthquakes and seismic design has greatly improved over the years, leading to the development of more stringent, modern seismic codes for this type of facility. To minimize the risk of damage to the plant during a major earthquake, seismic upgrades are recommended. Also, new regulatory requirements associated with Quagga Mussels, per- and polyfluoroalkyl substances (PFAS), and other water quality concerns will be addressed.

In addition to the seismic upgrades, a building expansion and functional layout improvements such as laboratory and office space reconfiguration, lab equipment replacements, accessibility improvements, HVAC and roof replacements, and other related building improvements necessary to renovate the building to support Metropolitan to meet current and future water quality regulations.

System Reliability - Security and Other Project Group**Coyote Creek PCS HEP Perimeter Security Upgrade**

The Coyote Creek Pressure Control Structure (PCS) and Hydroelectric Plant (HEP) facility falls under North American Electric Reliability Corporation (NERC) and Federal Energy Regulatory Commission (FERC) oversight and must adhere to critical infrastructure regulations set by these agencies. The current perimeter security fencing and security measures at this site do not meet the NERC/FERC security standards. This project will replace all perimeter fencing and both entry gates, relocate the rear vehicle gate to the front of the driveway at Lambert Road, and install multiple network security detection systems to detect and deter unauthorized individuals from accessing the site. This is a new project for this budget cycle.

Diamond Valley Lake Network Security Detection Systems

In 2018, a serial arsonist set 11 fires in the Diamond Valley Lake (DVL) area. This project will install multiple network detection security systems around DVL to cover areas with historically high security incidents. The network detection security system will utilize ground-based radar and thermal imaging as necessary to monitor for trespassing, criminal activity, security incidents, illegal dumping, fire, and medical emergencies. This is a new project for this budget cycle.

Eastern Region Security Camera Replacement

The existing camera system that serves the Eastern Region of Metropolitan's distribution system requires frequent maintenance, is obsolete and is not integrated with the current enterprise system, and its coverage is incomplete. This project will replace the existing camera system with new enhanced camera system and install other security related equipment in this region to enhance the theft and trespassing detection and deterrence, lower maintenance costs, and better leverage the available bandwidth and data storage capabilities to provide better video feeds and recordings. This is a new project for this budget cycle.

Etiwanda Reservoir Security Upgrades

Etiwanda Reservoir has experienced incidents of trespassing and illegal dumping. This project will replace the gate near residences with a high security gate that is cut and climb resistant and install multiple network security detection systems to detect and deter unauthorized individuals from accessing the site. This is a new project for this budget cycle.

Headquarters Building Automation System Upgrades

The building automation system controls all lighting, carbon monoxide monitoring system, HVAC, and associated mechanical equipment in Metropolitan's Headquarters Building. The system is required to operate the building in an energy efficient manner, consistent with Title 24 energy efficiency standards. In the event of a building automation system failure, thermal control within the data center would be lost and garage exhaust fans within the parking garage would become inoperable, resulting in damage to critical facilities and unsafe conditions, respectively. The existing building automation system is obsolete and is no longer supported by the manufacturer.

This project will replace the existing building automation system with a new nonproprietary system and will support integration of the new fire and smoke control systems that will be installed under the Headquarters improvements project.

Headquarters Building Interior and Exterior Lighting and Control System Upgrade

The existing fluorescent lighting fixtures in the Metropolitan Headquarters building are 23 years old and past their service lives. As the fixtures and components continue to age, the risk of fire hazard will increase and in July 2019, a fire incident occurred on the first floor due to the deterioration of fixture components. This project will replace and upgrade interior and exterior lighting with new energy efficient light emitting diode (LED) fixtures controlled by a new lighting control system which allows for programmable on/off, dimming, daylight harvesting, and occupancy sensing. This project will bring the building lighting up to the current California Title 24 building standards and may qualify for Los Angeles Department of Water and Power's Commercial Lighting Incentive Program. This is a new project for this budget cycle.

Headquarters Chiller Plant Upgrade

Metropolitan's Headquarters' original central plant cooling equipment was installed in 1997 when the building was constructed. This equipment provides the comfort cooling requirements for the Metropolitan Headquarters Building. Chillers and cooling tower equipment typically has a lifespan of 10 to 25 years and the existing equipment in the building is no exception. Costs to maintain the aging, obsolete, and inefficient equipment continue to increase. This project will replace the central plant cooling equipment with new chillers, cooling towers and related mechanical, electronic and electrical systems that meet today's energy efficiency and seismic standards. This is a new project for this budget cycle.

Headquarters Facility Replacement of Modular Furniture

The service life of office modular furniture is about 20 years and the existing furniture in Metropolitan Headquarters Building predates the building since it was originally purchased and used when Metropolitan worked out of Cal Plaza. Additionally, the furniture supplier has discontinued this line of products. This project includes space planning, which will develop new furniture standards and guidelines that address changing organizational needs; replacement of obsolete modular furniture; installation of new common use space/privacy rooms/meeting rooms/storage; additional enclosed offices; associated power, communication and network installations in walls, ceilings, and floors; and other work to comply with safety codes. This is a new project for this budget cycle.

Headquarters Improvements

Analysis has confirmed that the Headquarters Building does not meet current building code criteria for an Essential Facility. While the building remains safe to occupy, seismic strengthening to meet updated code levels is recommended in order for operations and business functions to continue following a major earthquake. This upgrade will increase the Headquarters Building's level of seismic performance and safety to that of an existing state-owned building and will reduce the risk of significant damage and resulting business interruption due to a major earthquake.

Construction of the seismic upgrades poses logistical challenges associated with the major retrofit of a high-rise building while the facility remains operational. During the anticipated three-year duration of construction, two to three floors of the high-rise tower will be vacated sequentially to allow a contractor to execute the repairs. Metropolitan staff will be relocated in stages to the five-story wing of the building.

Seismic upgrade work provides an opportunity to complete improvements to specific building systems in a cost-effective manner, while the floors are unoccupied and building finishes are removed. The Headquarters Building is over 20 years old, and some of its features need to be upgraded or replaced. These features include the fire/life safety systems including existing fire sprinkler piping at the parking garage, some of the kitchen equipment and ceiling/wall finishes, HVAC system equipment including cooling towers, air handler units, chillers, air disinfection systems, and associated mechanical, electrical, and control systems, restroom facilities on several floors, and video rooms and video production equipment.

Headquarters Security Improvements

The comprehensive security upgrades for Metropolitan's Union Station Headquarters have been prioritized and staged to minimize rework and impacts to operations. The Stage 1 work is complete, which enhanced perimeter windows and doors by providing needed blast protection. The Stage 2 work, currently in construction, provides security system upgrades inside the building with entry validation, surveillance and intrusion protection, and additional security features in the main entry rotunda area, board room, executive dining lounge, and security control room. Stage 3 is in design phase and will enhance perimeter security along the exterior of the building and courtyard including bollards and gates.

Hinds Pumping Plant Perimeter Security Upgrades

Existing portions of the current perimeter fencing at Hinds Pumping Plant are deteriorated and do not deter intruders. The inability to properly monitor the area has resulted in incidents of theft and illegal dumping. This project will install a complete and continuous anti-cut anti-climb perimeter fence and multiple network security detection systems at Hinds Pumping Plant to detect and deter unauthorized individuals from accessing the site. This is a new project for this budget cycle.

Lake Mathews Network Security Detection Systems

Existing portions of the current perimeter fencing at the Lake Mathews facility are deteriorated and do not prevent intruders. The inability to properly monitor the area has resulted in incidents of theft and illegal dumping. This project will install multiple network detection security systems around Lake Mathews to cover areas with historically high security incidents. The network detection security system will utilize ground-based radar and thermal imaging to monitor for trespassing, criminal activity, security incidents, illegal dumping, fire, and medical emergencies. This is a new project for this budget cycle.

Perris PCS Perimeter Security Upgrades

The current fencing at the Perris Pressure Control Structure (PCS) is inadequate, evidenced by a recent intrusion. This project will replace all perimeter fencing with a high security fence that is cut and climb resistant with a 3-strand barbed wire top guard, and install multiple network security detection systems with the intent to lower the District's exposure to theft, arson, and vandalism. This is a new project for this budget cycle.

Power Switch Yard Protection

Several of Metropolitan's switch yard facilities fall under North American Electric Reliability Corporation (NERC) and Federal Energy Regulatory Commission (FERC) oversight and must adhere to infrastructure regulations set by these agencies. This project will install ballistic barriers and chain link roofs at all power switch yards throughout the District to protect equipment from projectiles and drone attacks. This is a new project for this budget cycle.

Security System Upgrade

The electronic security system is the backbone of Metropolitan's physical security system. Studies indicate that replacement of the 17-year-old system is not yet required; however, incremental upgrades are needed to extend the life of the system. Work includes hardware and software upgrades to network controllers, computer servers, card readers, and the video management system.

Valley View PCS HEP Perimeter Security Upgrades

The Valley View Pressure Control Structure (PCS) and Hydroelectric Plant (HEP) facility falls under North American Electric Reliability Corporation (NERC) and Federal Energy Regulatory Commission (FERC) oversight and must adhere to critical infrastructure regulations set by these agencies. Upgrades to perimeter security fencing and security measures are needed to comply with NERC/FERC security standards. This project will replace fencing and gates to meet security standards and will install multiple network security detection systems to detect and deter unauthorized individuals from accessing the site. This is a new project for this budget cycle.

Wadsworth/DVL Control & Protection System Upgrade

This project is the final phase of the Wadsworth Pumping Plant/DVL control system upgrade and includes replacement of the entire Diamond Valley Lake (DVL) control and communications systems, the protection relay system, UPS, vibration monitoring system, and pump/turbine drive controls.

West Portal Perimeter Security Upgrade

The West Portal site of the San Jacinto Tunnel does not have a continuous perimeter fence. The location is susceptible to intruders. This project will install a complete and continuous anti-cut anti-climb perimeter fence with barbed wire top guard at West Portal to meet security standards and will install multiple network security detection systems to detect and deter unauthorized individuals from accessing the site. This is a new project for this budget cycle.

Western Region Security Camera Replacement

The existing camera system that serves the Western Region of Metropolitan's distribution system requires frequent maintenance, is obsolete, is not integrated with the current enterprise system, and its coverage is incomplete. This project will replace the existing camera system with new enhanced camera system and install other security related equipment in this region to enhance the theft and trespassing detection and deterrence, lower maintenance costs, and better leverage the available bandwidth and data storage capabilities to provide better video feeds and recordings. This is a new project for this budget cycle.

Treatment Plant Reliability Program

Fiscal Year 2022/23 Estimate: \$24.9 million

Fiscal Year 2023/24 Estimate: \$17.2 million

Program Information: The Treatment Plant Reliability Program is comprised of projects to replace or refurbish facilities and components of Metropolitan's five water treatment plants in order to continue to reliably meet treated water demands.

Accomplishments for FY 2020/21 and FY 2021/22

Diemer Plant

New Projects Initiated:

- Diemer Electrical Improvements
- Diemer Filter Rehabilitation
- Diemer Power and Distribution Panel Upgrades

Major Milestones Achieved:

- Diemer Basin Rehabilitation - construction of the west basins completed
- Diemer Filter Building Seismic Upgrades - construction of seismic upgrades for the west filter building completed
- Diemer Filter Valve Replacement - construction of valve replacement for the west filters completed
- Diemer Water Sampling System Improvements - construction completed

Jensen Plant

New Projects Initiated:

- Jensen Control Room HVAC
- Jensen New Caustic Soda Tank Farm at the Combined Filter Effluent
- Jensen Reservoir Bypass Gate Refurbishment

Major Milestones Achieved:

- Jensen Modules 2 and 3 Flocculator Rehabilitation – construction completed
- Jensen Ozone PSU and Critical Component Upgrade – design completed
- Jensen Electrical Upgrades - Stage 2 – construction completed

Mills Plant

New Projects Initiated:

- Mills Ozone PLC Control and Communication Equipment Upgrade
- Mills Electrical Upgrades – Stage 2

Major Milestones Achieved:

- Mills Electrical Upgrades – construction of Stage 1 completed
- Mills Electrical Upgrades – construction of Stage 2 started
- Mills Ozone PLC Control and Communication Equipment Upgrade – procurement contract awarded

Skinner Plant

New Projects Initiated:

- Skinner Fluoride Tank Replacement

Major Milestones Achieved:

- Skinner Survey Building Roof Replacement – construction completed
- Skinner Ozone PLC Upgrade – installation completed

Weymouth Plant

New Projects Initiated

- None

Major Milestones Achieved:

- Weymouth Basins 5-8 and Inlet Channel Refurbishment – final design completed
- Weymouth Chlorination System Upgrades – construction completed
- Weymouth Domestic Water System Improvements – construction completed
- Weymouth Water Quality Instrumentation Improvements – construction completed

Objectives for FYs 2022/23 and 2023/24

Project	Total Project Estimate	Estimated Construction Completion	Major Milestones
Diemer Chemical Feed Systems Improvements	\$ 11,300,000	2026	Complete design
Diemer Filter Rehabilitation	\$ 49,700,000	2026	Complete design
Jensen Electrical Upgrades - Stages 1 & 2	\$ 54,000,000	2022	Complete Stage 2 construction
Jensen Ozone PSU and Critical Component Upgrade	\$ 14,300,000	2023	Complete construction
Jensen Site Security Upgrade	\$ 2,100,000	2024	Complete construction
Mills Electrical Upgrades - Stage 2	\$ 14,500,000	2024	Complete construction of Stage 2
Mills Fluorosilicic Acid Tank Replacement	\$ 2,500,000	2024	Complete construction
Mills Perimeter Security and Erosion Control Improvements	\$ 5,800,000	2024	Complete construction
Skinner Fluorosilicic Acid Tank Replacement	\$ 1,600,000	2024	Complete construction
Skinner Ozone Contactor Roof Elastomeric Coating	\$ 2,300,000	2023	Complete construction
Skinner Sulfuric Acid Transfer Line Rehabilitation	\$ 1,400,000	2025	Complete design
Weymouth Basin 5-8 and Inlet Channel Refurbishment	\$ 65,000,000	2024	Begin construction
Weymouth Filter Valve Replacement	\$ 24,400,000	2024	Begin construction
Weymouth Hazardous Waste Staging and Containment	\$ 2,600,000	2023	Complete construction

Diemer Project Group

Diemer Administration Building HVAC Replacement

The existing HVAC system in the Diemer plant's Administration Building consists of two 20-ton, chilled and hot water coiled air-handling units, which maintain multi-zone work-space environments on both floors. The 57-year-old units are beyond their expected operating life and have caused issues with regular maintenance activities. This project will replace the existing HVAC units with new energy efficient units and upgrade the temperature control system for the building. The project will also replace chiller, boiler, compressor, and make ductwork modifications. Seismic anchorage of the equipment will be incorporated to meet the current building code.

Diemer Chemical Feed System Improvements

The chemical feed equipment for ammonia, alum/ferric chloride, sodium hydroxide, fluorosilicic acid, liquid polymer, and dry polymer at the Diemer plant has aged and its reliability has deteriorated over the years. Most equipment is over 22 years old and has experienced failures. Some of the repair parts are no longer manufactured and are difficult to obtain. Loss of chemical feed or inadequate feeding capacity could disrupt plant operations. In addition, design criteria for some of the chemicals have changed and the existing equipment is unable to cover the required range for chemical feed. This project will replace the worn-out feed equipment and optimize the system design to improve system reliability and to protect treated water quality.

A canopy over the caustic soda tank farm and a new fluoride tank farm is needed to improve operations at the Diemer plant. Heat tracing around caustic feed lines is required to feed 50% caustic soda during the winter months. However, rainwater trapped within the chemical containment area could submerge the heat tracing wires. A canopy will minimize rainwater accumulation within the containment area and eliminate electrical hazards. The plant's fluoride tanks have reached the end of their service life and lack access for inspection and maintenance. This project will install a canopy over the existing caustic soda feed equipment; and replace the two fluoride storage tanks, associated feed equipment, and the roof over the fluoride tank farm.

Diemer Power and Distribution Panel Upgrades

Power and distribution panels that were installed during the original Diemer plant construction, are more than 57 years old. These panels, circuit breakers, and feeder conductors (wires that feed the panels) have exceeded their normal life span and have deteriorated. This project will upgrade the aged electrical equipment to meet the current electrical code and enhance the plant's reliability. The improvements will allow the electrical equipment to be taken out of service for preventive maintenance, replacement, and testing in a safe working condition.

Diemer Erosion Control Improvements

The Diemer plant is located on the top of a hill in the city of Yorba Linda and consists of numerous fill slopes. Due to the large water-bearing structures at the Diemer plant, some of these slopes are within the State of California Department of Water Resources Division of Safety of Dams (DSOD)'s jurisdiction. Some slopes within the Diemer plant have eroded and are in need of rehabilitation. This project will provide site improvements for grading, drainage, and erosion/sediment control to erosion-damaged slopes at the plant site.

Diemer Filter Rehabilitation

The Diemer plant has 48 independent filter units that are normally operated from the main control room, although they also have the capability to be operated locally if needed. Over the life of the Diemer plant, staff has performed regular maintenance on the filters to support reliable plant operation. However, as regulations and source water conditions have changed, filter performance reliability has decreased. Metropolitan's Water Quality recently developed recommendations for the rehabilitation of all Weymouth filters, including reconfiguration of underdrains, media, troughs and surface wash systems. Due to the similarities between the filters at Diemer and Weymouth, staff recommends implementing the same filter modifications at the Diemer plant.

This project will rehabilitate all of the Diemer plant's filters to improve their performance and enhance treatment plant reliability. The planned rehabilitation work includes replacing the filter media with optimized size and depth specifications; replacing the surface wash system with larger piping and improved flow configuration; replacing the underdrains; modifying flow distribution flumes; and raising and replacing the existing troughs to accommodate a higher depth of filter media.

Diemer Ozone Network Upgrade

Ozone is the primary disinfectant at Metropolitan's water treatment plants. At the Diemer plant, the programmable logic controllers (PLCs), which control the ozone process, have exceeded their service lives; are discontinued; and the existing firmware has security flaws. This project will replace the PLC processors, upgrade the network modules to ethernet, modify the existing fiber optic cable infrastructure to support the new district standard ethernet, and other appurtenances necessary to complete the upgrade. The existing PLC configuration will be migrated to the new processors and the operations manual will be updated to reflect the associated changes. This is a new project for this budget cycle.

Diemer Wastewater Reclamation Facilities Reliability Improvement

Approximately 40 percent of Diemer plant's existing Wastewater Reclamation Plant (WWRP) is constructed on long slender piles and earthen fill, which form a level surface at the top of a slope. Seismic rehabilitation is required to ensure reliability of the WWRP facility. In addition, submerged WWRP equipment is continually subjected to abrasive and corrosive operating conditions caused by the solids in the used filter backwash water. The WWRP's two identical treatment trains share a common influent channel and both must be removed from service during maintenance. This project will retrofit the WWRP with reliability improvements, including a new coal grit removal facility and new headworks to allow independent shut-down of each individual process trains. Seismic stabilization will be accomplished by replacing the existing sedimentation basins with smaller footprint inclined plate settlers to reduce the footprint and move the process away from the seismically vulnerable fill portion of the pad. The project also includes modifications to the existing chemical feed system, sludge line, and utilities at the west slope.

Diemer Water Sampling System Improvements

The existing sample lines at the Diemer plant do not meet the 10-minute turnover rate requirement from sample point to laboratory sample taps due to long sample lines and pressure limit for the existing polypropylene tubing used to transport the samples. This project will upgrade the existing sample lines and all sample pumps to allow higher operational pressure to shorten the transport time. In addition, new chlorine analyzers, turbidimeters, and pH analyzers will be installed closer to the sample locations to eliminate variable analytical results caused by algae growth, solids deposition, temperature variation, and excessive detention time in the sample lines. These local analyzers will reduce distances from sample point to analyzer to better represent actual conditions in the process stream.

Jensen Project Group**Jensen Bull Creek Repair**

The Bull Creek channel located on the east side of the Jensen plant has suffered significant erosion from continued stormwater flow during the past wet seasons. This project will rehabilitate approximately 800 feet of the Bull Creek channel to prevent erosion through the use of biological and engineered solutions. The work includes: installation of rip rap and slurry backfill along the channel; repairing damaged concrete liner on the channel sides, restoration of the broken apron next to the railroad bridge, and revegetation of native species to keep sediments in place and reduce erosion. In addition, a catch basin and other stormwater management infrastructure will be constructed along the San Fernando service road to the Jensen plant, to mitigate excessive erosion on the north bank of the Bull Creek.

Jensen Chemical Feed Improvements

This project will improve several chemical feed systems at the Jensen plant, including replacing two fluorosilicic acid (fluoride) tanks, rehabilitation of sulfuric acid tanks, construction of a new caustic soda tank farm near the filtered water line, and containment upgrades for the liquid polymer system.

The Jensen plant relies on two 9,000-gallon cross-linked high-density polyethylene (HDPE) tanks for the storage of fluorosilicic acid. Internal inspections have identified cracks in the two fluorosilicic acid tanks. This project will replace the fluoride tanks with tanks of the same capacity and improved mechanical properties to provide an expected service life of 20 years.

A recent internal inspection of one of two sulfuric acid tanks at the Jensen plant identified corrosion in the tank wall material and welds. Reconfiguration of the transfer piping and basket strainer is needed to minimize clogging and facilitate chemical transfer between the tanks. This project will rehabilitate Jensen's two sulfuric acid storage tanks, apply new protective coating to the sulfuric acid tank farm, and complete minor modifications to the sulfuric acid feed system piping within the acid tank farm.

The Jensen plant's existing caustic soda tank farm was installed in 1970, and needs to be replaced. Caustic soda is used to increase the pH for corrosion control. The caustic soda dosage varies based on source water quality and the amount of other chemicals (e.g. sulfuric acid and alum) applied during the treatment process. Currently at the Jensen plant, sulfuric acid is added to suppress the pH and control bromate formation and then caustic soda is added to reduce corrosion in the distribution system. This project allows the Jensen plant to meet current water quality design criteria for bromate control with the addition of ammonia and chlorine added upstream of the ozone contactor. This approach would significantly reduce the plant's usage of both sulfuric acid and caustic and reduce overall chemical costs. With the ammonia-chlorine process to control bromate, caustic soda would only need to be added to the filtered water. This allows the new caustic soda tank farm to be sized, designed, and built specifically for adding caustic soda to the filtered water. This project will replace the existing tank farm with a new facility located near the filtered water line.

In addition, the liquid polymer unloading facility does not have a permanent spill containment system. This project will provide a permanent single concrete unloading facility for both chlorine neutralizing caustic soda and liquid polymer chemicals, equipped with a new sump and discharge piping to provide secondary containment. In addition, the ferric chloride handling facility and the Liquid Polymer Building will be removed.

Jensen Chlorine Caustic Scrubber Tanks Replacement

Similar to the other four water treatment plants, the Jensen plant uses caustic scrubbers to neutralize chlorine gas in the event of an accidental leak in the chlorine containment building. The existing scrubber systems are experiencing corrosion and the best option for rehabilitation of this safety system is replacement of the scrubber tanks. This project replaces the caustic scrubber tanks and associated equipment. This is a new project for this budget cycle.

Jensen Control Room HVAC

The Jensen plant was placed into service in 1972. During recent wildfire events, it was observed that existing HVAC systems do not meet the objective of reliably maintaining air quality in the control rooms that must be staffed at all times. This project will provide improved air quality in the Jensen control rooms to ensure that the plant can be reliably operated during periods of poor outdoor air quality. This project will: (1) install dedicated high-efficiency heating, ventilating, and air conditioning (HVAC) system for the main plant control room in the administration building and the secondary plant control room in the ozone generator building, and (2) seal the two control rooms from other portions of the building to reduce smoke or other air quality contaminants from entering the control room.

Jensen Electrical Upgrades

The Jensen plant's electrical system was designed to meet then-current electrical codes when the plant was constructed over 42 years ago. The aging electrical equipment has deteriorated through long-term continuous use, lacks redundancy, and is difficult to maintain and repair. Much of the equipment is underrated by current standards and does not have adequate short-circuit interrupting capability, which results in an elevated risk of unplanned outages and equipment damage. This project will replace aging equipment and provide needed redundancy for critical components of the plant's electrical system. To expedite completion of the most critical electrical upgrades while minimizing impacts to plant operations, the upgrade work has been prioritized and staged. The Stage 1 work improved the medium voltage switchgear on the western portion of the plant and provided electrical infrastructure for the Jensen Solar Power Plant. Stage 2 improvements are underway to upgrade UPC-7, UPC-9, and their associated motor control centers to support critical process equipment such as the washwater pumps, service water pumps, washwater return pumps, filters, thickeners, sludge pumps, and ammonia facilities. Stage 3 improvements will upgrade the remaining components of the electrical system on the eastern portion of the plant, including geotechnical seismic analysis of the east side of the plant to determine areas of seismic vulnerability.

Jensen Entrance Improvements

Both main Jensen plant gates at San Fernando and Balboa entrances need to be redesigned to improve security and traffic flow consistent with Metropolitan's other Treatment Plants. This project will enhance security of the Jensen plant's entrances. Project scope includes replacement of security gates; installation of traffic control devices to improve security at the entrance points of the Jensen plant; and installation of fire-resistant plants and irrigation along the west side of the plant.

Jensen Hazardous Waste Containment Facility

The Jensen plant currently stores its hazardous waste in a storage area that was repurposed from a general equipment storage area. The existing site has inadequate storage space for the facilities' needs. In addition, the waste containment area roof covering does not provide adequate protection from the rain and sun. This project will replace and relocate the Jensen plant Hazardous Waste Consolidation Site (commonly known as 90-day storage).

Jensen Module 1 and Washwater Pump Rehabilitation

Washwater pumps are used to pump water from the combined filter effluent to the washwater tanks. The tank water is then used to back wash filters. If washwater pumps are unavailable, the plant cannot perform filter backwashes that are necessary to maintain operation of the filtration process. Jensen's Module No. 1 washwater (WW) lift pumps were installed with the original plant construction and have been in service for 52 years. Inspection and testing has revealed significant corrosion in the pumps' housings, and diminished pump output. The pumps have reached the end of their useful life and should be rehabilitated. This project will rehabilitate the Module No. 1 vertical turbine washwater lift pumps, modify the piping for the Module No. 1 service water and washwater lift pumps, and will replace the open motors with closed motors.

Jensen Modules 2 and 3 Traveling Bridge and Basin Rehabilitation

This project will rehabilitate Modules Nos. 2 and 3 traveling bridges and sedimentation basins at the Jensen plant to enhance solids removal efficiency. Planned work includes replacing the existing traveling bridge end-truck structure, drive system, rails, and racks; replacing suction pumps and flexible hoses; retrofitting the suction piping; replacing sludge line piping, rehabilitating/replacing launder gates and launders; upgrading the bridge control system and power supply; replacing the 48-existing basin inlet gate actuators; recoating bridge trusses; replacing basin guardrails; and installing improvements to prevent bird nesting within the basin.

Jensen Ozone PSU and Critical Component Upgrade

Ozone is used as the primary disinfectant at Metropolitan's treatment plants. However, the critical systems associated with ozone generation have deteriorated or have become obsolete after 17 years of operation and need to be upgraded. This project will upgrade the units that provide power to the Jensen plant's ozone generators and will replace outdated components of other critical systems associated with the plant's ozone generation, which have reached the end of their service life, and are no longer supported by the original equipment manufacturer. The systems to be upgraded include the following areas: (1) power supply unit (PSU); (2) nitrogen supply system; (3) ozone destruct units; (4) dissolved ozone; (5) cooling water loop; (6) ozone generator dielectrics; (7) liquid oxygen vaporizers; and (8) other components of the ozone system. This project also will make modifications to re-purpose one existing PSU chiller as a backup HVAC chiller.

Jensen Raw Water Emergency Bypass

The Jensen plant is located within proximity of a number of faults, which are capable of generating large earthquakes. In the event of a large earthquake that can cause extensive damages to the plant and disables the water treatment capability, the plant does not have an emergency raw water bypass to deliver raw water under a boil water order in such a need were to occur. This project will improve resiliency against severe earthquake and enhance operational flexibility by constructing a raw water emergency bypass for the Jensen plant.

Jensen Reservoir Bypass Gate Refurbishment

The Jensen plant's existing reservoir bypass gates were installed in 1972 and allow the reservoirs to be isolated in case of water quality issues. The bypass gates are corroded and are currently inoperable because portions of the bronze bearings are degraded and missing. This project will enhance infrastructure curity, and resiliency, and will improve the reliability of water deliveries by replacing the reservoir bypass gates.

Jensen Site Security Upgrade

The outdated Jensen plant's security system needs an upgrade to minimize risk of an intrusion. The existing camera system is undersized and aged. Planned upgrade includes installation of additional card readers and motion-activated lights in sensitive areas; replacement of existing aging security cameras with high resolution cameras; addition of new cameras, motion detection devices, and public announcement speakers to monitor the perimeter of the plant and deter intruders; replacement of security signage to meet current code; security upgrades of first floor windows; addition of horizontal structural support to strengthen the existing gates; and addition of new defensive barrier plants and trees to screen the west side of the Jensen plant.

Jensen Solids Handling System Upgrades

Efficient recovery of water from residual solids is critical for the operation and efficiency of the Jensen plant, the current system consisting of solids thickeners on the Jensen site, and solids lagoons located at the adjacent Los Angeles Department of Water and Power (LADWP) site.

The solids thickeners play a key role in the recovery of water from the residual solids. During thickener operation, operators rotate valves daily to divert flow of residual solids to different thickeners. These valves leak and are difficult to access. This project will reconfigure Solids Pump Station No. 2 to allow better access to the valves; and upgrade the solids splitter vault to facilitate remote operation.

Metropolitan has an ongoing lagoon use agreement with LADWP, which allows for Metropolitan's use of four of the lagoons located at the Los Angeles Aqueduct Filtration Plant (LAAFP) to process solids generated and conveyed from the Jensen plant. Under this agreement, two of the lagoons can be used until October 1, 2062, and the other two until October 1, 2022. To reliably support the Jensen plant operation and provide operational flexibility during unfavorable source-water quality or higher water demand, it was recently determined that construction of two new lagoons to replace the two existing lagoons that must be returned to LADWP is not sufficient. This project will design and construct a new mechanical solids handling facility at the Jensen plant instead of constructing two new lagoons to replace the ones that must be returned to LADWP. This new mechanical facility will be sized to handle all of Jensen plant's solids handling needs when treating as much as 500 mgd.

San Fernando Road Rail Crossing Rehabilitation

The Jensen plant receives water treatment chemical supply by rail. Metropolitan's chlorine vendor is transitioning to heavier chemical railcars which require heavier gauge rails to meet Federal Railroad Administration regulations for hazardous chemical transportation requirements. This project will rehabilitate the deteriorated railroad crossing at San Fernando Road, upgrade the strength of the rails and turnout, add concrete crossing panels to handle heavy truck traffic, replace damaged asphalt, and install crossing arms and signage. This is a new project for this budget cycle.

Mills Project Group**Mills Basin Solids Removal Improvements**

Currently, the Mills plant removes solids from each sedimentation basin using a bridge-mounted siphon system and discharges the solids to the retention basins. However, the siphon flow cannot be adequately controlled. As a result, excessive amounts of water are often siphoned to the retention basins, causing increased solids drying time and reduced retention basin capacity. This project will upgrade the traveling bridges' solids removal equipment and controls to improve the solids removal process at the Mills plant's Modules Nos. 3 and 4. The new equipment and controls will allow the plant to optimize its solids removal process by simultaneously reducing the amount of water removed from the basin and reducing excessive solids build-up in the basins.

Mills Electrical Upgrades

The electrical system at the Mills plant has deteriorated through long-term use, is difficult to maintain and repair, and needs improved backup capability. Failure of a single electrical device could impact the treatment process. The electrical upgrades at the Mills plant will be completed in three stages. Stage 1 upgrades addressed the highest priority work, including replacement of obsolete circuit breakers, expansion of the electrical building for UPC-9, installation of new air conditioning system, installation of MCCs and distribution of power feed to chemical feeds systems, washwater return pumps, modules 3 and 4 filter surface wash pumps, and improvement of power reliability for key process equipment. Stage 2 upgrades will add a second incoming 12 kV service from Riverside Public Utilities and upgrade the plant's main switchgear and standby generator switchgear. Stage 3 upgrades will install climate control systems and doors at two electrical buildings, modify electrical manholes, replace digital metering modules for all motor control centers, and add fiber optic cabling.

Mills Fluorosilicic Acid Tank Replacement

The Mills plant relies on two 6,250-gallon cross-linked high-density polyethylene (HDPE) tanks for the storage of fluorosilicic acid. These tanks have a recommended service life of 10 years and have been in service since 2007. Recent inspections have identified leakage at the bolted connections of both tanks. This project will replace the fluorosilicic acid storage tanks with capacity of 7,900-gallon and improved mechanical properties to provide an expected service life of 20 years. The project will also replace coating in the containment area as necessary.

Mills Modules 3 and 4 Flash Mix Chemical Containment Upgrades

The existing flash mix areas at Mills Plant Modules 3 and 4 contain chemical feed equipment for ammonia, polymer, caustic, alum, sodium hypochlorite and chlorine. The equipment is contained within a low concrete curb. To reduce the risk of chemical releases, improved containment is needed. This project will replace the chemical piping in the area with double-walled piping with a leak detection system; replace flow meters, valves, actuators, and control panels, and install flow meter display units in a weatherproof enclosure outside of the containment areas.

Mills Ozone PLC Control and Communication Equipment Upgrade

The Mills plant ozonation equipment utilizes a type of Programmable Logic Controller (PLC) that was introduced to the commercial market in 1988. Computer hardware from that era is now outdated, and the PLC manufacturer has announced that it will no longer produce or support this equipment. Inventories of spare parts will no longer be maintained once exhausted. Failure of a PLC and/or its communication module could cause a disruption in the ozone control system. This project will replace the equipment and modify the software to operate with the new equipment for the Mills ozone control system. The upgraded system will feature Metropolitan-standardized PLCs in an open-architecture approach that staff will be able to maintain and upgrade in the future.

Mills Perimeter Security and Erosion Control Improvements

The Mills plant has approximately 14,500 linear feet of perimeter fencing that is primarily a chain link with a height of six to eight feet. The fencing and several of the entry gates are deteriorating and may be vulnerable to security breaches. In addition, stormwater runoff has eroded an area on the southern boundary of the plant. This project will replace 7,700 feet of the existing fence with security fencing along the plant's southern, northern and western boundaries, replace existing guard shack and motorized sliding gate at the Barton Street entrance with motorized double swing gate with associated controls, replace three existing secondary gates with taller security gates with security cameras, and install one security camera at each of the sliding gates. Grading and erosion control improvements, such as installation of v-ditches and flow re-direction, will also be performed to prevent sediment from leaving the site. All improvements will be consistent with Mills plant's architectural design guidelines, and with Metropolitan's approach to facility security.

Mills Raw Water Emergency Bypass

The Mills plant is located within proximity of a number of faults, which are capable of generating large earthquakes. In the event of a large earthquake that can cause extensive damages to the plant and disables the water treatment capability, the plant does not have an emergency raw water bypass to deliver raw water under a boil water order in such a need were to occur. This project will improve resiliency against severe earthquake and enhance operational flexibility by constructing a raw water emergency bypass for the Mills plant.

Skinner Project Group**Skinner Finished Water Reservoir Slide Gates Rehabilitation**

The three operational slide gates (Inlet, Outlet, and Bypass) that control the inlet and outlet flows from the Skinner Finished Water Reservoir have been exposed to a corrosive and wet environment since 1991. Visual inspections identified leaking gates and continuing deterioration of the slide gates' exterior coatings. These gates have been in service for 28 years and have not been recoated. This project will rehabilitate the three Skinner Finished Water Reservoir slide gates. The gates will be removed from the gate frames, thoroughly inspected for carbon steel material loss, blasted and recoated to extend their service life. The existing gate frames will be replaced with new frames and other installation components (i.e., guides, wedge blocks, and seals). In addition, the rejection structure will be modified to separate the stormwater and rejection water pipelines and prevent potential stormwater from flowing into the finished water reservoir.

Skinner Fire Protection System Expansion

The installation of a new Battery Energy Storage System (BESS) at the Skinner plant requires improvements to the plant's fire protection system. This project constructs a new fire hydrant, water pipes, and other improvements to provide a permanent fire protection water source for the Skinner's solar facility and BESS to comply with the fire codes. This is a new project for this budget cycle.

Skinner Fluorosilicic Acid Tank Replacement

Fluorosilicic acid tanks will be removed and replaced with two 8,200-gallon above-ground (Fluoride) tanks at the Skinner Plant. New extrusion-molded linear HOPE tanks will be installed. To minimize changes in the tank farm, the new tanks will match the dimensions and capacity of the existing tanks. Scope will include modification to the tank farm to provide access during construction and associated piping work to connect the new storage tanks to the existing chemically compatible PVDF tank farm piping. The new tanks will be mounted on the existing tank pads.

Skinner Module 7 Filter Inlet Valve Gearbox Replacement

Replace existing sixteen (16) units of discontinued and failing filter inlet valve gearboxes on Module 7 East and West Filter basins with new gearboxes to maintain a reliable filter operation at Skinner Plant. Removal of existing gearboxes and installation of new units will be undertaken by Skinner District Forces with the assistance of Engineering. Scheduling of the equipment replacement will be in accordance with Skinner Plant's water treatment operational requirements and with the water demand and supply conditions within the Skinner service area. Minor field adjustments will be done to align the existing actuators and vertical valve extension stems with the new valve and gearbox assemblies at the bottom of the filter influent channel.

Skinner Ozone Contactor Roof Elastomeric Coating

Leakage through cracks in Skinner plant's ozone roof deck was found in 2010. Cracks in the concrete roof deck can allow rain and nuisance water to be drawn down into the contactors which then mixes with the freshly ozonated water, creating a potential cross-connection. The water and air penetrating through the existing concrete roof decks exposes the rebar and structural steel in the decks, creating the potential of eventual structural failure to the roof decks. In addition, in order to keep the constant vacuum in the contactors, the Ozone Destruct Units have to work excessively which consumes additional electricity and affects the Destruct Units reliability and long-term life span. This project will abrasive blast, apply primer, and coat 61,000 square-feet of the Ozone Contactor Building concrete roof deck with an elastomeric coating to reduce potential structural damage and operational impact.

Skinner Ozone Contactors 1-2 and Influent Channel Concrete Refurbishment

Ozone gas and ozonated water are extremely corrosive oxidizers and can penetrate concrete walls to cause significant corrosion of structural steel and equipment. This project will inject chemical grout into the existing concrete walls of the Skinner Ozone Contactor Nos. 1 and 2 and the influent channel, in order to prevent ozone gas and ozonated water from penetrating the concrete walls.

Skinner Ozone Generator PLC Control & Communication Equipment Upgrade

The Skinner plant ozonation equipment utilizes a type of Programmable Logic Controller (PLC) that was introduced to the commercial market in 1988. Computer hardware from that era is now outdated, and the PLC manufacturer has announced that it will no longer produce or support this equipment. In addition, inventories of spare parts will no longer be maintained once exhausted. Failure of a PLC and/or its communication module could cause a disruption in the ozone control system. This project will replace the equipment and modify the software to operate with the new equipment for the Skinner ozone control system. The upgraded system will feature Metropolitan-standardized PLC's in a new code format to enable future maintenance and modifications as may be operationally necessary.

Skinner Plant 1 - Concrete Joint Sealant Replacement

Concrete joint sealant throughout Skinner Plant 1 is cracked, delaminating, degraded, or missing as it has exceeded its service life. The degradation has allowed vegetation growth and moisture, sediment, and other outside contaminants to enter and penetrate into the concrete joints. This project will remove severely degraded concrete joint sealant throughout Plant 1, prepare and primer the existing joints, and replace with new concrete joint sealant.

Skinner Raw Water Emergency Bypass

The Skinner plant is located within proximity of a number of faults, which are capable of generating large earthquakes. In the event of a large earthquake that can cause extensive damages to the plant and disables the water treatment capability, the plant does not have an emergency raw water bypass to deliver raw water under a boil water order in such a need were to occur. This project will improve resiliency against severe earthquake and enhance operational flexibility by constructing a raw water emergency bypass for the Skinner plant.

Skinner Sulfuric Acid Transfer Line Rehabilitation

The sulfuric acid transfer system at the Skinner plant is used to move chemical between tanks and is also used to homogenize the chemical within individual tanks. This critical water treatment system recently experienced a leak in a transfer pipeline. This project will replace degraded transfer and recirculation pipes with pipe made from more appropriate material, and includes adding pressure relief valves and alarms, and other appurtenant work to improve the safety and reliability of the sulfuric acid transfer system. This is a new project for this budget cycle.

Skinner WTP Service Building 1 Rehabilitation

Service Building 1 Rehabilitation will replace the sanitation facilities and roofing system and improve the staff work/meeting/lunch areas of the building. The scope includes the following: replace the roofing system; replace/upgrade all MEP and HVAC systems (mechanical; electrical; plumbing, heating, and air conditioning) to current building codes; upgrade IT requirements; comply with ADA requirements; improve employees shared facilities and offices (bathroom, locker rooms, break rooms, meeting rooms, cubicles); and abate all hazardous materials. Option to replace the building will be considered during the early phases of this project.

Weymouth Project Group**Oxidation Demonstration Plant Rehabilitation**

Constructed in 1992, the 5.5 MGD Oxidation Demonstration Plant (ODP) provides a 1:100 demonstration-scale test facility of Metropolitan's full-scale plants. This demonstration scale testing capability is needed to ensure that Metropolitan continues to meet all current and future drinking water regulations. Currently, much of ODP's infrastructure has reached the end of its service life, which adversely affects the facility's continued safe and reliable operation. Among other associated improvements, the project will remove obsolete equipment; install new ozone generators, a new liquid oxygen (LOX) storage tank, and associated equipment; install variable frequency drives (VFDs) for the backwash pumps; rehabilitate secondary containment system for all chemicals used at the plant; and upgrade other electrical, mechanical, and control systems to make the plant operation more efficient, reliable, and safe. This is a new project for this budget cycle.

Weymouth Administration and Control Building Seismic Upgrades

The Weymouth Administration Building has been in service since 1941 and houses the plant's control room and administrative staff. The building needs to be seismically upgraded to current standards since this building is over 77 years old and is a critical facility to the operation of the water treatment plant. The project includes reinforcement of the walls for the plant's filter outlet channel and abandoned inlet channel.

In conjunction with the seismic upgrades, the California Building Code (CBC) requires the installation of a fire sprinkler system and accessibility improvements. Electrical, mechanical, and plumbing components impacted by the upgrades will also be reconfigured and modernized. The Weymouth plant's water quality sampling laboratory and office space will also be updated and optimized where required. The existing laboratory has been in continuous service for nearly 32 years.

Weymouth Basins 1 & 2 Rehabilitation

Basins Nos. 1 & 2 were built in 1939 as part of the original Weymouth plant construction. Each basin has a treatment capacity of 57.5 million gallons per day. These basins were originally designed to treat Colorado River Water (CRW). With the addition of State Project Water (SPW), the plant periodically requires higher coagulant dosages than CRW. As a result, the basins operated at a higher solids loading rate than the rate for which the basins were originally designed. This situation has dramatically increased run time on the basins' circular sludge rakes, which remove sludge from the basins. As originally designed, the sludge rakes only operated 1 to 2 hours every 4-7 days. Under current conditions, the sludge rakes are operated 6 to 12 hours each day which results in more frequent maintenance. These basins also have had issues with low solids-settling rates within the basins and high particle loading to the filters, or short-circuiting. The project includes the rehabilitation of the flocculation basins, settling basins, sludge collection equipment, baffling, and edge weirs.

Weymouth Basins 5 - 8 and Inlet Channel Refurbishment

The basin inlet channels deliver water to each of the Weymouth plant's eight flocculation/sedimentation basins. The inlet channel serving Basins Nos. 1-4 is a concrete box culvert constructed in 1940, while the inlet channel serving Basins Nos. 5-8 was constructed in 1962. A structural assessment of the basin inlet channels has found that they should be upgraded to reduce the risk of damage from a major seismic event. Inspections have also identified that wooden baffle walls have deteriorated after repeated wet and dry cycles and have shown a propensity to support algae and microbial growth.

For the inlet channel serving Basins Nos. 1-4, this project will strengthen the conduit and will reconfigure the channel to provide additional flexibility. For the Basins Nos. 5-8 refurbishment, the project includes repairing the steel guides; replacing the drive and paddle shaft assemblies; replacing the baffle boards, supports, and paddle wheel boards in the flocculation section. The project also includes filling the interior corners of each cell with sloping concrete fillets to direct residual solids into the path of the rotating scrapers; refurbishing the structural members of the catwalks; replacing the sedimentation basin sludge collector rakes, drives, and pumps; replacing launders, launder isolation gates, and drains; installing utilities, handrails, and other work necessary to complete the basin refurbishment. Replacement of inlet channel gates for Basins 1 through 8 and inlet channel seismic structural upgrades for Basins 5 through 8 are also part of this project.

Weymouth Chlorine Delivery Railroad Tracks Replacement

The Weymouth plant receives chlorine deliveries via rail cars. The railroad spur to the Weymouth plant was originally installed in the 1930s to transport material and equipment for the construction of the Weymouth plant. This project will replace the track dedicated to the Weymouth plant, improve traffic control and intersections as necessary, and install new rail car scales. This is a new project for this budget cycle.

Weymouth Chlorine Maintenance Shop Expansion

With the completion of the Weymouth Chlorine System Upgrades project, the amount of equipment to maintain has increased resulting in insufficient space in the existing shop to perform necessary maintenance and accommodate storage of equipment and spare parts. Storage cabinets and electrical panels have been added where desks and workspace were located. Also, due to the space limitations, spare equipment is currently stored in the two storage bays which poses the potential of the equipment being compromised in the event of a leak. This project will expand the existing Chlorine Maintenance Shop including a room addition to ensure adequate working space and storage exist to address these space, storage, and maintenance needs to reliably maintain the chlorine equipment for the expanded chlorine process. This is a new project for this budget cycle.

Weymouth Dry Polymer System Upgrade

Cationic polymers are used as a coagulant aid for the wastewater reclamation plant, and nonionic polymers are needed to meet filter performance regulations when treating high State Project Water (SPW) blends. Depending on the quality of the source water, both dry polymers may need to be applied simultaneously. However, the current dry polymer system only has one mixing train available. Since these feed systems share a common polymer mixer, it is difficult to operate both systems at the same time. Additionally, the existing dry polymer mixer uses a type of batch mixer that can only make a single batch at a time and frequently clogs. The mixer is housed in a metal structure that does not meet current seismic codes although it was constructed to meet the codes at that the time of construction.

The project will construct a new dry polymer mixing facility to replace the existing facility. The scope of the project includes construction of a new building designed to meet current seismic standards, installation of a dry polymer mixing system to allow simultaneous mixing and feeding of cationic and nonionic polymers, independently; and construction of a covered containment area to house feed equipment and new polymer storage tanks.

Weymouth Filter Valve Replacement

The original filter valves in Building No. 1 were installed in two stages in 1941 and 1949, and were replaced in the early 1970s with similar valves. These valves are not consistent with modern American Water Works Association (AWWA) standards. The filter valves in Building No. 2 were installed during the second plant expansion in 1962 and are similar in dimension to the valves in Building No. 1. The existing filter valve bodies exhibit corrosion, the rubber seats are worn, and many valves leak after 47 to 57 years of continuous operation. In addition, the frequency of repairs to the actuators is increasing, and spare parts are difficult to obtain. This project will replace all filter valves and actuators in both Filter Building Nos. 1 and 2 with Metropolitan furnished AWWA-standard valves and current industry-standard actuators. This project will also replace or refurbish appurtenant equipment which is ancillary to the reliable operation of the filter valves, such as flow meters, underdrain valves, electrical and control systems, pipes, and other equipment.

Weymouth Hazardous Waste Staging and Containment

The existing hazardous waste storage area requires a number of upgrades to enhance compliance with current codes and to provide enhanced safety measures, such as providing spill containment, eyewashes and safety shower, a canopy, leak detection, and sump. These utilities are all available at the existing sulfuric acid tank farm, which is no longer utilized. As the existing hazardous waste storage area does not provide containment to capture spills or leaks there is potential for hazardous waste to runoff to the storm drain system as well as exposure to plant personnel.

This project will relocate the existing Hazardous Waste Staging and Containment Facility to the existing sulfuric acid tank farm in order to account for deficiencies at the existing facility. The existing sulfuric acid tank farm, located approximately 100 feet from the existing hazardous waste area, is a 30' x 30' containment area with a roof, sump, SCADA controls, eyewash station, power, and potable water that can be cost effectively utilized to relocate the hazardous waste facility.

Weymouth Solids Handling Rehabilitation

Residual solids generated during the water treatment process are sent to the gravity thickeners to separate water from the solids before being sent to belt presses in the solids handling facility for further dewatering. Dewatered solids are then pumped to elevated hoppers for storage prior to offsite disposal. Mechanical equipment at the solids handling facility has experienced frequent failures, and the facility itself requires full-time staffing to operate. Regular failures occur with the system's bridge breakers, which break apart dewatered solids so that they can be pumped to the hoppers. The facility also experiences frequent issues with the hoppers. After the belt presses dewater the solids, polymer solution is added to the discharge side of the cake pumps to facilitate pumping. This produces a cake-like material that often sticks to the hoppers' mechanical components and impedes opening and closing of the hopper gates. Rehabilitation of the solids handling facility is necessary to maintain its long-term function, reduce maintenance and operational labor costs, and reduce chemical costs.

This project will identify and implement the most feasible rehabilitation of the facility and to evaluate the capacity of the facility's decant lines. Options for rehabilitation include: (1) eliminating the existing cake pumps and installing a conveyor belt system to transfer the dewatered solids to the hopper system without the addition of liquid polymer; (2) transferring solids to a separate storage area where the solids are held prior to being hauled offsite. This project will also evaluate modifications within the building that would facilitate future equipment repairs and replacement; and (3) constructing sludge lagoons that would replace the belt press facility as the main solids handling facility to process residual solids.

Weymouth Wastewater Pumpback Improvements

When ozone is used as the plant's primary disinfectant, the ozone generators will produce the amount of ozone needed based on flow into the plant. The plant inlet flow can experience fluctuations when the washwater return pumps that send flow back to the head of the plant, cycle on and off. Ideally, the flow to the ozone contactors would be consistent. However, the existing pump station has a small forebay as compared to the capacity of the washwater pumps. The forebay receives flow from both the Washwater Reclamation Plant and the Oxidation Demonstration Plant (ODP) clearwell. Significant changes in flow from these two facilities may increase fluctuation in ozone dose requirements.

This project will evaluate options to improve minimizing fluctuations in the treated washwater flow returned to the plant inlet and implement the most effective and feasible option. Options for improvements include: (1) construction of a new stand-alone pumpback structure with adequate buffering instead of making improvements to the existing washwater pumpback structure; and (2) modifying the ODP clearwell pumps with variable speed pumps; upgrading washwater pump station pump program to moderate changes in pump speed; reconfiguring the ODP clearwell pumps so that one pump is dedicated for backwash, one pump is dedicated for pumpback, and one pump as a spare for either of the two pumps; and other improvements identified during early stages of the project

Weymouth Wheeler Gates Security Improvements

Construction vehicles and chemical delivery trucks access the Weymouth plant through the Wheeler entrance gate. This project will provide safety and security improvements to the Weymouth plant's Wheeler gate, including construction of a new guard enclosure; improved lighting, security cameras, and communication features; crash rated gates at vehicle and train entrances; perimeter wall and fencing along Wheeler Avenue; two traffic lanes at the entrance and exit; chemical delivery staging and containment area; and vehicle rejection turn-about outside the plant entrance gate.

Treatment - General Project Group

CUF Dechlorination System Upgrade

The chlorine unloading facility (CUF) is used to transfer liquid chlorine from rail cars to cargo trailers for delivery to Metropolitan facilities. The goal of this project is to enhance compliance with discharge regulations and allow the transfer of liquid chlorine from rail cars to cargo trailers to occur over a wide range of operating conditions. This project will evaluate available technologies; perform a pilot study, if needed, to determine the most feasible technology; and will explore methods and technologies of neutralizing chlorine in order to improve chlorine transloading ability throughout the year. This project will upgrade the existing system that neutralizes chlorine at CUF.

Water Quality Program

Fiscal Year 2022/23 Estimate: \$0

Fiscal Year 2023/24 Estimate: \$0.8 million

Program Information: The Water Quality Program is comprised of projects to add new facilities to ensure compliance with water quality regulations for treated water, located at Metropolitan's treatment plants and throughout the distribution system.

Accomplishments for FY 2020/21 and FY 2021/22

- New projects initiated:
 - None
- Major milestones achieved:
 - Weymouth Hypochlorite Feed Facilities – Completed project
 - Weymouth ORP - Ozonation Facilities Construction, and Completion Activities – Completed project

Objectives for FYs 2022/23 and 2023/24

Project	Total Project Estimate	Estimated Construction Completion	Major Milestones
Mills Enhanced Bromate Control	\$ 5,700,000		Complete final design

Water Quality - All Project Group

Mills Enhanced Bromate Control Facilities

The Mills plant is currently using a temporary system built for bromate reduction. This system has been running successfully and has proven the effective use of chloramines in bromate control and the reduced operational costs over a wider range of influent water quality conditions. This project will replace the temporary feed, metering, monitoring, and injection (chlorine and ammonia) system with a permanent system which will incorporate new doubled walled piping, double wall containment, new flow metering, new chlorinators, new analyzers, and new ammonia feed tank. The full implementation of this project will significantly reduce the current operational costs of bromate control as well as provide greater control of bromate formation over a wide range of influent water quality conditions. The project also includes replacement of two existing chlorinators with new units for lower chlorine dosage control flexibility.



Engineering & Operations Committee

Appropriation of Biennial Capital Investment Plan Budget for FYs 2022/23 and 2023/24

Item 7-5

April 11, 2022

Appropriation of Biennial Capital Investment Plan Budget for FYs 2022/23 and 2023/24

Current Action

- Appropriate \$600 million for projects identified in the Capital Investment Plan for Fiscal Years 2022/23 and 2023/24
- Authorize the General Manager to initiate or proceed with work on all capital projects identified in the CIP Appendix plus Minor Capital Projects, subject to any limits on the General Manager's authority and CEQA requirements

Appropriation of
Biennial
Capital
Investment Plan
Budget
for FYs 2022/23
and 2023/24

Recommended 2-Year CIP Budget is \$600 M

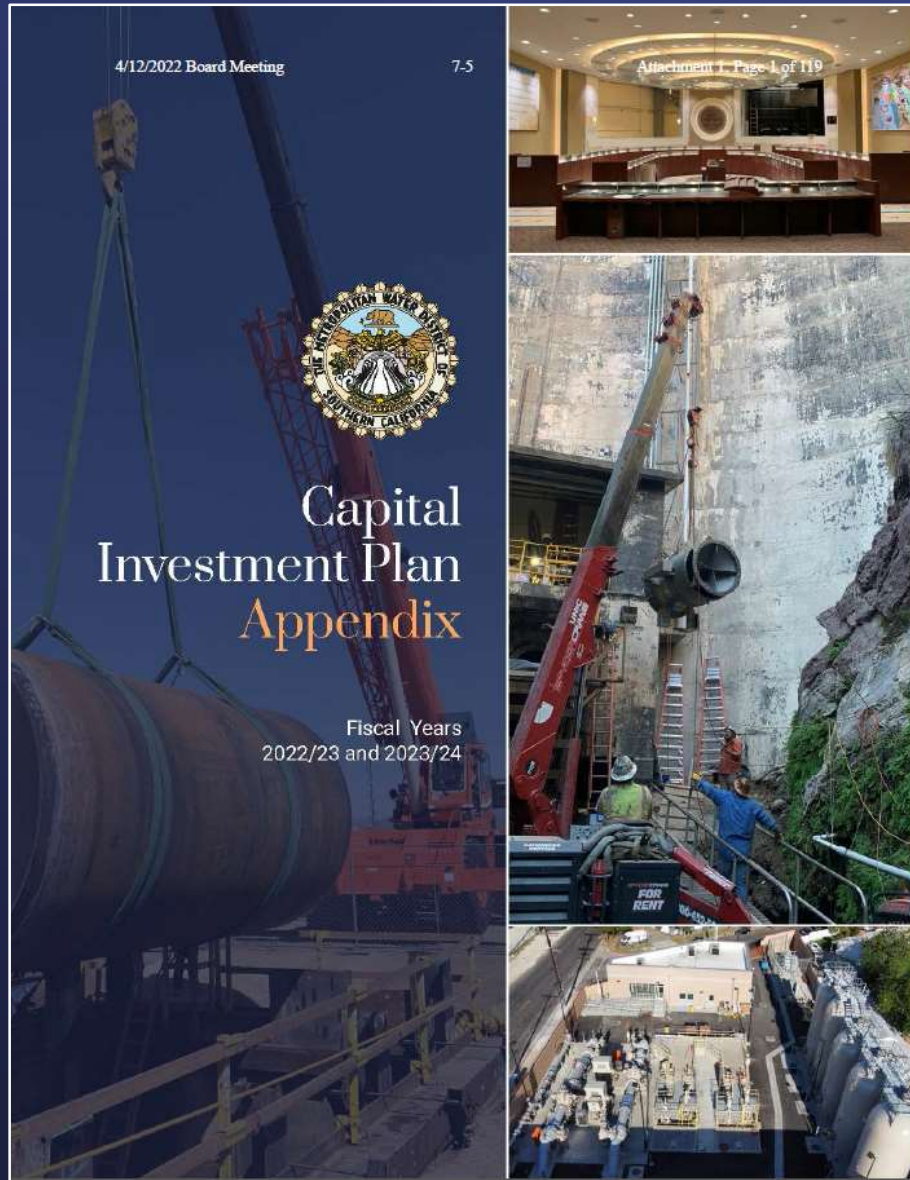
- Spending plan maintains focus on R&R work while advancing new initiatives
- Approximately \$3.2 billion of capital work identified for the next 10 years
 - \$2.9 billion is for currently identified R&R projects
 - Proposed two-year CIP budget does not include funding for full-scale Regional Recycled Water Program

Appropriation of
Biennial
Capital
Investment Plan
Budget
for FYs 2022/23
and 2023/24

Administrative Code § 5108(e)

- Appropriate funds required for projects identified in the CIP Appendix for the next two fiscal years following adoption of the biennial budget

CIP Appendix Attached to Board Letter



- Biennial CIP budget
- 10-year CIP projection
- Project description for every planned project
- Key project objectives in upcoming biennium
- Organized by program

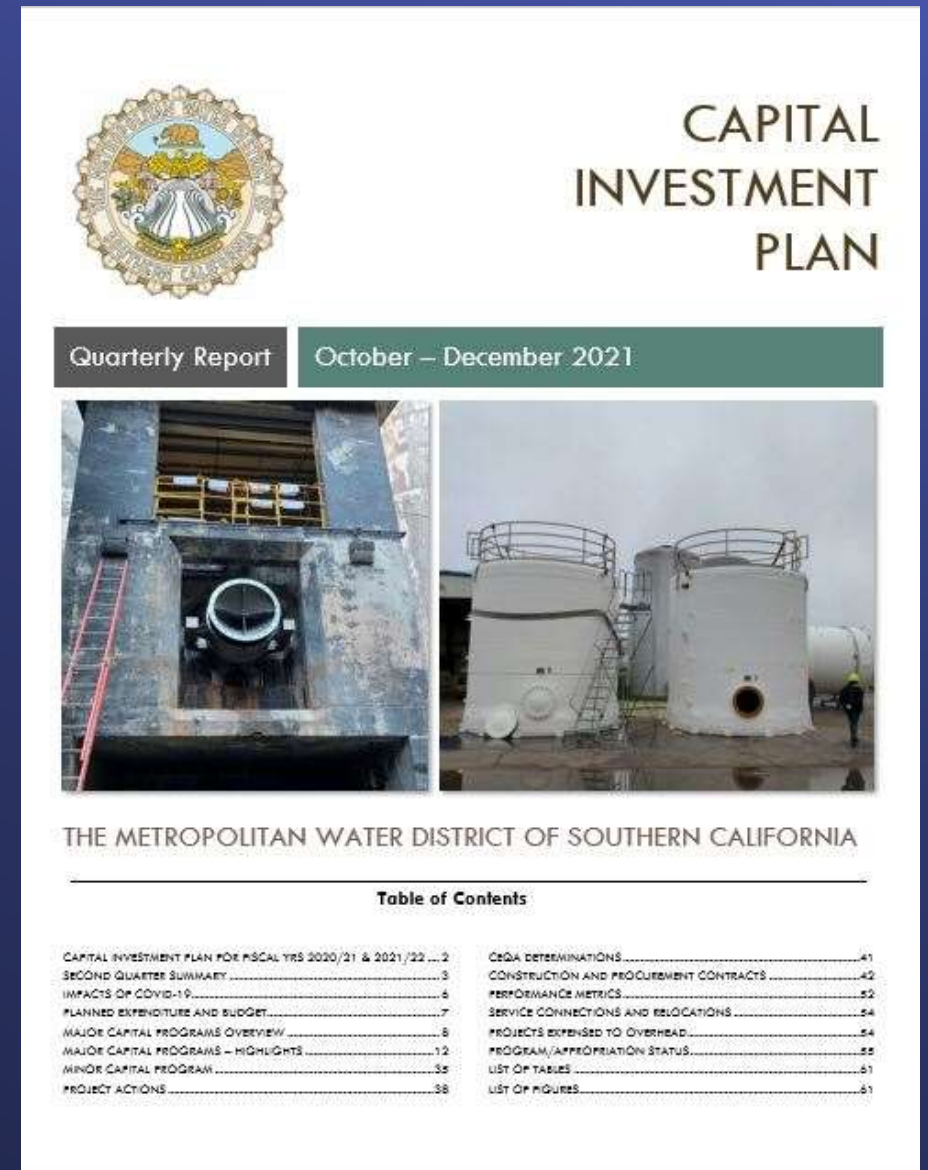
Appropriation of
Biennial
Capital
Investment Plan
Budget
for FYs 2022/23
and 2023/24

CIP Implementation Process

- Provides for efficiency and transparency
 - Enables staff to quickly proceed with an increasing number of planned projects
 - Reduces overall project delivery times
- Provides enhanced flexibility
 - Quickly react to changing conditions
- Enhances visibility & reporting on capital programs
 - Quarterly Board reports
 - Internal monitoring and reporting

CIP Quarterly Reports

- Board actions
- Actuals vs. planned expenditures
- Program & key project updates
- Status of construction & procurement contracts
- Actions taken to authorize and fund projects
- Performance metrics



Proposed CIP for FYs 2022/23 and 2023/24 by Program

Programs

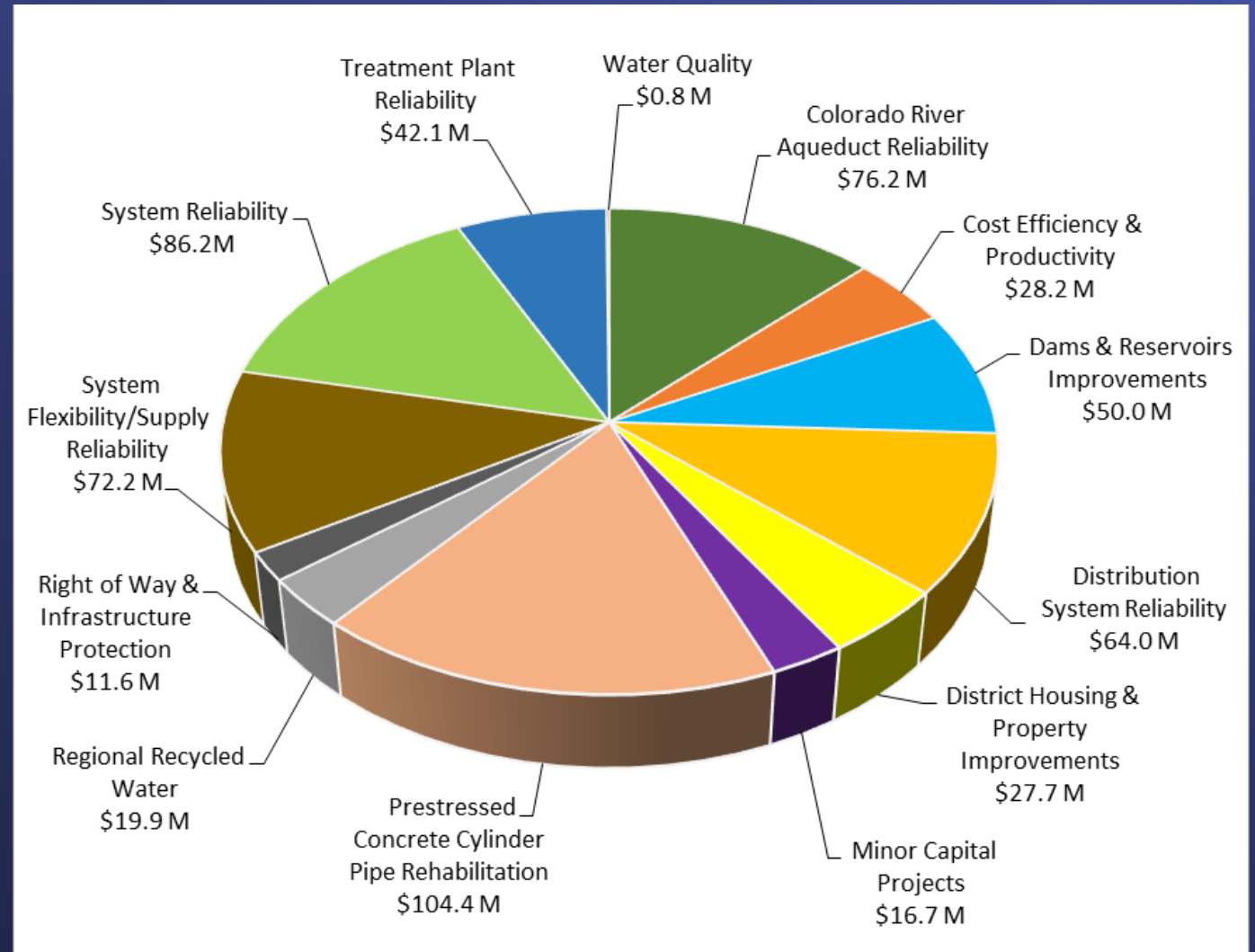
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Projects

450*

* Excluding Minor Capital Projects



Appropriation of Biennial Capital Investment Plan Budget for FYs 2022/23 and 2023/24

Next Steps

- GM allocates appropriated funds as needed to identified projects
- Future Board Actions
 - Professional services agreements and contracts greater than \$250K
 - Certification of CEQA documents
 - Property acquisitions
 - Change orders greater than 5% of contract or \$250K, whichever is greater
 - Unplanned project authorization
- Continue quarterly CIP reporting

Board Options

- Option #1
 - a. Appropriate \$600 million for projects identified in the CIP appendix for FYs 2022/23 and 2023/24.
 - b. Authorize the General Manager to initiate or continue work on the capital projects described in the CIP Appendix for FYs 2022/23 and 2023/24 and Minor Capital Projects to be identified during the biennial period, subject to any limits on the General Manager's authority and CEQA requirements.
- Option #2
 - Do not appropriate funds and seek appropriations and board authorizations for each project individually.

Staff Recommendation

- Option #1





● **Board of Directors**
Engineering and Operations Committee

4/12/2022 Board Meeting

7-6

Subject

Adopt the CEQA determination that the proposed project was previously addressed in the approved 2014 Mitigated Negative Declaration and related CEQA action and (1) award a \$17,226,250 contract to Spiniello Infrastructure West, Inc. to replace the lining in a portion of the Orange County Feeder; and (2) authorize the General Manager to enter into a new 24-month lease agreement, with an 18-month option to extend, at 2750 Bristol Street in Costa Mesa, CA (Assessor's Parcel No. 418 182-05) in an amount not to exceed \$360,000 for use as a construction staging and storage site

Executive Summary

Internal inspections of the Orange County Feeder have identified significant deterioration of the pipeline's existing coal-tar enamel lining, which is over 80 years old. While the pipeline's structural integrity remains sound at present, the interior lining displays blistering and disbonding, which exposes the pipeline to accelerated rates of corrosion and eventual leakage. A three-stage approach to relining the feeder was implemented, with Stage 1 completed in July 2017 and Stage 2 in November 2019. This action awards a construction contract to move forward with the final stage of the Orange County Feeder relining. The relining of this final reach of the pipeline will enhance delivery reliability to member agencies served by the feeder and will improve access for future maintenance of the feeder.

Details

Background

The Orange County Feeder conveys treated water from the F. E. Weymouth Water Treatment Plant in La Verne to six member agencies in Los Angeles and Orange Counties. The feeder was constructed in three reaches, with the first reach commissioned in 1941, extending 28 miles south from the Weymouth plant to the city of Santa Ana. The second reach of the feeder, which is the subject of this rehabilitation project, has a diameter of 36 to 39 inches, is made of welded steel pipe with coal-tar enamel lining, and was completed in 1942. This reach is known as the Orange County Feeder Extension and follows Bristol Street south for approximately 11 miles through the cities of Santa Ana, Costa Mesa, and Newport Beach. The third and final reach of the feeder, which was completed in 1953, extends 1.5 miles from the hills overlooking Newport Beach harbor to the Pacific Coast Highway.

Internal inspections of the Orange County Feeder Extension identified significant deterioration of the existing 80-year-old coal-tar enamel lining along the feeder's 11-mile length. Video inspections of the pipeline found large areas of degradation of the internal lining, including blistering, disbonding, and rust. In 2009 and 2016, two leaks occurred in this portion of the feeder that required unscheduled shutdowns to perform urgent repairs. Relining the pipe is recommended to avoid continued corrosion of the steel pipe, which will result in an increasing number of leaks.

In November 2014, Metropolitan's Board authorized the design to replace the lining within the 11-mile portion of the Orange County Feeder Extension in three stages. The first stage, which was completed in July 2017, rehabilitated approximately three miles of the Orange County Feeder Extension within the city of Santa Ana. The second stage, which was completed in November 2019, rehabilitated four miles of the Orange County Feeder Extension within the cities of Santa Ana and Costa Mesa. The third and final stage of the project, which is the

subject of this action, will reline the remaining four miles of the Orange County Feeder Extension within the cities of Costa Mesa and Newport Beach.

In accordance with the April 2020 action on the biennial budget for Fiscal Years 2020/21 and 2021/22, the General Manager will authorize staff to proceed with the rehabilitation of the Orange County Feeder, pending board award of the contract described below. Based on the current Capital Investment Plan expenditure forecast, funds for the work to be performed pursuant to this action during the current biennium are available within the Capital Investment Plan Appropriation for Fiscal Years 2020/21 and 2021/22 (Appropriation No. 15517). Funds required for work to be performed pursuant to the subject contract after fiscal year 2021/22 will be budgeted within the Capital Investment Plan Appropriation for Fiscal Years 2022/23 and 2023/24. This project has been reviewed in accordance with Metropolitan's CIP prioritization criteria and was approved by Metropolitan's CIP evaluation team to be included in the Distribution System Reliability Program.

Orange County Feeder Lining Replacement, Stage 3 – Construction

The project consists of replacing the coal-tar enamel lining in approximately four miles of the Orange County Feeder Extension. The contractor will remove pipe segments at 17 sites along the feeder to enable the cleaning and relining machines to access the interior of the pipe. The interior wall of the pipe will be cleaned by removing the coal-tar enamel and corrosion using water blasting. Damaged pipe segments will be repaired, joints will be welded, and a new cement mortar lining will be applied to the pipe's interior wall. At each access site, new steel pipe segments with maintenance hole outlets will be installed. These outlets will significantly improve access to the feeder for future maintenance. Metropolitan force activities will include bulkhead procurement and fabrication; multiple feeder shutdowns and establishment of clearances; final disinfection and water quality testing; and return of the pipeline to service.

Supplemental environmental monitoring of the construction is required to ensure compliance with the project's Mitigated Negative Declaration. Construction will occur in close proximity to residences and will require round-the-clock operation of equipment at the access points into the pipeline. Supplemental environmental monitoring will be performed by Helix Environmental Planning, Inc. under an agreement that is planned to be executed under the General Manager's Administrative Code authority to award contracts of \$250,000 or less.

A total of \$22,400,000 is required for this work. In addition to the amount of the contract described below, other funds to be allocated include \$100,000 for supplemental environmental monitoring and reporting by Helix Environmental Planning, Inc.; \$204,000 for lease of a parcel that will be used by the contractor for construction staging and storage as described below. Allocated funds for Metropolitan staff activities include \$1,400,000 for Metropolitan force activities as described above; \$80,000 for materials and supplies; \$1,500,000 for construction management and inspection; \$460,000 for submittals review, technical support during construction, responding to requests for information, and preparation of record drawings; \$140,000 for public outreach support; \$626,000 for contract administration, environmental monitoring, and project management; and \$663,750 for the remaining budget. Approximately \$2.82 million has been expended on the Orange County Feeder Lining Replacement - Stage 3 to date.

Attachment 1 provides the allocation of the required funds. The total estimated cost to complete the Orange County Feeder Lining Replacement-Stage 3, including the amount allocated to date and funds allocated for the work described in this action, is approximately \$25.22 million. The total estimated cost to reline the Orange County Feeder (all three stages) is \$46.9 million.

Award of Construction Contract (Spiniello Infrastructure West, Inc.)

Specification No. 1961 to replace the lining in a portion of the Orange County Feeder was advertised for bids on January 27, 2022. As shown in **Attachment 2**, three bids were received and opened on March 15, 2022. The low bid from Spiniello Infrastructure West, Inc. in the amount of \$17,226,250 complies with the requirements of the specifications. The other bids ranged from approximately \$22.4 million to \$22.7 million, while the engineer's estimate for this project was \$14.3 million. Staff investigated the difference between the engineer's estimate and the low bid, and believes it reflects the low bidder's anticipation of increased costs for specialized cleaning equipment needed to perform the extensive water blasting and surface preparation required to apply the new cement mortar lining. For this contract, Metropolitan established a Small Business Enterprise participation level

of at least 15 percent of the bid amount. Spiniello Infrastructure West, Inc. has agreed to meet this level of participation. The subcontractors for this contract are listed in **Attachment 3**.

As described above, Metropolitan staff will perform construction management and inspection. Engineering Services' performance metric target range for inspection of projects with construction greater than \$3 million is 9 to 12 percent. For this project, the performance metric goal for inspection is 8.0 percent of the total construction cost. The total cost of construction for this project is \$18,706,250, which includes the cost of the contract (\$17,226,250), procurement of materials (\$80,000) and Metropolitan force construction (\$1,400,000).

Property Lease at 2750 Bristol St., Costa Mesa, CA (Assessor's Parcel No. 418-182-05) – New Agreement

In November 2018, Metropolitan's Board awarded the second of three-planned construction contracts to replace the damaged interior lining in a portion of the Orange County Feeder Extension. At that time, a two-year lease agreement with an 18-month option to extend was executed for approximately one acre of vacant land located at 2750 Bristol Street in Costa Mesa, CA, for contractor staging and storage. The third construction contract to reline the Orange County Feeder Extension is in the same general geographical location and will also utilize the same vacant lot to support the storage of equipment and the contractor's mobilization activities.

This action authorizes the General Manager to enter into a new lease agreement at 2750 Bristol Street in Costa Mesa, CA, in order to provide the contractor an area for staging and storage of equipment for 24 months starting May 1, 2022, through April 30, 2024. The total lease amount for 24 months is \$204,000, with an option for an 18-month extension and a total not-to-exceed amount of \$360,000. A land lease package was preliminarily processed, and its implementation is subject to board authorization.

Alternatives Considered

Staff considered accomplishing this final stage of the relining project by issuing two contracts, one for each affected city. This approach would manage the geographically diverse projects and resolve local agency permitting issues on a case-by-case basis. This approach would also shorten the length of individual shutdowns but would require successive shutdowns spread over multiple years. Following these evaluations, staff recommends using one construction contract to reline the remaining four miles of the Orange County Feeder Extension at this time. Design and coordination with the jurisdictional cities are in place to allow for relining of the final reach of the Orange County Feeder Extension under one contract. This alternative is a cost-effective approach that minimizes the risk of service interruptions to member agencies as a result of pipeline leaks and enhances the reliability of Metropolitan's distribution system.

Summary

This action awards a \$17,226,250 construction contract to Spiniello Infrastructure West, Inc. to replace the lining in a portion of the Orange County Feeder. See **Attachment 1** for the Allocation of Funds, **Attachment 2** for the Abstract of Bids, **Attachment 3** for the listing of Subcontractors for Low Bidder, and **Attachment 4** for the Location Map.

Project Milestone

August 2023 – Completion of lining replacement of the Orange County Feeder

Policy

Metropolitan Water District Administrative Code Section 8121: General Authority of the General Manager to Enter Contracts

By Minute Item 51963, dated April 14, 2020 the Board appropriated a total of \$500 million for projects identified in the Capital Investment Plan for Fiscal Years 2020/21 and 2021/22.

California Environmental Quality Act (CEQA)

CEQA determination for Option #1:

To comply with CEQA and the State CEQA Guidelines, Metropolitan, as the Lead Agency, prepared a Mitigated Negative Declaration (MND) for the Orange County Feeder Relining Project. The MND was distributed for a 30-day public review period that began on August 7, 2014, and ended on September 6, 2014. The Board later

adopted the MND and the Mitigation Monitoring and Reporting Program on November 18, 2014. The present board action is solely based on awarding a construction contract and entering into a new lease agreement, and not on any changes to the approved project itself. Hence, the previously adopted environmental documentation in conjunction with the current action fully complies with CEQA and the State CEQA Guidelines. Accordingly, no further environmental documentation is necessary for the Board to act on with respect to the proposed action.

CEQA determination for Option #2:

None required

Board Options

Option #1

Adopt CEQA determination that the proposed project was previously addressed in the approved 2014 Mitigated Negative Declaration and related CEQA documentation, and that no further environmental analysis or documentation is required and

- a. Award \$17,226,250 contract to Spiniello Infrastructure West, Inc. to reline a portion of the Orange County Feeder.
- b. Authorize General Manager to enter into a new 24-month lease agreement with an 18-month option to extend at 2750 Bristol Street in Costa Mesa, CA (Assessor's Parcel No. 418 182-05) in an amount not to exceed \$360,000.

Fiscal Impact: Expenditure of \$22.4 million in capital funds. Approximately \$800,000 will be incurred in the current biennium and has been previously authorized. The remaining capital expenditures will be funded from future CIP appropriations following board approval.

Business Analysis: This option will protect Metropolitan's assets, enhance delivery reliability to member agencies, and reduce the risk of costly urgent repairs.

Option #2

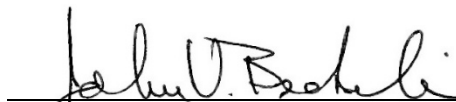
Do not proceed with the project at this time.

Fiscal Impact: None


Business Analysis: This option would forego an opportunity to enhance reliability and extend the service life of the Orange County Feeder and could lead to more extensive repairs, higher costs, and unplanned shutdowns.

Staff Recommendation

Option #1



John V. Bednarski
Manager/Chief Engineer
Engineering Services
3/24/2022
Date



Adel Hagekhalil
General Manager
3/30/2022
Date

Attachment 1 – Allocation of Funds

Attachment 2 – Abstract of Bids

Attachment 3 – Subcontractors for Low Bidder

Attachment 4 – Location Map

Allocation of Funds for Orange County Feeder Lining Replacement, Stage 3

	Current Board Action (Apr. 2022)
Labor	
Studies & Investigations	\$ -
Final Design	-
Owner Costs (Program mgmt., envir. monitoring)	766,000
Submittals Review & Record Drwgs.	460,000
Construction Inspection & Support	1,500,000
Metropolitan Force Construction	1,400,000
Materials & Supplies	80,000
Incidental Expenses	-
Professional/Technical Services	
Helix Environmental Planning, Inc.	100,000
Right-of-Way	204,000
Equipment Use	-
Contracts	
Spiniello Infrastructure West, Inc.	17,226,250
Remaining Budget	663,750
Total	\$ 22,400,000

The total amount expended to date for the Orange County Feeder Lining Replacement-Stage 3 is approximately \$2.82 million. The total estimated cost to complete the Stage 3 lining replacement, including the amount appropriated to date and funds allocated for the work described in this action, is about \$25.22 million.

The Metropolitan Water District of Southern California**Abstract of Bids Received on March 15, 2021, at 2:00 P.M.****Specifications No. 1961
Orange County Feeder Lining Replacement, Stage 3**

The work includes removal of existing coal-tar enamel lining; hydro-blasting; welding joints with buttstraps; and application of cement mortar lining inside a 36-inch to 39-inch-diameter steel pipeline for approximately 4 miles.

Engineer's estimate: \$14,300,000

Bidder and Location	Total	SBE \$	SBE %	Met SBE¹
Spiniello Infrastructure West, Inc. Pomona, CA	\$17,226,250	\$2,583,940	15%	Yes
Mladen Buntich Construction Co., Inc Upland, CA	\$22,387,500	-	-	-
TE Roberts, Inc. Orange, CA	\$22,720,874	-	-	-

¹ Small Business Enterprise (SBE) participation level established at 15% for this contract.

The Metropolitan Water District of Southern California**Subcontractors for Low Bidder****Specifications No. 1961****Orange County Feeder Lining Replacement, Stage 3**

Low bidder: Spiniello Infrastructure West, Inc.

Subcontractor and Location
LNA Concrete Structures, Inc. Chino Hills, CA
Mat Chlor, Inc. El Monte, CA
Aqua Drill International Dickinson, TX
Hardy & Harper, Inc. Lake Forest, CA
PCI Long Beach, CA
FM General Engineering, Inc. Moreno Valley, CA
Wessex Industries, Inc Rancho Cucamonga, CA
T&M Trucking San Pedro, CA
Summit Environmental Contractors San Juan Capistrano, CA
Smithson Electric, Inc. Orange, CA





Engineering & Operations Committee

Orange County Feeder Lining Replacement

Item 7-6

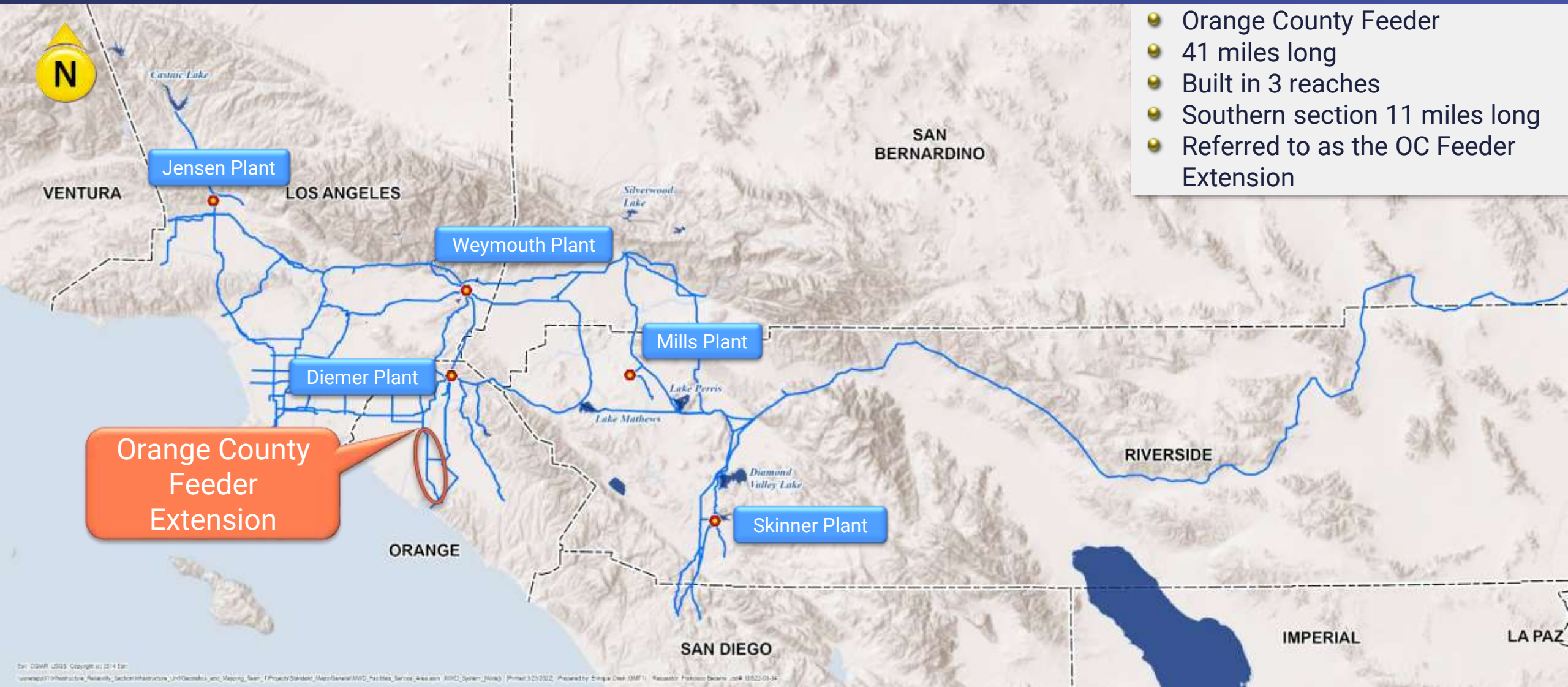
April 11, 2022

Orange County Feeder Lining Replacement

Current Action

- Award a \$17,226,250 contract to Spiniello Infrastructure West, Inc. to replace the lining in a portion of the Orange County Feeder
- Authorize the General Manager to enter into a new 24-month lease agreement, in an amount not-to-exceed \$360,000, for use as a construction staging and storage site

Distribution System



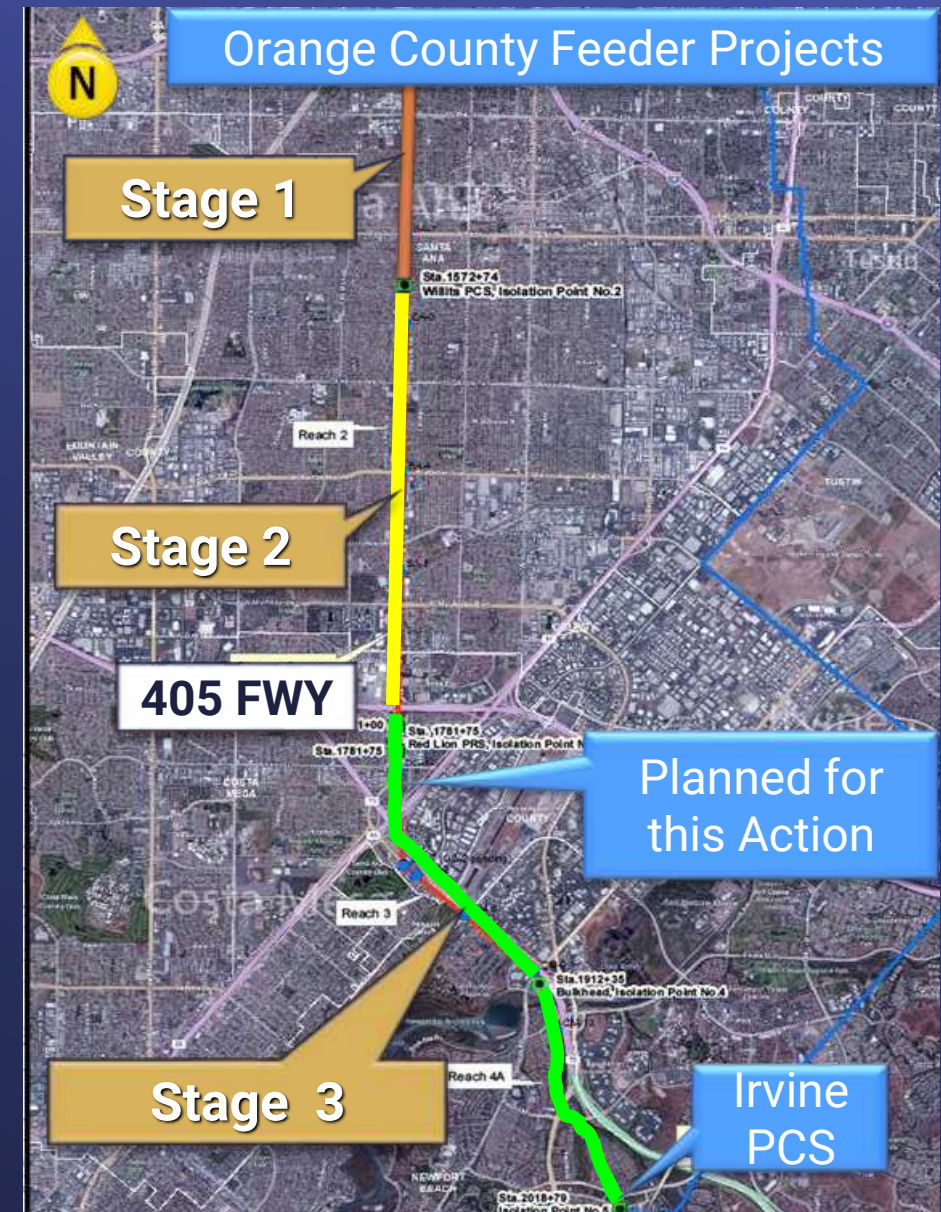
Background – OC Feeder Extension

- 11 miles of welded steel pipe
 - 36" to 39" diameter
- Originally commissioned in 1942
- Existing lining is deteriorating
- Two recent unplanned repairs



Rehabilitation Strategy

- Stage 1 – Completed 2017
 - Replaced 3 miles of lining
- Stage 2 – Completed 2019
 - Replaced 4 miles of lining
- Stage 3 – This action
 - Replaces remaining 4 miles of existing lining with new cement mortar lining
 - Replaces deteriorated valves
 - Improves access locations



Orange County Feeder Lining Replacement

Alternatives Considered

- Multiple contracts
 - Issue two contracts, one for each affected city
 - Shorter, successive shutdowns spread over multiple years
- Selected Alternative - one contract for remaining work
 - Efficient & economical for both permitting & contracting
 - Cost-effective approach which minimizes the risk of service interruptions to member agencies
 - Accelerates rehabilitation of Metropolitan's distribution system

Scope of Work

- Contractor
 - Excavation & shoring at 17 access sites
 - Removal & disposal of coal tar enamel
 - Weld over 700 butt straps, apply mortar lining, & access-way installation
 - Install MWD-furnished valves
 - Provide traffic control
 - Conduct street restoration



Scope of Work

- Metropolitan
 - Dewatering, clearances & return to service for multiple shutdowns
 - Procurement & fabrication of bulkhead
 - Review of submittals
 - Field & fabrication inspection
 - Public outreach
- Helix Environmental Planning, Inc.
 - Environmental & noise monitoring



Valve Installation



Traffic Control

Property Lease – New Agreement

- Property at 2750 Bristol Street in Costa Mesa
 - Area for contractor storage & staging
 - One-acre site
 - Two-year lease
 - May 2022 – April 2024
 - Potential for 18-month lease extension
 - Estimated cost – \$204,000
 - Total lease not-to-exceed \$360,000



Bid Results

Specifications No. 1961

Bids Received	March 15, 2022
No. of Bidders	3
Low Bidder	Spiniello Infrastructure West, Inc.
Low Bid	\$17,226,250
Range of Higher Bids	\$22.4 million to \$22.7 million
Engineer's estimate	\$14.3 million
SBE Participation*	15%

*SBE (Small Business Enterprise) participation level set at 15%

Allocation of Funds

Contract	
Spiniello Infrastructure West, Inc.	\$17,226,250
Right-of-Way	204,000
Metropolitan Labor	
Force construction	1,400,000
Construction inspection	1,500,000
Submittal review, technical support & record dwgs	460,000
Owner's cost	766,000
Professional Services	
Helix Environmental Planning, Inc.	100,000
Materials	80,000
Remaining Budget	663,750
<hr/>	
Total	\$22,400,000

Project Schedule

Project	2022				2023			
Orange County Feeder Lining Replacement – Stage 3								



Board Action



Construction



Completion of
Construction

Board Options

- Option #1
 - Adopt CEQA determination that the proposed project was previously addressed in the approved 2014 Mitigated Negative Declaration and related CEQA documentation, and that no further environmental analysis or documentation is required and
 - a. Award \$17,226,250 contract to Spiniello Infrastructure West, Inc. to reline a portion of the Orange County Feeder.
 - b. Authorize General Manager to enter into a new 24-month lease agreement with an 18-month option to extend at 2750 Bristol Street in Costa Mesa, CA (Assessor's Parcel No. 418 182-05) in an amount not to exceed \$360,000.
- Option #2
 - Do not proceed with the project at this time.

Staff Recommendation

- Option #1





• **Board of Directors**

3/8/2022 Board Meeting

7-6

Subject

Approve the General Manager's Strategic Priorities; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA

Summary

Metropolitan's mission is to provide its service area with adequate and reliable supplies of high-quality water to meet present and future needs in an environmentally and economically responsible way. The General Manager's Strategic Priorities guide actions during the biennial budget period of fiscal years 2022/23 and 2023/24. As longer-term priorities, they would also be expected to continue through the subsequent biennial budget period.

The proposed Strategic Priorities guide key areas of focus, investment, and transformation for Metropolitan. They were founded on discussions and input from the Board of Directors, member agencies, executive management, and other interested parties.

While the Strategic Priorities focus on transformation to support the long-term stability of Metropolitan, they also reflect discussions and concerns raised in multiple venues. In October 2019, the Board began looking at the long-term vision of Metropolitan during a retreat focused on "Charting Metropolitan's Second Century." During the retreat, board members reviewed the benefits of regional collaboration in the past and began to explore how the regional model of cooperation and collaboration will best serve member agencies in the future. Then and since, any discussion about envisioning Metropolitan's future was informed by an awareness of shifting conditions due to climate change, growing expectations to integrate diversity and inclusivity, how successful conservation and local supply programs impact the demand for future wholesale water supplies, and the need for member agencies to share the benefits and costs of investments that ensure reliability for the region.

The five strategic priorities are stated simply here and developed further in Attachment 1.

- **Empower.** Empower the workforce and promote diversity, equity, and inclusion
- **Sustain.** Sustain Metropolitan's mission with a strengthened business model
- **Adapt.** Adapt to changing climate and water resources
- **Protect.** Protect public health, regional economy, and Metropolitan's assets
- **Partner.** Partner with interested parties and the communities we serve

Specific actions to further the Strategic Priorities will be developed by staff as part of the General Manager's Business Plan for FY 2022/23. In addition to the broad initiatives discussed here, the Business Plan will describe further change-oriented goals and measurable actions to further the broad initiatives described in **Attachment 1**.

Policy

Metropolitan Water District Administrative Code Section 11104: Delegation of Responsibilities

Metropolitan Water District Administrative Code Section 6416, Annual Report to Executive Committee

California Environmental Quality Act (CEQA)

CEQA determination for Option #1:

The proposed action is not defined as a project under CEQA (Public Resources Code Section 21065, State CEQA Guidelines Section 15378(b)(2) and 15378(b)(5)) because it involves organizational or administrative activities and general policy and procedure making that would not result in a direct or indirect physical change to the environment.

CEQA determination for Option #2:

None required

Board Options

Option #1

Adopt the General Manager's Strategic Priorities.

Fiscal Impact: Activities highlighted in the Strategic Priorities are included in the proposed biennial budget for fiscal years 2022/23 and 2023/24.

Business Analysis: The Strategic Priorities will address ongoing workforce concerns, examine the business model, and provide direction to address water supply reliability and resilience challenges in the region. These priorities also expand Metropolitan's engagement with interested external parties.

Option #2

Do not adopt strategic priorities at this time.

Fiscal Impact: Unknown. Changes to the Strategic Priorities may require adjustments to budget priorities within the proposed biennial budget for fiscal years 2022/23 and 2023/24.

Business Analysis: The General Manager would need to be provided with different direction to address critical priorities faced by Metropolitan.

Staff Recommendation

Option # 1



Adel Hagekhalil
General Manager

3/3/2022
Date

Attachment 1 – General Manager's Strategic Priorities

Ref# EO12680876

General Manager's Strategic Priorities

Introduction

Thirty years ago, our Board of Directors adopted our first mission statement:

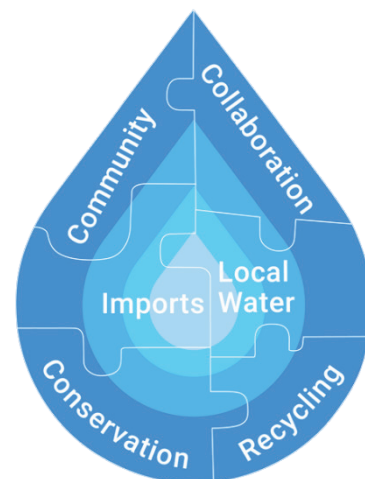
"The mission of the Metropolitan Water District of Southern California is to provide its service area with adequate supplies of high-quality water to meet present and future needs in an environmentally and economically responsible way."

Much has been accomplished since then through consensus forged by the Board, the individual and cooperative efforts of the member agencies, and our employees' daily, dedicated work. Metropolitan developed its first Integrated Resources Plan, built drought-protective infrastructure such as Diamond Valley Lake and the Inland Feeder. It transformed water treatment through the installation of ozone and biological filtration. Metropolitan also forged water supply agreements in the region and along the two imported supply systems, advanced stewardship initiatives, and made water conservation a part of daily life in Southern California.

Some of you may have noticed something missing from our mission statement above. "Adequate" wasn't enough. Shortly after its initial adoption, the Board expanded the phrase from "adequate" to "adequate **and reliable**." The distinction is significant. A good working definition of reliable is "consistently good in quality or performance; dependable or capable of being trusted." There are two elements at work here: **performance** and **trust**.

Today we face a reliability challenge. Climate change has and continues to have considerable impacts on our imported supplies. As Southern California enters a third drought year, impacts to the State Water Project highlight vulnerabilities of portions of our service area. On our other imported supply, chronic aridification of the Colorado River watershed began accelerating 20 years ago and shows us that vast amounts of storage alone cannot single-handedly stabilize a river at risk. Simultaneous drought in both imported supply systems and within Southern California—called a "perfect drought"—threatens the continued performance of our mission without new approaches to planning, innovation, and leadership.

Reliable also means "capable of being trusted." As an organization, we operate on supplies of water and trust. Our "One Water" initiative involves an **integrated** planning and implementation approach to manage finite water resources for long-term **resilience** and **reliability** to meet both **community** and **ecosystem** needs. Our "We Are One" initiative recognizes the interrelatedness of improving the region's water supplies and valuing the diverse perspectives and needs of our employees, our member agencies, and the communities we serve. These themes repeatedly emerged throughout the development of proposed strategic priorities.



Summary

These Strategic Priorities guide key areas of focus, investment, and transformation for Metropolitan over the next three to five years. They are necessarily high-level objectives that identify areas where the opportunity for change can deliver meaningful improvement. They were founded on discussions and input from the Board of Directors, member agencies, and executive management. The action steps and implementation of the Priorities will continue to take shape from a collaborative process among staff, member agencies, Board members, and other interested parties.

Strategic Priorities ensure consistency among the programs and initiatives of the organization and shape the implementation of other key plans and processes already underway. For example, the proposed Biennial Budget for FY 2022/23 and 2023/24 was developed concurrently with these Strategic Priorities in the draft form. The themes informed budget preparations to align with the activities presented in the budget. Ultimately, staff will align the Strategic Priorities with efforts, including implementation of the Integrated Resource Plan (IRP), the Climate Action Plan, and organizational assessments. The General Manager's Fiscal Year 2022/23 Business Plan will be developed with goals and actions to support these priorities and will be presented to the Board later this year. Progress on the implementation of the goals and actions supporting the Strategic Priorities will be reported to the Board regularly as part of the General Manager's Business Plan and monthly reports.

While these Strategic Priorities focus on transformation to support the long-term stability of Metropolitan, they also reflect discussions and concerns raised in multiple venues. In October 2019, the Board began looking at Metropolitan's long-term vision during a retreat focused on "Charting Metropolitan's Second Century." During the retreat, Board members reviewed the benefits of regional collaboration in the past. They began to explore how the regional model of cooperation and partnership will best serve member agencies in the future. Then and since, any discussion about envisioning Metropolitan's future is imbued with an awareness of shifting conditions due to climate change, growing expectations to integrate diversity and inclusivity, how successful conservation and local supply programs impact the demand for future wholesale water supplies, and the need for member agencies to share the benefits and costs of investments that ensure reliability for the region.

Shortly after joining Metropolitan in July 2021, General Manager Adel Hagekhalil convened member agency managers to solicit input on Metropolitan's key issues. In September 2021, the Chair of the Board convened a Board retreat focused on priorities, opportunities, challenges, and concerns. Executive Management met immediately following and developed the Draft Strategic Priorities presented below based on input and direction received from the Board and member agencies.

Following approval by the Board, staff will convene member agencies to further discuss implementation, and the General Manager will align the Priorities with his Business Plan.

Strategic Priority #1: Empower

Empower the workforce and promote diversity, equity, and inclusion

It is only through the combined efforts of many talented and dedicated employees that Metropolitan can meet the challenges of today's changing landscape. Metropolitan serves a diverse region through member agencies with varying local conditions and supplies, providing essential services to the full spectrum of communities and industries. Those who depend on us expect transparency in our actions and responsiveness to their needs.

To be as effective as possible, employees must be respected, empowered, and allowed to contribute. Goals and actions in this area may establish policies and procedures that build a culture of inclusion, support our managers and coworkers as they strive to meet performance expectations, and hold each other accountable for our actions.

Metropolitan must further develop its existing and future workforce to grow with the region, stay at the leading edge of technology and innovation, and be able to meet the many challenges ahead. Goals and actions in this area may propel training and skill development, forward-thinking succession planning as retirements increase, and expanding our reach to prospective employees that reflect the region's diversity. Increased diversity will help us recognize the diverse needs of our region, connect with more of our interested parties, and reach and support underserved communities.

Leading Goals

- 1.1 Build a safe, inclusive, and accountable workplace where all employees feel valued, respected, and able to meaningfully contribute to decisions about their work.
- 1.2 Prepare and support the workforce by expanding training and skill development and updating strategies to recruit and retain diverse talent at a time when Metropolitan's needs are evolving, and employee expectations about the workplace are changing.

Strategic Priority #2: Sustain

Sustain Metropolitan's mission with a strengthened business model

Metropolitan must make ongoing, significant investments to maintain and continue improving its vast infrastructure, robust water supply portfolio, and long-term water supply contracts. Demographic growth and rising regional water demands sustained much of the needed investments in the past. Today, however, conditions have changed. Demand projections have leveled and even show a decline, while drought, water quality, and a changing climate require immediate attention to ensure that we serve the critical needs of our member agencies and their millions of customers.

Metropolitan's mission requires forward-looking planning and actions to adapt to a changed future. Metropolitan was created out of a partnership, and likewise, our investments in the future depend on a business model in which member agencies equitably share both costs and benefits. Goals and actions in this priority area will review and affirm a rate structure that can support necessary system investments that are built upon a shared understanding among member agencies. At the same time, Metropolitan will seek to manage both risk and cost by leveraging its investments, securing external funding, and expanding innovation and partnerships.

Leading Goals

- 2.1 Review rate structure to ensure the business model can adapt to changing needs of the member agencies and support sustainable local and imported supplies.
- 2.2 Manage rate pressure on member agencies through aggressive and coordinated efforts to secure funding for projects with broad and multi-purpose benefits.

Strategic Priority #3: Adapt

Adapt to changing climate and water resources

Climate change and the latest severe drought that began in 2020 fundamentally threaten and may reshape our business model and the reliability of water resources that are core to our mission. We must act now to prepare for the future, reduce our contribution to climate change, diversify our water resources and increase our agility and resiliency. The consequences of failing to lead a collective response to this crisis could be dire, and Metropolitan is again being looked to for leadership in a time of uncertainty.

In October 2021, Governor Newsom declared a drought emergency for the entire state of California. This follows statewide drought emergencies proclaimed by Governors Brown in 2014 and Schwarzenegger in 2009. Collectively, we must take deliberate actions to prevent drought and a changing climate from constraining the prosperity of Southern California. This present acute drought emergency exposed particular vulnerabilities of the State Water Project system that are not felt equally across Metropolitan's service area. For example, some member agencies can rely entirely on local supplies, Colorado River deliveries, or other water supply programs. Individually, these supplies may provide near-term assurance, but they remain at risk due to drought, climate change, or other threats in the long term. Goals and actions in this area will align with the "One Water" approach to expand the reliability of any individual water source through system-wide planning and collective action.

In November 2021, the Board adopted a resolution declaring emergency conditions within parts of Metropolitan's service area. It further directed the General Manager to identify and implement measures to ensure all portions of the service area attain a high level of reliability against multi-year, severe droughts. We can better prioritize and scope the measures needed to achieve this reliability, having taken a new approach to Integrated Resource Planning that accounts for an increasingly uncertain future. Informed by that new approach, goals and actions in this priority area will support state and regional system improvements, local water supply development, new water storage opportunities, imported supply strategies, and water efficiency gains.

Leading Goals

- 3.1 Provide each member agency access to an equivalent level of water supply reliability through adaptive implementation of the IRP findings.
- 3.2 Advance the long-term reliability and resilience of the region's water sources through a One Water approach that recognizes the interconnected nature of imported and local supplies, meets both community and ecosystem needs, and adapts to a changing climate.

Strategic Priority #4: Protect

Protect public health, the regional economy, and Metropolitan's assets

Metropolitan's mission is fundamental to public health and a growing regional economy. It is essential that we consider and actively support these two core aspects of daily life as we provide water to Southern California. To succeed, we must ensure the integrity of our system and the wide range of assets on which our operations depend.

Metropolitan's two sources of imported supply face continuing uncertainty. The meager State Water Project allocation in 2021—and the low initial allocation for 2022—exposed limitations of the regional delivery system to sustain normal demands for all agencies. Though the system was operated in a manner that stretched Colorado River supplies as far as possible, and staff and member agencies implemented additional extraordinary actions to further address demands in the State Water Project dependent areas during this time, the resulting difference in water supply reliability spurred a call for action to shore up these and other potential vulnerabilities of the system. Meanwhile, other growing risks to the system compound the environmental stressors of drought and climate change, including physical and cybersecurity; earthquake, fire and flood; aging infrastructure; and emerging contaminants.

Metropolitan views resilience as both the ability to anticipate, prepare for and adapt to changing conditions, and the ability to withstand and recover rapidly from disruptions. Goals and actions in this priority area will reflect this vision of resilience. They will lead us in closer collaboration and partnership with our member agencies to protect existing supplies and infrastructure from disruption across the full range of threats and ensure continued high-quality water from source to tap. These goals also pursue maintenance and modernization of existing infrastructure using state-of-the-art technology, a commitment to innovation, and best practices to balance the costs and benefits of these investments while also maximizing the public good. To protect our most valuable asset, our workforce, Metropolitan will take proactive efforts to foster a strong safety culture within our workforce, focused on continued improvement.

Leading Goals

- 4.1 Proactively identify, assess, and reduce potential vulnerabilities to Metropolitan's system, operations, and infrastructure.
- 4.2 Apply innovation, technology, and sustainable practices across project lifecycles (design, construction, operations, maintenance, and replacement).

Strategic Priority #5: Partner Partner with interested parties and the communities we serve

The preceding four Strategic Priorities speak to a transformation building the Metropolitan of the future, even while we remain resolute in reliable daily operations. Transformation demands difficult decisions, significant investments, and lasting commitments to new ways of thinking. This is a familiar story in the history of Metropolitan: we were formed as a partnership making long-term investments to transform water supplies for the region. Today, partnerships must include not only our member agencies but also a wide range of external forces.

Partnering speaks to taking a strategic approach to building mutual understanding and support among decision-makers, interested parties, and stewards of our water resources. It recognizes that our member agencies and the people of Southern California share a common interest in having a sustainable, affordable supply of high-quality water. It also seeks to build upon the strong foundation of communications and external relations already in place.

Partnering as a strategic approach means better informing our decision-making and building trust and support through two-way intentional engagement. Goals and actions in this area can help Metropolitan amplify its message through non-traditional messengers. They can help Metropolitan reach more diverse sets of interested parties by incorporating principles of diversity, equity, and inclusion into a broader set of communication and outreach strategies. Through this approach, we can broaden our support and influence and create new opportunities to tap into resources and expertise that result in multi-benefit outcomes.

Leading Goals

- 5.1 Grow and deepen collaboration and relationships among member agencies, interested parties, and leaders on the issues most important to them.
- 5.2 Reach underserved communities and non-traditional interested parties to better understand their needs and ensure their inclusion in decision-making.



Board of Directors

General Manager's Strategic Priorities

Item 7-7

April 12, 2022

General Manager's Strategic Priorities



Role of Strategic Priorities

- The foundation for General Manager's Business Plan
- A framework for Metropolitan's approach to transformative change
- Change is intentional to strengthen the ability to achieve Metropolitan's mission
- Implemented through multiple existing and parallel processes/initiatives
- Board makes policy decisions during implementation
- Envisions a 3-5 year horizon

General Manager's Strategic Priorities



Proposed Strategic Priorities

- Not listed in order of importance
- A framework for change to strengthen ability to achieve our mission
 - Empower
 - Sustain
 - Adapt
 - Protect
 - Partner



General Manager's Strategic Priorities



Inclusive Development Process

- Reflects months of discussion
 - Board of Directors
 - Member Agencies
 - Executive management and staff
- Board last month requested additional time to provide feedback



General Manager's Strategic Priorities



Themes of Comments Received

- Support ongoing water supply and water quality activities as core responsibilities
- Broader priorities should not predetermine the outcome of specific deliberative activities
- Affirm need for predictable rates and attention to managing costs
- Consider local, regional, and historical contexts to inform implementation
- Work with member agencies when partnering locally
- Outline next steps and timelines

General Manager's Strategic Priorities



Regular and ongoing opportunity for Board and Member Agency input

Next Steps

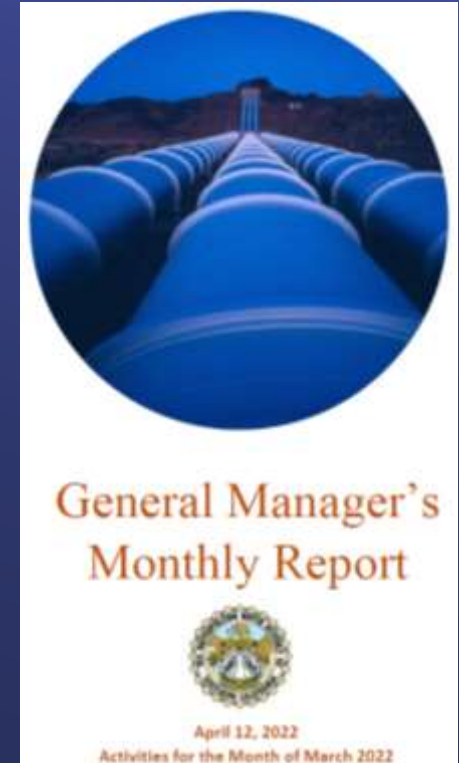
- General Manager's Business Plan
 - Outlines measurable actions
- Implementing activities include
 - IRP implementation plan
 - Proposed Climate Action
 - Pursuit of state and federal funding/actions
 - Capital Investment Program
 - Long-term financial planning
 - Rate refinement process
 - Colorado River compact renegotiations

General Manager's Strategic Priorities



Transparent and Collaborative

- Board will be updated on progress through the General Manager's monthly reports
- Strategic Priorities will be updated or adjusted through annual General Manager's Business Plan



General Manager's Strategic Priorities



Board Action

- Option #1: Adopt the General Manager's Strategic Priorities
- Option #2: Do not adopt the General Manager's Strategic Priorities





• **Board of Directors**
Real Property and Asset Management Committee

4/12/2022 Board Meeting

7-8

Subject

Authorize granting a new ten-year license agreement to New Cingular Wireless, PCS LLC, for the continued operation of an existing telecommunications site on Metropolitan's fee-owned property in the city of Yorba Linda, identified as Orange County Assessor 329-021-03; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA

Executive Summary

This action authorizes the General Manager to enter a new, ten-year license agreement with two, five-year renewal options for New Cingular Wireless, PCS LLC (Cingular) to continue operating its existing wireless telecommunication site on Metropolitan's fee-owned property. Since 1987, Cingular has leased the premises and they have requested to extend the term beyond the June 2022 expiration date. The subject 5,200 square foot premises is located off Green Crest Drive in the city of Yorba Linda. **(Attachment 1)**

Details

Background

The subject Metropolitan property has several telecommunication sites located adjacent to Green Crest Drive in the city of Yorba Linda, which is approximately 4.5 miles east of the Robert B. Diemer Filtration Plant in northeast Orange County. Metropolitan's 96-inch Lower Feeder Pipeline, the Santiago Lateral Control Tower, the 108-inch Santiago Lateral Spillway, and the 72-inch Santiago Lateral Pipelines are located within the subject property's boundaries. The current telecommunications facilities at this location are compatible with Metropolitan's existing facilities.

Cingular is requesting a ten-year extension with two, five-year renewal options, which allows their uninterrupted operation. The existing Cingular facility includes a small equipment building and a 30-foot tall tower. No new equipment or improvements are proposed at this time.

Staff recommends replacing the existing lease structure with current Metropolitan standard telecommunication license provisions. A license agreement allows Metropolitan to have control over specific land uses on the site, is revocable, and is not transferrable. The proposed license will have the following key provisions:

- Subject to Metropolitan's paramount rights reservation.
- Ten-year base term with two, five-year options to renew.
- One-time processing fee of \$9,000.
- Annual license fee of \$45,600 per appraised market rates.
- Fixed license fee increases of three percent annually.
- Metropolitan has right to re-appraise and reset fees every five years.
- Licensee is responsible for weed abatement and utilities.

Staff evaluation has determined that this agreement will not interfere with Metropolitan's operations or facilities in the area. Board authorization of this agreement is required because the term of the license exceeds five years.

Policy

Metropolitan Water District Administrative Code Section 8230: Grants of Real Property Interests

Metropolitan Water District Administrative Code Section 8231: Appraisal of Real Property Interests

Metropolitan Water District Administrative Code Section 8232: Terms and Conditions of Management

Metropolitan Water District Administrative Code Section 11104: Delegation of Responsibilities

By Minute Item 48766, dated August 16, 2011, the Board adopted the proposed policy principles for managing Metropolitan's real property assets.

California Environmental Quality Act (CEQA)

CEQA determination for Option #1:

The proposed action is categorically exempt under the provisions of CEQA and the State CEQA Guidelines. The proposed action consists of the leasing, licensing, maintenance, and operating of existing public or private structures, facilities, and equipment with negligible or no expansion of use beyond that existing at the time of the lead agency's determination. In addition, it will not have a significant effect on the environment. Accordingly, this proposed action qualifies as a Class 1 Categorical Exemption (Section 15301 of the State CEQA Guidelines).

CEQA determination for Option #2:

None required

Board Options

Option #1

Authorize granting a ten-year license agreement with two, 5-year options to New Cingular Wireless, PCS LLC for telecommunication purposes.

Fiscal Impact: Metropolitan will receive annual revenue of \$45,600

Business Analysis: Metropolitan will generate revenue and avoid weed abatement costs.

Option #2

Do not authorize the license agreement

Fiscal Impact: Forgo the opportunity to generate revenue

Business Analysis: The existing telecommunication facility would need to be removed and Metropolitan would be responsible for the weed abatement.

Staff Recommendation

Option #1



Lilly L. Shraibati
Manager, Real Property

3/28/2022

Date



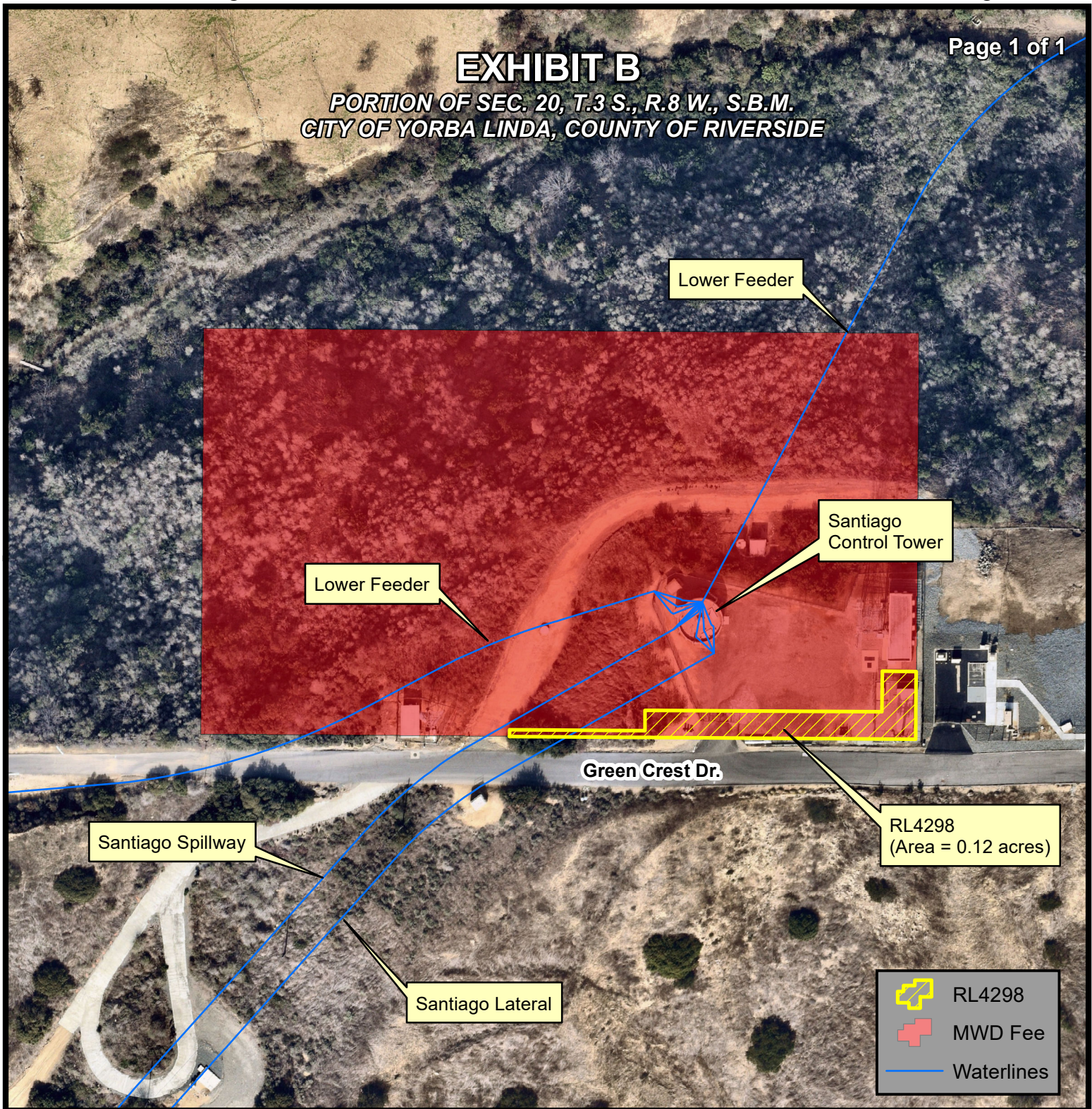
Adel Hagekhalil
General Manager

3/30/2022

Date

Attachment 1 – Location Map

Ref# rpd12687819



Feet
 0 25 50 100

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The Metropolitan Water District of Southern California
 Engineering Services Group

LOWER FEEDER / SANTIAGO LATERAL / SPILLWAY

License
RL4298

MWD
to
New Cingular Wireless PCS, LLC

MWD ROW: 1000-24-1

APN: 329-021-03

WSO Team: Orange County Team



Real Property & Asset Management Committee

Authorize a License Agreement to New Cingular Wireless, PCS LLC

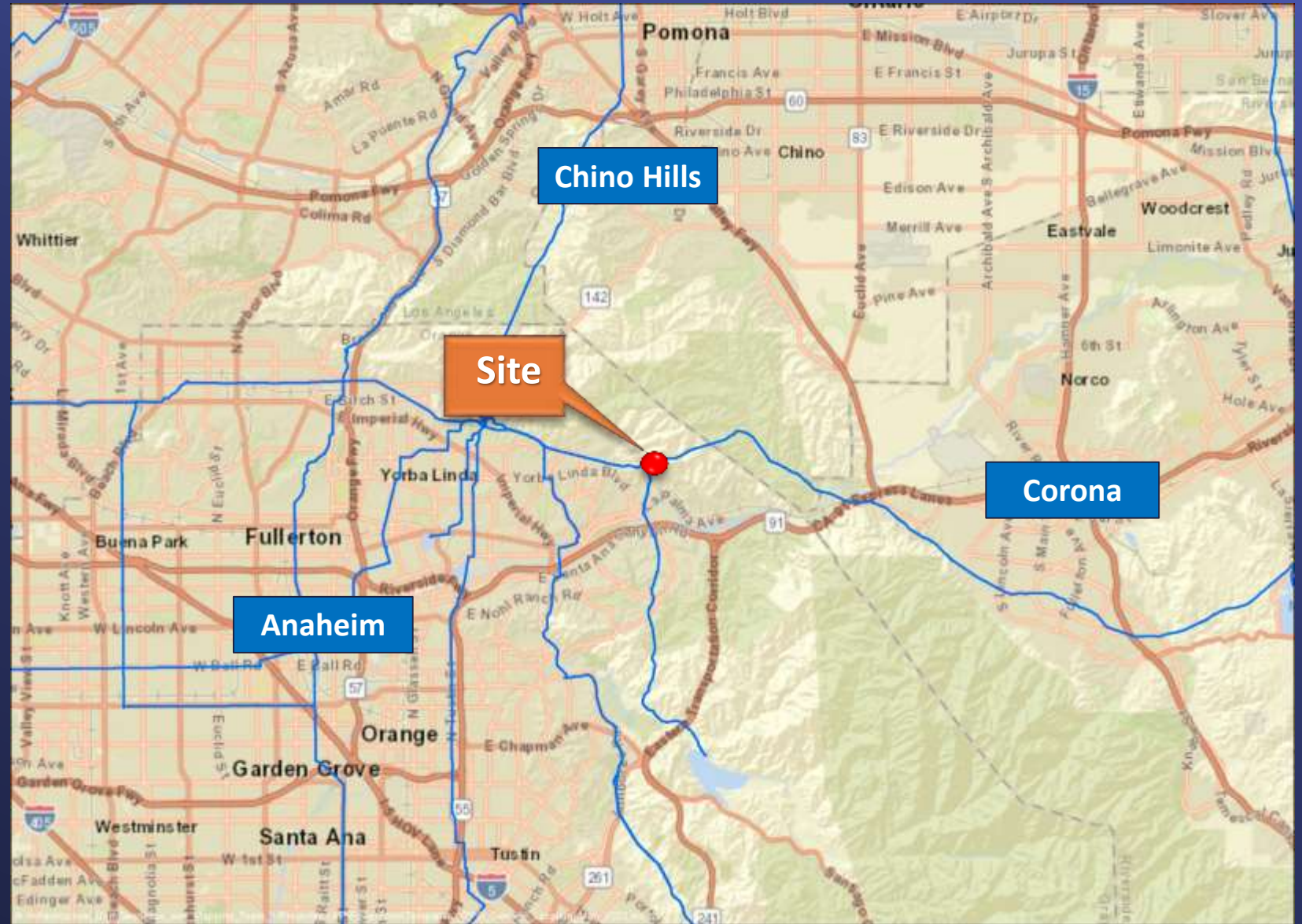
Item 7-8

April 11, 2022

Distribution System Map



General Location Map



Site Map



Existing Telecommunications Site



Key Provisions

- Subject to Metropolitan's paramount right reservation
- Ten-year base term with two 5-year options to renew
- One-time processing fee of \$9,000
- Annual license fee of \$45,600 per appraised market rates
- Fixed license fee increases at 3% annually
- Metropolitan's right to reappraise every five years to reset fees
- Licensee is responsible for weed abatement and utilities

Board Options

Option #1

- Authorize granting a ten-year license agreement with two 5-year options to New Cingular Wireless, PCS LLC for telecommunication purposes

Option #2

- Do not authorize the license agreement

Staff
Recommendation

Option #1





• **Board of Directors**
Real Property and Asset Management Committee

4/12/2022 Board Meeting

7-9

Subject

Authorize granting a new ten-year license agreement to CCATT LLC, for the continued operation of an existing telecommunications site on Metropolitan's fee-owned property in the city of Los Angeles commonly identified as Los Angeles County Assessor Parcel Number 4493-014-906; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA

Executive Summary

This action authorizes the General Manager to enter a new ten-year license agreement with two five-year renewal options for CCATT LLC (ATT) to continue operating its existing wireless telecommunication site on Metropolitan's fee-owned property. Since 1989, ATT has leased the premises, and they have requested to extend the term beyond the December 2024 expiration date and to add approximately 200 square feet of area to accommodate a backup generator. The subject property is located in the city of Los Angeles. **(Attachment 1)**

Details

Background

The subject Metropolitan property has several telecommunication sites on the property, which is located adjacent to the 405 freeway southbound Getty Center Drive offramp/onramp and Sepulveda Boulevard in West Los Angeles. Metropolitan's 96-inch Sepulveda Feeder, Sepulveda Canyon Pressure Control Structure and Power Plant are located within the subject property's boundary. The telecommunication sites at this location, including ATT's, are compatible with Metropolitan's existing facilities.

The existing ATT facility includes a 12' x 30' equipment building area and a 27-foot tall tower. ATT is requesting consideration for the installation of a backup generator that will add 200 square feet to the existing area. Therefore, ATT is requesting the additional area, a ten-year extension with two five-year renewal options, which allows their uninterrupted operation.

Staff recommends replacing the existing lease structure with current Metropolitan standard telecommunication license provisions. A license agreement allows Metropolitan to have control over specific land uses on the site, is revocable, and is not transferrable. The proposed license will have the following key provisions:

- Subject to Metropolitan's paramount rights reservation.
- Ten-year base term with two, five-year options to renew.
- One-time processing fee of \$7,500.
- Annual license fee of \$45,600 per appraised market rates.
- Fixed license fee increases of three percent annually.
- Metropolitan has the right to re-appraise and to reset fees every five years.
- Licensee is responsible for weed abatement and utilities.

Staff evaluation has determined that this agreement will not interfere with Metropolitan's operations or facilities in the area. Board authorization of this agreement is required because the term of the license exceeds five years.

Policy

Metropolitan Water District Administrative Code Section 8230: Grants of Real Property Interests.

Metropolitan Water District Administrative Code Section 8231: Appraisal of Real Property Interests.

Metropolitan Water District Administrative Code Section 8232: Terms and Conditions of Management.

Metropolitan Water District Administrative Code Section 11104: Delegation of Responsibilities.

By Minute Item 48766, dated August 16, 2011, the Board adopted the proposed policy principles for managing Metropolitan's real property assets.

California Environmental Quality Act (CEQA)

CEQA determination for Option #1:

The proposed action is categorically exempt under the provisions of CEQA and the State CEQA Guidelines. The proposed action consists of the leasing, licensing, maintenance, and operating of existing public or private structures, facilities, and equipment with negligible or no expansion of use beyond that existing at the time of the lead 'agency's determination. In addition, it will not have a significant effect on the environment. Accordingly, this proposed action qualifies as a Class 1 Categorical Exemption (Section 15301 of the State CEQA Guidelines).

CEQA determination for Option #2:

None required

Board Options

Option #1

Authorize granting a ten-year license agreement with two five-year options to CCATT LLC for telecommunication purposes

Fiscal Impact: Metropolitan will receive annual revenue of \$45,600.

Business Analysis: Metropolitan will generate revenue and avoid weed abatement costs.

Option #2


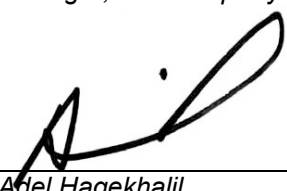
Do not authorize the license agreement

Fiscal Impact: Forgo the opportunity to generate revenue

Business Analysis: The existing telecommunication facility would need to be removed, and Metropolitan would be responsible for the weed abatement.

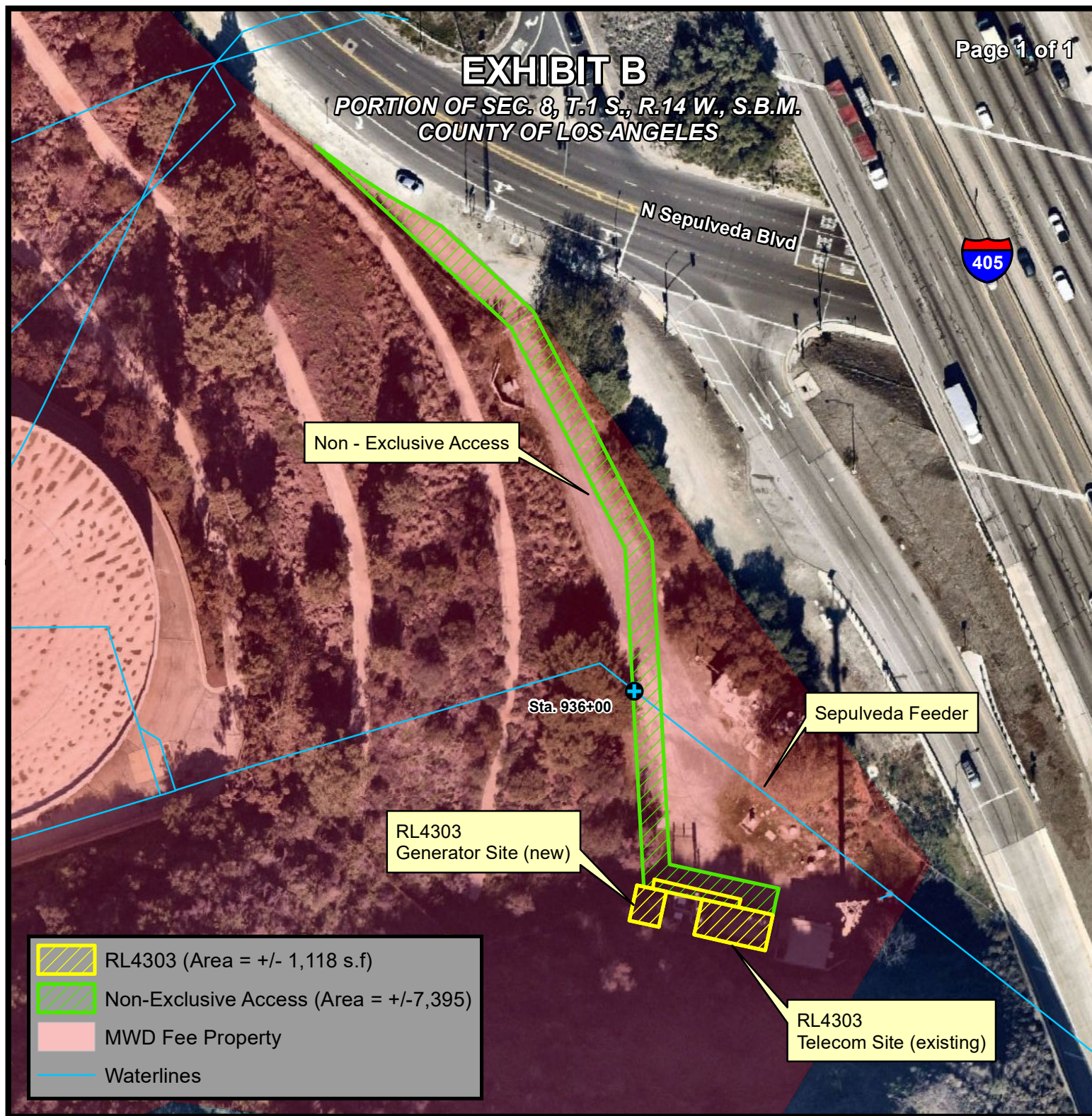
Staff Recommendation

Option #1

 _____ Lilly L. Shraibati Manager, Real Property	3/22/2022 Date
 _____ Adel Hagekhalil General Manager	3/24/2022 Date

Attachment 1 – Location Map

Ref# 1268224



Feet
 0 18.75 37.5 75

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The Metropolitan Water District of Southern California
 Engineering Services Group

SEPULVEDA FEEDER

License
RL4303

MWD
to
CCATT LLC

MWD ROW: 1800-20-3
 APN: 4493-014-906



Real Property & Asset Management Committee

Authorize a License Agreement to CCATT LLC

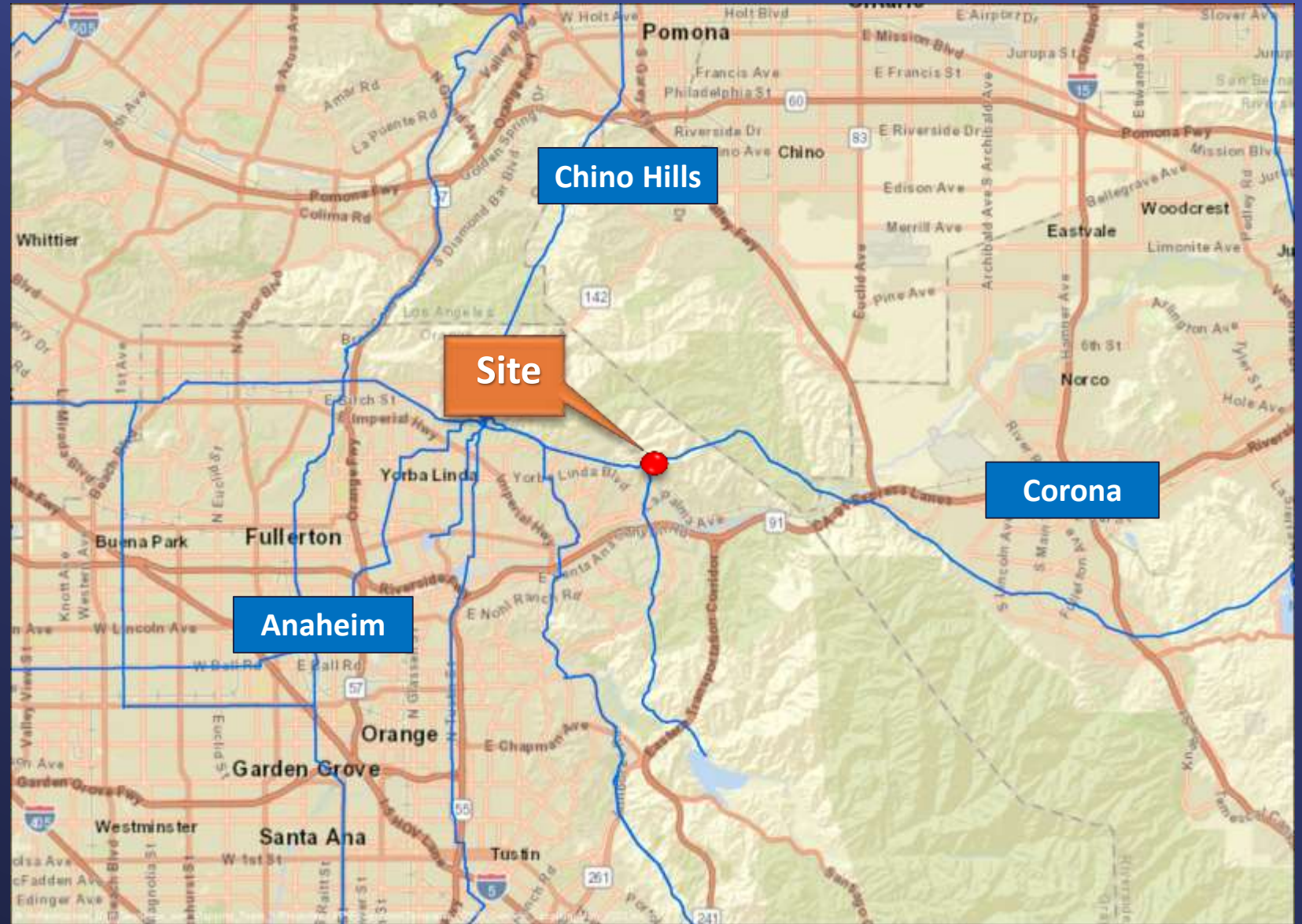
Item 7-9

April 11, 2022

Distribution System Map



General Location Map



Site Map



Existing Telecommunication Site



Key Provisions

- Subject to Metropolitan's paramount right reservation
- Ten-year base term with two 5-year options to renew
- Includes a one-time processing fee of \$7,500
- Annual license fee of \$45,600 per appraised market rates
- Fixed license fee increases 3% annually
- Metropolitan's right to reappraise every five years to reset fees
- Licensee is responsible for weed abatement and utilities

Board Options

Option #1

- Authorize granting a ten-year license agreement with two 5-year options to CCATT LLC for telecommunication purposes.

Option #2

- Do not authorize the license agreement.

Staff
Recommendation

Option #1





• **Board of Directors**
Water Planning and Stewardship Committee

4/12/2022 Board Meeting

7-10

Subject

Authorize agreement with Western Municipal Water District, Rubidoux Community Services District, West Valley Water District, and San Bernardino Valley Municipal Water District to provide Rubidoux Community Services District assistance on water deliveries; the General Manager determined that the proposed action is exempt or otherwise not subject to CEQA

Executive Summary

This letter seeks authorization for an agreement with Western Municipal Water District (WMWD), Rubidoux Community Services District (Rubidoux), West Valley Water District (West Valley), and San Bernardino Valley Municipal Water District (Valley District) (the “Parties”) to assist with water deliveries. Under the proposed agreement, Metropolitan would deliver, provided there is available capacity, up to 2,000 acre-feet of water per year (AFY) to Rubidoux for use within WMWD’s service area. Metropolitan would deliver the requested water to Rubidoux through Valley District’s connection on the San Gabriel Valley Devil Canyon – Azusa Pipeline (Azusa Pipeline).

Details

Background

Metropolitan has capacity rights in the Azusa Pipeline as part of an existing exchange agreement with San Gabriel Valley Municipal Water District (San Gabriel Valley). San Gabriel Valley owns and operates the Azusa Pipeline, which delivers its State Water Project (SWP) supplies from the Devil Canyon turnout on the East Branch of the SWP. Valley District has an existing connection at Lytle Creek Station on the Azusa Pipeline. West Valley can accept SWP supplies through Valley District’s connection. Rubidoux’s location is immediately south of West Valley. West Valley has treatment facilities and infrastructure in place to deliver treated water to Rubidoux. WMWD does not currently have infrastructure in place to deliver Metropolitan’s imported water to Rubidoux.

Rubidoux obtains its water supplies from groundwater with total dissolved solids (TDS) of 530 to 540 milligrams per liter (mg/L) or parts per million (ppm). After customer use, the TDS concentration in the sewer increases to approximately 720 mg/L, which exceeds the City of Riverside’s National Pollutant Discharge Elimination System (NPDES) permit limit of 650 mg/L. Due to this issue, Rubidoux staff identified several potential water supply alternatives, including the use of imported water supplies from Metropolitan facilities.

Proposed Agreement

The Parties are requesting a long-term agreement to provide up to 2,000 AFY to assist Rubidoux in meeting the City of Riverside’s NPDES permit limit for TDS. Metropolitan would deliver the requested water to Valley District through Valley District’s connection on the Azusa Pipeline, to the extent that there is capacity in the Azusa Pipeline. Valley District would then deliver the water to West Valley. West Valley would treat the water and deliver treated water to Rubidoux. WMWD would pay Metropolitan’s full-service rate in effect at the time of the delivery of the water. The delivery is subject to the capacity charge, readiness-to-serve charge, and all volumetric water rates.

Staff recommends that the Board authorize the General Manager to enter into an agreement with the Parties consistent with the terms outlined in **Attachment 1**, including:

1. Agreement termination of December 31, 2035.
2. Maximum delivery amount is 2,000 AF per calendar year.
3. Metropolitan water deliveries under this Agreement will be used solely within WMWD's service area.
4. Deliveries are limited to Metropolitan's unused capacity in the Azusa Pipeline.

In July 2021, Metropolitan's Board authorized a similar agreement with Inland Empire Utilities Agency (IEUA), West Valley, and Valley District to provide assistance to West Valley's customers in an area overlapping IEUA's service area in the event of an emergency or planned outage, or the loss of local supply. Metropolitan staff evaluated the capacity of the Azusa Pipeline and determined that the needs of both West Valley and Rubidoux can be met.

Policy

Metropolitan Water District Administrative Code, Division IV, Section 4209: Contracts

Metropolitan Water District Administrative Code, Division IV, Section 4401-4403: Rates; Readiness-to-Serve Charge; Capacity Charge

Metropolitan Water District Administrative Code, Division XI, Section 11104: Delegation of Responsibilities

By Minute Item 30524, dated September 17, 1974, the Board authorized a cooperative water exchange agreement to eliminate the overdraft condition in the western portion of the Main San Gabriel Basin; as part of this agreement, Metropolitan is granted conveyance rights to the unused capacity in San Gabriel Valley Municipal Water District's Devil Canyon-Azusa pipeline.

California Environmental Quality Act (CEQA)

CEQA determination for Option #1:

The proposed action is not defined as a project under CEQA (Public Resources Code Section 21065, State CEQA Guidelines Section 15378) because the proposed action will not cause either a direct physical change in the environment or a reasonably foreseeable indirect physical change in the environment and involves continuing administrative activities, such as general policy and procedure making (Section 15378(b)(2) of the State CEQA Guidelines). In addition, the proposed action is not defined as a project under CEQA because it involves the creation of government funding mechanisms or other government fiscal activities which do not involve any commitment to any specific project which may result in a potentially significant physical impact on the environment (Section 15378(b)(4) of the State CEQA Guidelines). The delivery of water is exempt from CEQA as it consists of the operation, repair, maintenance, permitting, leasing, licensing, or minor alteration of existing public or private structures, facilities, mechanical equipment, or topographical features, involving negligible or no expansion of existing or former use (Section 15301 of the State CEQA Guidelines).

CEQA determination for Option #2:

None required

Board Options

Option #1

Authorize the General Manager to enter into an agreement with Western Municipal Water District, Rubidoux Community Services District, West Valley Water District, and San Bernardino Valley Municipal Water District to provide Rubidoux assistance with water deliveries.

Fiscal Impact: None. Metropolitan would receive compensation for any delivered water under this agreement.

Business Analysis: Provides water supply reliability to an area of Metropolitan's service area that does not currently receive Metropolitan water supplies.

Option #2

Do not authorize the General Manager to enter into an agreement with Western Municipal Water District, Rubidoux Community Services District, West Valley Water District, and San Bernardino Valley Municipal Water District to provide Rubidoux assistance with water deliveries.

Fiscal Impact: None

Business Analysis: Would not provide water supply reliability to an area of Metropolitan's service area that does not currently receive Metropolitan water supplies.

Staff Recommendation

Option #1



Brad Coffey
Manager, Water Resource Management

3/30/2022

Date



Adel Hagekhalil
General Manager

4/5/2022

Date

Attachment 1 – Term Sheet for the Agreement to Provide the Rubidoux Community Services District Assistance with Water Deliveries

Ref# wrm12679762

**Term Sheet for the Agreement to Provide the Rubidoux Community Services District
Assistance with Water Deliveries**

Agreement Overview

- Parties: The Rubidoux Community Services District (Rubidoux), West Valley Water District (West Valley), Western Municipal Water District (Western), San Bernardino Valley Municipal Water District (Valley District), and The Metropolitan Water District of Southern California (Metropolitan)
- Effective Date: June 1, 2022
- Termination Date: December 31, 2035, provided that any party may cancel with 30 days written notice
- Maximum Delivery Amount: 2,000 AF per calendar year

Key Terms

- Metropolitan water deliveries under this Agreement will be used within Western's service area.
- Western will request delivery of water from Metropolitan on behalf of Rubidoux under this agreement.
- Rubidoux may request water deliveries at any time. Rubidoux will coordinate with Western on the monthly amount of water requested from Rubidoux.
- Metropolitan will deliver requested water to Valley District at Valley District's connection (Lytle Creek, Station, 1747+00) on the San Gabriel Valley Devil Canyon – Azusa Pipeline. Valley District will deliver the water to West Valley.
- West Valley will treat the water and deliver the requested amount of treated water to Rubidoux for use by Rubidoux only within Metropolitan's service area.
- The delivery of water by Metropolitan is not guaranteed and is limited to the unused capacity in the San Gabriel Valley Devil Canyon-Azusa Pipeline.
- Western will pay Metropolitan's full-service untreated rate in effect at the time of delivery. The delivery is subject to the capacity charge, readiness-to-serve charge, and all volumetric water rates in the same manner as deliveries made to Western through Metropolitan's distribution system and connections.
- Rubidoux will reimburse Western for all payments made by Western to Metropolitan under this agreement.
- Valley District or West Valley shall have no responsibility for the cost of water delivered to Valley District's connection for use within Western's service area by Rubidoux.
- Metropolitan will be responsible for any Department of Water Resources charges for the State Water Project supplies delivered to Rubidoux through Valley District's connection.



Water Planning and Stewardship Committee

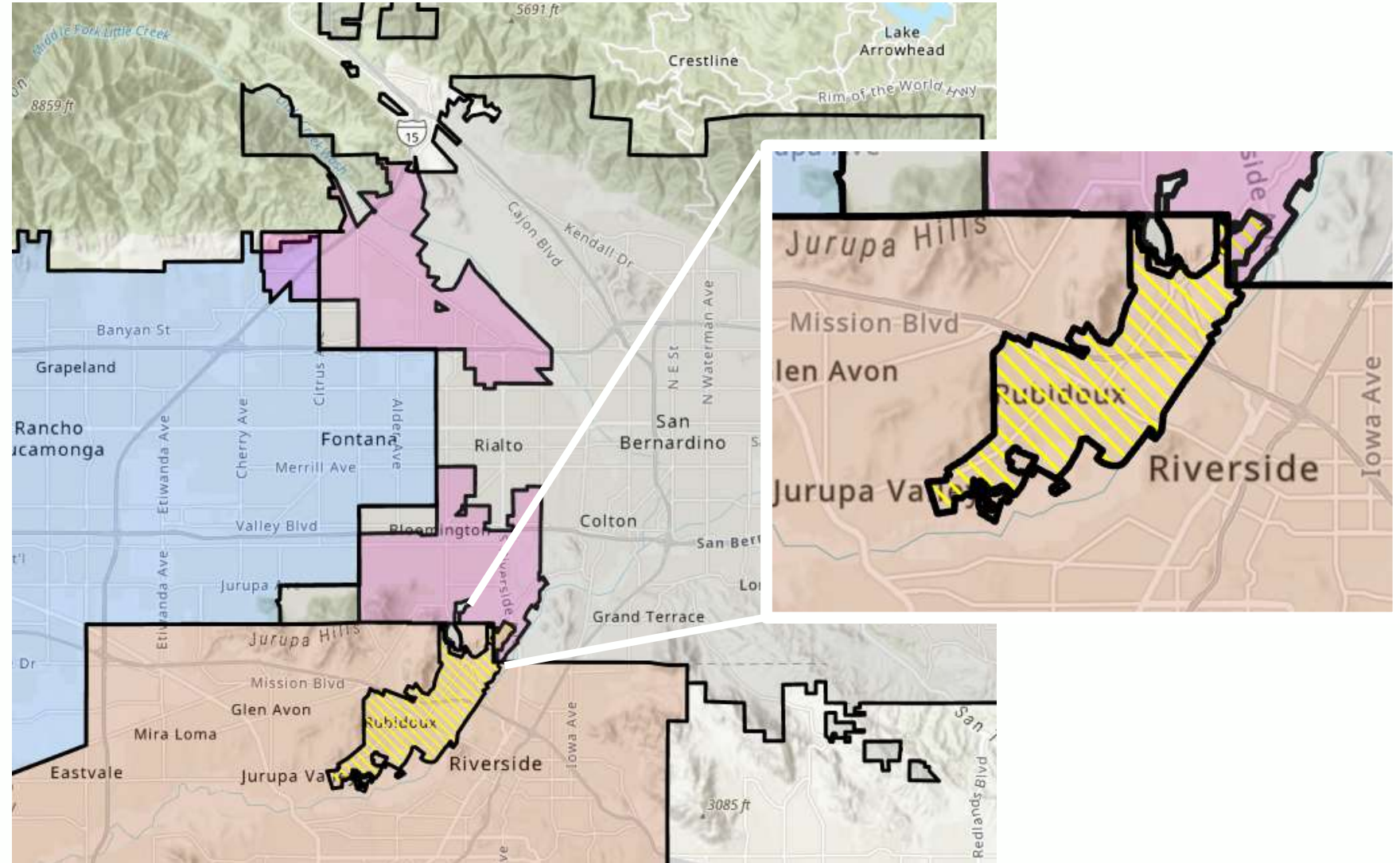
Authorize agreements with Western MWD, Rubidoux Community Services District, West Valley Water District, & San Bernardino Valley MWD to provide Rubidoux Community Services District assistance with water deliveries

Item 7-10

April 12, 2022

Background

Rubidoux Community Services District is located within Western Municipal Water District



Background

San Gabriel Devil Canyon – Azusa Pipeline

- Owned and operated by San Gabriel Valley MWD
- Delivers water from the State Water Project to Main San Gabriel Basin
- Metropolitan granted conveyance rights to the unused capacity in the pipeline in 1974

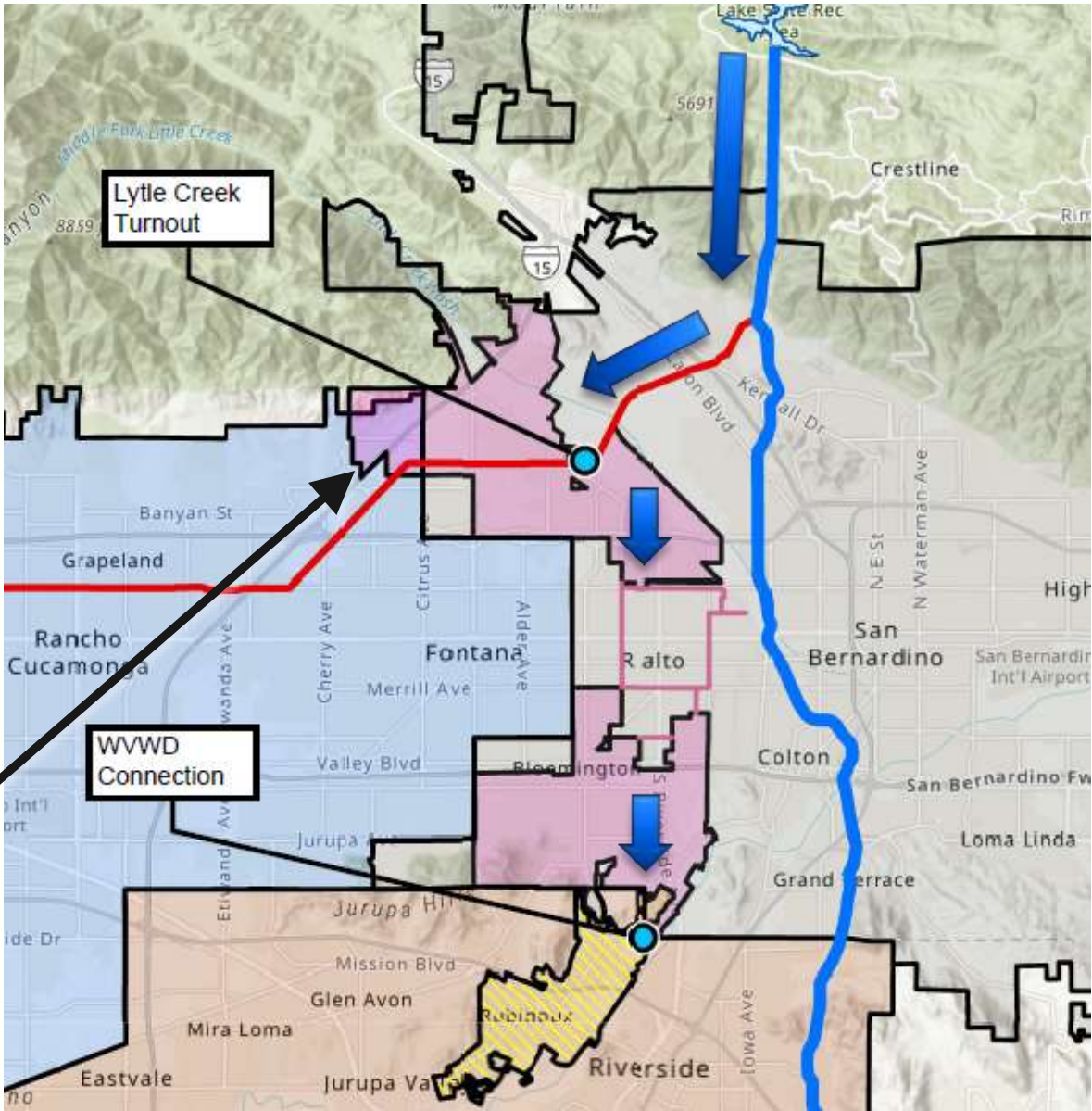


Background

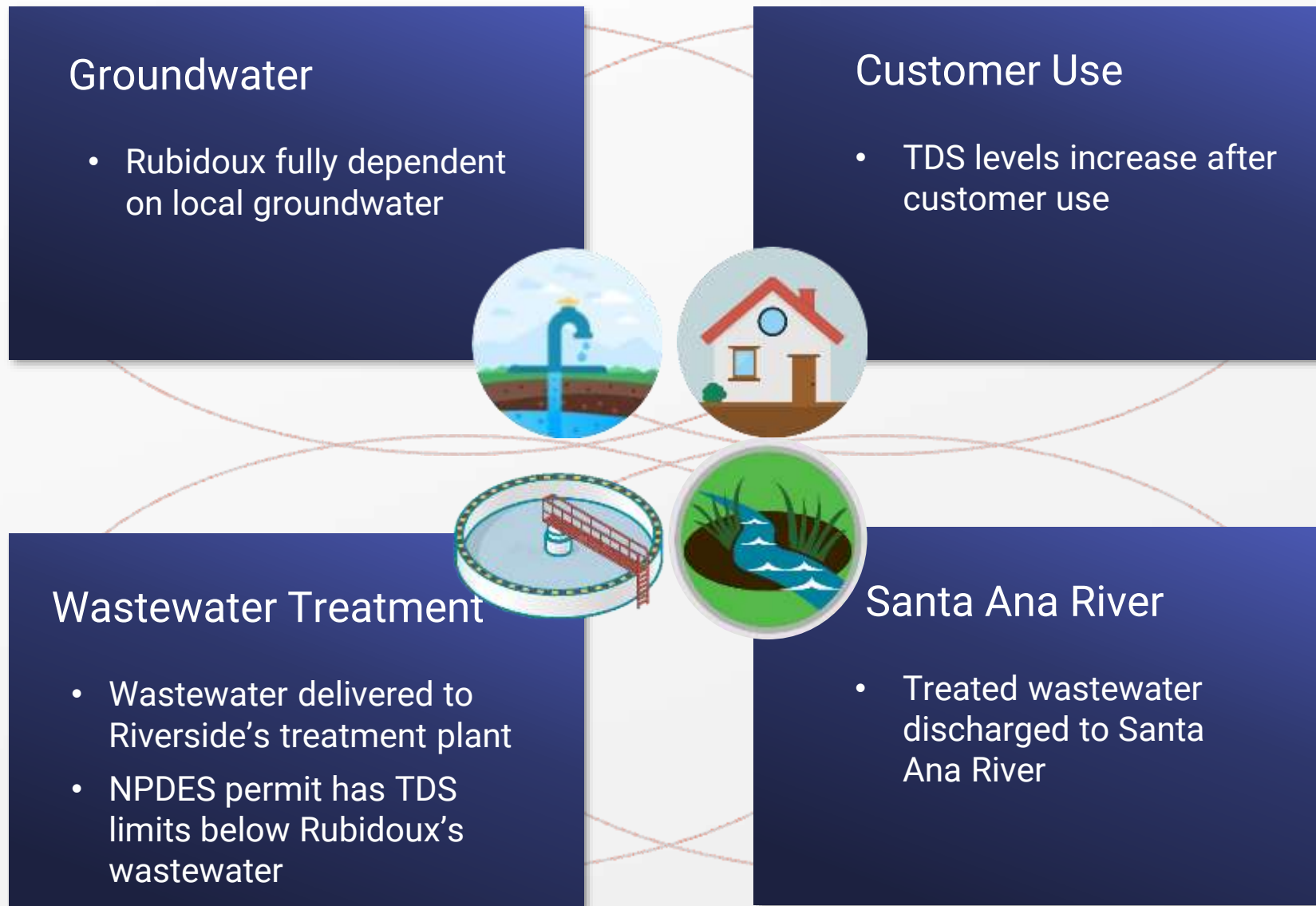
Water conveyance is through the Azusa Pipeline



July 2021: Delivery agreement for West Valley & IEUA



Need for Proposed Agreement

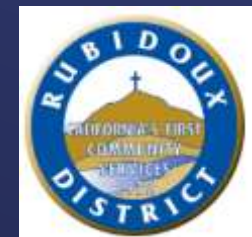


Proposed Agreement

to provide water deliveries
to Rubidoux Community
Services District

Parties

- Metropolitan Water District of Southern California
- Western Municipal Water District
- Rubidoux Community Services District
- West Valley Water District
- San Bernardino Valley Municipal Water District



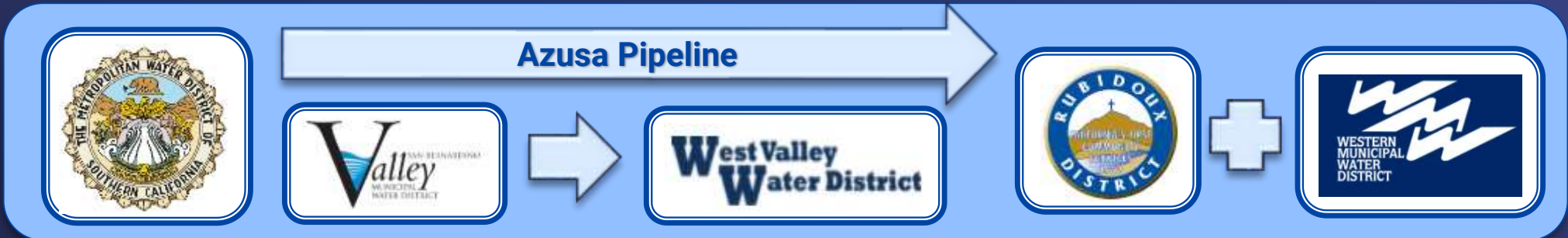
Proposed Agreement

to provide water deliveries
to Rubidoux Community
Services District

Agreement Terms

- Maximum Delivery Amount of 2,000 AFY
- Terminates December 31, 2035; Could renew with new SWP Contract
- Water deliveries to be used within Western's service area
- The delivery of water by Metropolitan is not guaranteed and is limited to the unused capacity in the Azusa Pipeline
- Western will pay Metropolitan's full service untreated water rate in effect at the time of the delivery, including Capacity Charge and Readiness-to-Serve Charge

How it Works



Summary

Metropolitan has facilities in place to help Rubidoux by partnering with WMWD, West Valley, and Valley District



Rubidoux is within WMWD's service area



Rubidoux is fully dependent on groundwater



TDS in Rubidoux's wastewater exceeds NPDES permit



Rubidoux requests imported supplies to blend with groundwater



WMWD's infrastructure does not serve Rubidoux



Metropolitan can provide deliveries through the Azusa Pipeline

Option #1

- Authorize the General Manager to enter into an agreement with WMWD, Rubidoux, West Valley, and Valley District to provide Rubidoux assistance with water deliveries.

Option #2

- Do not authorize the General Manager to enter into an agreement with WMWD, Rubidoux, West Valley, and Valley District to provide Rubidoux assistance with water deliveries.

Board Options

Option #1

Staff
Recommendations





- **Board of Directors**
Water Planning and Stewardship Committee

4/12/2022 Board Meeting

7-11

Subject

Authorize the General Manager to negotiate an agreement consistent with the draft terms of the Metropolitan Water District/Inland Empire Utilities Agency Exchange Agreement; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA

Executive Summary

California's Proposition 1 in 2014 allocated \$7.5 billion for water system investments, with \$2.7 billion dedicated to the implementation of the Water Storage Investment Program (WSIP). The California Water Commission (CWC) selected eight projects to conditionally fund under the WSIP based on their associated public benefits. Inland Empire Utilities Agency's (IEUA) Chino Basin Program (CBP) is among the conditionally funded projects within Metropolitan's region. The CBP is an innovative advanced wastewater treatment, storage, water exchange, and reliability program. The CBP would exchange advanced treated recycled water stored in the Chino Basin for an equivalent amount of State Water Project (SWP) supply to provide additional flow to improve fisheries in the Feather River.

Under the proposed program, IEUA would invest in local infrastructure to produce and store 375,000 acre-feet (AF) advanced treated wastewater over 25 years. This stored water would be exchanged for an equivalent portion of Metropolitan's SWP Table A allocation. The exchanged SWP supplies would be used for additional flows in the Feather River, providing benefit to the Chinook salmon and the surrounding ecosystem. The CBP would improve water reliability within the Chino Basin, provide environmental benefits to the Feather River in critical and dry years, and increase aquifer storage and recovery within the region.

The CBP requires that SWP supplies are exchanged to provide the environmental fishery flows in the Feather River. Because IEUA does not hold a participation right in the SWP, IEUA seeks Metropolitan's participation in the CBP as its facilitating State Water Project contractor. As such, Metropolitan would agree to facilitate the exchange of an equivalent portion of its SWP Table A allocation for stored Chino Basin groundwater in certain call years. Metropolitan's SWP Table A allocation would not be called in critical dry years.

An agreement between Metropolitan and IEUA will be required to formalize the relationship and responsibilities of each agency for this exchange and to protect Metropolitan's interests. This letter details the draft terms for this exchange. The draft terms cover the exchange quantities, operations, costs, and additional benefits provided for participation in the CBP. The MWD/IEUA Exchange Agreement is one of multiple agreements that will be necessary to facilitate the CBP.

Details

Background

In November 2014, California voters approved The Water Quality, Supply, and Infrastructure Improvement Act (Proposition 1). This state water bond provides \$7.5 billion for investment in the state's water system, dedicating \$2.7 billion specifically for investment in water storage projects through the WSIP. The California Water Commission (CWC) is responsible for administering the WSIP, and the bond funds have been continuously appropriated for that purpose. The WSIP provides funding based on a project's public benefits, which can include flood control, ecosystem improvement, water quality improvement, or emergency response and recreation. In July 2018, the CWC determined eight projects eligible for conditional WSIP funding, which combined would

increase California's water storage capacity by 4.3 million AF and provide for the public benefits identified by the WSIP. Among the projects selected for conditional WSIP funding is the CBP, proposed by the IEUA, a member agency of Metropolitan. The CBP's original conditional WSIP funding was \$206.9 million. It has since been increased twice for an inflation adjustment, with the latest funding amount totaling \$215.2 million. In June 2021 and March 2022, Metropolitan staff presented updates on the Prop 1 WSIP projects and an overview of the CB to the Board. Additionally, in 2021 Metropolitan provided a letter of intent to continue collaborating with IEUA as its potential facilitating SWP contractor.

Chino Basin Program Overview

The CBP is an innovative advanced wastewater treatment, storage, water exchange and reliability program. Under the CBP, IEUA would construct an advanced water treatment facility to treat up to 15,000 AF of wastewater per year. After treatment, the recycled water would be stored in the Chino Basin groundwater basin using distribution facilities and injection wells constructed as part of the CBP. The CBP would also include the construction of distribution facilities to pump and deliver extracted groundwater to Metropolitan's distribution system and to IEUA's member agencies.

IEUA would agree to store up to 375,000 AF of advanced treated recycled water in the Chino Basin over a 25-year period. This stored water allows for a water exchange agreement with the state. The exchange would provide a water supply for pulse flows released from Oroville Reservoir into the Feather River for the benefit of both Chinook salmon and the surrounding ecosystem. IEUA and the state would agree to exchange an equivalent amount of stored water to be delivered to Metropolitan and its service area for an equivalent amount of Metropolitan's SWP Table A allocation. That exchanged SWP supply is the physical water supply that would be used for the pulse flows released from Oroville Reservoir into the Feather River.

In a call year, IEUA would extract stored groundwater from the Chino Basin and deliver it to Metropolitan's distribution system directly or by in-lieu pumping to meet IEUA service area demands to substitute for the exchanged SWP Table A allocation. Thus, Metropolitan and its service area would remain whole in terms of water supply. The exchange would only occur during years when the Department of Water Resources (DWR) determines that SWP operations and SWP contractor supplies would not be at risk. As such, the state would not request an exchange in critical dry years.

The state could request an annual exchange, for up to three consecutive years, provided there is sufficient groundwater stored in the Chino Basin and both IEUA and Metropolitan agree to an exchange. After the 25-year term, the stored water remains under IEUA's ownership and could be used to satisfy local supply. The program also includes an emergency use provision, where up to 40,000 AF of stored Chino Basin water could be borrowed by Metropolitan for use within its service area.

Metropolitan's Role as a Facilitating State Water Contractor

The CBP requires that SWP supplies stored in Lake Oroville are exchanged and used to provide pulse flows in the Feather River. Because IEUA is not an SWP contractor, IEUA requested Metropolitan's participation in the CBP. Metropolitan would agree to facilitate the exchange of SWP supplies and stored water in the Chino Basin and participate in necessary related agreements. There are several associated agreements needed to facilitate the program, some of which Metropolitan will be party to. Agreement terms will be negotiated to ensure Metropolitan will not be negatively impacted by its participation. The CBP will provide for environmental, local, and regional benefits for multiple parties, including Metropolitan, and is being developed under a tenet of "No Harm," meaning that its development and operation cannot adversely affect any of the parties or participants in the program. This tenet extends to the SWP and its contractors, to Metropolitan and its service area, and to IEUA and its member local agencies.

Draft Terms for the MWD/IEUA Exchange Agreement

A direct agreement between Metropolitan and IEUA will formalize each agency's roles and responsibilities. Draft terms for the agreement have been developed for review and consideration by the Board and will guide staff in finalizing the MWD/IEUA Exchange Agreement.

The draft terms of the agreement can be organized into four overarching categories: Exchange Quantities, Operations, Cost, and Additional Benefits. A summary of the objectives of the terms for each of the categories is provided below. Detailed agreement term language can be found in **Attachment 1**.

Exchange Quantities

These terms specify the exchange quantities and the breakdown of how stored groundwater will be delivered to the Metropolitan service area via in-lieu and pump in.

Operations

These terms cover a number of CBP operational considerations between IEUA and Metropolitan. Notably, it includes a limitation on when an exchange year can be initiated (e. g. no call in critical dry years or when Metropolitan has an operational constraint). A CBP Operating Committee will also be established to coordinate IEUA/MWD activities, including generating an annual operating plan, detailing operation and maintenance requirements, water quality monitoring, and reporting, among other items. These terms also indicate Metropolitan's ability to withhold call year decisions should IEUA be unable to perform.

Cost

Metropolitan currently has no obligation to invest in the facilities required for the exchange. These terms include the take or pay contract commitment for IEUA and its member agencies. Additionally, the draft terms confirm that any net costs or credits resulting from the variable operation and maintenance costs on the SWP would be between IEUA and DWR, and not the responsibility of Metropolitan.

Additional Benefits

The CBP provides additional system flexibility within Metropolitan's service area. Specific terms of these supplemental benefits are covered under this category. This includes an ability to borrow up to 40,000 AF for emergency use and potential predelivery of stored groundwater against future performance requirements, as coordinated by the CBP Operating Committee.

Next Steps

Staff recommends that the Board, upon review and consideration of the draft terms for the MWD/IEUA Exchange Agreement, authorize the General Manager to negotiate an agreement with IEUA consistent with the draft terms. The General Manager would not execute this agreement separately from the full set of agreements contemplated. IEUA will continue working with Metropolitan and other necessary parties to develop the full set of agreements needed for the CBP. Staff will return for Board approval of all agreements to which Metropolitan is a party, including approval of final MWD/IEUA Exchange Agreement terms. The CWC is expected to award final WSIP funding for the CBP in Fall 2023.

Policy

Metropolitan Water District Administrative Code Section 11104: Delegation of Responsibilities

By the 1999 Strategic Plan Policy Principles, Metropolitan is a regional provider of water for its service area and a steward of regional infrastructure.

By the General Manager's Business Plan for FYs 2020/21 and 2021/22, one of Metropolitan's strategic priorities is to promote sustainability.

By Minute Item 42287, dated February 11, 1997, the Board adopted a set of policy principles on water recycling.

California Environmental Quality Act (CEQA)

CEQA determination for Option #1:

The proposed action is not defined as a project under CEQA (Public Resources Code Section 21065, State CEQA Guidelines Section 15378) because the proposed action will not cause either a direct physical change in the environment or a reasonably foreseeable indirect physical change in the environment and involves continuing administrative activities such as general policy and procedure making (Section 15378(b)(2) of the State CEQA Guidelines). In addition, where it can be seen with certainty that there is no possibility that the proposed action in

question may have a significant effect on the environment, the proposed action is not subject to the provisions of CEQA (Section 15061(b)(3) of the State CEQA Guidelines).

CEQA determination for Option #2:

None required

Board Options

Option #1

Authorize the General Manager to negotiate an agreement consistent with the draft terms of the Metropolitan Water District/Inland Empire Utilities Agency Exchange Agreement.

Fiscal Impact: None

Business Analysis: Participation in the CBP will improve regional reliability and system flexibility within MWD's service area, as well as critical dry-year reliability.

Option #2

Do not authorize the General Manager to negotiate an agreement consistent with Metropolitan/IEUA Exchange Agreement draft terms.

Fiscal Impact: None

Business Analysis: This option would impact Metropolitan's ability to participate in the CBP and limit the opportunity to provide additional regional reliability.

Staff Recommendation

Option #1



Brad Coffey
Manager, Water Resource Management

4/4/2022

Date



Adel Hagekhalil
General Manager

4/6/2022

Date

Attachment 1 – Term Sheet for Water Storage and Investment Program (WSIP) Environmental Water Exchange between Metropolitan Water District of Southern California (Metropolitan) and Inland Empire Utilities Agency (IEUA)

Ref# wrm12685364

Attachment 1**Term Sheet for Water Storage and Investment Program (WSIP) Environmental Water Exchange
between Metropolitan Water District of Southern California (Metropolitan)
and Inland Empire Utilities Agency (IEUA)****Exchange Quantities**

1. WSIP is a water storage investment program funded by the California Water Commission (CWC) through Proposition 1 and Inland Empire Utilities Agency (IEUA).
2. The water exchange will total 375,000 acre-feet (AF) of water in increments (40,000 AF per call year maximum) over a 25-year agreement term.
3. IEUA will facilitate the production and storage of 375,000 AF of advanced treated recycled water supply in the Chino Groundwater Basin.
4. IEUA will deliver stored groundwater into the Metropolitan service area during call years. In exchange, Metropolitan will provide the State with water supply to facilitate the release of water from Oroville for ecosystem-improvement purposes (pulse flows).
5. When water is released from Lake Oroville for pulse flows, Metropolitan will receive an exchange of water from IEUA from water stored in the Chino Basin.
6. IEUA shall coordinate up to 40,000 AF of local production through a combination of in-lieu means (30,000 AF of capacity) and direct pumping into Metropolitan's Rialto Pipeline (10,000 AF of capacity).
7. This IEUA production fulfills IEUA's obligation under the exchange agreement.

Operations

8. The Environmental Water Exchange shall not negatively impact the water supply or system operations of the State Water Project (SWP), Metropolitan, or its member agencies.
9. Metropolitan will work in good faith to develop the operating terms and conditions and agreement with the State to facilitate the exchange.
10. California Department of Water Resources (DWR) will identify the annual capacity available for pulse flows. California Department of Fish and Wildlife (CDFW) will limit calls to below normal and dry years. DWR will preapprove the potential volume of pulse flows in any potential call year. If called by CDFW, the pulse flow release from Lake Oroville will occur in the Spring, with the water exchange between Metropolitan and IEUA taking place as agreed upon in the CBP Operating Committee.
11. Metropolitan has the ability to decline any annual call when IEUA is unable to show availability of exchange water, when Metropolitan operations limit the ability to receive exchange supplies from IEUA or when the exchange will negatively impact Metropolitan or its member agencies. Such actions shall be brought to the CBP Operating Committee for discussion.
12. A schedule for local performance and completing water exchanges will be established in the operating plan and administered by the CBP Operating Committee.
13. Pump-in/in-lieu deliveries shall be metered to account for all deliveries.
14. Pump-in water will need to comply with Metropolitan's present and future pump-in water quality and system protection requirements.

15. A “CBP Operating Committee” will be established to coordinate IEUA and Metropolitan activities. The CBP Operating Committee will generate an annual operating plan in anticipation of a call year. The operating plan will consider the amount of call water, a performance schedule, the in-lieu/pump-in split, operations and maintenance requirements, water quality monitoring, accounting, reporting, and performance certification/reconciliation.
16. Metropolitan shall have the right to withhold subsequent call year ‘go’ decisions should IEUA be unable to perform in a given year until such required performance is achieved.
17. Metropolitan will support future efforts by IEUA to obtain federal funding to offset program costs.
18. Metropolitan will work collaboratively and in a timely fashion with IEUA to explore additional benefits including opportunities for long-term storage programs in the Chino Basin.

Cost

19. Metropolitan has no obligation to invest in the facilities required for the exchange.
20. IEUA will enter into a take or pay contract committing to pay the supply rate for the potential in-lieu delivery from the CBP (30 TAF). In non-call years, IEUA would get credited that amount toward their Metropolitan water purchases. In call years, Metropolitan would refund the supply rate charges to IEUA for the certified amount of in-lieu delivery from the CBP as part of the annual reconciliation process.
21. Pulse flow releases from Lake Oroville and subsequent reduction in Table A deliveries to Metropolitan from SWP facilities will affect schedules and quantities of SWP hydropower generation and pump load requirements. IEUA and Metropolitan will work with DWR to implement equitable accounting and reimbursement procedures to the satisfaction of all parties to account for any resulting changes in the variable operation and maintenance, power and replacement (OMP&R) component of Transportation Charges as designated in SWP water supply contracts. This accounting will include consideration of real-time energy market considerations and be based on application of best practices for management of the SWP energy portfolio by DWR. Net costs or credits will be exchanged between IEUA and DWR by separate agreement and are not a responsibility of Metropolitan.

Additional Benefits

22. Metropolitan can borrow up to 40,000 AF of stored water from WSIP, consistent with the IEUA/CWC agreement. This benefit is intended to provide flexibility to Metropolitan. IEUA will be made whole for direct costs resulting from such borrowing. Execution and payback of the borrowed water shall occur by the end of the agreement and be coordinated through the CBP Operating Committee.
23. Predelivery of water against future performance requirements will be allowed by mutual agreement and coordinated/administered by the CBP Operating Committee. In-lieu vs. pump-in strategies will be determined by CBP Operating Committee.



Water Planning and Stewardship Committee

Negotiate an agreement consistent with the draft terms of the Metropolitan Water District/Inland Empire Utilities Agency Exchange Agreement

Item 7-11

April 12, 2022

Previous Board Briefings



June 2021

- Staff presented an update on Prop 1 WSIP projects and an overview of the Chino Basin Program
 - Metropolitan provided a letter of intent

March 2022

- Staff presented an update on the Chino Basin Program and pending terms of agreement with IEUA

Categories of the Metropolitan/ IEUA Exchange Agreement Draft Terms



Exchange Quantities

Specify exchange quantities, breakdown of how groundwater will be delivered (in-lieu, pump in)



Operations

Limitation on call years, CBP Operating Committee to coordinate IEUA/MWD activities



Cost

Details take or pay contract commitment, no MWD financial obligation for investment currently



Additional Benefits

Provides system flexibility within MWD service area;
Emergency use provision

Key Terms - Exchange Quantities



- IEUA will facilitate the production and storage of advanced treated recycled water supply in the Chino Groundwater Basin
- IEUA to deliver stored groundwater into Metropolitan service area during call years
 - Combination of in-lieu means and direct pumping into Metropolitan's Rialto pipeline

Key Terms - Operations



- Exchange shall not negatively impact water supply or system operations of SWP, Metropolitan, or its member agencies
- MWD has ability to decline any annual call when:
 - Exchange water from IEUA is unavailable
 - Internal operations limit the ability to receive exchange supplies from IEUA
 - Exchange will negatively impact MWD or member agencies
- CBP Operating Committee will be established to coordinate IEUA and MWD activities

Key Terms - Cost



- Metropolitan has no obligation to invest in facilities required for exchange
- IEUA will enter a take or pay contract with Metropolitan
 - Commits to pay the supply rate for the potential in-lieu delivery from CBP
 - Establishes a baseline for in-lieu performance
- Any increase in SWP costs resulting from the CBP changes will be resolved between IEUA and DWR by separate agreement and are not a responsibility of Metropolitan

Key Terms - Additional Benefits



- Metropolitan can borrow up to 40 TAF of stored water
 - Intended to provide flexibility to Metropolitan; IEUA will be made whole for direct costs from borrowing
- Predelivery of water against future performance requirements
 - Will be allowed by mutual agreement

Next Steps

- IEUA to continue working with Metropolitan and other parties to develop full set of agreements needed for CBP
- Staff will return for Board approval of all agreements Metropolitan is party to, including approval of final MWD/IEUA Exchange Agreement Terms
- CWC expected to award final WSIP funding for CBP in Fall 2023

Board Actions

Option 1

- Authorize the General Manager to negotiate an agreement consistent with the draft terms of the Metropolitan Water District/Inland Empire Utilities Agency Exchange Agreement

Option 2

- Do not authorize the General Manager to negotiate an agreement consistent with MWD/IEUA Exchange Agreement draft terms

Staff Recommendation

Option I





● **Board of Directors**
Water Planning and Stewardship Committee

4/12/2022 Board Meeting

7-12

Subject

Authorize the General Manager to: (1) secure one-year water transfers with various water districts north of the Sacramento-San Joaquin River Delta for up to 75,000 acre-feet of additional supplies; (2) secure storage and conveyance agreements with the Department of Water Resources and various water districts to facilitate these transfers; (3) pay up to \$60 million from the State Water Project Budget for such transfers; and grant final decision-making authority to the General Manager subject to the terms set forth in this letter; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA

Executive Summary

Staff requests authorization to allow the General Manager to secure one-year water transfers with north of the Sacramento-San Joaquin River Delta water districts for up to 75,000 acre-feet (AF) of additional supplies and to secure storage and conveyance agreements with the Department of Water Resources (DWR) and various water districts as needed to facilitate these transfers, including Sacramento Valley water districts and the Yuba County Water Agency (YCWA). The maximum payments to purchase these supplies would be up to \$60 million from the State Water Project Budget. Staff also requests that the Board grant the General Manager final decision-making authority to determine whether to move forward with these transfers, subject to the terms and conditions set forth below.

Details

Background

The water transfer market has changed significantly over the last twenty-five years. The market shifted considerably from when water transfers were marketed almost exclusively to urban water districts. More recently, agricultural water districts shifted to high-value permanent crops that require water in dry years to maintain the farmer's investment. To further complicate the water transfer market, increased regulations limit the transfer window and available capacity to move the supplies. In normal and wet years, transfer prices may be lower, but there is little, if any, capacity to move these supplies. Additionally, buyers must take certain risks by agreeing to purchase transfer water before knowing the scope of conveyance losses that may occur as the water travels across the Delta. In the drier years, there is plenty of capacity to move transfer supplies through the system, but there is not much supply available for purchase, and prices are higher. In 2014 and 2015, some transfer prices rose above \$1,500/AF. Dry conditions in 2022 ensure that capacity to move transfer supplies is available, but prices do not appear to have reached the heights of the previous drought cycle.

Demand for water transfers leads to both cooperation and competition among parties. A water district that develops a more flexible water resource mix and the capability to respond to changed conditions can perform better in this new environment. Water transfers are an important part of the current drought response and work well with Metropolitan's surface water storage, water supply, and demand management programs. As shown in this month's Water Surplus and Drought Management Report, Metropolitan requires drought actions to meet all member agency demands in 2022. Participating in the transfer market this year would help Metropolitan meet member agency demands or preserve water stored on the State Water Project system for next year, should the critically dry pattern continue into 2023. Transfers would provide additional security for the regions within Metropolitan's service area that rely more heavily on State Water Project supplies. Staff is requesting the Board

grant final decision-making authority to the General Manager to determine whether to move forward with water transfers as outlined below.

Discussion

2022 State Water Contractors Dry Year Water Transfers Program

In February 2022, the Board authorized the General Manager to enter into an agreement with the State Water Contractors, Inc. (SWC) to pay up to \$500,000 in administrative costs to pursue up to 100,000 AF of Sacramento Valley water through the 2022 State Water Contractors Dry Year Water Transfers Program. The SWC is serving as the participating contractors' facilitator in pursuing these water transfers. These funds cover the administrative, environmental, and other regulatory costs associated with developing the transfers. Metropolitan staff, in partnership with other contractors acting through the SWC's agreement, are negotiating one-year water transfers with sellers. The participants have not negotiated a final price for transferable water, but staff expects the price to range from \$700 to \$800/AF. If drought conditions curtail supplies to the Feather River service area, the amount of water available to transfer will be substantially less. A curtailment would significantly impact the amount of supplies made available from fallowing. Staff is currently estimating around 40,000 AF would be available from the program, which would be allocated based on Metropolitan's proportional Table A amount.

Yuba County Water Agency

In 2007, the Board authorized an agreement with DWR to purchase water supplies from the YCWA. Under the agreement and later board-authorized amendments, YCWA transfers water to participating State Water Contractors and the San Luis Mendota Water Authority. YCWA provides surface water by reoperating its reservoirs or by using pumped groundwater instead of surface water. The reservoir supplies are priced at up to \$447/AF. Participants negotiate the groundwater substitution price each year based on market conditions, if YCWA chooses to make this water available. Staff estimates that the price for the groundwater substitution supplies would be similar to the Dry Year Transfer Program. Staff estimates Metropolitan could receive 10,000 to 40,000 AF.

Other Sellers

Apart from the Dry Year Transfer Program and the YCWA transfers, other sellers are approaching Metropolitan. At this time, it is unclear if successful negotiations with these separate parties will occur. However, the requested authority would allow the General Manager to negotiate and execute agreements with these separate parties, subject to the terms listed below.

One-Year Water Transfer General Manager Delegation

Staff recommends that the Board authorize the General Manager to secure one-year water transfers with water districts for up to 75,000 AF of additional supplies. The price for these transfers can vary depending on market conditions but would be limited to a total cost of \$60 million. Assuming Metropolitan acquires 75,000 AF, the average cost would be limited to \$800/AF. Metropolitan may also be responsible for documented out-of-pocket expenses, including but not limited to administrative, legal, environmental, and engineering consultants' fees. Finalizing these transfers also includes possible storage and conveyance agreements with DWR and the water districts. These storage and conveyance agreements would be consistent with Articles 55 and 56 of Metropolitan's State Water Supply Contract. Metropolitan will be responsible for all losses, including Delta carriage water losses, associated with transfer water between the sellers' points of delivery and Metropolitan's service area. The losses are expected to range from 20 percent to 30 percent. In 2021, the final conveyance loss for transfer supplies was 25 percent.

Metropolitan's maximum cost would be \$60 million, and would use funds available from the State Water Project Budget. These State Water Project funds are available because staff initially budgeted for receiving a delivery of a 50 percent SWP allocation for calendar year 2022. However, it was always contemplated that funds from the State Water Project could be used for potential transfer purchases in a dry or critical year as these conditions coincide with lower State Water Project deliveries and costs.

DWR's operational projections show sufficient capacity at Banks pumping plant to convey any transfer water to Metropolitan due to the low SWP allocation. Any water transfers would help improve water supply reliability in 2022 and 2023. These water transfers are key in providing water to Metropolitan's State Water Project-dependent areas. Accordingly, staff requests that authorization be given to the General Manager to determine whether or not to move forward with these water transfers following completion of, and based upon, any environmental reviews that may be necessary under the California Environmental Quality Act (CEQA). No commitment to any given transfer would be made by the General Manager unless and until all applicable CEQA requirements have been met. Any such commitment would be subject to and consistent with the terms and conditions set forth above.

Policy

Metropolitan Water District Administrative Code Section 4203: Water Transfer Policy

Metropolitan Water District Administrative Code Section 11104: Delegation of Responsibilities

By Minute Item 52581, November 9, 2021, the Board recognized a statewide drought emergency, declared specified emergency conditions within the Metropolitan service area, and directed specified actions.

California Environmental Quality Act (CEQA)

CEQA determination for Option #1:

The proposed action is not defined as a project under CEQA because it involves the tentative approval of and funding for water transfers, but does not involve a commitment to any specific transfers at this time that may result in a potentially significant physical impact on the environment (Section 15378(b)(4) of the State CEQA Guidelines). Prior to final authorization of any water transfers by the General Manager, CEQA documentation will be prepared by the Lead Agency and reviewed and processed in accordance with CEQA and the State CEQA Guidelines.

CEQA determination for Option #2:

None required

Board Options

Option #1

- a. Authorize the General Manager to:
 - (a) Secure one-year water transfers with various water districts north of the Sacramento-San Joaquin River Delta for up to 75,000 AF of additional supplies.
 - (b) Secure storage and conveyance agreements with the Department of Water Resources and various water districts north of the Sacramento-San Joaquin River Delta to facilitate these transfers consistent with Articles 55 and 56 of Metropolitan's State Water Project Supply Contract.
 - (c) Pay up to \$60 million from the State Water Project Budget for such transfers.
- b. Grant the General Manager final decision-making authority to determine whether or not to move forward with these transfers following completion of any environmental reviews required under CEQA, subject to the terms and conditions set forth in this letter.

Fiscal Impact: Assuming Metropolitan purchases 75,000 AF at a price of \$800/AF, the cost would be \$60 million. The State Water Project Budget will be used to fund the water transfer purchase. Funds are available in the State Water Project Budget due to the low State Water Project allocation. Metropolitan staff currently estimates a more likely transfer amount of up to 50,000 AF, with a price range from \$358 to \$750/AF, which would result in an estimated cost of \$30 million. Staff is requesting authorization for the higher amount to provide Metropolitan flexibility in obtaining all available water transfer supplies, if needed. These funds would also be used for any additional administrative and related costs to implement the transfers.

Business Analysis: Purchasing additional transfer supplies will improve regional water supply reliability in 2022 and help mitigate impacts should dry conditions extend into 2023. Obtaining transfer supplies in 2022 could reduce the need to allocate supplies based on health and safety.

Option #2

Do not authorize the General Manager to enter one-year water transfer agreements with various water districts north of the Sacramento-San Joaquin River Delta.

Fiscal Impact: None

Business Analysis: Not authorizing one-year water transfers with various water districts north of the Sacramento-San Joaquin River Delta could result in a lost opportunity to secure additional water supplies in 2022, potentially resulting in lower water supply reliability in 2022 or 2023.

Staff Recommendation

Option #1



Brad Coffey
Manager, Water Resource Management

3/24/2022

Date



Adel Hagekhalil
General Manager

3/29/2022

Date

Ref# wrm12688897



Water Planning and Stewardship Committee

2022 North of Delta Water Transfers

Item 7-12
April 12, 2022

North of Delta Water Transfers



Reservoir Reoperation



Groundwater Substitution



Crop Idling / Fallowing

North of Delta Water Transfers



* Supplies may be made available through November if capacity is available

Factors Influencing Decision to Purchase Water



- **Water Supply Conditions**
 - Current 5% SWP Allocation
 - 2023 initial SWP allocation projected to be very low
 - Water transfers will meet demands in 2022 or SWP surface water carryover supplies in 2023
 - *SWP pump-in programs, transfer supply, and flex storage are additive to Human Health & Safety supplies*
- **Ability to move supplies through Delta**
 - Capacity available

2022 North of Delta Water Transfers



- **Price**
 - Price in negotiations
 - Authority to spend up to \$60 million
 - Using \$60 million on 75,000 AF would result on an average cost of \$800/AF
- **Budget**
 - Propose to utilize unused funds in the SWP Budget
 - *Approach for dry and critical years*
 - SWP Budget projected to be \$90 million under budget
- **Conveyance loss**
 - Varies between 20% to 30% (2021 – 25% loss)

2022 North of Delta Water Transfers



- **SWC Dry Year Water Transfers**
 - Estimated available water: ~ 10,000 – 20,000 AF
 - Metropolitan allocated: ~ 50% (5,000 – 10,000 AF)*
 - Price in negotiations
 - Impacted by curtailment
- **Yuba County Water Agency**
 - Estimated available water: ~ 158,000 AF
 - Metropolitan allocated: ~ 25% (38,000 AF)*
 - Surface water price: \$358 - \$447/AF
 - Groundwater substitution price: \$800/AF

**subject to carriage losses*

Board Options

Option #1

- Authorize the General Manager to secure one-year water transfers with water districts north of the Sacramento-San Joaquin River Delta for up to 75,000 acre-feet of additional supplies.
- Authorize the General Manager to secure storage and conveyance agreements with the Department of Water Resources and various water districts north of the Sacramento-San Joaquin River Delta to facilitate these transfers consistent with Articles 55 and 56 of the Metropolitan State Water Project Contract.
- Pay up to \$60 million from the State Water Project Budget for such transfers.
- Grant the General Manager final decision-making authority to determine whether or not to move forward with these transfers following completion of any environmental reviews required under CEQA, subject to the terms and conditions set forth in the Board letter.

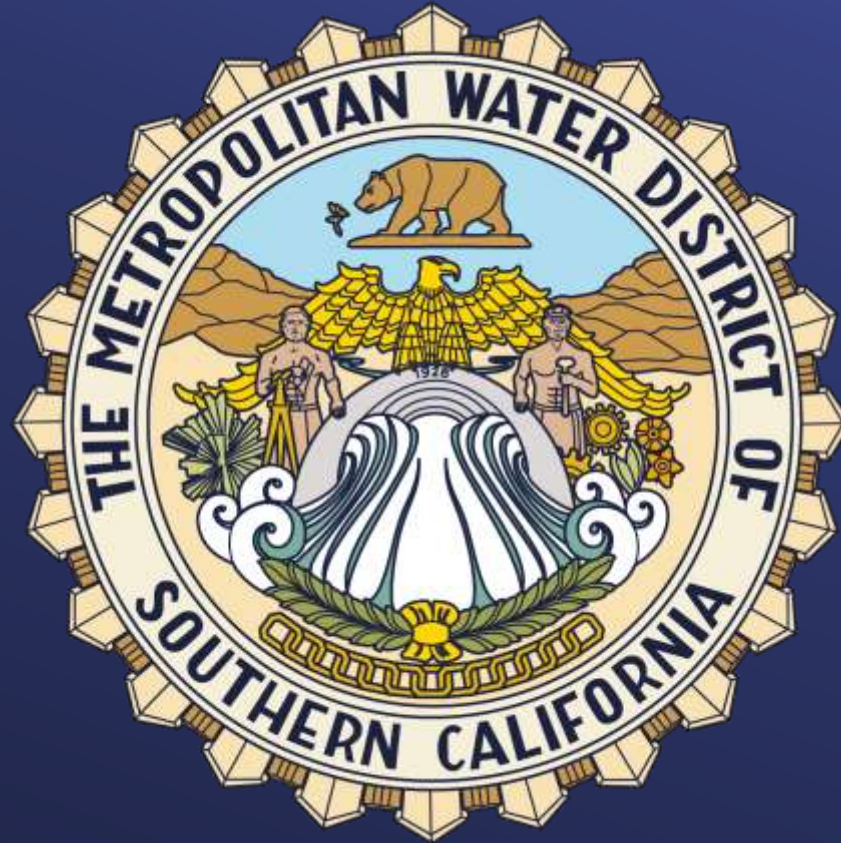
Board Options

Option #2

- Do not authorize the General Manager to enter one-year water transfer agreements with various north of the Sacramento-San Joaquin River Delta water districts.

Option #1

Staff Recommendation





● **Board of Directors**
Water Planning and Stewardship Committee

4/12/2022 Board Meeting

7-13

Subject

Appropriate \$20 million and authorize an amendment to the 2019 Reservoir Project Agreement with the Sites Project Authority to allow participation in the Sites Reservoir Project Amendment 3 Workplan; the General Manager has determined that the proposed actions are exempt or otherwise not subject to CEQA

Executive Summary

This Board letter requests authorization for Metropolitan to participate in and fund completion of the planning, permitting, and environmental review effort of the proposed multi-benefit Sites Reservoir Project (Project) over the next three years.

In 2017, 2019, and 2020, the Metropolitan Board (Board) authorized participation in the planning and environmental review/permitting effort for the proposed Project, which would be located in the Sacramento Valley in northern California, and appropriated \$1,500,000, \$4,212,500, and \$5,000,000, respectively. In 2021, the Sites Project Authority proposed a workplan and budget for funding the remaining three-year planning effort through 2024.

The 2021 workplan, referred to as the Amendment 3 Workplan, will focus on finalizing the environmental planning documents, project construction/operation permits, and a coordinated operations plan with the federal and state water projects. The Amendment 3 Workplan would be implemented through an amendment to the 2019 Reservoir Project Agreement (**Attachment 4**) previously executed by Metropolitan and other project participants. The overall participant budget for this Amendment 3 Workplan is \$142,863,000, which includes funding from the state of California, the United States Bureau of Reclamation (USBR), and 23 public water agencies.

For Metropolitan to continue its participation and reserve 311,700 acre-feet (AF) of storage rights, which is equivalent to approximately 50,000 AF of annual water supply reservoir releases, the additional planning cost share would total \$20 million. This cost-share amount is payable over a three-year period, \$5 million in calendar year (CY) 2022, \$7 million in CY 2023, and \$8 million in CY 2024. The obligation of the proposed Project participants to make the second and third installments is conditioned upon the Sites Project Authority and the Sites Reservoir Committee members each annually reapproving the Amendment 3 Workplan by an affirmative vote of at least 75 percent.

Continued participation in planning, permitting, and environmental review of the proposed Project will preserve the opportunity to work with the participants to jointly improve water supplies for both northern and southern California, enhance critical habitat and flows for native fish species, reduce the impacts of the frequent wet and dry hydrologic swings, and develop key analyses of project feasibility. The proposed Project is identified as one of only two priority surface water reservoir projects in the Governor's Water Resilience Portfolio and is one of the first multi-benefit reservoirs in California that would have dedicated water storage and yield to be used for fishery enhancement, instream flow releases in drier periods, and improved habitat for native species.

Metropolitan's agreement to participate in funding for the Amendment 3 Workplan does not commit Metropolitan to the proposed Project implementation.

Details

History

The proposed Project first emerged as part of a second stage of the State Water Project (SWP) proposed in the 1980s, which included multiple water-related projects in northern California. In 1996, the proposed Project was further analyzed by the California Department of Water Resources (DWR) and the USBR as part of the state and federal water cooperative effort called the CALFED Bay-Delta process. The CALFED environmental planning process resulted in a Programmatic Record of Decision that recommended implementation of the proposed Project as a component of the Preferred Program Alternative. In 2010, the Sites Project Authority was formed as a joint powers authority to continue moving forward with development of the proposed Project. There are 31 agencies participating in the planning phases of the proposed Project, including the state of California and the USBR. In 2020, the proposed Project was identified as a priority in the Governor's Water Resilience Portfolio.

Project Location

The proposed Project would be located in rural Glenn and Colusa counties, 60 miles north of Sacramento and about 10 miles west of the town of Maxwell in northern California (**Attachment 1**). The proposed Project location is separated from the greater Sacramento Valley by a foothill range to the east, making it suitable for off-stream storage of water from the Sacramento River.

Project Description

The proposed Project is currently being analyzed as a 1.3 million to 1.5 million AF off-stream surface water storage reservoir that would divert unregulated high-flow water from the Sacramento River. The proposed Project would require the construction of two dams up to 310 feet high and nine smaller saddle dams. Water to be stored in the proposed Project would be conveyed through existing intakes on the Sacramento River at Red Bluff Pumping Plant and Glenn-Colusa Diversion Dam. Water from these diversions would be conveyed through the existing Tehama-Colusa and the Glenn-Colusa canals to the proposed Project (**Attachment 2**). Combined, the diversions could deliver as much as 3,900 cubic feet per second of water from the Sacramento River to the proposed Project. Water diversions would only occur when conditions exist that are: (1) protective of aquatic resources; (2) after all other downstream senior water rights and conditions are met; and (3) only when excess flow conditions exist in the Delta. Water discharged from the proposed Project would flow through the existing Tehama-Colusa Canal, then into the Colusa Basin Drain before reaching the Sacramento River or the Upper Yolo Bypass. Project participants would divert their share of the water as it moves through the Tehama-Colusa Canal and river system, including Central Valley Project and SWP participating agencies south of the Delta. Dedicated environmental storage funded with state Proposition 1 monies would also utilize this system to convey supplies to enhance fishery flows, habitat, and water quality.

Key Benefits

For the Metropolitan service area, key benefits include improving drought-year supply reliability, securing additional sources for SWP dependent areas, providing low-salinity groundwater recharge, reducing risk of declining groundwater storage in the service area, and assisting in the Board's water quality blending salinity objective. Other key benefits of the proposed Project include providing:

- Off-Stream, Fish-Friendly Storage. The proposed Project would provide storage off-stream of the Sacramento River using existing modern-screened fish intakes designed to minimize fish losses and not block fish migration or spawning.
- California's Largest Dedicated Ecosystem Storage. Current methods of allocating water to support ecosystem health rely on minimum flow standards. The proposed Project will be one of the first reservoirs in California that will have dedicated ecosystem water and storage to enable more flexible and effective water management during dry times. This ecosystem water will be used to enhance instream fishery flows, water temperatures for spawning, pulse flows for out-migrating fish, riparian/floodplain habitat, water quality, and other environmental purposes.
- Climate Change Resiliency to Shrinking Snowpack. The proposed Project is envisioned as a climate change adaptation measure to manage the shrinking snowpack, to capture and manage the increased flood

flows for use in dry times, to enhance upstream Sacramento River water temperature management for migrating salmon, and to augment flows for fishery protection. In 2021, if the proposed Project had been in operation, it is estimated that there could be close to one million AF of additional water supplies, previously stored during wet periods, available for release over a two to three-year period to farms, cities, and the environment.

- Enhance Statewide Depleted Groundwater Basins. The state estimates that approximately 50 percent of the water that could be used to replenish California's groundwater will need to come out of the Sacramento River. The proposed Project is well suited to staging and conveying water to areas where groundwater depletion is producing undesirable effects.
- Local Flood Control and Recreational Opportunities. The proposed Project will enhance flood control protection for small communities prone to flooding near the reservoir project and expand recreational opportunities in northern California.
- Diversion Only During High-Flow Events. The proposed Project will enhance the ability to store unregulated flows during high precipitation events and release those water supplies for environmental and water supply purposes during dry water years.
- Significant Local and Statewide Support. The proposed Project has significant local, statewide, and bipartisan support from more than 175 organizations, agencies, businesses, and elected officials.

Tribal, Environmental, and Local Stakeholder Outreach

Sites Project Authority has been conducting an extensive outreach process to meet with local stakeholders, including environmental, salmon fishing, and tribal interests. During the past 18 months, over 40 meetings and workshops have been conducted to communicate and listen to additional input. This includes reaching out to over a dozen Native American tribes. The Sites Project team has also been holding monthly meetings with two local tribes (Yoche Dehe Wintun Nation and the Colusa Indian Community Council) with a known historical connection to the proposed Project area. In addition, the USBR has consulted with federally recognized tribes. The proposed Project does not occur in an area that would affect tribal hunting or water rights, nor is the alternative on tribal trust lands.

These listening sessions and public input have been used by the Sites Project Authority to substantially modify the proposed Project facilities and operations to be more protective of the environment and reduce local impacts.

Sites Project Authority Members

The Sites Project Authority was formed under California law in 2010 as a joint powers authority and currently consists of 11 public agencies: Colusa County, Glenn County, Tehama-Colusa Canal Authority, Colusa County Water District, Glenn-Colusa Irrigation District, Reclamation District 108, Westside Water District, Sacramento County Water Agency/City of Sacramento, Placer County Water Agency/City of Roseville, Western Canal Water District, and Maxwell Irrigation District. DWR and USBR also participate on the Sites Project Authority as non-voting members.

For decision-making purposes, approval of at least 75 percent of the total weighted vote of both the Sites Project Authority and the Sites Reservoir Committee members is required for any material change actions, including changes to budget, schedule, and workplan. For non-material changes, an affirmative vote of at least a majority of the total weighted vote is required.

Current Participating Project Partners

Currently, there are 31 agencies participating in the proposed Project, including the state of California and the USBR, with 23 agencies reserving water supply storage in the reservoir. In 2021, Rosedale-Rio Bravo Water Storage District and Irvine Ranch Water District joined in funding the planning effort. A full list of participating agencies is attached (**Attachment 5**). Metropolitan is currently a member of the Sites Reservoir Committee, which has certain decision-making authority in carrying out the budget and workplan.

Participating agencies are currently in the process of reviewing the Amendment 3 Workplan with their governing boards to consider approving participation and funding. The Sites Project Authority is also in discussions with other water agencies that have expressed an interest in participating in the proposed Project.

Project Environmental Documentation

An initial feasibility study and Administrative Draft Environmental Impact Report (EIR) were completed in 2013 by DWR. A Public Draft EIR/ Environmental Impact Statement (EIS) for the proposed Project was released by the Sites Project Authority (state lead agency) and the USBR (federal lead agency) in August 2017.

However, with the completion of a value-planning process in 2019, a Revised Draft EIR and Supplemental EIS were initiated due to modifications that included a smaller proposed Project footprint and operational changes to enhance environmental flows. The Revised Draft EIR and Supplemental EIS were released in November 2021, with a Final EIR/EIS scheduled for completion in fall 2022. The formal Notice of Determination and Record of Decision are scheduled for late 2022 or early 2023.

Responses to Common Questions About Potential Environmental Impacts

In November 2021, the Sites Project Authority released a fact sheet responding to common questions about the potential environmental impacts of the proposed Project (**Attachment 7**). In addition, the Revised Draft EIR/Supplemental Draft EIS includes more details related to the analysis of the proposed Project's potential impacts on a range of environmental resource areas.

In general, the proposed Project is an off-stream facility that does not dam a major river system or block fish migration or spawning. The proposed Project diverts water only during high-flow events. In addition, after discussions with state and federal fishery agencies, local stakeholders, environmental and Native American interests, the proposed Project operations were modified to be more protective of the environment. These modifications reduced the proposed Project diversions from the Sacramento River substantially, by almost 50 percent, as compared to the criteria proposed in 2017.

Storing water in Sites Reservoir during high-flow wet periods is part of the statewide strategy for adapting to changing climate conditions and to return much-needed flexibility to enhance environmental and water user needs.

Project Yield

The current operations model estimates the annual water yield of the proposed Project at approximately 207,000 to 260,000 AF per year. This model utilizes upstream Sacramento River flow and fishery regulatory criteria to protect instream river flows and water temperatures for salmon and other native species. Additional modeling analyses will continue to be conducted as further refinements are made to proposed Project operations.

Implementation of the proposed Delta Conveyance Project could allow for greater yields south of the Delta due to potential savings in Delta carriage water losses and south Delta regulatory restrictions. In 2021, if the proposed Project had been in operation, it is estimated that there would be close to one million AF of additional water supplies, previously stored during wet periods, and available for release over a two to three-year period to farms, cities, and the environment.

For Metropolitan, that additional storage in 2021 would amount to an approximate 230,000 AF share, which could have been used to secure water for our SWP exclusive areas, provide low-salinity supplies to reduce salt impacts and recharge our region's groundwater basins, and assist in meeting the Board's 500 mg/L water quality blending salinity objective.

Final Project formulation and annual operations will determine how the reservoir storage and yield will be divided between meeting water supply and environmental improvements funded by state Proposition 1 grant and federal Water Infrastructure Investment for the Nation (WIIN) Act appropriations.

Effect of Potential Climate Change Impacts

California's climate has always featured wide swings between drought and flood events. Storing water in natural snowpack reservoirs in the winter, which is slowly released through snowmelt into California's river system during the hotter spring/summer months, is critical to our economy and natural ecosystem. In a warming world,

the snowpack will become even more volatile, melting faster with more precipitation falling as rain. River flows will increase during the winter, causing more flooding, and less during the spring/summer months.

If the current climate change projections are right, the increasing temperature will require additional reservoirs to capture the more volatile runoff. Sites Reservoir helps provide more flexibility to water supply and fishery agencies to mitigate these climate change impacts. In addition, as climate temperatures increase, the effectiveness of the reservoir increase, both from a water supply and environmental flow perspective.

Operations and Coordination with Other Regional Reservoirs

The proposed Project is designed to divert water from the Sacramento River through existing state-of-the-art fish screens, only when actual flows on the Sacramento River exceed that needed by more senior water right holders, the Delta is in excess conditions, and based on stringent criteria to protect aquatic resources. Releases from the reservoir will be based on environmental needs, water user participant requests, and regulatory permit conditions.

The proposed Project's unique location, south of Lake Shasta and Lake Oroville but north of the Delta, allows it to enhance the environmental, water quality, flood control, recreational, and water supply functions those existing reservoirs serve. Sites Reservoir allows the state and federal fishery agencies and water supply operators more flexibility to adapt to changing river, climate, Delta flow, and water quality conditions.

As an example, the proposed Project could be operated in coordination with Lake Shasta to preserve and enhance cold water for endangered salmon in the Sacramento River. The proposed Project could also contribute to the increased fresh-water flow into the Delta during drier periods to assist with salinity management of this critical estuary. The proposed Project would not compete for the water resources stored in these state and federal facilities but would increase the total amount of managed water in storage. With the uncertainty associated with California's varying snowmelt runoff in the next century, having Sites Reservoir will enhance the conservation of our critical statewide water supplies.

Proposed Participant Budget and Metropolitan Cost Share

The proposed participant budget for the Amendment 3 Workplan is \$142,863,000, which includes:

Revenue Source	2022	2023	2024	TOTAL
State (Proposition 1)	\$ 18,300,000	--	--	\$ 18,300,000
Federal (WIIN Act)	\$ 10,000,000	\$ 20,000,000	\$ 20,000,000	\$ 50,000,000
Water User Participants	\$ 16,762,000	\$ 23,467,000	\$ 26,819,000	\$ 67,048,000
Sites Joint Powers Authority	\$ 505,000	\$ 505,000	\$ 505,000	\$ 1,515,000
Carryover Funds	\$ 6,000,000	--	--	\$ 6,000,000
TOTAL	\$ 51,567,000	\$ 43,972,000	\$ 47,324,000	\$ 142,863,000
Metropolitan Share	\$ 5,000,000	\$ 7,000,000	\$ 8,000,000	\$ 20,000,000

Costs associated with the proposed Project planning activities currently are being allocated to each water user participant based on its share of an assumed project yield of approximately 168,000 AF, which does not include the state or federal shares. The total assumed project yield for all participants is 234,000 AF. At present, Metropolitan holds 50,000 AF of participation rights in the proposed Project, which equates to 29.8 percent. Thus, Metropolitan's cost share for this next phase of planning activities would total \$20 million. This cost share would be paid over a three-year period, \$5 million in CY 2022, \$7 million in CY 2023, and \$8 million in CY 2024. Subsequently, costs associated with the proposed Project would be allocated based on each participant's share of the ultimate storage capacity approved for construction. As before, participation in this planning phase does not commit Metropolitan to participate in the construction phase of the proposed Project.

The obligation of the Project participants under the 2019 Reservoir Project Agreement and Third Amendment (**Attachments 3 and 4**) to make the second installment and third installment is conditioned upon the Sites Project

Authority and the Sites Reservoir Committee members each annually reapproving the Amendment 3 Workplan by an affirmative vote of at least 75 percent.

The final amount of water supplies available to Metropolitan and other participants from the proposed Project, if it is implemented, and the unit costs will depend on state and federal participation levels, the total dollar amount that Metropolitan and others elect to contribute through future phases, and the final costs and yield for the proposed Project.

Estimated Overall Project Cost

In 2019, the Sites Project Authority and participating agencies conducted a value-planning effort to minimize potential Project costs and impacts. That effort resulted in an improved Project that reduced costs from \$5.2 billion to approximately \$3.9 billion (in 2021 dollars). Cost savings came primarily from the removal of the proposed 13.5-mile Delevan Diversion pipelines and intake facility on the Sacramento River. The annual costs for operations, maintenance, and power are estimated at \$83 million to \$100 million annually. The estimated average cost per AF of yield ranges from \$700 to \$900 per AF at the reservoir. For Metropolitan, it is estimated that an additional \$300 to 400 per AF would be added to the yield cost to take care of conveyance losses in the Delta, SWP pumping costs, and Metropolitan water treatment costs. Efforts are underway by the Sites Project Authority to continue refining the proposed Project cost estimates as potential additional state and federal funding becomes available.

State and Federal Investment Funding

In 2017, the Sites Project Authority applied for state Proposition 1 grant funding to the California Water Commission. Proposition 1 included \$2.7 billion for new storage projects. In 2018, the California Water Commission approved \$816 million in state investment to advance the proposed Project, the largest grant award given to any project requesting Proposition 1 support. The state's Proposition 1 investment was increased in 2020 to \$836 million, and in 2022 to \$875 million. To date, the state has released approximately \$40 million to the proposed Project for completion of the environmental documentation and permit process. This state investment will pay for a portion of the reservoir cost, and in return, the state will receive flood control and recreation benefits as well as a portion of the water and storage produced by the proposed Project to be dedicated to environmental benefits in the watershed and Delta. On the federal side, the proposed Project has been awarded \$104 million in WIIN Act grants by the US Environmental Protection Agency (EPA). In addition, the proposed Project was awarded a \$449 million US Department of Agriculture loan that can be used to build the intertie between the Glen-Colusa Irrigation District and Tehama-Colusa Irrigation District canals to assist in water operations for the Project and its partners. The Sites Project Authority has been invited to apply for an EPA Water Infrastructure Finance and Innovation Act (WIFIA) loan in the amount of 49 percent of the total project cost (currently estimated to be \$2.2 billion). When executed, this low cost and flexible source of financing is estimated to reduce annual debt service payments by approximately 10 percent compared to without WIFIA.

Schedule

The proposed key milestones to be completed over the next three years include:

- Mar 2022 – Section 7 Biological Assessment for the US Fish & Wildlife Service (USFWS) and National Marine Fisheries Service (NMFS)
- Mar 2022 – CDFW Incidental Take Permit issued for Operations and Construction
- Oct 2022 – Final Revised EIR and Supplemental EIS issued
- Oct 2022 – Section 106 – National Historic Preservation Act Final Programmatic Agreement
- Dec 2022 – Federal ESA – Receive Biological Opinions from USFWS & NMFS
- Dec 2022 – Execute State (DWR) and Federal (USBR) Coordinated Operations Agreements
- Apr 2023 – Section 408 US Army Corps of Engineers Levee & Flood Permit and Central Valley Flood Protection Board Encroachment Permit issued
- Jun 2023 – Section 401 and 404 US EPA Clean Water Act Permit issued
- Jun 2023 – Section 1602 CDFW Streambed Alteration Agreement issued
- Oct 2023 – State Water Resources Control Board Water Right Permit issued
- Dec 2023 – 30 percent engineering design completed

- Nov 2023 – Proposition 1 Water Storage Investment Program final award from California Water Commission

Final engineering design for the project is scheduled to be completed by 2026, with reservoir construction completed by 2030 (**Attachment 6**).

Previous Metropolitan Board Authorizations

In April 2017, the Board authorized appropriation of \$1.5 million and participation in the Phase 1 Sites Reservoir Project Agreement. The \$35 million budget for the 2017/18 Workplan includes funding from the state of California, USBR, and public water agencies.

On February 12, 2019, the Board authorized appropriation of \$4,212,500, and participation in the 2019 Reservoir Project Agreement (**Attachment 3**) through December 31, 2019. The budget for the 2019 agreement was approximately \$15 million.

On October 12, 2020, the Board authorized appropriation of \$5 million and participation in the Phase 2 Workplan and the Second Amendment to the 2019 Reservoir Project Agreement. The budget for the Phase 2 Workplan was \$31.75 million, and included funding from the state of California, USBR, and public water agencies.

Policy

By Minute Item 45753, dated May 11, 2004, the Board adopted refined Bay-Delta finance and cost allocation policy principles for communication with the California Bay-Delta Authority and interested parties, as set forth in the letter signed by the Chief Executive Officer on April 20, 2004.

By Minute Item 46637, dated April 11, 2006, the Board adopted the policy principles regarding long-term actions for the Sacramento-San Joaquin River Delta as described in the revised letter signed by the General Manager on April 4, 2006.

By Minute Item 47135, dated June 12, 2007, the Board supported, in principle, the proposed Delta Action Plan, as set forth in the letter signed by the General Manager on May 25, 2007.

Metropolitan Water District Administrative Code Section 11104: Delegation of Responsibilities

California Environmental Quality Act (CEQA)

CEQA determination for Option #1:

The proposed action is not defined as a project under CEQA because it involves the creation of government funding mechanisms or other government fiscal activities which do not involve any commitment to any specific project which may result in a potentially significant physical impact on the environment (Section 15378(b)(4) of the State CEQA Guidelines), and involves only feasibility or planning studies for possible future actions which the Board has not approved, adopted or funded (Section 15262 of the State CEQA Guidelines). In addition, the proposed action is categorically exempt under the provisions of CEQA and the State CEQA Guidelines because the proposed action involves basic data collection and research activities which do not result in a serious or major disturbance to an environmental resource, which may be strictly for information gathering purposes, or as part of a study leading to an action which a public agency has not yet approved, adopted, or funded (Class 6, Section 15306 of the State CEQA Guidelines).

CEQA determination for Option #2:

None required

Board Options

Option #1

- a. Authorize the General Manager to sign the Third Amendment to the 2019 Reservoir Project Agreement with the Sites Project Authority and other participants for participation in the Amendment 3 Workplan process for an amount not to exceed \$20,000,000; and
- b. Appropriate \$20,000,000 for the Amendment 3 Workplan based on reserving 311,700 acre-feet of storage rights, which is equivalent to approximately 50,000 AF of annual water supply reservoir releases.

Fiscal Impact: \$20,000,000; This cost share would be paid over a three-year period, \$5 million in CY 2022, \$7 million in CY 2023, and \$8 million in CY 2024. CY 2023 and 2024 funding is included in the Proposed Biennial Budget for FYs 2022/23 and 2023/24. CY 2022 funding is unbudgeted, but the additional costs will be offset by lower State Water Contract power costs as a result of the low SWP allocation.

Business Analysis: Allows active participation in the development of the Project, its benefits, and associated operations plan that could impact SWP supplies. Maintains option for reserving priority status in participating in future Project implementation.

Option #2

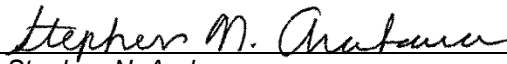
Do not authorize the General Manager to sign the Third Amendment to the 2019 Reservoir Project Agreement with the Sites Project Authority for participation in the Amendment 3 Workplan.


Fiscal Impact: None

Business Analysis: Vacates the option to participate in the benefits of the Project.

Staff Recommendation

Option #1

 3/24/2022
 Stephen N. Arakawa
 Manager, Bay-Delta Initiatives Date

 3/30/2022
 Adel Hagekhalil
 General Manager Date

Attachment 1 – Sites Reservoir Location Map

Attachment 2 – Sites Reservoir Facilities Map

Attachment 3 – 2019 Reservoir Project Agreement

Attachment 4 – Third Amendment to the 2019 Reservoir Project Agreement

Attachment 5 – Sites Reservoir Project Participants

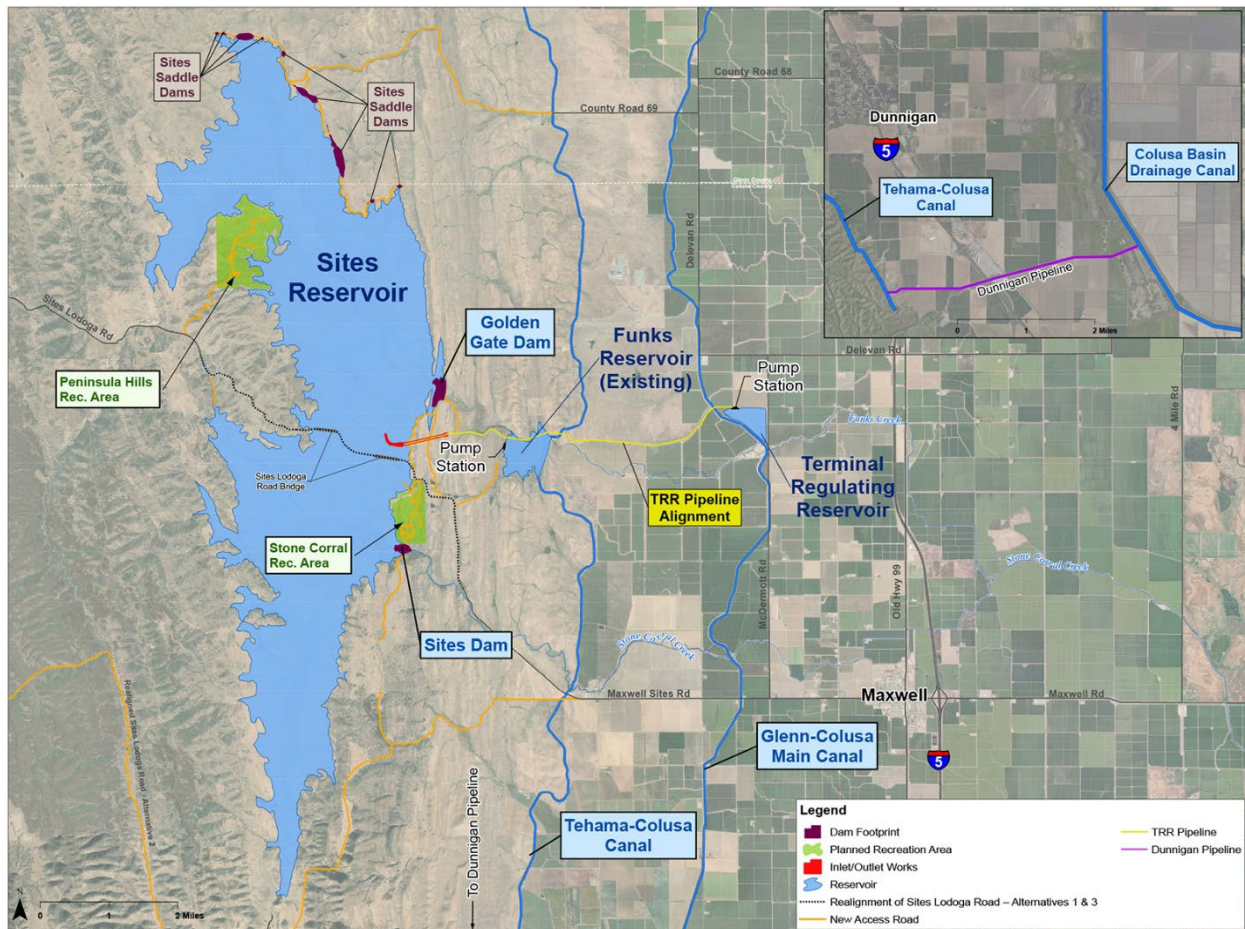
Attachment 6 – Sites Reservoir Schedule

Attachment 7 – Sites Reservoir RDEIR-SDEIR Common Questions & Responses

Sites Reservoir – Location Map



Sites Reservoir Project – Facilities Map



SITES PROJECT AUTHORITY

2019 RESERVOIR PROJECT AGREEMENT

DATED AS OF APRIL 1, 2019

BY AND AMONG

SITES PROJECT AUTHORITY

AND

THE PROJECT AGREEMENT MEMBERS LISTED HEREIN

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THIS 2019 RESERVOIR PROJECT AGREEMENT is made effective as of April 1, 2019, by and among (a) the Sites Project Authority (the “Authority”) and (b) certain Members and/or Non-Member Participating Parties, listed on the attached **Exhibit A** and is made with reference to the following facts:

RECITALS

A. Various public agencies in the Sacramento River Watershed created the Authority in 2010. Various public agencies in the Sacramento River Watershed, including certain Project Agreement Members, previously entered into the Fourth Amended and Restated Sites Project Authority Joint Exercise of Powers Agreement, dated November 21, 2016, pursuant to which they are developing the Sites Reservoir Project, which is contained in the CalFed Bay-Delta program Programmatic Record of Decision, August 28, 2000. The Joint Powers Agreement provides a mechanism for “Project Agreements” (as defined in the Joint Powers Agreement) to undertake specific work activities for the development of the Sites Reservoir Project. On September 17, 2018, the Authority’s Board of Directors also adopted Bylaws for Phase 2 of the Sites Reservoir Project, which also address Project Agreements and their management through Reservoir Project Committees.

B. On April 11, 2016, certain Authority Members of the Authority entered into the PHASE 1 RESERVOIR PROJECT AGREEMENT which was amended and restated as of November 21, 2016.

C. The Authority and certain Project Agreement Members have undertaken a process to negotiate a 2019 Reservoir Project Agreement to undertake specific work activities.

D. The Project Agreement Members wish to continue development of the Project pursuant to a Work Plan approved by the Authority on November 19, 2018 and the Reservoir Project Committee on November 16, 2018 and a summary of which is described in **Exhibit B** attached hereto. The Project will be undertaken in the name of the Authority and in accordance with the Authority’s stated Mission as set forth in the fourth Recital of the Joint Powers Agreement. The Project Agreement Members are entering into this Project Agreement to satisfy the requirements of Article VI of the Joint Powers Agreement.

E. All members of the Authority have also been given the opportunity to enter into this Project Agreement. The form of this Project Agreement was determined to be consistent with the Joint Powers Agreement and the Bylaws and approved by the Authority’s Board of Directors on September 17, 2018.

F. The Authority and the Project Agreement Members acknowledge that one of the Authority’s goals, in addition to providing environmental benefits, is to develop and make both a water supply and storage capacity available to water purveyors and landowners within the Sacramento River watershed, and in other areas of California, who are willing to purchase either or both a water supply and storage capacity from the Sites Reservoir Project, and that the Project Agreement Members should have a preference to the water supply or storage capacity.

G. The Authority and the Project Agreement Members acknowledge that the approval and execution of this Project Agreement does not commit the Authority, the Project Agreement Members or any other party to any definite course of action regarding the Sites Reservoir Project. As

set forth in Section 6(a) of this Project Agreement, there are no assurances that the Sites Reservoir Project will be constructed. One of the prerequisites that would need to be fulfilled before the Sites Reservoir Project could be constructed is the completion of environmental review under the California Environmental Quality Act (“CEQA”). As part of this environmental review, the Authority, as the lead agency that is conducting the review, reserves all of its rights, responsibilities, obligations, powers, and discretion under the provisions of CEQA to: (i) evaluate the environmental impacts of the Sites Reservoir Project; (ii) deny and disapprove the Sites Reservoir Project if the environmental review reveals significant environmental impacts that cannot feasibly be mitigated; (iii) adopt feasible mitigation measures and/or an alternative to the Sites Reservoir Project to avoid or lessen significant environmental impacts; or (iv) determine that any significant environmental impacts that cannot feasibly be mitigated are outweighed by the economic, social or other benefits of the Sites Reservoir Project.

AGREEMENT

THEREFORE, in consideration of the facts recited above and of the covenants, terms and conditions set forth herein, the parties agree as follows:

Section 1 Definitions

“Authority” means the Sites Project Authority, a joint exercise of powers agency created pursuant to the Joint Powers Agreement.

“Authority Members” means the members of the Authority executing the Joint Powers Agreement, as such members may change from time-to-time in accordance with Section 3.3, Section 7.12 and Section 7.2 of the Joint Power Agreement.

“Board” means the Board of Directors of the Authority.

“Bylaws” means the Bylaws for Phase 2 of the Sites Reservoir Project adopted by the Authority on September 17, 2018, as such Bylaws may be amended or supplemented from time-to-time in accordance therewith.

“Committee” means the Reservoir Project Committee described in Section 3 of this Project Agreement.

“Fiscal Year” means the fiscal year of the Authority, which currently begins on January 1 of each calendar year and ends on December 31 of each calendar year, or such other twelve month period which may be designated by the Authority as its Fiscal Year.

“Joint Power Agreement” means the Fourth Amended and Restated Sites Project Authority Joint Exercise of Powers Agreement, dated November 21, 2016, as such agreement may be amended or supplemented from time-to-time in accordance therewith.

“Law” means Articles 1 through 4 (commencing with Section 6500), Chapter 5, Division 7, Title 1 of the California Government Code, as amended or supplemented from time-to-time.

“Material Change Item” shall have the meaning ascribed thereto in the Bylaws.

“Participation Percentage” means the Participation Percentages as set forth in **Exhibit A** hereto, as such Participation Percentages may be modified in accordance herewith.

“2019 Budget” means the 2019 Budget approved by the Committee on November 16, 2018 and the Authority on November 19, 2018, as such 2019 Budget may be amended or supplemented from time-to-time in accordance with the Joint Powers Agreement, this Project Agreement and the Bylaws.

“Project” or “Sites Reservoir Project” means the Sites Reservoir Project as described in **Exhibit B** hereto, as modified from time-to-time in accordance therewith.

“Project Agreement” means this Project Agreement, dated as of April 1, 2019, by and among the Authority and the Project Agreement Members listed on **Exhibit A** from time-to-time, as such Project Agreement may be amended or supplemented from time-to-time in accordance herewith.

“Project Agreement Members” means (a) the Authority Members listed in the attached **Exhibit A**, (b) the Non-Member Participating Parties listed in the attached **Exhibit A** and (c) additional Authority Members or Non-Member Participating Parties who execute this Project Agreement from time-to-time pursuant to Section 10 hereof.

“Work Plan” means the activities described in **Exhibit B** hereto as such description may be amended or supplemented from time-to-time.

Section 2 Purpose

The purpose of this Project Agreement is to permit the Authority and the Project Agreement Members to continue development of the Project in the name of the Authority consistent with the Joint Powers Agreement. The activities undertaken to carry out the purposes of this Project Agreement shall be those, and only those, authorized by the Authority and the Committee in accordance with this Project Agreement, the Joint Powers Agreement and the Bylaws. Without limiting in any way the scope of the activities that may be undertaken under this Project Agreement, such activities shall include funding the Authority’s costs undertaken to carry out the directions of the Committee. Notwithstanding any other provision of this Project Agreement, no activity undertaken pursuant to this Project Agreement shall conflict with the terms of the Joint Powers Agreement or the Bylaws, nor shall this Project Agreement be construed in any way as creating an entity or combination of entities that is separate and apart from the Authority.

Section 3 Reservoir Project Committee

(a) Committee Membership. The business of the Project Agreement Members under this Project Agreement shall be conducted by a Committee consisting of one member appointed by each Project Agreement Member. Appointment of each member of the Committee shall be by action of the governing body of the Project Agreement Member appointing such member, and shall be effective upon the appointment date as communicated in writing to the Authority. Project Agreement Members may also appoint one or more alternate Committee members, which alternate(s) shall assume the duties of the Committee member in case of absence or unavailability of such member. Project Agreement Members may also appoint an alternate Committee member from a different Project Agreement Member for convenience in attending Committee meetings, who may

cast votes for such Project Committee Members, provided that no person shall represent more than five other Project Committee Members and more than 20% of the weighted vote as provided in Subsection 3(g) at any given meeting; provided however, that if the appointing Project Committee Member is an officer of the Committee, the appointed alternate Committee member shall not assume the capacity of such officer position. In order to serve as an alternate Committee member, a written evidence of such designation shall be filed with the Committee Secretary. Each member and alternate member shall serve on the Committee from the date of appointment by the governing body of the Project Agreement Member he/she represents and at the pleasure of such governing body.

(b) Officers. The Committee shall select from among its members a Chairperson, who shall annually act as presiding officer, and a Vice Chairperson, to serve in the absence of the Chairperson. There also shall be selected a Secretary, who may, but need not be, a member of the Committee and a Treasurer. All elected officers shall be elected and remain in office at the pleasure of the Committee, upon the affirmative vote of at least a majority of the total weighted vote as provided at Subsection 3(g);

(c) Treasurer. The Authority Treasurer shall serve as the Committee's Treasurer and shall act as the Committee's liaison to the Authority's General Manager and Authority Board on financial matters affecting the Committee. The Treasurer shall prepare and provide regular financial reports to the Committee as determined by the Committee. The Treasurer shall not be required to be a member of the Board of Directors of the Authority.

(d) General Manager. The Authority's General Manager shall (1) serve as the Project Director responsible for advancing the Sites Reservoir Project, (2) be a non-voting member of the Committee, (3) ensure coordination of activities between the Authority and Committee, (4) convene, on an as needed basis, legal representatives from the Project Agreement Members and Authority Members to advise the General Manager on legal matters that will be reported to the Committee and Authority on a timely basis, and (5) coordinate the activities between the Committee and both the United States Bureau of Reclamation and Department of Water Resources.

(e) Meetings. The Chairperson of the Committee or a majority of a quorum of the members of the Committee are authorized to call meetings of the Committee as necessary and appropriate to conduct its business under this Project Agreement. All such meetings shall be open to the public and subject to the requirements set forth in the Ralph M. Brown Act (Government Code Sections 54950 et seq.).

(f) Quorum. A majority of the Committee members based on the weighted vote provided in Subsection 3(g) shall constitute a quorum of the Committee.

(g) Voting. Notwithstanding any provisions of the Bylaws that might be construed otherwise, for purposes of this Project Agreement, the voting rights of each Project Agreement Member shall be determined as follows:

(i) an equal number of voting shares for each Project Agreement Member as defined in **Exhibit A**, that being for each Project Agreement Member, 1 divided by the total number of Project Agreement Members, multiplied by 50; plus

- (ii) an additional number of voting shares for each Project Agreement Member equal to its respective Participation Percentage described in **Exhibit A**, multiplied by 50, using the version of **Exhibit A** in effect at the time the Committee votes.

The resulting weighted total of all voting shares shall equal 100. An Example of this weighted voting incorporating the formulas for determining participating percentages is attached at **Exhibit A**.

(h) Decision-making Thresholds. In accordance with Section 5.8 of the Bylaws, for purposes of this Project Agreement, approval by the Committee for material and non-material changes shall be as follows: for actions other than Material Change Items, action of the Committee shall be taken upon the affirmative vote of at least a majority of the total weighted vote as provided in Subsection 3(g); for Material Change Items, action shall be taken upon the affirmative vote of at least 75% of the total weighted vote as provided at Subsection 3(g).

(i) Delegation of Authority/Powers and Limitations Thereon. Subject to the direction of the governing bodies of the Project Agreement Members, the Committee shall undertake all actions necessary for carrying out this Project Agreement, including but not limited to setting policy for the Project Agreement Members acting under this Project Agreement with respect to the Project; recommending actions to be undertaken in the name of the Authority under this Project Agreement; determining the basis for calculation of the Participation Percentages for each fiscal year, and the timing required for payments of obligations hereunder; authorizing expenditure of funds collected under this Project Agreement within the parameters of the Work Plan and budget; and such other actions as shall be reasonably necessary or convenient to carry out the purposes of this Project Agreement. This Section 3(i) is subject to any and all limitations set forth in the Joint Powers Agreement and Bylaws, including but not limited to, any action that constitutes a material change as defined at Section 12.3 of the Bylaws requiring the approval of both the Committee and the Authority Board, and actions specified in Section 10 of the Bylaws which remain exclusively with the Authority Board.

Section 4 Funding

(a) Budget. The Committee shall, in cooperation with the Authority's Board, provide and approve both a Fiscal Year operating budget and reestablish a Phase 2 budget target, annually or more frequently as needed. On November 19, 2018, the Board approved the Fiscal Year 2019 operating budget. The Work Plan, including annual budget, dated November 19, 2018, is attached at Exhibit B, along with the budget approval process and requirements. The Project Agreement Members shall contribute their respective pro-rata share of the budgeted sums in accordance with Section 5 of this Project Agreement; provided, however, that in no event shall the amount paid by a Project Agreement Member exceed \$60 per acre-foot without the approval of such Project Agreement Member.

(b) Fiscal Responsibilities. Exhibit B specifies the Authority's requirements regarding the fiscal responsibilities of the Committee.

(c) Allocation of Project Agreement Expenses. The Project Agreement Members agree that all expenses incurred by them and/or by the Authority under this Project Agreement are the costs of the Project Agreement Members and not of the Authority or the Project Agreement Members of the Authority that do not execute this Project Agreement, and shall be paid by the Project Agreement Members; provided, however, that this Section shall not preclude the Project

Agreement Members from accepting voluntary contributions and/or Authority Board's pre-approval of in-kind services from other Authority Members, or Project Agreement Members, and applying such contributions to the purposes hereof. The Project Agreement Members further agree to pay that share of any Authority costs reasonably determined by the Authority's Board to have been incurred by the Authority to administer this Project Agreement. Before the Authority's costs of administering this Project Agreement become payable, the Authority will provide its calculation of such costs to the Committee, which will have the right to audit those costs and provide comments on the calculation to the Authority Board. The Authority Board shall consider the Committee's comments, if any, including the results of any such audit, in a public meeting before the Authority Board approves a final invoice for such costs.

Section 5 Participation Percentages

Subject to Section 4(a), each Project Agreement Member shall pay that share of costs for activities undertaken pursuant to this Project Agreement, whether undertaken in the name of the Authority or otherwise, equal to such Project Agreement Member Participation Percentage as established in this Section 5. The initial Participation Percentages of the Project Agreement Member are set forth in the attached **Exhibit A**. These initial Participation Percentages are for the purpose of establishing the Reservoir Project Agreement Members respective responsibilities for costs under this Project Agreement and other amounts contained in the approved Fiscal Year budget and Phase 2 budget target, which is defined as the "Reservoir Total" on **Exhibit B**. The Participation Percentages of each Project Agreement Member will be modified by the Committee from time to time as the result of the admission of a new Project Agreement Member to this Project Agreement or the withdrawal of a Project Agreement Member, and **Exhibit A** shall be amended to reflect all such changes. Such amended **Exhibit A** shall, upon approval by the Committee, be attached hereto and upon attachment, shall supersede all prior versions of **Exhibit A** without the requirement of further amendment of this Project Agreement.

Section 6 Future Development of the Sites Reservoir Project

(a) The Project Agreement Members acknowledge that the Sites Reservoir Project is still in the conceptual stage and there are no assurances that the Sites Reservoir Project will be constructed or that any water supplies will be developed as a result of this Project Agreement. **Exhibit B** includes a partial list of some of the risks and uncertainties that underlie the lack of assurances. The Project Agreement Members therefore recognize that they are not acquiring any interest in the Sites Reservoir Project other than their interest in the specific permitting, design, engineering and other materials that will be in the Work Plan Project as described in **Exhibit B**, and that the Project Agreement Members are not acquiring under this Project Agreement any interest in any future water supply or access to any other services from the Sites Reservoir Project except as provided hereunder.

(b) Without limiting the foregoing, any Project Agreement Member that elects to continue participating in the development, financing, and construction of the Sites Reservoir Project to the time when the Authority offers contracts for a water supply or other services, will be afforded a first right, equal to that Project Agreement Member's Participation Percentage, to contract for a share of any water supply that is developed, and for storage capacity that may be available from, the Sites Reservoir Project. In any successor phase agreements, Project Agreement Members who are parties to this Project Agreement that submitted a proposal to participate before February 15, 2019, shall be granted rights to contract for a share of any water supply that is developed, and for storage capacity

that may be available from the Sites Reservoir Project prior to the rights of those becoming parties to this Project Agreement after that date. The Authority and the Project Agreement Members will cooperate on the drafting of provisions in the water supply contract that will allow a Project Agreement Member or other eligible entity that commits to purchase a Sites Reservoir Project water supply to transfer water that the entity may not need from time to time on terms and conditions acceptable to the such Project Agreement Member.

Section 7 Indemnity and Contribution

(a) Each Project Agreement Member, including Authority Members acting in their capacity as Project Agreement Members, shall indemnify, defend and hold the Authority, Authority Members and other Project Agreement Members and their directors, trustees, officers, employees, and agents harmless from and against any liability, cause of action or damage (including, without limitation, reasonable attorneys' fees) arising out of the performance of this Project Agreement multiplied by each Project Agreement Member's Participation Percentage. Notwithstanding the foregoing, to the extent any such liability is caused by the negligent or intentional act or omission of an Authority Member or a Project Agreement Member, such Authority Member or Project Agreement Member shall bear such liability.

(b) Each Project Agreement Member, including Authority Members acting in their capacity as Project Agreement Members, shall indemnify, defend and hold the Authority and the members of the Authority that do not execute this Project Agreement and their directors, trustees, officers, employees and agents harmless from and against any liabilities, costs or expenses of any kind (including, without limitation, reasonable attorney's fees) arising as a result of the activities described in or undertaken pursuant to this Project Agreement multiplied by each Project Agreement Member's Participation Percentage. All assets, rights, benefits, debts, liabilities and obligations attributable to activities undertaken under this Project Agreement shall be assets, rights, benefits, debts, liabilities and obligations solely of the Project Agreement Members in accordance with the terms hereof, and shall not be the assets, rights, benefits, debts, liabilities and obligations of the Authority or of those members of the Authority that have not executed this Project Agreement. Members of the Authority not electing to participate in the Project Agreement shall have no rights, benefits, debts, liabilities or obligations attributable to the Project Agreement.

Section 8 Term

(a) No provision of this Project Agreement shall take effect until this Project Agreement has been duly executed and delivered by the Authority and by one Project Agreement Member.

(b) The term of this Project Agreement shall continue until December 31, 2019, unless extended in writing by the parties hereto.

Section 9 Withdrawal From Further Participation

To withdraw from this Project Agreement, a Project Agreement Member shall give the Authority and other Project Agreement Members written notice of such withdrawal not less than 30 days prior to the withdrawal date. As of the withdrawal date, all rights of participation in this Project Agreement shall cease for the withdrawing Project Agreement Member. The financial obligation as prescribed in the Bylaws' Section 5.11 in effect on the withdrawal date, shall consist of the

withdrawing Member's share of the following costs: (a) payment of its share of all non-contract costs incurred prior to the date of the written notice of withdrawal, and (b) those contract costs associated with funds approved in either contract amendments or task orders that were approved prior to the date of the written notice of withdrawal for which the contractor's work extends beyond the withdrawal date. However, a withdrawing member shall have no liability for any change order or extensions of any contractor's work that the remaining Project Agreement Members agree to after the withdrawing Member provides written notice of withdrawal. Withdrawal from this Project Agreement shall not be considered a Material Change Item and shall not be subject to the Dispute Resolution process provided for in Section 13.3 of the Bylaws.

Section 10 Admission of New Project Agreement Members

Additional Members of the Authority and Non-Member Participating Parties may become Project Agreement Members upon (a) confirmation of compliance with the membership requirements established in the Bylaws, (b) the affirmative vote of at least 75% of the total weighted vote as provided at Subsection 3(g) of the then-current Project Agreement Members, (c) the affirmative vote of at least 75% of the total number of Directors of the Authority, and (d) upon such conditions as are fixed by such Project Agreement Members.

Section 11 Amendments

This Project Agreement may be amended only by a writing executed by the Authority and at least 75% of the total weighted vote as provided in Subsection 3(g) of the then-current Committee members.

Section 12 Assignment; Binding on Successors

Except as otherwise provided in this Project Agreement, the rights and duties of the Project Agreement Members may not be assigned or delegated without the written consent of the other Project Agreement Members and the Authority, which consent shall not be unreasonably withheld. Any attempt to assign or delegate such rights or duties in contravention of this Project Agreement shall be null and void. Project Agreement Members may assign and delegate their rights and duties under this Project Agreement to other Project Agreement Members, and they may assign, sell, trade, or exchange all or a fraction of the potential benefits (e.g. acre-feet of water supply, megawatt-hours of power) they expect to receive through their participation in this Project Agreement. Any approved assignment or delegation shall be consistent with the terms of any contracts, resolutions, indemnities and other obligations of the Authority then in effect. This Project Agreement shall inure to the benefit of, and be binding upon, the successors and assigns of the Authority and the Project Agreement Members.

Section 13 Counterparts

This Project Agreement may be executed by the Authority and each Project Agreement Member in separate counterparts, each of which when so executed and delivered shall be an original, but all such counterparts shall together constitute but one and the same instrument. Facsimile and electronic signatures shall be binding for all purposes.

Section 14 Merger of Prior Agreements

This Project Agreement and the exhibits hereto constitute the entire agreement between the parties and supersede all prior agreements and understanding between the parties relating to the subject matter hereof. This Project Agreement is intended to implement, and should be interpreted consistent with, the Joint Powers Agreement.

Section 15 Severability

If one or more clauses, sentences, paragraphs or provisions of this Project Agreement shall be held to be unlawful, invalid or unenforceable, the remainder of the Project Agreement shall not be affected thereby.

Section 16 Choice of Law

This Project Agreement shall be governed by the laws of the State of California.

Section 17 Notices

Notices authorized or required to be given under this Project Agreement shall be in writing and shall be deemed to have been given when mailed, postage prepaid, or delivered during working hours, to the addresses set forth **Exhibit E (“Notifications”)**, or to such other address as a Project Agreement Member may provide to the Authority and other Project Agreement Members from time to time.

IN WITNESS WHEREOF, the Authority and Project Agreement Members hereto, pursuant to resolutions duly and regularly adopted by their respective governing bodies, have caused their names to be affixed by their proper and respective officers on the date shown below:

Dated: _____

SITES PROJECT AUTHORITY

By: _____

Name:

Title:

[PROJECT AGREEMENT MEMBER]

Dated: _____

(Authority & Project Agreement Member)

By: _____

Name:

Title:

EXHIBIT A

PROJECT AGREEMENT MEMBERS

Participant	Participation (Annualized Acre-Foot)	
	Preliminary	Percent
American Canyon, City of	~4,000	1.7%
Antelope Valley-East Kern Water Agency	~500	0.2%
Carter Mutual Water Company ‡	~500	0.2%
Coachella Valley Water District	~10,000	4.3%
Colusa County	~10,000	4.3%
Colusa County Water District	~13,100	5.6%
Desert Water Agency	~6,500	2.8%
Glenn-Colusa Irrigation District	~5,000	2.1%
Metropolitan Water District of S. CA	~50,000	21.4%
Pacific Resources Mutual Water Company ‡	~20,000	8.5%
Reclamation District 108	~5,000	2.1%
San Bernardino Valley Municipal Water District	~21,400	9.1%
San Geronio Pass Water Agency	~14,000	6.0%
Santa Clara Valley Water District	24,000	10.3%
Santa Clarita Valley Water Agency	~5,000	2.1%
TC-4: Cortina Water District	~300	0.1%
TC-4: Davis Water District	~2,000	0.9%
TC-4: Dunnigan Water District	~2,774	1.2%
TC-4: LaGrande Water District	~1,000	0.4%
Westside Water District	~15,000	6.4%
Wheeler Ridge-Maricopa Water Storage District	14,000	6.0%
Zone 7 Water Agency	~10,000	4.3%
Potential new participants	TBD	%
Total:	234,074	100.0%

Participation Percentages exclude State of California and United States Bureau of Reclamation share of the Project.

NOTE: Any annualized amounts listed for Phase 2 are preliminary and are based on best estimates received after participants' respective review of the draft financing plan and draft Phase 2 Reservoir Project Agreement. These amounts do not represent the results of any action having been taken by the participants' respective governing body to formally execute the Phase 2 Reservoir Project Agreements. Final participation amounts will be established after interim financing terms and conditions have been provided and incorporated into the final Phase 2 Reservoir Project Agreement.

‡ Denotes a non-public agency. Refer to California Corporations Code Section 14300 et. seq. with additional requirements provided in both the Public Utilities Code and Water Code.

EXHIBIT B

2019 WORK PLAN

2018 November 16 Reservoir Committee Meeting - Attachment A - Agenda Item 3-3

Category	(Multiple Items)
Action	(Multiple Items)
Funding Source	(Multiple Items)
Work Manager	(All)
Priority	(All)

Report: **Reservoir Committee 2019 Work Plan & Budget**
Report Date: 2018 Nov 12

Expense (-) or Revenue (+)	Cost Center	Task	Resource	Reprioritize	Proposed Budget
				Currently Approved Budget	Authority= 12 mon Res. Comm= 9 mon
				Sum of Total End of Phase 1	Sum of Total 2019
Expense	C.R. Policy			\$ -	\$ (2,067,094)
	Engagement			\$ -	\$ (135,000)
	Operations	Contingency		\$ -	\$ -
		Env Interests		\$ (44,936)	\$ (120,552)
		Exchange		\$ -	\$ (75,550)
		Modeling		\$ (325,000)	\$ (998,480)
		Op POA		\$ (59,488)	\$ (61,040)
		Staff+		\$ (69,705)	\$ (417,555)
		Storage		\$ (17,824)	\$ (136,300)
		Water Rights		\$ (29,712)	\$ (204,264)
		Water Rights+		\$ (29,712)	\$ (119,892)
	Operations Total			\$ (576,377)	\$ (2,133,633)
	Power	Grid Interconn+		\$ -	\$ (1,097,880)
		H2oPower+		\$ -	\$ (668,453)
		Staff Aug+		\$ -	\$ (632,880)
		Staff+		\$ -	\$ -
	Power Total			\$ -	\$ (2,399,213)
	Res. Comm. O	Advisory		\$ (43,200)	\$ (82,565)
		Office		\$ -	\$ (133,100)
		Participation		\$ (109,800)	\$ (210,600)
		PROCURE		\$ -	\$ (80,240)
		PROCURE-2		\$ -	\$ -
		Rebalance		\$ (8,400)	\$ (134,070)
		Staff		\$ (6,000)	\$ (1,739,573)
		Staff Aug		\$ -	\$ (4,237,495)
		Staff Aug+		\$ -	\$ (225,990)
		Staff+		\$ -	\$ -
		Support		\$ (26,925)	\$ (107,678)
		Technology		\$ (3,330)	\$ (13,280)
		USDA-1		\$ (10,000)	\$ (10,800)
		WSIP-1		\$ (51,440)	\$ (81,960)
	Res. Comm. OH Total			\$ (259,095)	\$ (7,057,351)
	Water	Dam Design		\$ -	\$ (8,776,500)
		Economics+		\$ -	\$ (329,880)
		EIR-EIS		\$ (165,000)	\$ (2,371,767)
		Field Studies		\$ (200,000)	\$ (887,876)
		Field Surveys		\$ -	\$ (91,980)
		Permit Coord		\$ (590,000)	\$ (8,095,900)
		Rights of Entry		\$ (306,000)	\$ (600,119)
	Water Total			\$ (1,261,000)	\$ (21,154,022)
Expense Total				\$ (2,096,472)	\$ (34,946,312)

Summary - Page 1 of 2

NOTE: 2019 proposed budget, which is applicable to this Agreement, was approved by the Reservoir Committee at their November 16, 2018 meeting with the Reservoir Committee's share of expenses listed on page B-2.

				Reprioritize Currently Approved Budget	Proposed Budget Authority= 12 mon Res. Comm= 9 mon
Expense (-) or Revenue (+)	Cost Center	Task	Resource	Sum of Total End of Phase 1	Sum of Total 2019
Revenue	Conversion			\$ -	\$ 2,067,094
	WIIN			\$ -	\$ 8,776,500
	WSIP			\$ 821,603	\$ 10,077,760
	Res. Comm.			\$ -	\$ 14,044,440
Revenue Total				\$ 821,603	\$ 34,965,795
Grand Total				\$ (1,274,870)	\$ 19,482

EXHIBIT C

NOTIFICATIONS

Attention: Mr. Steve Hartwig
City of American Canyon
4381 Broadway, Suite 201
American Canyon, CA 94503

Attention: Mr. Tom Charter
c/o Ms Jamie Traynham
Davis Water District
P.O. Box 83
Arbuckle, CA 95912

Attention: Mr. Dwayne Chisam
Antelope Valley-East Kern WA
6500 West Avenue N
Palmdale, CA 93551

Attention: Mr. Mark Krause
Desert Water Agency
1200 South Gene Autry Trail
Palm Springs, CA 92264

Attention: Mr. Ben Carter
Carter MWC
4245 River Road
Colusa, CA 95932

Attention: Mr. Bill Vanderwaal
Dunnigan Water District
P.O. Box 84
Dunnigan, CA 95937

Attention: Mr. Jim Barrett
Coachella Valley Water District
P.O. Box 1058
Coachella, CA 92236

Attention: Mr. Thad Bettner
Glenn-Colusa Irrigation District
P.O. Box 150
Willows, CA 95988

Attention: Ms. Wendy Tyler
Colusa County
547 Market St., Suite 102
Colusa, CA 95932

Attention: Mr. Matt LaGrande
LaGrande Water District
P.O. Box 370
Williams, CA 9598

Attention: Ms. Shelley Murphy
Colusa County Water District
P.O. Box 337
Arbuckle, CA 95912

Attention: Mr. Steve Arakawa
Metropolitan Water District of Southern
California
1121 L Street, Suite 900
Sacramento, CA 95814

Attention: Mr. Jim Peterson
Cortina Water District
P.O. Box 489,
Williams, CA 95987

Attention: Mr. Preston Brittain
Pacific Resources MWC
4831 Calloway Drive, Ste. 102
Bakersfield, CA 93312
Bakersfield, CA 93312

Attention: Mr. Bill Vanderwaal

Reclamation District 108
P.O. Box 50
Grimes, CA 95950

Attention: Mr. Dirk Marks

Santa Clarita Valley Water Agency
27234 Bouquet Canyon Road
Santa Clarita, CA 91350

Attention: Mr. Doug Headrick

San Bernardino Valley Municipal Water District
380 East Vanderbilt Way
San Bernardino, CA 92408-3593

Attention: Dan Ruiz

Westside Water District
5005 State Hwy 20
Williams, CA 95987

Attention: Mr. Jeff Davis

San Geronio Pass Water Agency
1210 Beaumont Ave,
Beaumont, CA 92223

Attention: Robert Kunde

Wheeler Ridge-Maricopa Water Storage District
12109 Highway 166
Bakersfield, CA 93313

Attention: Ms. Cindy Kao

Santa Clara Valley Water District
5750 Almaden Expressway
San Jose, CA 95118-3686

Attention: Ms. Valerie Pryor

Zone 7 Water Agency
100 North Canyons Parkway
Livermore, CA 945

Attention: Mr. Dirk Marks

THIRD AMENDMENT TO 2019 RESERVOIR PROJECT AGREEMENT

BY AND AMONG
SITES PROJECT AUTHORITY

and

THE PROJECT AGREEMENT MEMBERS LISTED HEREIN

Dated as of January 1, 2022

THIS THIRD AMENDMENT TO 2019 RESERVOIR PROJECT AGREEMENT (this “Third Amendment”), dated as of January 1, 2022, by and among SITES PROJECT AUTHORITY, a joint powers authority duly organized and existing under the laws of the State of California (the “Authority”), and the project agreement members listed in the Agreement referenced below (the “Project Agreement Members”) amends that certain 2019 Reservoir Project Agreement dated as of April 1, 2019 (the “Original Agreement”), as previously amended by the First Amendment to 2019 Reservoir Project Agreement dated as of January 1, 2020 (the “First Amendment”) and by the Second Amendment to 2019 Reservoir Project Agreement dated as of July 1, 2020 (the “Second Amendment” and, together with the Original Agreement, the First Amendment and the Second Amendment, the “Agreement”), each by and among the Authority and the Project Agreement Members;

WITNESSETH:

WHEREAS, Authority and the Project Agreement Members have determined to approve an Amendment 3 Work Plan and to extend the term of the Agreement to December 31, 2024; and

WHEREAS, under Section 11 of the Agreement, the Agreement may be amended by a writing executed by the Authority and at least 75% of the total weighted vote of the then current Committee members as provided in Subsection 3(g); and

WHEREAS, except as provided below in Section 2.07 below, all acts, conditions and things required by law to exist, to have happened and to have been performed precedent to and in connection with the execution and the entering into of this Third Amendment do exist, have happened and have been performed in regular and due time, form and manner as required by law, and the parties hereto are now duly authorized to execute and enter into this Third Amendment;

NOW, THEREFORE, THIS THIRD AMENDMENT WITNESSETH, the Authority and the Project Agreement Members agree, as follows:

ARTICLE I

DEFINITIONS

Section 1.01. Definitions. All capitalized terms not otherwise defined herein shall have the meaning set forth in the Agreement.

ARTICLE II

AMENDMENTS TO AGREEMENT

Section 2.01. Project Agreement Members.

(a) Effective January 1, 2022, Exhibit A to the Agreement titled “Project Agreement Members” shall be removed and replaced with Exhibit A to this Third Amendment titled “Project Agreement Members.”

Section 2.02. Work Plan.

(a) Effective January 1, 2022, the Amendment 2 Work Plan attached as Exhibit B to the Second Agreement shall be supplemented by the Work Plan attached hereto as Exhibit B (the “Amendment 3 Work Plan”).

Section 2.03. Funding.

The Agreement is hereby amended to remove Section 4(a) in its entirety and replace it with the following:

“(a) Budget. The Committee shall, in cooperation with the Authority’s Board, provide and approve both a Fiscal Year operating budget and reestablish a Phase 2 budget target, annually or more frequently as needed. The Project Agreement Members shall contribute their respective pro-rata share of the budgeted sums reflected in the Amendment 3 Work Plan in accordance with Section 5 of this Project Agreement. The contribution with respect to the pro-rata budgeted sums reflected in the Amendment 3 Work Plan shall be payable by each Project Agreement Member in three installments. The first installment shall be in an amount equal to \$100 per acre-foot and shall be payable by no later than May 1, 2022. The second installment shall be in an amount equal to up to \$140 per acre-foot and shall be payable by no later than January 1, 2023. The third installment shall be in an amount equal to up to \$160 per acre-foot and shall be payable by no later than January 1, 2024. The obligation of the Project Agreement Members to make the second installment and third installment shall be conditioned upon the Authority and the Committee reapproving the Amendment 3 Work Plan or approving an amendment thereto by (i) an affirmative vote of at least 75% of the total number of Directors of the Authority Board and (ii) an affirmative vote of at least 75% of the total weighted vote as provided at Subsection 3(g) of the then-current Committee members, prior to January 1, 2023 or January 1, 2024, as applicable.”

Section 2.04. Future Development of the Proposed Sites Reservoir Project.

The Agreement is hereby amended to add the below Sections 6(c), 6(d) and 6(e):

“(c) On or prior to March 31, 2022, each Project Agreement Member shall provide the Authority with a completed Project Agreement Member Project Payment Annex in the form attached hereto as Exhibit C. The Project Agreement Members, upon written request of the Authority, will meet with Authority staff from time to time, but not more often than once per calendar quarter, at which meeting, Authority staff will provide such Project Agreement Members with information regarding the then-current financing options being considered by the Authority and the expected terms of such financing options and the Project Agreement Member will provide updates regarding the status of the items identified in the Project Agreement Member Project Payment Annex.

(d) On or prior to June 30, 2023, each Project Agreement Member shall provide the Authority with a written update (the “Project Agreement Member Update”) with respect to the progress in the implementation of such repayment option, the remaining actions to be taken and the estimated completion dates.

For those Project Agreement Members that identified special benefit assessments or land based charges imposed in an improvement district as a source of repayment for an Authority

financing in its Project Agreement Member Payment Annex, the Project Agreement Member Update will also include a confirmation that such Project Agreement Member has the legal or contractual authority to discontinue water service to a water user that is delinquent in the payment of such special benefit assessment or land based charge, as applicable.

The Project Agreement Member Update will also include a confirmation that the Project Agreement Member has adopted a debt management policy that is compliant with California Government Code Section 8855(i), or, if such Project Agreement Member has not adopted such a debt management policy, the Project Agreement Member Update will include a statement that such Project Agreement Member expects to adopt such a debt management policy or an opinion from the general counsel to such Project Agreement Member to the effect that such a debt management policy is not required to be adopted by the Project Agreement Member to finance its share of the Project.

The Project Agreement Member Update shall also identify any change in the proposed source of repayment from the source identified in the Project Agreement Member Payment Annex previously submitted to the Authority.

(e) The Project Agreement Members that identified the repayment options of either special benefit assessments or land based charges imposed in an improvement district in their respective Project Agreement Member Payment Annexes agree to use best efforts to complete the necessary procedures to comply with the applicable requirements of Proposition 218 by no later than June 30, 2023.”

Section 2.05. Term. The Agreement is hereby amended to remove Section 8(b) in its entirety and replace it with the following:

“(b) The term of this Project Agreement shall continue until December 31, 2024. In the event that this Third Amendment is not approved by Project Agreement Members with the requisite percentage of the total weighted vote as set forth in the Agreement by March 31, 2022, the Agreement shall be revived immediately upon approval by such requisite percentage, without any additional approval of the Project Agreement Members, and this Third Amendment shall become effective.”

Section 2.06. Admission of New Project Agreement Members. The Agreement is hereby amended to add the following sentence to end of the paragraph included under Section 10 of the Agreement:

“The Authority shall have the right to charge Project Agreement Members executing the Agreement after a date determined by the Board a fee, which such fee shall be established by the Board, to compensate Project Agreement Members who executed the Agreement prior to a date determined by the Board, for providing funding for the initial phases of the Project.”

Section 2.07. California Environmental Quality Act. The Agreement is hereby amended to add the following Section 18:

“Section 18 California Environmental Quality Act

Notwithstanding any provision of this Agreement, the Authority and the Project Agreement Members fully reserve all of their respective rights, powers, authority and discretion with respect to

the proposed Project pursuant to the agencies' respective obligations and responsibilities under the California Environmental Quality Act ("CEQA"). This includes: (A) the power and discretion of the Authority as the lead agency, upon the completion of its CEQA review, to adopt feasible mitigation measures or a feasible project alternative, to approve the proposed Project based on the requisite CEQA findings, or to disapprove the proposed Project; and (B) the powers and discretion of the Project Agreement Members concerning the specific matters within their respective jurisdiction and authority acting as responsible agencies under CEQA. Any future decisions on whether to issue an approval of the proposed Project, and if so, how to issue such approval, will not be made until the agency making the decision has first completed its CEQA review of the proposed Project."

ARTICLE III

PROJECT AGREEMENT MEMBER PARTICIPATION

Section 3.01. Project Agreement Participation. Each Project Agreement Member shall specify its participation in the Sites Reservoir Project by indicating its storage amount in the Sites Reservoir Project on the signature page to this Third Amendment. Based upon the respective participation elections of the Project Agreement Members, the Authority shall update Exhibit A pursuant to Section 5 of the Agreement.

ARTICLE IV

MISCELLANEOUS

Section 4.01. Effectiveness of Agreement. Except as expressly amended by this Third Amendment, the Agreement is hereby ratified and confirmed and shall continue in full force and effect in accordance with the terms and provisions thereof. The amendments set forth in this Third Amendment shall be incorporated as part of the Agreement upon their effectiveness in accordance with Section 11 of the Agreement.

Section 4.02. Execution in Several Counterparts. This Third Amendment may be executed in any number of counterparts and each of such counterparts shall for all purposes be deemed to be an original; and all such counterparts, or as many of them as the Authority and the Project Agreement Members shall preserve undestroyed, shall together constitute but one and the same instrument.

Section 4.03. Laws Governing Third Amendment. The effect and meaning of this Third Amendment and the rights of all parties hereunder shall be governed by, and construed according to, the laws of the State.

IN WITNESS WHEREOF, the Authority and Project Agreement Members hereto, pursuant to resolutions duly and regularly adopted by their respective governing bodies, have caused their names to be affixed by their proper and respective officers on the date shown below:

Dated: _____

SITES PROJECT AUTHORITY

By: _____
Name: _____
Title: _____

[PROJECT AGREEMENT MEMBER]

Dated: _____

(Authority & Project Agreement Member)

By: _____
Name: _____
Title: _____

[PROJECT AGREEMENT MEMBER]
REPRESENTATIVES

The primary and alternate representatives of the [PROJECT AGREEMENT MEMBER] are identified below.

Primary Representative:

Alternate Representative:

ELECTION OF PARTICIPATION AMOUNT

[PROJECT AGREEMENT MEMBER] hereby elects to participate in the Sites Reservoir Project in the below amount.

- a) **Annualized Acre-Foot**
(acre-feet of releases)
- b) **Storage Allocation**
(acre-feet of storage)
*Box "a" * 6.234*
- c) **Total Budget Authorization**
*Box "a" * \$400 per acre-foot*

PARTICIPATION LEVELS ARE PRELIMINARY AND MAY BE ADJUSTED FOLLOWING REBALANCING

EXHIBIT A

PROJECT AGREEMENT MEMBERS

Participant	Third Amendment Participation		
	Annualized Acre-Foot (Box "a")	Storage Allocation (Box "b")	Percent
American Canyon, City of	4,000	24,936	2.4%
Antelope Valley-East Kern Water Agency	500	3,117	0.3
Carter Mutual Water Company #	300	1,870	0.2
Coachella Valley Water District	10,000	62,340	6.0
Colusa County	10,000	62,340	6.0
Colusa County Water District	10,073	62,795	6.0
Cortina Water District	450	2,805	0.3
Davis Water District	2,000	12,468	1.2
Desert Water Agency	6,500	40,521	3.9
Dunnigan Water District	2,972	18,527	1.8
Glenn-Colusa Irrigation District	5,000	31,170	3.0
Irvine Ranch Water District	1,000	6,234	0.6
LaGrande Water District	1,000	6,234	0.6
Metropolitan Water District of S. CA	50,000	311,700	29.8
Reclamation District 108	4,000	24,936	2.4
Rosedale-Rio Bravo Water Storage District	500	3,117	0.3
San Bernardino Valley Municipal Water District	21,400	133,408	12.8
San Geronio Pass Water Agency	14,000	87,276	8.4
Santa Clara Valley Water District	500	3,117	0.3
Santa Clarita Valley Water Agency	5,000	31,170	3.0
Westside Water District	5,375	33,508	3.2
Wheeler Ridge-Maricopa Water Storage District	3,050	19,014	1.8
Zone 7 Water Agency	10,000	62,340	6.0
Total:	167,620	1,044,943	100.0

Participation Percentages exclude State of California and United States Bureau of Reclamation share of the Project.

Denotes a non-public agency. Refer to California Corporations Code Section 14300 et. seq. with additional requirements provided in both the Public Utilities Code and Water Code.

EXHIBIT B
AMENDMENT 3 WORK PLAN

Exhibit B
Reservoir Committee
2022, 2023 and 2024 Work Plan Summary

Reservoir Committee and Authority Board Annual Budget for FY 2022, FY 2023 and FY 2024 (\$000)

Work Plan	Subject Area	2022	2023	2024	Total
Revenue	Participation Revenue	\$16,762	\$23,467	\$26,819	\$67,048
	Authority Board Seats	\$505	\$505	\$505	\$1,515
	Federal Revenue	\$10,000	\$20,000	\$20,000	\$50,000
	State Revenue	\$18,300	\$0	\$0	\$18,300
	Carry-over Funds	\$6,000	\$0	\$0	\$6,000
Revenue Total		\$51,567	\$43,972	\$47,324	\$142,863
Expenses	Communications	(\$477)	(\$477)	(\$495)	(\$1,449)
	Engineering	(\$18,715)	(\$30,516)	(\$20,485)	(\$69,716)
	External Affairs	(\$273)	(\$273)	(\$282)	(\$828)
	General Project Activities	(\$620)	(\$545)	(\$565)	(\$1,730)
	Permitting	(\$7,503)	(\$4,731)	(\$2595)	(\$14,829)
	Planning	(\$5,092)	(\$1,212)	(\$278)	(\$6,582)
	Program Operations	(\$8,594)	(\$7,440)	(\$5690)	(\$21,724)
	Real Estate	(\$902)	(\$903)	(\$935)	(\$2,740)
Expenses Total		(\$42,176)	(\$46,097)	(\$31,325)	(\$119,598)
Grand Total		\$9,391	(\$2,125)	\$15,999	\$23,265

EXHIBIT C

FORM OF PROJECT AGREEMENT MEMBER
PROJECT PAYMENT ANNEX**Project Agreement Member:****Date:**

Expected Source(s) of Repayment For Authority Financing (Check Each Box That Applies):	<input type="checkbox"/> Amounts Collected Through Department of Water Resources State Water Project Annual Statement of Charges	<input type="checkbox"/> Water Rates and Charges (Proposition 218 Compliance Required)	<input type="checkbox"/> Water Rates and Charges (Proposition 218 Compliance Not Required)	<input type="checkbox"/> Special Benefit Assessment-Districtwide	<input type="checkbox"/> Special Benefit Assessment Levied by District on Certain Lands	<input type="checkbox"/> Land-Based Charges Imposed Within an Improvement District
If An Improvement District, Has It Been Formed?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	If no, is it anticipated to be formed by June 30, 2023? <input type="checkbox"/> Yes <input type="checkbox"/> No			
If A Special Benefit Assessment, Has the Special Benefit Been Approved In An Amount To Pay Debt Service On The Authority Financing?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	If no, is it anticipated to be presented for landowner approval by June 30, 2023? <input type="checkbox"/> Yes <input type="checkbox"/> No			
Does the District Have A Debt Management Policy Compliant With Section 8855(i) of the California Government Code?	<input type="checkbox"/> Yes	<input type="checkbox"/> No				

Sites Reservoir Project

Project Participants in the Sites Project Planning

Sacramento Valley

- Carter Municipal Water Company
- City of American Canyon
- Colusa County
- Colusa County Water District
- Cortina Water District
- Davis Water District
- Dunnigan Water District
- Glenn County
- Glenn-Colusa Irrigation District
- La Grande Water District
- Reclamation District 108
- City of Roseville
- Sacramento County Water Agency
- City of Sacramento
- Tehama Colusa Canal Authority
- Westside Water District
- Western Canal Water District

Bay Area

- Santa Clara Valley Water District
- Zone 7 Water Agency

Southern California

- Antelope Valley - East Kern Water Agency
- Coachella Valley Water District
- Desert Water Agency
- Irvine Ranch Water District
- Metropolitan Water District of Southern California
- San Bernardino Valley Municipal Water District
- San Geronio Pass Water Agency
- Santa Clarita Valley Water Agency

San Joaquin Valley

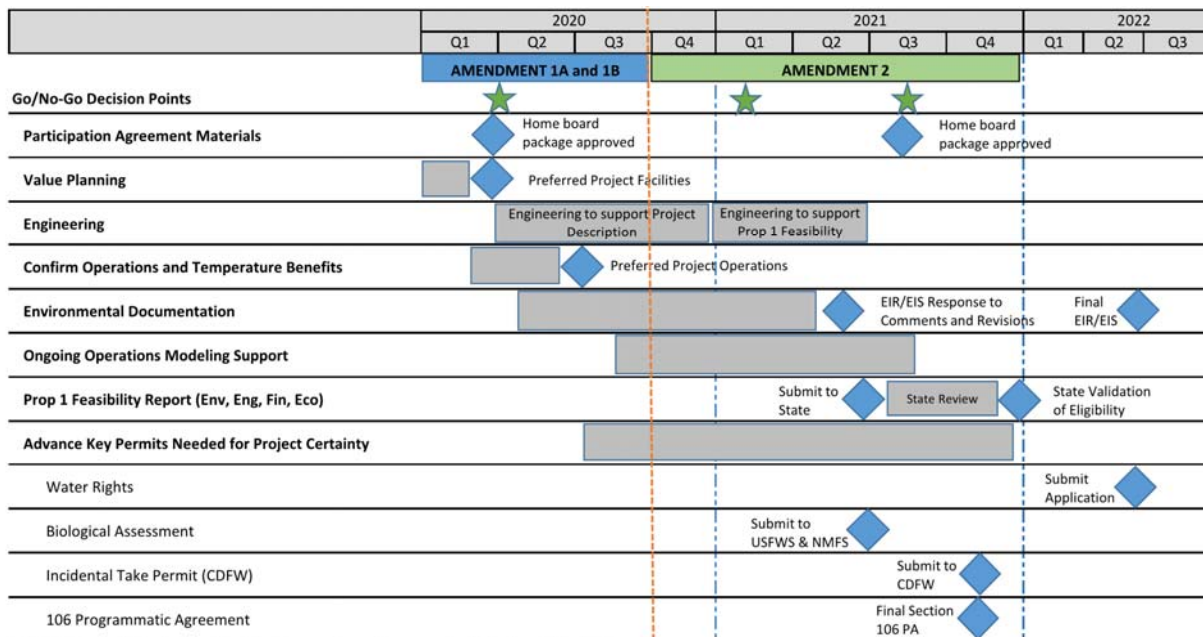
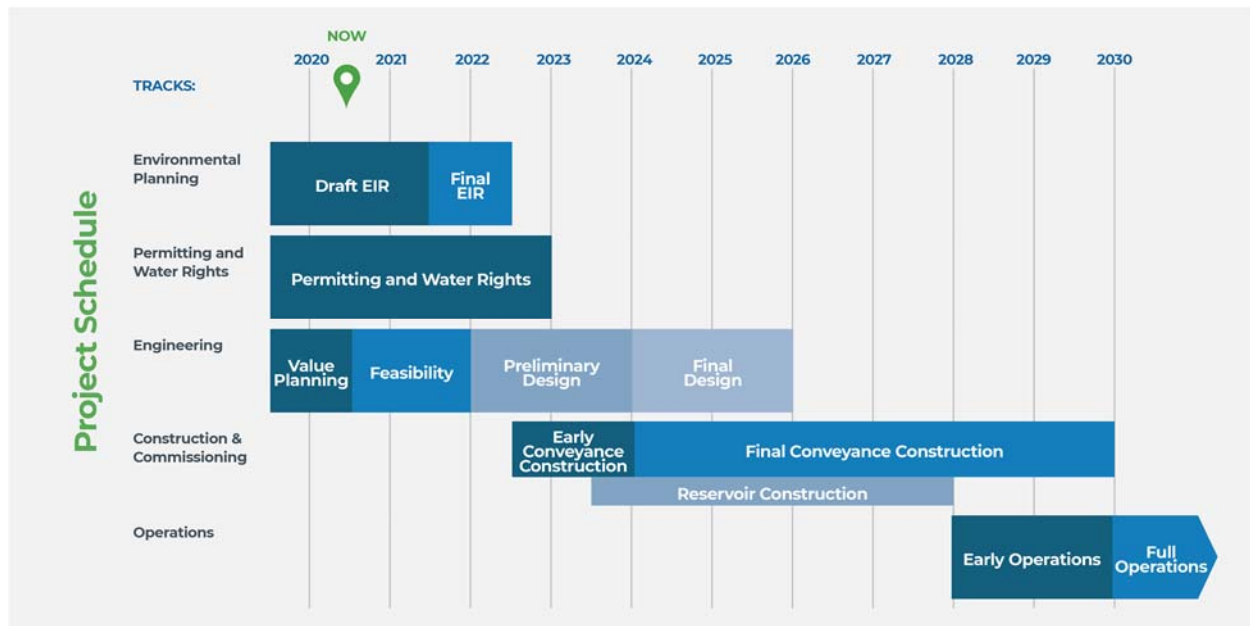
- Rosedale-Rio Bravo Water Storage District
- Wheeler Ridge - Maricopa Water Storage District

State/Federal

- California Department of Water Resources
- US Bureau of Reclamation



Sites Reservoir Schedule



NOTE: This graphic includes schedule drivers only and does not include all activities/deliverables. This work plan is based on current participation commitments.



Sites Reservoir Project

RDEIR/SDEIS Frequently Asked Questions

The following questions and answers are meant to respond to common questions about the potential environmental impacts of the proposed Sites Reservoir Project.

1. Would Sites Reservoir divert water from the Sacramento River during dry and critically dry years?

Yes, even during drier years there can be significant precipitation events that present conditions where water can be diverted safely from the river and placed in Sites Reservoir. All diversions would be subject to the highly protective operating conditions that are currently being proposed for the Sites Reservoir Project.

2. Would Sites Reservoir meaningfully address future droughts?

Sites Reservoir is an insurance policy for future droughts. Sites Reservoir does not rely on snowpack and if the scientific projections are correct about the impacts of climate change (i.e., California is expected to receive about the same annual precipitation that it currently does but more will come as rain than snow and be subject to year-to-year variability), then having Sites Reservoir would mean we can collect more water in the reservoir for use during future droughts.

3. Would Sites Reservoir decrease Delta flows?

Yes, slightly, when the Project is diverting. However, since the Sites Reservoir diversions would occur only when there are high river flows, any reduction to Delta flows would be minor and would not impact any of the beneficial uses of the water in the Delta. Storing water in Sites Reservoir during times when there is a lot of flow in the Sacramento River for use during times when the flows are low, including during drought periods, is part of the statewide strategy for adapting to changing climate conditions and to return much needed flexibility to our statewide water management system.

4. Have concerns about the impact of Sites Reservoir operations on the environment been addressed in the current proposal?

The Project operations have been modified substantially over the last two years to be more protective of the environment. These modifications have reduced the Project diversions from the Sacramento River substantially (almost in half) as compared to the criteria proposed in 2017. The current Project operations strikes the needed balance between environmental protections and Project affordability that has to exist for the Project to proceed.

5. Does this Project impact the Trinity River?

The Project would not affect or result in changes in the operation of the Central Valley Project (CVP), Trinity River Division facilities (including Clear Creek). Reclamation would continue to operate the Trinity River Division consistent with all applicable statutory, legal, and contractual obligations, including but not limited to the Trinity River Record of Decision (ROD), the 2017 ROD for the Long-Term Plan for the Lower Klamath River, and the provision of (not less than) 50,000 acre-feet identified in Trinity River Division Central Valley Project Act of 1955 to be made available to Humboldt County and downstream water users.



6. How does this Project impact water quality in the Sacramento River and Delta?

The Project would have some impacts to water quality and would also enhance beneficial uses of water, even improving water quality in some areas. For example, increases in outflow in drier years could reduce seawater intrusion into the Delta. During those same periods, exchanges with Sites water could benefit fish by preserving cold-water supplies from Shasta Lake, Lake Oroville, and Folsom Lake later into the year. The Sites Project Authority would implement best management practices to minimize any potential water quality impacts associated with facility operations and maintenance. These would include actions to prevent spills and reduce runoff that may cause sediment or contaminants to flow into waterbodies. Monthly water quality testing would be performed for discharges moving into and through the Yolo Bypass, and mitigation measures – such as mercury sediment management – would be implemented to counteract any impacts to water quality.

7. How will the Project benefit anadromous fish?

The additional water supply provided by Sites Reservoir may provide opportunities for improved management of salmonid habitat, particularly in the Sacramento River above Red Bluff Diversion Dam. By exchanging Sites water for CVP water, Reclamation has an additional tool to maintain and improve habitat for salmonid spawning, incubation, rearing, and migration. By delivering water to CVP contractors from Sites Reservoir, Reclamation may maintain supply in Shasta Lake for important periods to support these habitat conditions. The possible additional water supply in Shasta Lake can then be allocated during real-time management scenarios for a number of uses (e.g., cold-water pool maintenance, spring pulse or fall pulse flow events, reduced fall flows) that may provide enhanced anadromous fish benefits.

8. Will this Project curtail or otherwise reduce allocations for other water right holders?

Sites Reservoir would only divert water when flows in the Sacramento River meet minimum diversion criteria, when the Delta is in “excess” conditions, when all senior downstream water rights have been met, when all environmental permit conditions have been met, and when there is excess capacity within the conveyance facilities, such as the Tehama-Colusa and Glenn-Colusa Canals. The Project would not curtail or otherwise reduce allocations of water for other water right holders.





Water Planning & Stewardship Committee

Appropriate \$20 million, and
authorize an amendment to the
2019 Reservoir Project Agreement

Item 7-13

April 12, 2022

Topics

- Overview & Participants
- Project Benefits
- Key Progress & 2022-2024 Workplan
- Board Action

Sites Reservoir

Proposal Under Analysis



- 1.3 – 1.5 million acre-feet
- Off-stream Sacramento River storage
- Largest dedicated environmental storage
- Broad statewide involvement

April 12, 2022

Broad Statewide Involvement

● Bay Area

- Santa Clara Valley WD
- Zone 7 Water Agency

● San Joaquin Valley

- Rosedale-Rio Bravo WSD
- Wheeler Ridge - Maricopa

● Southern California

- Antelope Valley - East Kern WA
- Coachella Valley WD
- Desert Water Agency
- Irvine Ranch Water District
- Metropolitan Water District
- San Bernardino Valley MWD
- San Geronio Pass Water Agency
- Santa Clarita Valley Water Agency

● State/Federal

- California Dept. of Water Resources
- U.S. Bureau of Reclamation



Sites



● Sacramento Valley

- Carter Municipal Water Co.
- City of American Canyon
- Colusa County
- Colusa County Water District
- Cortina Water District
- Davis Water District
- Dunnigan Water District
- Glenn County
- Glenn-Colusa Irrigation District
- La Grande Water District
- Reclamation District 108
- Rosedale-Rio Bravo WSD
- City of Roseville
- Sacramento County WA
- City of Sacramento
- Tehama Colusa Canal Authority
- Westside Water District
- Western Canal Water District

Topics

- Overview & Participants
- Project Benefits
- Key Progress & 2022-2024 Workplan
- Board Action

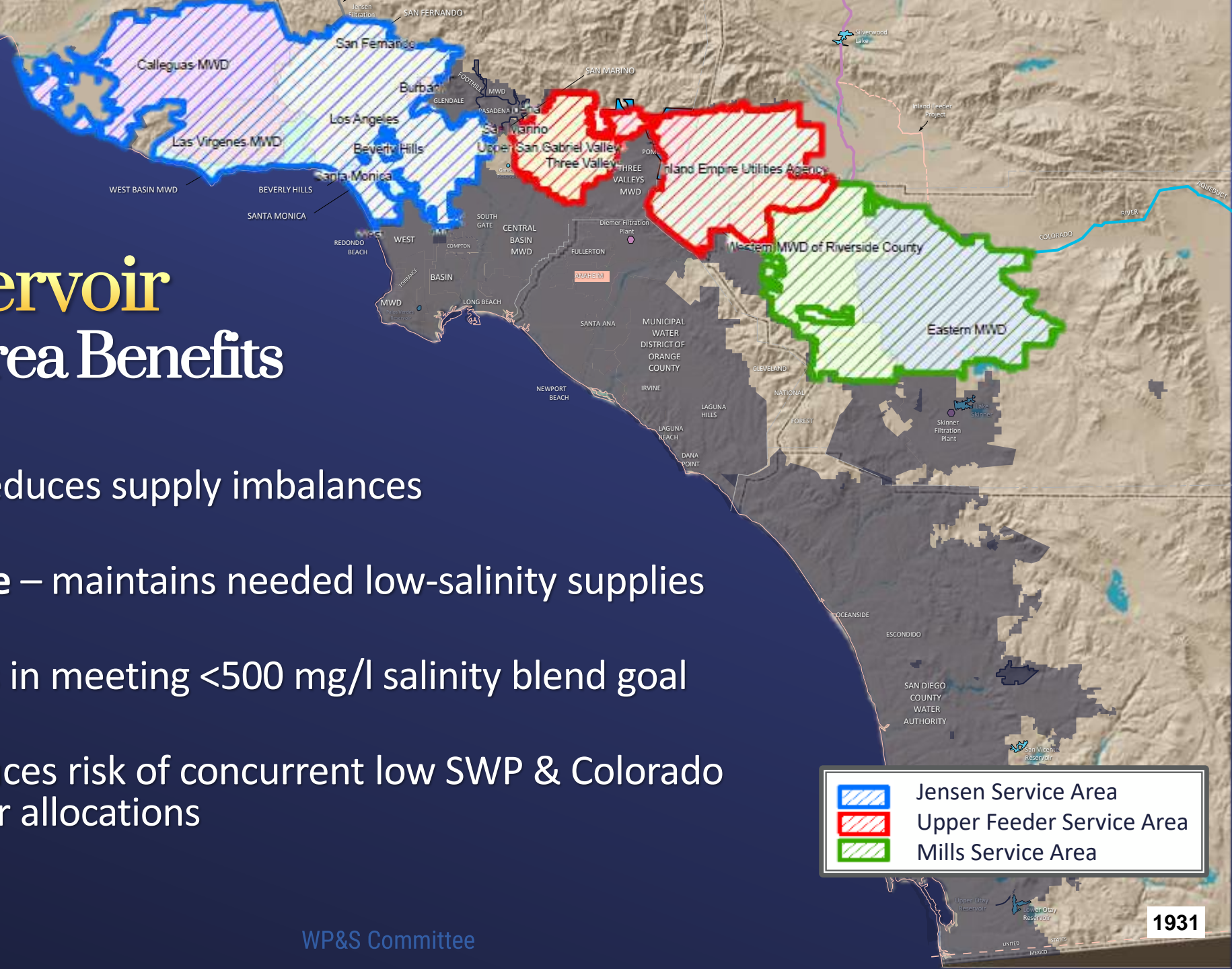
Sites Reservoir

Statewide Benefits



Sites Reservoir MWD Service Area Benefits

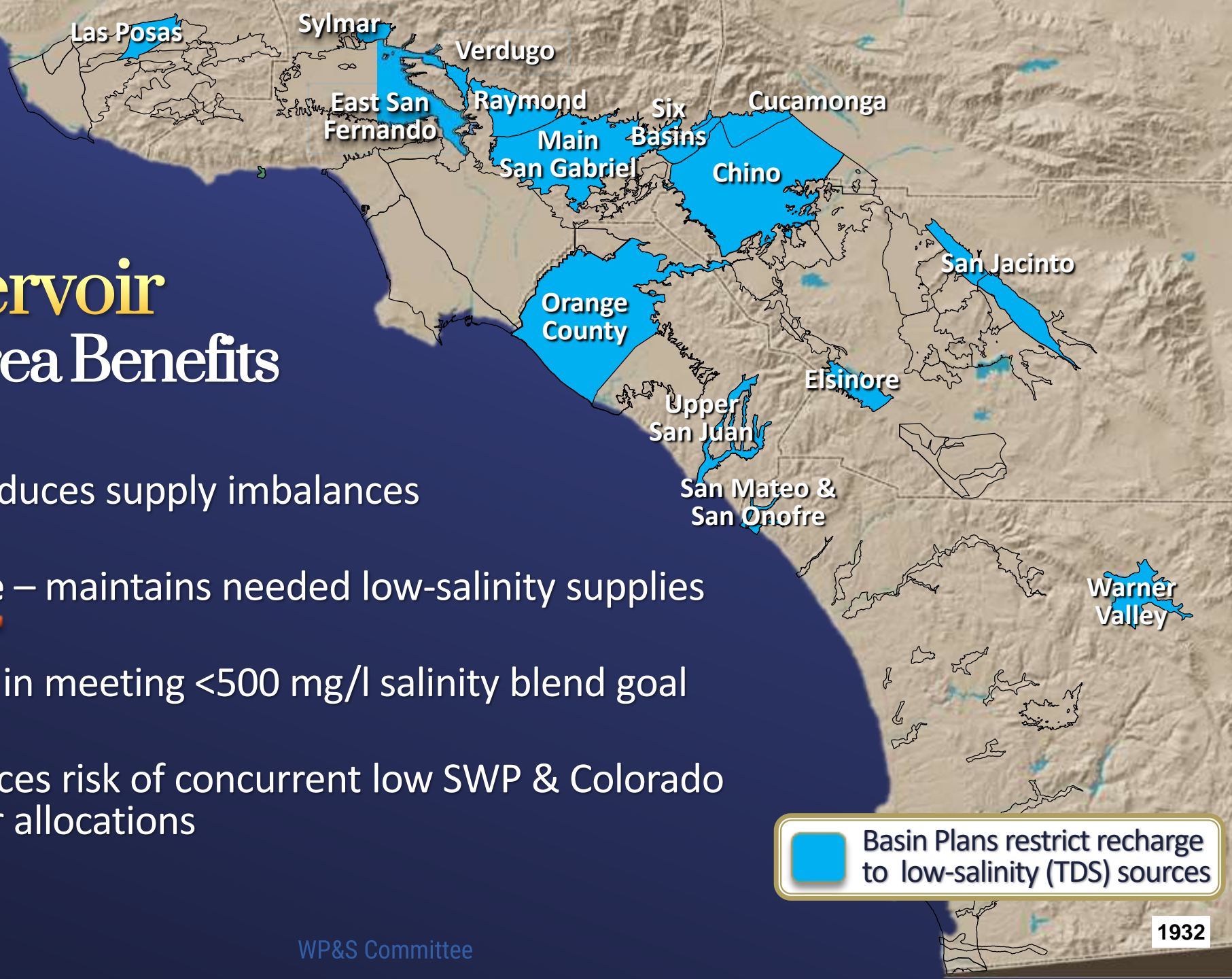
- ☒ **SWP Reliant Areas** – reduces supply imbalances
- ☐ **Groundwater Recharge** – maintains needed low-salinity supplies
- ☐ **Water Quality** – assists in meeting <500 mg/l salinity blend goal
- ☐ **Perfect Drought** – reduces risk of concurrent low SWP & Colorado River allocations



Sites Reservoir

MWD Service Area Benefits

- ☐ SWP Reliant Areas – reduces supply imbalances
- ☒ Groundwater Recharge – maintains needed low-salinity supplies
- ☐ Water Quality – assists in meeting <500 mg/l salinity blend goal
- ☐ Perfect Drought – reduces risk of concurrent low SWP & Colorado River allocations



Sites Reservoir MWD Service Area Benefits

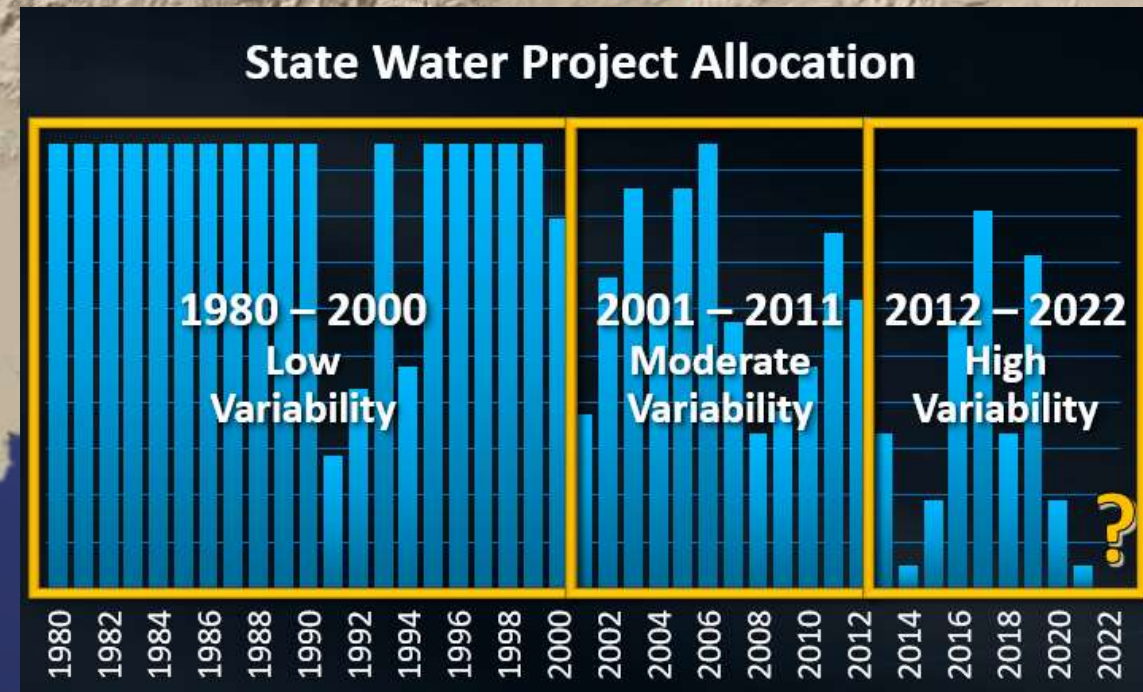
- ☐ SWP Reliant Areas – reduces supply imbalances
- ☐ Groundwater Recharge – maintains needed low-salinity supplies
- ☒ Water Quality – assists in meeting <500 mg/l salinity blend goal
- ☐ Perfect Drought – reduces risk of concurrent low SWP & Colorado River allocations



Sites Reservoir

MWD Service Area Benefits

- ☐ **SWP Reliant Areas** – reduces supply imbalances
- ☐ **Groundwater Recharge** – maintains needed low-salinity supplies
- ☐ **Water Quality** – assists in meeting <500 mg/l salinity blend goal
- ☒ **Perfect Drought** – reduces risk of concurrent low allocations of SWP and Colorado River supplies



Topics

- Overview & Participants
- Project Benefits
- Key Progress & 2022-2024 Workplan
- Board Action

Key Progress

✓ Technical Analyses

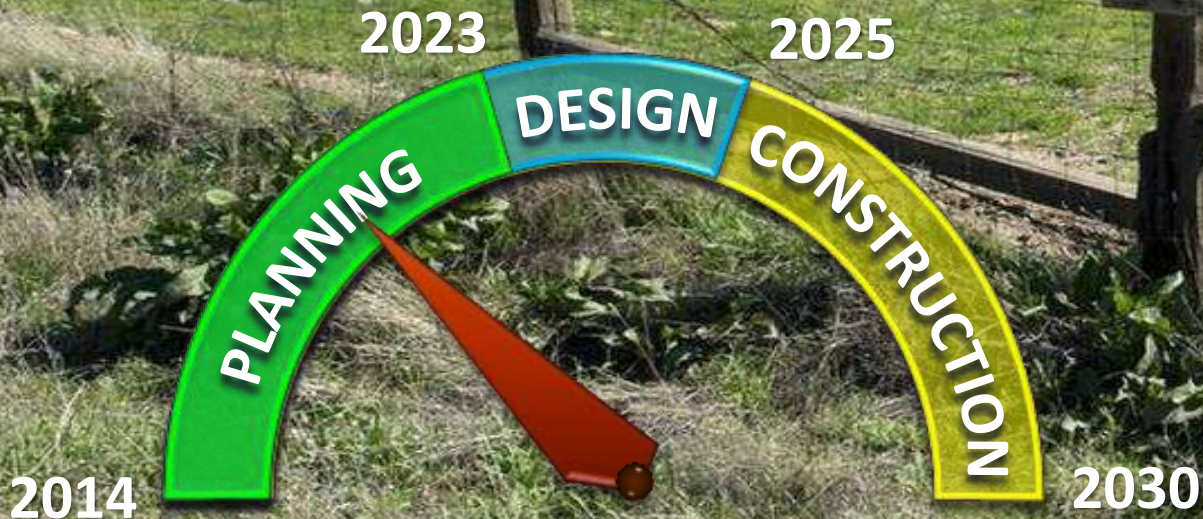
- Initial water supply modeling & operations
- Initial engineering design & cost estimates
- Value Planning project improvements


✓ Regulatory/Environmental

- Revised Draft Environmental Impact Report/Statement
- Regulatory agency consultation & initial permit application development

✓ State/Federal Funding

- \$875 million State Proposition 1 grant
- \$104 million federal WIIN Act grant
- \$449 million US Dept. of Agriculture loan
- \$2.2 billion federal WIFIA loan (application)





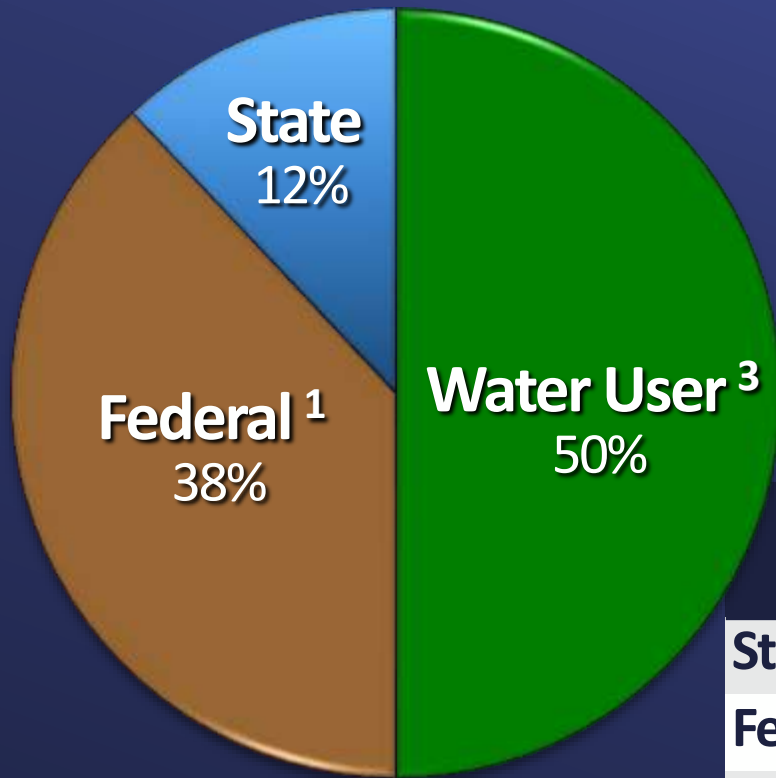
2022-24 Workplan

Focus & Key Deliverables

- Environmental
 - Final EIR/EIS & Record of Decision
- Permits/Agreements
 - Water rights permit
 - Environmental permits
 - Local agency agreements
- Project Operations
 - Final coordinated operations agreement with DWR/USBR
- Engineering
 - Advance 30% design & geotechnical investigations
- Develop mitigation & land acquisition master plan

Reservoir overlook – Governor Brown (2018)

1. 2022-24 Workplan, also referred to as the Amendment 3 Workplan



2022-24 Workplan 3-Year Budget¹

Source	2022	2023	2024	Total
State (Prop 1 Grant)	\$ 18,300,000	--	--	\$ 18,300,000
Federal (WIIN Act) ²	\$ 10,000,000	\$ 20,000,000	\$ 20,000,000	\$ 50,000,000
Water Users ³	\$ 17,267,000	\$ 23,972,000	\$ 27,324,000	\$ 68,563,000
Carryover Funds	\$ 6,000,000			\$ 6,000,000
TOTAL³	\$ 51,567,000	\$ 43,972,000	\$ 47,324,000	\$ 142,863,000
MWD Share ⁴	\$ 5,000,000	\$ 7,000,000	\$ 8,000,000	\$20,000,000

1. 2022-24 Workplan, also referred to as the Amendment 3 Workplan, is for the period of Jan. 1, 2022, through Dec. 31, 2024.

2. Subject to federal appropriation

3. Subject to individual participating agency Board approval

4. Assumes participation by Metropolitan based a 311,700 acre-ft of storage (also defined as an average yield of 50,000 AF/year)

Topics

- Overview & Participants
- Project Benefits
- Key Progress & 2022-2024 Workplan
- Board Action

Options

Option #1

- Authorize the General Manager to sign the Third Amendment to the 2019 Project Reservoir Agreement with the Sites Project Authority and other participants for participation in the Amendment 3 Workplan for an amount not to exceed \$20,000,000; and
- Appropriate \$20,000,000 for the Amendment 3 Workplan based on reserving 311,700 acre-feet (AF) of storage rights, which is equivalent to approximately 50,000 AF of annual water supply reservoir releases.

Option #2

- Do not authorize the General Manager to sign the Third Amendment to the 2019 Reservoir Project Agreement with the Sites Project Authority for participation in the Amendment 3 Workplan

Staff Recommendation

Option #1





- Board of Directors
Communications and Legislation Committee

4/12/2022 Board Meeting

7-16

Subject

Express support for SB 991 (Newman, D-Fullerton): Public contracts: progressive design-build: local agencies; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA

Executive Summary

Senate Bill (SB) 991 (**Attachment 1**) would authorize water and wastewater agencies to use the progressive design-build (PDB) project delivery method for any public works project in excess of \$5 million that would produce, store, supply, treat, or distribute water from any source.

PDB is a method in which a single entity is hired to do both the design and construction at an early stage in the project to allow increased collaboration among the owner, designer, and builder. SB 991 could benefit water agencies, including Metropolitan, by giving them the option to use PDB, which can reduce the overall project costs, risk, and schedules.

Details

Current California statutes place explicit limits on the types of contracting methods that public agencies can use on public works projects. The traditional design-bid-build method, where the lowest responsive and responsible bid is selected, is common practice. However, agencies that wish to use alternative delivery methods must first obtain authorization from the State legislature. Existing law, until January 1, 2025, authorizes certain local agencies, as defined, to use the design-build procurement process for specified public works with prescribed cost thresholds. Existing law requires specified information submitted by a design-build entity in the design-build procurement process to be certified under penalty of perjury.

The Water Collaborative Delivery Association, formerly the Design Build Council, an industry education group that supports collaborative-delivery methods for water and wastewater projects, is sponsoring SB 991 to expand project delivery options to include PDB. PDB authorization would benefit water agencies that plan to make significant investments in new sustainable water supply projects, such as those to advance the use of recycled water, by allowing the design-build contractor to work with the project owner during the project's design phase. Early collective engagement and collaboration by the owner, designer, and the contractor has potential benefits, which can reduce overall project risks, costs, and schedules.

If passed, SB 991 would authorize water and wastewater agencies to use the PDB method for public works projects in excess of \$5 million, similar to the California Department of General Services' authorization (Public Contract Code § 10187.5). SB 991 would allow water and wastewater agencies to use PDB through January 1, 2029.

Comparison of Bills

Metropolitan is separately sponsoring a bill to seek authorization for three new delivery methods: design-build, PDB, and construction manager/general contractor for the Regional Recycled Water Program and a select number of emergency drought mitigation projects. There are some notable differences between the Metropolitan-sponsored bill - AB 1845 (Calderon): Metropolitan Water District of Southern California: alternative project delivery method – and SB 991, which are identified below and outlined in **Table 1**.

SB 991 applies to local agencies, as defined. SB 991 allows only PDB and requires that the PDB entity be chosen through a qualifications-based selection process. Projects under SB 991 would also have a cost threshold of \$5 million. SB 991 contains a conflict of interest provision as well as a very prescriptive request for qualification (RFQ) process and requires that all construction subcontracts be awarded through a specified, owner-controlled process. SB 991 has no requirements for owner inspections, and while it is silent on design-build-operate (DBO) contracts, it does not specifically prohibit DBO contracts.

AB 1845 applies specifically to Metropolitan, and sets a cap on the number of projects irrespective of price. In addition, AB 1845 allows more owner discretion in the selection process, allowing for either a qualifications-based selection of the design-build entity, or a best-value selection through a request for proposal following an initial RFQ process. AB 1845 requires owner inspections and specifically prohibits DBO contracts. Both bills specifically require that all contractors and subcontractors performing work on applicable projects or contracts use a skilled and trained workforce that falls within an apprenticeable occupation in the building or construction trades. Both bills also allow for the identification of specific types of subcontractors to be included in the design-build entity's statement of qualifications.

Table 1

Category	SB 991	AB 1845
Alternative delivery method	PDB only	DB, PDB, CM/GC
Coverage	Water-related projects > \$5M	RRWP and drought projects
Sunset Date	January 1, 2029	DB January 1, 2025 PDB and CM/GC January 1, 2028
Conflict of Interest Language	Yes	Yes
Skilled & Trained Workforce Requirements	Enforceable commitment required unless agency has a project labor agreement (PLA)	Enforceable commitment required unless agency has PLA
Selection Process	Qualifications-based	Qualifications-based or Best Value
Subcontractor Selection Process	Owner's discretion	Owner's discretion

Staff recommends Metropolitan support SB 991 to allow water and wastewater agencies to use the PDB project delivery method, which has the following benefits:

- Enhanced opportunities for collaboration between owner and contractor through the design and construction process
- Enhanced potential for project risk identification and allocation between owner and contractor
- Greater flexibility in the contract award process, not limited to the lowest responsible bidder
- Potentially shorter project completion schedules, leading to earlier online dates
- Earlier cost certainty with the potential for lower overall project costs
- Increased opportunities for innovation through the collaborative design process

Supporters of the bill include the Association of California Water Agencies, California Association of Sanitation Agencies, California Municipal Utilities Association, Inland Empire Utilities Agency, Santa Clara Valley Water District, Silicon Valley Leadership Group, State Building & Construction Trades Council of California, The Bay Area Council, and Watereuse Association. There is no registered opposition.

Policy

Metropolitan Water District Administrative Code Section 11104: Delegation of Responsibilities

California Environmental Quality Act (CEQA)

CEQA determination for Option #1:

The proposed action is not defined as a project under CEQA because it involves legislative proposals that do not involve any commitment to any specific project which may result in a potentially significant physical impact on the environment (Public Resources Code Section 21065 and Section 15378(b)(1) of the State CEQA Guidelines).

CEQA determination for Option #2:

None required

Board Options

Option #1

Express a support position on SB 991 (Newman, D-Fullerton): Public contracts: progressive design-build: local agencies

Fiscal Impact: No direct fiscal impact; possible cost savings to local agencies that utilize PDB, including Metropolitan, if passed.

Business Analysis: Should SB 991 become law, local agencies would have the option to use the PDB project delivery method for projects that exceed \$5,000,000.

Option #2

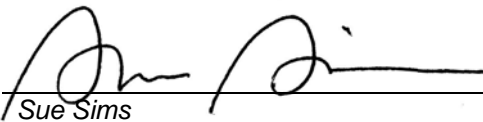
Take no position.

Fiscal Impact: No direct fiscal impact

Business Analysis: Should SB 991 become law, local agencies would have the option to use the PDB project delivery method for projects that exceed \$5,000,000.

Staff Recommendation

Option #1


Sue Sims
External Affairs Manager
4/6/2022
Date


Adel Hagekhalil
General Manager
4/6/2022
Date

Attachment 1 – SB 991 (Newman, D-Fullerton): Public contracts: progressive design-build: local agencies.

Ref# ea 12687305

AMENDED IN SENATE MARCH 22, 2022

SENATE BILL**No. 991****Introduced by Senator Newman**

February 14, 2022

An act to add *and repeal* Chapter 4.1 (commencing with Section 22170) ~~to~~ of Part 3 of Division 2 of the Public Contract Code, relating to public contracts.

LEGISLATIVE COUNSEL'S DIGEST

SB 991, as amended, Newman. Public contracts: progressive design-build: local agencies.

Existing law, until January 1, 2025, authorizes local agencies, as defined, to use the design-build procurement process for specified public works with prescribed cost thresholds. Existing law requires specified information submitted by a design-build entity in the design-build procurement process to be certified under penalty of perjury.

Existing law authorizes the Director of General Services to use the progressive design-build procurement process for the construction of up to 3 capital outlay projects, as jointly determined by the Department of General Services and the Department of Finance, and prescribes that process. Existing law defines "progressive design-build" as a project delivery process in which both the design and construction of a project are procured from a single entity that is selected through a qualifications-based selection at the earliest feasible stage of the project. Existing law, pursuant to the process, after selection of a design-build entity, authorizes the Department of General Services to contract for design and preconstruction services sufficient to establish a guaranteed maximum price, as defined. Existing law authorizes the department, upon agreement on a guaranteed maximum price, to amend the contract

SB 991

— 2 —

in its sole discretion, as specified. Existing law requires specified information to be verified under penalty of perjury.

This bill, until January 1, ~~2033~~, ~~authorizes 2029~~, *would authorize* local agencies, defined as any city, county, city and county, or special district authorized by law to provide for the production, storage, supply, treatment, or distribution of any water from any source, to use the progressive design-build process for public works projects in excess of \$5,000,000, similar to the progressive design-build process authorized for use by the Director of General Services. *The bill would require a local agency that uses the progressive design-build process to submit, no later than January 1, 2028, to the appropriate policy and fiscal committees of the Legislature a report on the use of the progressive design-build process containing specified information, including a description of the projects awarded using the progressive design-build process.* The bill would require *the design-build entity and its general partners or joint venture members to verify* specified information ~~to be~~ verified under penalty of perjury. By expanding the crime of perjury, the bill would impose a state-mandated local program.

The California Constitution requires the state to reimburse local agencies and school districts for certain costs mandated by the state. Statutory provisions establish procedures for making that reimbursement.

This bill would provide that no reimbursement is required by this act for a specified reason.

Vote: majority. Appropriation: no. Fiscal committee: yes.
State-mandated local program: yes.

The people of the State of California do enact as follows:

1 SECTION 1. Chapter 4.1 (commencing with Section 22170)
2 is added to Part 3 of Division 2 of the Public Contract Code, to
3 read:

4
5 CHAPTER 4.1. LOCAL AGENCY PROGRESSIVE DESIGN-BUILD
6 CONTRACTING
7

8 22170. For purposes of this chapter, the following definitions
9 apply:

10 (a) ~~“Best value” means a value determined by evaluation of~~
11 ~~objective criteria that relate to demonstrated competence and on~~
12 ~~the professional qualifications necessary for the satisfactory~~

1 ~~performance of the services required. Other factors such as price,~~
2 ~~features, functions, and life-cycle costs may be considered. If the~~
3 ~~qualifications-based selection process includes estimates of cost~~
4 ~~as a factor, a best value determination may involve the selection~~
5 ~~of the lowest cost proposal meeting the interests of the local agency~~
6 ~~and meeting the objectives of the project, or a tradeoff between~~
7 ~~price and other specified factors.~~

8 *(a) (1) “Best value” means a value determined by evaluation*
9 *of objective criteria that may include, but are not limited to, price,*
10 *features, function, life-cycle costs, experience, and past*
11 *performance.*

12 *(2) A best value determination may involve the selection of the*
13 *lowest cost proposal meeting the interests of the local agency and*
14 *the objectives of the project, selection of the best proposal for a*
15 *stipulated sum established by the procuring local agency, or a*
16 *tradeoff between price and other factors.*

17 (b) “Construction subcontract” means each subcontract awarded
18 by the design-build entity to a subcontractor that will perform work
19 or labor or render service to the design-build entity in or about the
20 construction of the work or improvement, or a subcontractor
21 licensed by the State of California that, under subcontract to the
22 design-build entity, specially fabricates and installs a portion of
23 the work or improvement according to detailed drawings contained
24 in the plans and specifications produced by the design-build team.

25 (c) “Design-build entity” means a corporation, limited liability
26 company, partnership, joint venture, or other legal entity that is
27 able to provide appropriately licensed contracting, architectural,
28 and engineering services as needed pursuant to a design-build
29 contract.

30 (d) “Design-build project” means any project that treats, pumps,
31 stores, or conveys water, wastewater, recycled water, or advanced
32 treated water using the progressive design-build construction
33 procurement process described in this chapter.

34 (e) “Design-build team” means the design-build entity itself
35 and the individuals and other entities identified by the design-build
36 entity as members of its team. Members shall include the general
37 contractor and, if utilized in the design of the project, all electrical,
38 mechanical, and plumbing contractors.

39 (f) “Guaranteed maximum price” means the maximum payment
40 amount agreed upon by the local agency and the design-build entity

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1 for the design-build entity to finish all remaining design,
2 preconstruction, and construction activities sufficient to complete
3 and close out the project.

4 (g) “Local agency” means a city, county, city and county, or
5 special district authorized by law to provide for the production,
6 storage, supply, treatment, or distribution of any water from any
7 source.

8 (h) “Progressive design-build” means a project delivery process
9 in which both the design and construction of a project are procured
10 from a single entity that is selected through a qualifications-based
11 selection at the earliest feasible stage of the project.

12 (i) “Qualifications-based selection” means the process by which
13 the local agency solicits for services from the design-build entities
14 and that price is not the sole factor as the basis of award.

15 22171. A local agency may procure progressive design-build
16 contracts and use the progressive design-build contracting process
17 described in this chapter for public works projects in excess of
18 five million dollars (\$5,000,000).

19 22171.5. A local agency entering into design-build contracts
20 authorized under this chapter shall develop guidelines for a
21 standard organizational conflict-of-interest policy, consistent with
22 applicable law, regarding the ability of a person or entity that
23 performs services for the local agency relating to the solicitation
24 of a design-build project, to submit a proposal as a design-build
25 entity, or to join a design-build team.

26 22172. The procurement process for progressive design-build
27 projects shall progress as follows:

28 (a) The local agency shall prepare and issue a request for
29 qualifications in order to select a design-build entity to execute
30 the project. The request for qualifications shall include, but is not
31 limited to, the following elements:

32 (1) Documentation of the size, type, and desired design character
33 of the project and any other information deemed necessary to
34 describe adequately the local agency’s needs, including the
35 expected cost range, the methodology that will be used by the local
36 agency to evaluate the design-build entity’s qualifications, the
37 procedure for final selection of the design-build entity, and any
38 other information deemed necessary by the local agency to inform
39 interested parties of the contracting opportunity.

(2) Significant factors that the local agency reasonably expects to consider in evaluating qualifications, including technical design and construction expertise, and all other non-price-related factors. The local agency may require that a cost estimate, including the detailed basis for the estimate, be included in the design-build entities' responses and consider those costs in evaluating the statements of qualifications.

(3) The relative importance or the weight assigned to each of the factors identified in the request for qualifications.

(4) A standard template request for statements of qualifications prepared by the local agency. In preparing the standard template, the local agency may consult with the construction industry, the building trades and surety industry, and other local agencies interested in using the authorization provided by this chapter. The template shall require the following information:

(A) If the design-build entity is a privately held corporation, limited liability company, partnership, or joint venture, a listing of all of the entity's shareholders, partners, or members known at the time of the statement of qualification submission who will perform work on the project.

(B) Evidence that the members of the design-build team have completed, or have demonstrated the experience, competency, capability, and capacity to complete, projects of similar size, scope, or complexity, and that proposed key personnel have sufficient experience and training to competently manage and complete the design and construction of the project, and a financial statement that ensures that the design-build entity has the capacity to complete the project.

(C) The licenses, registration, and credentials required to design and construct the project, including, but not limited to, information on the revocation or suspension of any license, credential, or registration.

(D) Evidence that establishes that the design-build entity has the capacity to obtain all required payment and performance bonding, liability insurance, and errors and omissions insurance.

(E) Information concerning workers' compensation experience history and a worker safety program.

(F) If the proposed design-build entity is a corporation, limited liability company, partnership, joint venture, or other legal entity,

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1 a copy of the organizational documents or agreement committing
2 to form the organization.

3 (G) An acceptable safety record. A proposer's safety record
4 shall be deemed acceptable if its experience modification rate for
5 the most recent three-year period is an average of 1.00 or less, and
6 its average total recordable injury or illness rate and average lost
7 work rate for the most recent three-year period does not exceed
8 the applicable statistical standards for its business category or if
9 the proposer is a party to an alternative dispute resolution system
10 as provided for in Section 3201.5 of the Labor Code.

11 (5) The information required under this subdivision shall be
12 certified under penalty of perjury by the design-build entity and
13 its general partners or joint venture members.

14 (b) (1) A design-build entity shall not be evaluated for selection
15 unless the entity provides an enforceable commitment to the local
16 agency that the entity and its subcontractors at every tier will use
17 a skilled and trained workforce to perform all work on the project
18 or contract that falls within an apprenticeable occupation in the
19 building and construction trades, in accordance with Chapter 2.9
20 (commencing with Section 2600) of Part 1.

21 (2) This subdivision shall not apply if one or more of the
22 following requirements are met:

23 (A) The local agency has entered into a project labor agreement
24 that will bind all contractors and subcontractors performing work
25 on the project or contract to use a skilled and trained workforce,
26 and the entity agrees to be bound by that project labor agreement.

27 (B) The project or contract is being performed under the
28 extension or renewal of a project labor agreement that was entered
29 into by the local agency ~~prior to~~ *before* January 1, 2023.

30 (C) The entity has entered into a project labor agreement that
31 will bind the entity and all its subcontractors at every tier
32 performing the project or contract to use a skilled and trained
33 workforce.

34 (3) For purposes of this subdivision, "project labor agreement"
35 has the same meaning as provided in paragraph (1) of subdivision
36 (b) of Section 2500.

37 (c) At the close of the solicitation period, the local agency shall
38 review the submissions. The local agency may evaluate
39 submissions based solely upon the information provided in each
40 design-build entity's statement of qualifications. The local agency

1 may also interview some or all of the design-build entities to further
2 evaluate their qualifications for the project.

3 (d) Notwithstanding any other provision of this code, upon
4 issuance of a contract award, the local agency shall publicly
5 announce its award, identifying the design-build entity to which
6 the award is made, along with a statement regarding the basis of
7 the award. The statement regarding the local agency's contract
8 award and the contract file shall provide sufficient information to
9 satisfy an external audit.

10 22172.1. (a) The design-build entity shall provide payment
11 and performance bonds for the project in the form and in the
12 amount required by the local agency, and issued by a California
13 admitted surety. The amount of the payment bond shall not be less
14 than the amount of the performance bond.

15 (b) The design-build contract shall require errors and omissions
16 insurance coverage for the design elements of the project.

17 (c) The local agency shall develop a standard form of payment
18 and performance bond for its design-build projects.

19 22172.2. (a) After selecting a design-build entity based upon
20 qualifications, the local agency may enter into a contract and direct
21 the design-build entity to begin design and preconstruction
22 activities sufficient to establish a guaranteed maximum price for
23 the project.

24 (b) (1) Upon agreement of the guaranteed maximum price for
25 the project, the local agency, at its sole and absolute discretion,
26 may amend its contract to direct the design-build entity to complete
27 the remaining design, preconstruction, and construction activities
28 sufficient to complete and close out the project, and may add funds
29 not exceeding the guaranteed maximum price to the contract for
30 these activities.

31 (2) If the cost for completing all remaining design,
32 preconstruction, and construction activities sufficient to complete
33 and close out the project exceed the guaranteed maximum price,
34 the costs exceeding the guaranteed maximum price shall be the
35 responsibility of the design-build entity. If the cost for these
36 activities are less than the guaranteed maximum price, the
37 design-build entity shall not be entitled to the difference between
38 the cost and the guaranteed maximum price. These amounts shall,
39 at the discretion of the local agency, be shared, based on
40 preestablished percentages, defined in the request for qualifications.

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(c) If the local agency and the design-build entity do not reach agreement on a guaranteed maximum price, or the local agency otherwise elects not to amend the design-build entity's contract to complete the remaining work, the local agency may solicit proposals to complete the project from firms that submitted statements of qualifications pursuant to Section 22172. The local agency may also, upon written determination that it is in the best interest of the city, county, city and county, or special district, as applicable, to do so, formally solicit proposals from other design-build entities, and contract award shall be made on a best value basis.

22172.3. (a) The local agency, in each design-build request for qualifications, may identify specific types of subcontractors that shall be included in the design-build entity's statement of qualifications. All construction subcontractors that are identified in the statement of qualifications shall be afforded the protections of Chapter 4 (commencing with Section 4100) of Part 1.

(b) Following award of the design-build contract, except for those construction subcontractors listed in the statement of qualifications, the design-build entity shall proceed as listed in this subdivision in awarding construction subcontracts with a value exceeding one-half of 1 percent of the contract price allocable to construction work for projects with a contract value of greater than or equal to ten million dollars (\$10,000,000).

(1) Provide public notice of availability of work to be subcontracted in accordance with the publication requirements applicable to the competitive bidding process of the local agency, including a fixed date and time on which qualifications statements, bids, or proposals will be due.

(2) Establish reasonable qualification criteria and standards.

(3) Award the subcontract ~~either on a best value basis or to the lowest responsible bidder.~~ *on a best value basis.* The process may include prequalification or short-listing.

(c) Subcontractors awarded construction subcontracts under this subdivision shall be afforded all the protections of Chapter 4 (commencing with Section 4100) of Part 1.

(d) A licensed construction contractor or subcontractor that provides design services used on a project authorized by this chapter shall not be subject to any liability arising from their

1 *design if the construction contract or subcontract for that design*
2 *is not performed by that contractor or subcontractor.*

3 22172.4. (a) If the local agency elects to award a project
4 pursuant to this chapter, retention proceeds withheld by the local
5 agency from the design-build entity shall not exceed 5 percent if
6 a performance and payment bond, issued by an admitted surety
7 insurer, is required in the solicitation. Work performed to establish
8 the guaranteed maximum price shall not be subject to retention.

9 (b) In a contract between the design-build entity and a
10 subcontractor, and in a contract between a subcontractor and any
11 subcontractor thereunder, the percentage of the retention proceeds
12 withheld shall not exceed the percentage specified in the contract
13 between the local agency and the design-build entity. If the
14 design-build entity provides written notice to any subcontractor
15 that is not a member of the design-build entity, before or at the
16 time the bid is requested, that a bond may be required, and the
17 subcontractor subsequently is unable or refuses to furnish a bond
18 to the design-build entity, then the design-build entity may withhold
19 retention proceeds in excess of the percentage specified in the
20 contract between the local agency and the design-build entity from
21 any payment made by the design-build entity to the subcontractor.

22 22172.5. (a) *Notwithstanding Section 10231.5 of the*
23 *Government Code, no later than January 1, 2028, a local agency*
24 *that uses the progressive design-build process pursuant to this*
25 *chapter shall submit to the appropriate policy and fiscal*
26 *committees of the Legislature a report on the use of the progressive*
27 *design-build process.*

28 (b) *The report shall include, but is not limited to, the following*
29 *information:*

30 (1) *A description of the project or projects awarded using the*
31 *progressive design-build process.*

32 (2) *The contract award amounts.*

33 (3) *The design-build entities awarded the project or projects.*

34 (4) *A description of any written protests concerning any aspect*
35 *of the solicitation, bid, or award of the contracts, including the*
36 *resolution of the protests.*

37 (5) *A description of the prequalification process.*

38 (6) *The number of specialty subcontractors listed by construction*
39 *trade type, on each project, that provided design services, but did*

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1 *not meet the target price for their scope of work, and therefore did*
2 *not perform construction services on that project.*

3 *(7) Whether or not any portion of a design prepared by the*
4 *specialty subcontractor that did not perform the construction work*
5 *for that design was used by the local agency.*

6 *(8) The number of specialty subcontractors listed by construction*
7 *trade type, on each project, that meet the definition of a small*
8 *business, as specified in paragraph (1) of subdivision (d) of Section*
9 *14837 of the Government Code.*

10 *(9) The number of specialty subcontractors listed by construction*
11 *trade type, on each project, that meet the definition of a*
12 *microbusiness, as specified in paragraph (2) of subdivision (d) of*
13 *Section 14837 of the Government Code.*

14 *(10) If a project awarded under this chapter has been completed,*
15 *an assessment of the project performance, including, but not limited*
16 *to, a summary of any delays or cost increases.*

17 *(c) The report submitted pursuant to subdivision (a) shall be*
18 *submitted in compliance with Section 9795 of the Government*
19 *Code.*

20 22173. Nothing in this chapter affects, expands, alters, or limits
21 any rights or remedies otherwise available at law.

22 22174. This chapter shall remain in effect only until January
23 1, ~~2033~~, 2029, and as of that date is repealed.

24 SEC. 2. No reimbursement is required by this act pursuant to
25 Section 6 of Article XIII B of the California Constitution because
26 the only costs that may be incurred by a local agency or school
27 district will be incurred because this act creates a new crime or
28 infraction, eliminates a crime or infraction, or changes the penalty
29 for a crime or infraction, within the meaning of Section 17556 of
30 the Government Code, or changes the definition of a crime within
31 the meaning of Section 6 of Article XIII B of the California
32 Constitution.

O



Communications & Legislation Committee

Express support for SB 991
(Newman, D-Fullerton):
Public contracts: progressive design-
build: local agencies

Item # 7-16
April 11, 2022

Background

- Traditional Delivery Method for Local Agencies
- Agencies with Alternative Delivery Authority
- Assembly Bill 1845

Definition of Term

Progressive Design Build (PDB)

- Contracting method where a single entity is hired to do both design and construction
- Selection through qualification-based process

SB 991 Background & Provisions

- Sponsored by **The Water Collaborative Delivery Association**
- Would authorize local water/wastewater agencies to use PDB
- Applicable to public works projects in excess of **\$5 million**
- Sunset date: January 1, 2029

Potential Benefits of PDB

- Potential for schedule advancement (earlier online dates)
- Enhanced opportunities for:
 - Collaboration during project development phase
 - Risk identification & allocation
- Earlier cost certainty; possible cost savings
- Greater flexibility in selection process
- Increased opportunities for innovation

SB 991 Comparison with AB 1845 (Calderon)

Category	SB 991	AB 1845
Alternative delivery method	PDB only	DB, PDB, CM/GC
Coverage	Water-related projects > \$5M	RRWP and drought projects
Sunset Date	January 1, 2029	DB January 1, 2025 PDB and CM/GC January 1, 2028
Conflict of Interest Language	Yes	Yes
Skilled & Trained Workforce Requirements	Enforceable commitment required unless agency has PLA	Enforceable commitment required unless agency has PLA
Selection Process	Qualifications-based	Qualifications-based or Best Value
Subcontractor Selection Process	Owner's discretion	Owner's discretion

Support & Opposition

Support

- Association of California Water Agencies
- California Association of Sanitation Agencies
- California Municipal Utilities Association
- Inland Empire Utilities Agency
- Santa Clara Valley Water District
- Silicon Valley Leadership Group
- State Building & Construction Trades Council of California
- The Bay Area Council
- WaterReuse Association

Opposition

- None registered

Options.

Option #1

Express a support position on SB 991
(Newman): Public contracts: progressive
design-build: local agencies

Option #2

Take no position

Staff Recommendation.

Option #1





• Conservation Board Report April 2022

Summary

This report provides a summary of conservation activity and expenditures for February 2022.

Purpose

Informational

Detailed Report

Conservation Expenditures – FY2020/21 & FY2021/22 ⁽¹⁾







	Paid ⁽²⁾	Committed ⁽³⁾
Regional Devices	\$6.7 M	\$8.1 M
Member Agency Administered	\$2.7 M	\$6.5 M
Turf Replacement	\$13.9 M	\$16.0 M
Advertising	\$0.2 M	\$4.3 M
Other	\$2.4 M	\$1.2 M
TOTAL	\$25.9 M	\$36.1 M

(1) The Conservation Program biennial expenditure authorization was \$86 million and expected expenditures for rate setting purposes were \$50 million.

(2) As of 7/1/2020 - 2/28/2022

(3) Committed dollars as of March 10, 2022

Summary of Expenditures in February 2022: \$1,988,269 ⁽¹⁾

 Turf Replacement Rebates: February: 604,898 ft ² removed FY2020/21-FY2021/22: 7,085,590 ft² removed	 Clothes Washers: February: 2,398 units rebated FY2020/21-FY2021/22: 28,316 units rebated
 Smart Controllers: February: 1,625 units rebated FY2020/21-FY2021/22: 21,236 units rebated	 Toilets: February: 693 units rebated FY2020/21-FY2021/22: 17,109 units rebated
 Rain Barrels and Cisterns: February: 130 units rebated FY2020/21-FY2021/22: 4,000 units rebated	 Sprinkler Nozzles: February: 3,898 units rebated FY2020/21-FY2021/22: 53,118 units rebated

Lifetime Water Savings to be achieved by all rebates in February 2022: 4,933 AF

FY2020/21-FY2021/22: 65,527 AF lifetime water savings

(1) Expenditures may include advertising and Water Savings Incentive Program activity in addition to the incentives highlighted above.



- Board of Directors
Water Planning and Stewardship

4/12/2022 Board Meeting

9-2

Subject

Information on a proposed Water Shortage Emergency Condition and Emergency Water Conservation Program to Preserve Metropolitan's Supplies in the State Water Project-Dependent Areas

Executive Summary

As a result of record drought in California and extremely limited State Water Project (SWP) allocations, staff projects there will be insufficient supplies this year to meet the anticipated demands in areas staff has identified as the current SWP-dependent portions of Metropolitan's service area ("SWP Dependent Area"). Therefore, staff is proposing that the Board take the following actions to reduce demands and preserve supplies in this area:

1. Express support for the Governor's Executive Order N-7-22 on March 28, 2022, calling for all urban water suppliers to implement actions to reduce water use by 20-30 percent, depending on local conditions.
2. Declare that a Water Shortage Emergency Condition exists in the SWP Dependent Area.
3. Adopt the framework for a two-phase Emergency Water Conservation Program to reduce non-essential uses of water and preserve available water supplies for the greatest public benefit in the SWP Dependent Area. The first phase of this program would:
 - a. Limit landscape watering to one day per week in the SWP Dependent Area;
 - b. Require those member agencies whose service areas encompass all or a portion of the SWP Dependent Area to adopt and implement effective enforcement mechanisms to ensure compliance with this limit; and
 - c. Impose volumetric penalties of up to \$2,000 per acre-foot for non-compliance.

The one-day-per-week watering limitation would be effective immediately; any penalties for non-compliance would be assessed beginning June 1, 2022. If needed, the second phase of this program would involve a complete ban on landscape watering to further preserve available supplies in the SWP Dependent Area, with similar penalties for non-compliance.

4. Authorize the General Manager to finalize the terms for the Emergency Water Conservation Program consistent with the Board's authorization and in conformance with the California Department of Water Resources' (DWR) requirements to access SWP water for human health and safety purposes.
5. Require the General Manager to regularly report to the Board on the effectiveness of the first phase of the Emergency Water Conservation Program and authorize the General Manager to implement the second phase of the program if deemed necessary.
6. Require the General Manager to return to the Board with proposed modifications to the Emergency Water Conservation Program should he determine that implementation of the first and second phases of the program are not adequately preserving available supplies in the SWP Dependent Area. These modifications may include using a population-based approach to set limits or targets on per capita water use.

Staff projects that water savings attained from these actions, if implemented by member agencies and other retail agencies, would preserve supply for essential human health and safety needs through the fall. However, if drought conditions persist or the water savings from these actions fall short, staff is prepared to recommend a complete ban on outdoor watering in the SWP Dependent Area.

A public hearing and Special Board Meeting is scheduled for April 26, 2022, for the Board to consider these actions, which would be taken pursuant to Water Code section 350 et seq., Water Code section 375 et seq., and other applicable authorities, and in accordance with Metropolitan's Urban Water Management Plan and Water Shortage Contingency Plan, the Governor's Executive Orders related to the drought, and recent directives from DWR concerning the use of SWP supplies.

Details

The Need to Access Human Health and Safety Supplies from the SWP

For decades, Metropolitan has worked to improve its conveyance and distribution system to ensure flexibility in delivering SWP and Colorado River water throughout much of its service area. However, due to the depth and duration of the current drought, staff projects that Metropolitan will not be able to meet normal demands in the SWP Dependent Area utilizing existing resources. Despite best efforts to maximize available resources and operational flexibility this year, Metropolitan must seek additional human health and safety water allocated from DWR.

Beginning in water year 2020 (October 1, 2019, to September 30, 2020), watersheds supplying the SWP received well below-average precipitation. DWR classified water years 2020 and 2021 as dry and critically dry, respectively. Despite substantial precipitation in October and December 2021, precipitation in Northern California from January through March 2022 fell to the driest levels on record. In addition to reduced precipitation, California's climate is warming, and the historical relationships between temperature, precipitation, and runoff are changing. In 2021, the DWR's snowmelt runoff forecast over-estimated actual runoff by 68 percent. In 2022, despite DWR estimating runoff to a highly conservative 99th percentile, runoff forecasts for the Sacramento River dropped by 27 percent, further exacerbating supply planning.

The deteriorating hydrologic conditions led DWR to reduce the SWP Table A Allocation for 2022 from 15 to five percent of contract amounts on March 18, 2022. This follows a five percent SWP Table A Allocation in 2021. Coming in the third year of drought, this extremely low Table A allocation is insufficient to meet minimum human health and safety needs in the SWP Dependent Area. Accordingly, DWR will exercise a never-before-invoked provision of the water supply contract (Article 18a) that allows SWP water to be allocated on some other basis than Table A to meet minimum demands for domestic supply, fire protection, or sanitation. To that end, in October 2021 Metropolitan submitted a letter to DWR requesting delivery of certain human health and safety supplies to the SWP Dependent Area.

It should be noted that the boundaries of the SWP Dependent Area are not fixed and other Metropolitan supplies (such as previously stored SWP supplies from groundwater banking, carryover, flexible storage in Castaic Lake or Perris Lake, or north-of-Delta transfers) are also delivered through those service connections. The boundaries of the SWP Dependent Area have been reduced in recent years with the new ability to supply the Mills Water Treatment Plant from Diamond Valley Lake (May 2021) and through new water management programs such as the Operational Shift Cost Offset Program (May 2021) and the Reverse Cyclic Storage Program (February 2022).

Although the exact conditions to access human health and safety supplies are not finalized, DWR expects contractors receiving such supplies to mandate substantial reductions in water use consistent with these emergency drought circumstances. Further, DWR will require any water taken in 2022 for human health and safety purposes to be returned within five years, thus creating a water supply debt that effectively trims future Table A allocations and slows any storage recovery once the drought eases. Guidelines established by DWR are based on prior curtailment regulations adopted by the California State Water Resources Control Board (SWRCB) and could be further modified.

The Need for Demand Management in the SWP Dependent Area

Of most importance, the normal water demands of Member Agencies currently lying within the SWP Dependent Area cannot be met in 2022 without a real risk of depleting supplies needed for human health

and safety. Metropolitan must seek the water offered by DWR for human health and safety purposes and must conform to conditions that DWR places on its use.

In November 2021, the Board declared that specified emergency conditions exist within portions of the service area rather than across the entire regional system. The Board's action on that date also stated that, "should drought conditions persist or worsen in the coming months, Metropolitan's Board of Directors will consider declaring a water shortage emergency condition and imposing appropriate regulations, restrictions and penalties pursuant to California Water section 350 et seq., so as to conserve Metropolitan's water supplies for the greatest public benefit with particular regard to domestic use, sanitation, and fire protection." Unfortunately, current hydrologic conditions require this type of action.

In 2014, the Board adopted a revised Water Supply Allocation Plan (WSAP) to be used when a regional shortage exists. The WSAP establishes baseline usage, regional shortage levels, and a surcharge for a member agency's aggregate water use above a predetermined allotment. The WSAP was designed and intended only for use during region-wide water shortages. The WSAP included provisions, based on Senate Bill X7-7 in 2009, to set a floor of minimum per capita usage of 100 gallons per person per day (gpcd) for total water use and 55 gpcd for indoor residential water use. Staff determined that the WSAP, with its regional focus, could not effectively or efficiently alleviate the circumstances of this current emergency.

Rather than modifying or reconstructing the WSAP for this rapidly developing emergency condition, a more expedient manner to preserve existing water supplies in the SWP Dependent Area is to reduce or eliminate non-essential uses in the directly affected areas. These non-essential uses (e.g., water for outdoor landscapes, filling swimming pools or fountains, or washing cars) could be curtailed through either price or non-price mechanisms.

A Framework for the Emergency Water Conservation Program

Based on these principles, and through collaboration with the affected member agencies, staff recommends the Board authorize an Emergency Water Conservation Program that initially focuses on non-price mechanisms to reduce outdoor watering. The proposed Emergency Water Conservation Program includes three main elements to achieve the goal of lowering normal demand and preserving water for human health and safety purposes:

- (1) Each member agency that currently receives SWP supplies¹ at the connections within the SWP Dependent Area must implement and enforce a restriction on outdoor watering of no more than one day per week (and outdoor watering may later be completely banned).
- (2) If a member agency either does not submit an acceptable plan to limit outdoor watering or if it inadequately enforces the plan, a penalty of up to \$2,000 per acre-foot shall be assessed on all supplies delivered to that non-compliant agency at the designated connections. Importantly, for wholesale member agencies, the penalty would apply only to that portion of water delivered to one or more of their non-compliant retail agencies. The penalty would not be applied to the full delivery to the wholesale member agency if only a portion of its retailers were non-compliant.
- (3) An agency **can entirely avoid these outdoor watering restrictions and penalties** if it takes sufficient action to entirely eliminate its use of SWP supplies at the designated connections.

Outdoor watering ordinances. Staff is coordinating with the affected member agencies to define elements of one-day-per-week watering. Metropolitan would not specify, for example, either the day of the week or any even/odd house numbering rotation. Metropolitan will, however, require that member agencies limit watering times to 8 minutes per station (for most irrigation systems) to prevent substitution of water use from newly banned days to permitted days. Hand watering of trees would be exempt from the one-day-per-week restriction.

Each retail water provider receiving supply at the designated connections must submit municipal codes or ordinances adopted by their respective governing bodies which clearly restrict outdoor watering to no more than one day per week. Staff will report progress and performance with these restrictions monthly to the Board. The

¹ SWP supplies are Metropolitan's supply inclusive of SWP Table A, carryover storage, flexible storage, north-of-Delta transfers, and previously stored Table A supplies pumped or exchanged through water management programs along the California Aqueduct.

call for one-day-per week watering would take place immediately upon the Board's authorization of the Emergency Water Conservation Plan (planned for April 26, 2022). In order to avoid a volumetric penalty for water used beginning in June 2022, the retailer must adopt and begin enforcement of the restrictions by May 31, 2022.

Enforcement plans. Equally important to the outdoor watering restrictions on paper is the agency's willingness and ability to enforce meaningful penalties for non-compliance. Staff is also coordinating with the member agencies in this area to develop a list of acceptable enforcement provisions, because enforcement mechanisms may vary widely. For example, one agency might use code enforcement officers to cite and educate customers. Another agency might use advanced metering infrastructure to flag suspected outdoor water use on banned days electronically. Yet another agency might use tiered pricing penalties to assure compliance. **The relevant enforcement principle is that the agency establishes a plan with real consequences to the consumer for inaction with either a one-day-per-week restriction or a ban on all outdoor water use.** Further, an enforcement plan must be auditable with a clear and transparent way to verify enforcement. Similar to the outdoor watering ordinances, enforcement plans must be adopted by the retail agency's governing body by May 31, 2022, to avoid the volumetric penalty beginning Jun. 1, 2022. If the retail agency is not the Metropolitan member agency, then the Metropolitan member agency must coordinate regulations to be enacted by the retail agency in the affected area.

Volumetric penalties. If a retail agency takes supply at the designated connection but does not adopt either an acceptable outdoor watering ordinance or enforcement plan, the volume of water purchased by the member agency at that connection for itself, or on behalf of the retail agency, shall be assessed a \$2,000 per acre-foot penalty. This penalty will be charged to the member agency separate from all other applicable rates and charges for water service, as it is not a charge for service. For wholesale member agencies, the penalty would apply only to that portion of water delivered to one or more of their non-compliant retail agencies. The penalty would not be applied to the full delivery to the wholesale Member Agency if only a portion of its retailers were non-compliant.

The fine of \$2,000 per acre-foot was selected to send a strong economic signal to reduce water use by complying with an outdoor watering ordinance and enforcement plan. Any penalties collected would be proportionately returned to member agencies (once compliant) to help defray enforcement or other costs incurred in conjunction with the proposed Emergency Water Conservation Program.

The outdoor watering ordinances, enforcement plans, and volumetric penalties listed above comprise the framework of the Emergency Water Conservation Plan. At the Special Board Meeting planned for April 26, 2022, the Board will consider whether to authorize the General Manager to finalize the plan's terms. Once final, the member agencies and retail agencies that are not member agencies would adopt ordinances and enforcement plans to avoid penalties to the Member agencies.

Assistance Provided to Member Agencies

Metropolitan will assist the member agencies in improving compliance with the watering restrictions and amplifying the serious message to consumers within the SWP dependent areas. Assistance will take these forms:

- (1) **Member Agency Administered Program (MAAP).** Metropolitan will make available the full allotment of the MAAP funds to the affected Member agencies. Metropolitan will allow affected member agencies to access remaining funds in the MAAP for enforcement activities for the current biennium. For the upcoming biennium, approximately \$4.2 million is proposed in the budget for the affected agencies. These funds would be made immediately available beginning July 1, 2021. In addition, any penalties paid for non-compliance with the Emergency Water Conservation Plan would likewise be made available to agencies for enforcement. A member agency wishing to access these funds must still submit a proposal for approval by Metropolitan.
- (2) **Assistance with public messaging for drought awareness and water conservation.** In Mar. 2022, the Board authorized staff to enter into a three-year contract with a media placement firm. From March – June 2022, up to \$3.5 million is available to develop and purchase advertising. Likewise, up to \$7.4 million is available in the proposed FY 2022-24 biennium budget. Metropolitan staff will coordinate closely with the public affairs staff of the affected member agencies to send an amplified and unified message to consumers about the one-day-per-week watering restrictions. Metropolitan will stand with the

member agencies in communicating these emergency conditions. Staff expects many opportunities to amplify the message also through the earned media of press conferences and news media stories.

Planned Monitoring and Reporting

Staff will report to the Water Planning and Stewardship Committee each month on progress achieved by the Emergency Water Conservation Program. Further, staff will partner with the member agencies to collect and report changes in per-capita water use. Staff will monitor progress and report back to the Board using these types of tools:

- Lists of agencies with compliant outdoor watering restrictions and enforcement plans.
- Change in Metropolitan water deliveries to the SWP Dependent Area.
- Total local supply production within the SWP Dependent Area.
- Water conservation and productions reports based on monthly data submitted to the SWRCB on residential per capita water use.
- Disaggregated data from more than 5,000 flow-monitoring devices installed on single-family homes in Metropolitan's service area (including approximately 1,500 within the SWP Dependent Area) showing changes in outdoor water use behavior.
- Remote-sensing imagery showing change in "greenness" of outdoor landscapes (this is a developing research method).

Through this monthly monitoring and through regular communications with the member agencies, the General Manager would inform the member agencies and the Board in advance of the intent to implement the second phase of the Emergency Water Conservation Plan and ban all outdoor watering.

Continuing Actions to Improve the Plan if the Drought Persists or Compliance Falters

The primary goals of the two-phase Emergency Water Conservation Plan are to (1) preserve Metropolitan's scarce supplies in 2022; (2) minimize the amount of SWP human health and safety water that Metropolitan must access (and pay back); and (3) prepare for a potentially dry 2023. Preserving water supply now allows the potential for a new water year to develop, and the plan could be modified as conditions improve. Alternatively, despite the best efforts of agencies in the SWP Dependent Area to reduce or eliminate non-essential water use, continuing drought conditions may force further action.

Staff is actively exploring with the member agencies alternative approaches to reduce demands if the outdoor watering restrictions within the proposed Emergency Water Conservation Plan prove ineffective, disproportionate, or unworkable. Staff will develop a population-based method designed to share the remaining supply across the agencies using limits on per-capita water use rather than solely on outdoor watering restrictions. The population-based method, or a hybrid approach combining outdoor watering restrictions with a backstop of a population-based limit, may prove to be a more viable tool to reduce water use. If an alternative approach is needed, the General Manager would seek Board approval before implementation.

Other Activities Supporting the SWP Dependent Area

Staff regularly reported to the Board and sought authority and funding to address system and supply shortages affecting the SWP Dependent Area. The Emergency Water Conservation Program is intended only as a short-term, stop-gap policy until lasting relief can be provided. Sample operational, physical, and supply actions to improve the supply constraints include:

- Adjusted distribution system operations to minimize SWP use and draw heavily on the Colorado River and stored supplies (January 2021).
- Increased pumping on the Colorado River Aqueduct to the total capacity of eight pumps (intermittent operation since April 2021).
- Initiated the Operational Shift Cost Offset Program (May 2021) and Reverse Cyclic Program (February 2022), which removed financial barriers to switching from or deferring SWP deliveries.
- Switched the source water feed to the Mills Water Treatment Plant from SWP to Diamond Valley Lake storage (May 2021).
- Rebuilt and started up the Greg Avenue facility to pump ~100 acre-feet per day of Colorado River and stored supplies into the western portion of the distribution system (June 2021).

- Expanded conservation programs (December 2021).
- Authorized agreements with other water agencies to improve management of SWP supplies (San Bernardino Valley MWD, San Diego County Water Authority, December 2021).
- Amended the capital investment plan to start planning and implementing infrastructure projects for the western portion of the distribution system (February 2022).

These actions are accelerating with the development of infrastructure and water supply portfolios through the Extreme Drought Assessment, which includes as its design condition three SWP allocations of five percent.

Policy

Metropolitan Water District Administrative Code Section 6410. Powers and Duties

Metropolitan Water District Administrative Code Section 6412. Delegation of Executive and Administrative Powers

Metropolitan Water District Administrative Code Section 11104: Delegation of Responsibilities

By Minute Item 20984, dated Nov. 1, 1960, the Board adopted Resolution 5838 and approved the execution of the SWP contract with DWR.

By Minute Item 49979, dated Dec. 9, 2014, the Board approved adjustments to the Water Supply Allocation Plan

By Minute Item 50824, dated May 9, 2017, the Board adopted a resolution that declared a “Condition 1 –Water Supply Watch.”

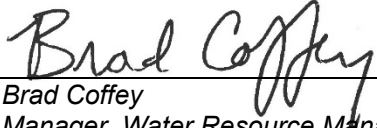
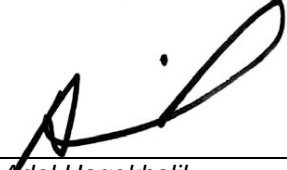
By Minute Item 52378, dated May 10, 2021, the Board adopted the 2020 Urban Water Management Plan and the Water Shortage Contingency Plan

By Minute Item 52481, dated Aug. 17, 2021, the Board adopted a resolution that declared a “Condition 2 –Water Supply Alert.”

By Minute Item 52581, dated Nov. 9, 2021, the Board adopted a resolution which declared specified emergency conditions within the Metropolitan service area.

Fiscal Impact

Upon adopting the Emergency Water Conservation Plan, revenues from water transactions will likely decrease as member agencies reduce water demands. At the Mar. 22, 2022, budget workshop, staff presented a scenario with 100 thousand acre-feet fewer transactions for two years. This scenario—realistic in the magnitude of the needed demand management activity—would reduce revenues by approximately \$100 million each year.

 Brad Coffey Manager, Water Resource Management	4/7/2022 Date
 Adel Hagekhalil General Manager	4/8/2022 Date



Water Planning and Stewardship Committee

Emergency Conservation Program for the SWP Dependent Areas

Item 9-2
April 12, 2022

How did we get here?

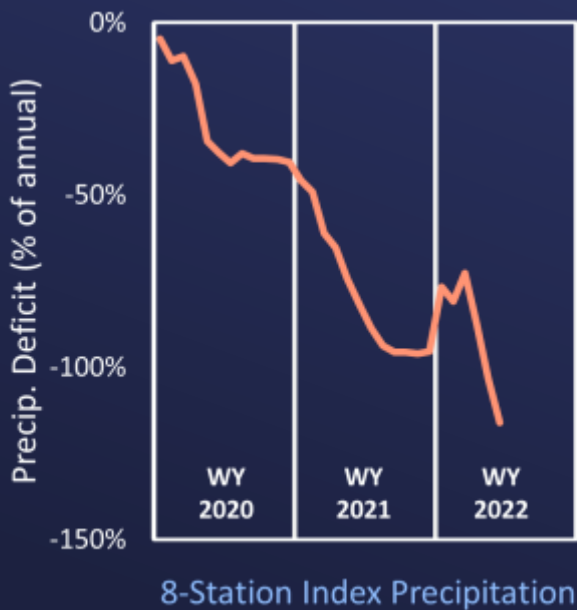
Third Year of Drought

- Driest 3 years
- Driest 3 months (Jan. – Mar.)



● Declarations and
Executive Orders by
Governor Newsom

How did we get here?

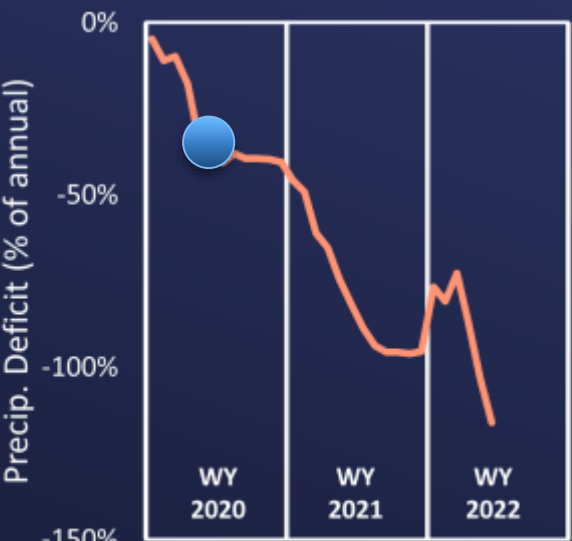


Third Year of Drought

- Driest 3 years
- Driest 3 months (Jan. – Mar.)
- Lowest 3-year total deliveries from State Water Project

Average Expectation for SWP	3.2 million AF
DWR’s Lowest Forecast	1.0 million AF
Today	0.6 million AF

What did we do as the drought intensified?



8-Station Index Precipitation

Proportionate Response Since Mar. 2020

● Mar. 2020

Minimized SWP flow to areas that can receive both SWP and CRW



Mar. 2021

Started pump-in from Semitropic and Kern Delta storage programs

Apr. 2021

Operated Colorado River Aqueduct at full capacity



Board approved North-of-Delta water transfers up to \$44 million

What did we do as the drought intensified?



8-Station Index Precipitation

Proportionate Response Since Mar. 2020

● May 2021

Board approved new Operational Shift Cost-Offset Program

Fed Mills Plant from DVL for the first time



Jun. 2021

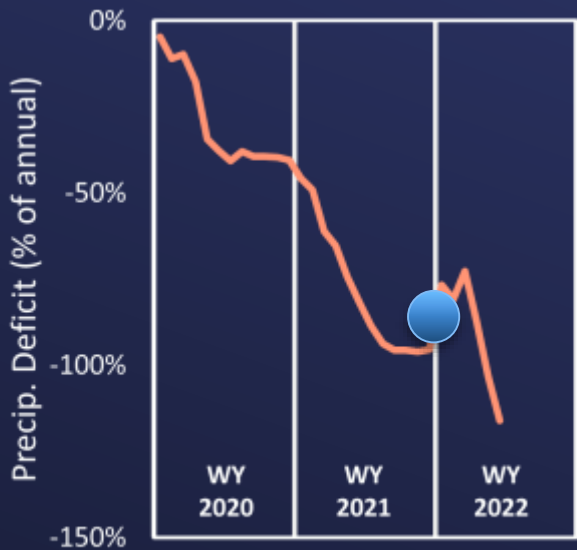
Rehabilitated Greg Avenue pumps began operation



Aug. 2021

Board declared Water Supply Alert, calling for consumers & businesses to voluntarily reduce water use

What did we do as the drought intensified?



8-Station Index Precipitation

Proportionate Response Since Mar. 2020

Oct. 2021

Governor Newsom declares State of Emergency for all California counties

Zero percent SWP allocation expected

Metropolitan requests supplies for human health and safety* if drought persists



Nov. 2021

Board declares drought emergency for SWP dependent area and warns of further action if drought continues

Board expands conservation programs

Dec. 2021

More than 16 feet of snow falls in December



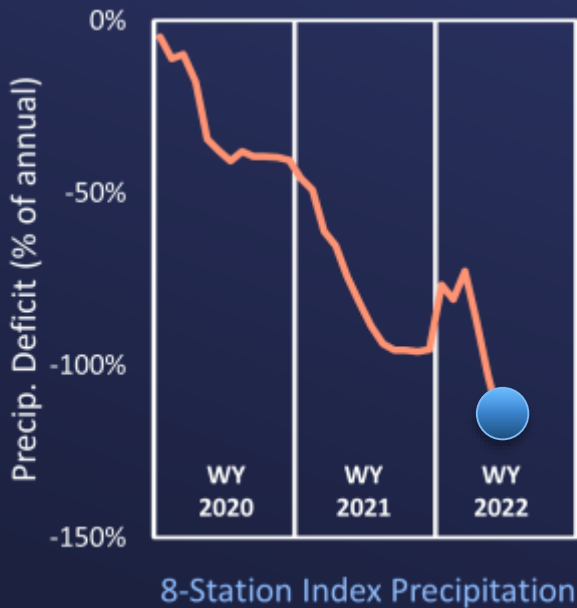
Board approves SDCWA & San Bernardino Valley Water District agreements

Board amends Capital Investment Plan to improve east area infrastructure reliability

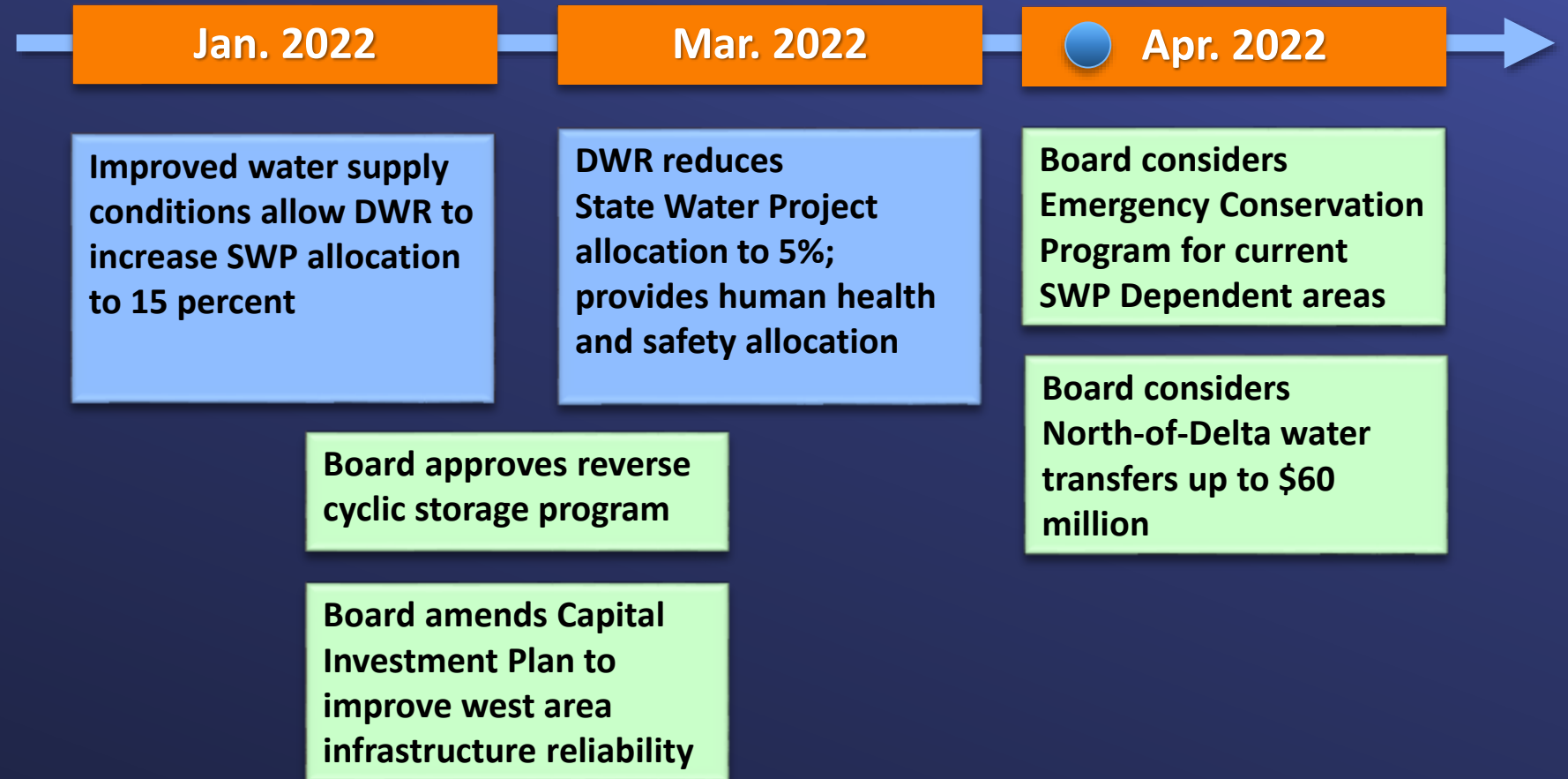
*domestic supply, fire suppression, or sanitation

Water Planning and Stewardship Committee

What did we do as the drought intensified?



Proportionate Response Since Mar. 2020



What is Human Health & Safety supply?

Water needed for domestic supply, fire protection, or sanitation

- SWP contract provision allocating water on a basis other than Table A
- Implemented consistent with State Water Board curtailment regulations
- Primary basis is 55 gal/person/day
- Does not include outdoor uses (except hand watering for fire protection)

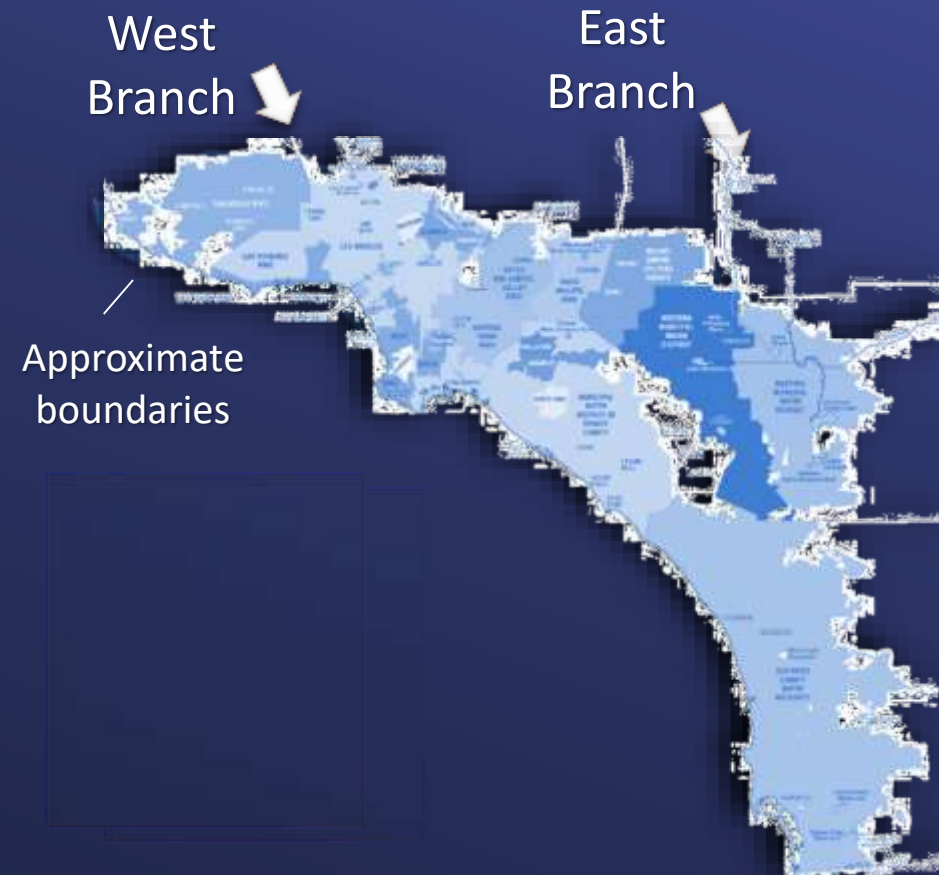
What are the conditions for receiving Human Health & Safety supplies?

DWR conditions to accessing human health & safety supplies

- “Robust conservation efforts with mandatory requirements”
- Pay back water within five years
- Make investments to reduce reliance on SWP for human health & safety needs
- Certain other supplies may supplement human health & safety deliveries

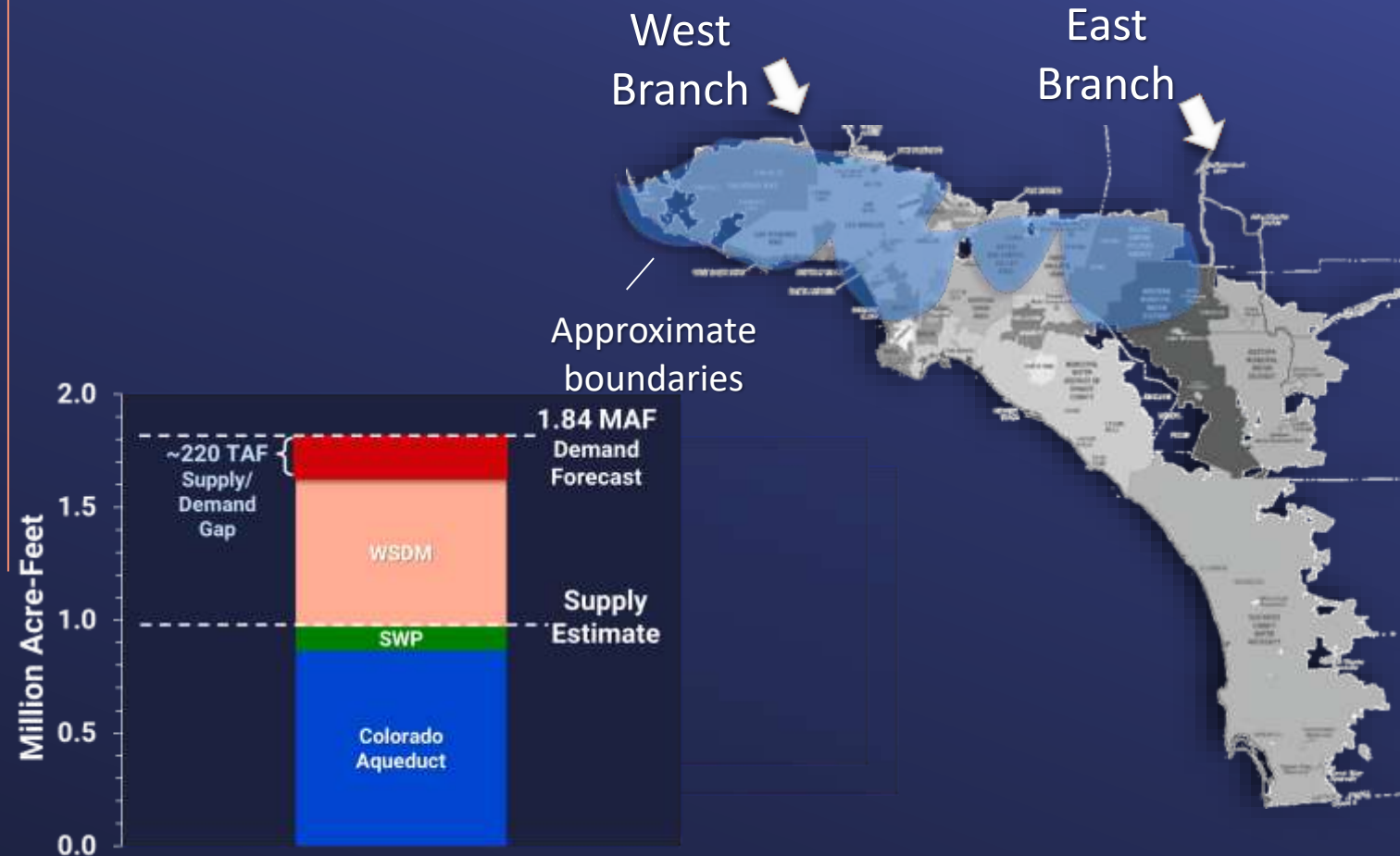
What is the SWP dependent area?

Areas currently served by Metropolitan
primarily through the State Water Project



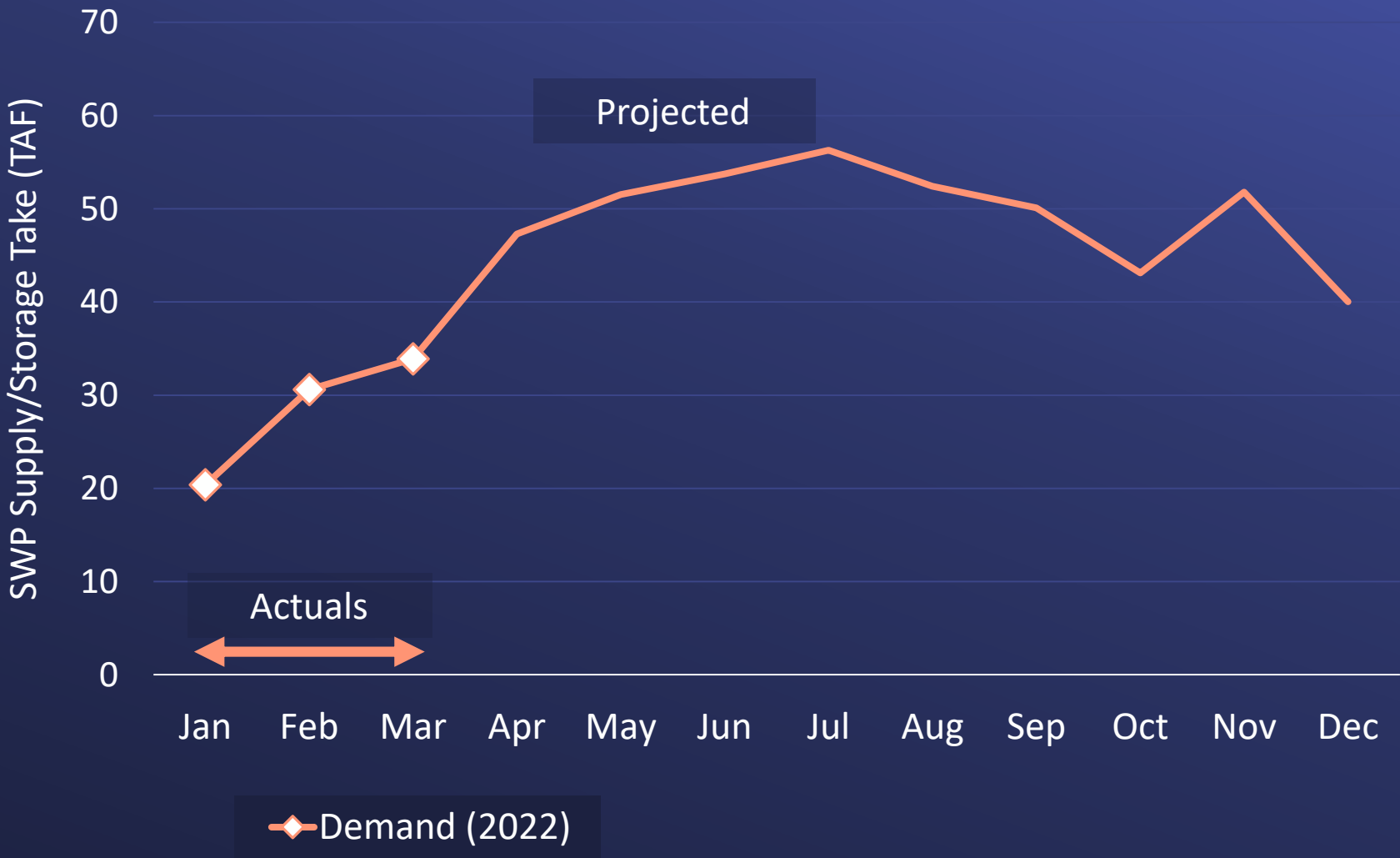
Can we
meet normal
demands
in the SWP
dependent
area?

Normal water demands cannot be met
in the SWP dependent area



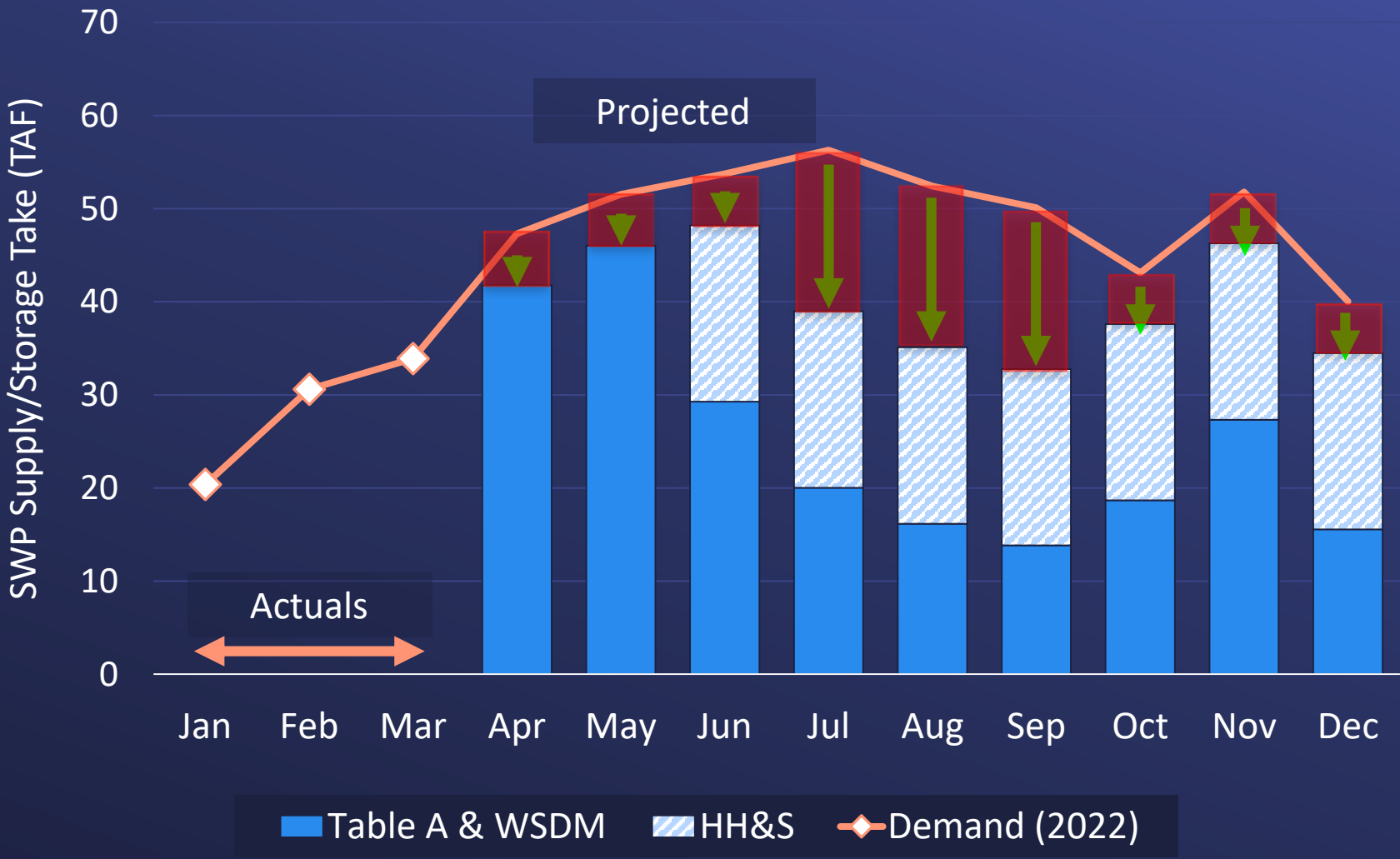
When should we accelerate actions?

Additional conservation needed now



When
should we
accelerate
actions?

Additional conservation needed now



What are the
goals of this
proposed
action?

Seeking three objectives

- Preserve scarce supplies this year
- Minimize take of human health and safety water and show clear line-of-sight to conditions for its use
- Prepare for a potential fourth year of drought

Were others involved?

Metropolitan staff advocated with DWR and sought Member Agency input

- DWR coordination to maximize use of stored supplies and transfers
- 15 meetings with directly affected Member Agency managers (since Aug. 2021)
- Monthly reporting to all Member Agency Managers and WP&S Committee of Board (through WSDM reports and presentations)

What tools were considered?

Three alternatives considered:

- Water Supply Allocation Plan (2014)
- Population-Based Allocation
 - Human health and safety (55 gal/person/day)
 - Water supply balance (~130 gal/person/day)
 - Minimum additional conservation (5% reduction)
- Mandatory Conservation Actions
 - Single day per week outdoor watering
 - No outdoor watering (if warranted)

What is the framework?

Three main elements of the Emergency Conservation Program

- Mandate and enforce conservation actions
 - Single day per week outdoor watering
 - No outdoor watering (if warranted)
- Volumetric penalty of \$2,000 per acre-ft
 - Assessed on all SWP delivered to non-compliant water provider (e.g., only part wholesale Member Agency delivery)
- Ability to opt out
 - Outdoor watering restrictions and penalties do not apply if agency eliminates need for delivery of water from SWP
 - This incentivizes local production and conservation

How does an agency comply?

Agencies must adopt certain elements (codes, ordinances, resolutions)

- Outdoor watering restrictions
 - Phase 1: Single day per week outdoor watering
 - Phase 2: No outdoor watering
- Enforcement plan
 - Real consequences to the customer for inaction
 - Approach will vary by agency
 - Ability to audit the enforcement plan
- Adopt by May 31, 2022, to avoid volumetric penalty in June

What would success look like?

Measures of Success

- Preserve sufficient supply for human health & safety if drought continues
- Provide supply for indoor commercial, industrial, and institutional use
- Allow time for additional emergency supply actions to come on-line

How will you monitor success?

Monitoring Mechanisms in SWP Dependent Areas

- Compliance status of water providers
- Metropolitan deliveries to affected service connections
- Local supply production
- Residential water use (existing SWRCB reporting)
- Disaggregated data from flow monitoring devices
- Remote sensing imagery analysis

What assistance is available?

- Assistance available for enforcement activities
 - Access to remaining Member Agency Administered Program (MAAP) funds in the current biennium
 - Access to the proposed \$4.2 million in the upcoming biennium will be made available on July 1, 2022
 - Any collected penalties add to these available funds
- Partnering with drought awareness and public water conservation messaging
- Regional conservation programs
 - Increased flexibility for turf removal applicants
 - Seeking additional conservation funding from state (\$4.5 million awarded last month)

What actions are proposed on April 26?

1. Support Governor's Executive Order N-7-22
 - Implement Water Shortage Contingency Plan Level 2 response actions to reduce water use
2. Declare a Water Shortage Emergency Condition
 - Targeted to the SWP Dependent Area
3. Adopt two-phase Emergency Water Conservation Program framework
 - Limit outdoor watering to one-day-per-week immediately
 - Require effective enforcement
 - Impose volumetric penalties of \$2,000 per acre-foot for non-compliance
 - Include second phase of complete ban on outdoor watering, if needed

What actions are proposed on April 26? (cont.)

4. Authorize GM to finalize Emergency Conservation Program
 - Ensure conformance with DWR human health and safety requirements
5. Require regular reporting
 - Effectiveness of 1-day watering restriction
 - Need for outdoor watering ban
6. Develop modifications to program if needed
 - Monitoring and feedback will determine if existing plan is effective, workable, and proportionate
 - Potential use of population-based approach to set limits on per capita water use
 - Board action required

How do we coordinate and accelerate actions?

- Continue coordination to finalize and implement the plan
 - Develop suite of acceptable enforcement provisions
 - Finalize and execute an amplified and unified public message for consumer actions
 - Bring information-sharing on-line with affected agencies
- Advocate before State and Federal government for maximum action and assistance during drought



