Board of Directors

August 15, 2023

1:00 PM

Tuesday, August 15, 2023 Meeting Schedule
08:30 a.m. FAIRP 10:30 a.m. EOP 12:30 p.m. Break 01:00 p.m. BOD 02:15 p.m. Audits

Agendas, live streaming, meeting schedules, and other board materials are available here: https://mwdh2o.legistar.com/Calendar.aspx. 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
Teleconference Locations:
Fullerton City Hall Council Chambers • 303 W. Commonwealth Avenue • Fullerton, CA 92832
2936 Triunfo Canyon • Agoura Hills, CA 91301
3008 W. 82nd Place • Inglewood, CA 90305
2680 W. Segerstrom Avenue Unit I, • Santa Ana CA 92704

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1. Call to Order

a. Invocation: Director Marsha Ramos, City of Burbank

b. Pledge of Allegiance: Board Vice Chair S. Gail Goldberg, San Diego County Water Authority

2. Roll Call

3. Determination of a Quorum

4. COMMUNITY REFLECTIONS

a. California African American Water Education Foundation **21-2353**

5. 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))

6. OTHER MATTERS AND REPORTS

A. Report on Directors' Events Attended at Metropolitan's Expense **21-2354**

Attachments: 08152023 BOD 6A Report

B. Chair's Monthly Activity Report **21-2355**

Attachments: 08152023 BOD 6B Report
08152023 BOD 6B Photo

C. General Manager's summary of activities **21-2356**

Attachments: 08152023 BOD 6C Report

D. General Counsel's summary of activities [ADDED SUBJECT 8/8/2023] **21-2358**

Attachments: 08152023 BOD 6D Report

E. General Auditor's summary of activities **21-2357**

Attachments: 08152023 BOD 6E Report

F. Ethics Officer's summary of activities **21-2359**

Attachments: 08152023 BOD 6F Report

G. Report on list of certified assessed valuations for fiscal year 2023/24 and tabulation of assessed valuations, percentage participation, and vote entitlement of member agencies as of August 15, 2023 (FAIRP) **21-2566**

Attachments: 08152023 FAIRP 6G B-L
08152023 FAIRP 6G Presentation

H. Presentation of Commendatory Resolution for Director Richard Atwater representing Foothill Municipal Water District **21-2545**

I. Presentation of 20-year Service Pin to Director Larry D. Dick, Municipal Water District of Orange County **21-2573**

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

7. CONSENT CALENDAR OTHER ITEMS - ACTION

A. Approval of the Minutes of the Board of the Directors Workshop Subcommittee on Long-Term Regional Planning Processes and Business Modeling Meeting for May 23, 2023 and June 27, 2023; Minutes of the Board of Directors Workshop on Ethics, Organization, and Personnel Meeting for June 27, 2023, and Minutes of the Board of Directors Meeting for July 11, 2023 (Copies have been submitted to each Director, any additions, corrections, or omissions) **21-2360**

Attachments: 08152023 BOD Workshop LTRPPBM 7A-1 (05232023) Minutes
08152023 BOD Workshop LTRPPBM 7A-2 (06272023) Minutes
08152023 BOD Workshop EOP 7A-3 (06272023) Minutes
08152023 BOD 7A-4 (07112023) Minutes

B. Approve Commendatory Resolution for Director Heather Repenning representing the City of Los Angeles **21-2544**

C. Confirm the appointment of the Board Executive Secretary effective August 6, 2023 **21-2587**

D. Approve Committee Assignments

8. CONSENT CALENDAR ITEMS - ACTION

7-1 Award an $1,962,691 contract to Structural Preservation Systems for urgent relining of three pipe segments on the Sepulveda Feeder; and authorize an increase of: (1) $280,000 to an agreement with HDR Engineering Inc., for a new not-to-exceed amount of $15,780,000; and (2) $240,000 to a land lease agreement with Los Angeles Community College District for a new not-to-exceed amount of $1,090,000; the General Manager has determined that the proposed actions are exempt or otherwise not subject to CEQA (EOT) **21-2546**

Attachments: 08152023 EOT 7-1 B-L
08152023 EOT 7-1 Presentation

7-2 Authorize an agreement with Nth Generation Computing, Inc. in an amount not to exceed $367,448 for the Datacenter Backup Infrastructure Upgrade;the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA (EOT) **21-2549**

Attachments: 08152023 EOT 7-2 B-L
08142023 EOT 7-2 Presentation

7-3 Authorize amendments to the Cyclic Cost-Offset Program terms; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA (OWS) **21-2555**

Attachments: 08152023 OWS 7-3 B-L
08152023 OWS 7-3 Presentation

7-4 Authorize implementation of a tree rebate modification to the Turf Replacement Program; the General Manager has determined that these actions are exempt or otherwise not subject to CEQA (OWS) **21-2557**

Attachments: 08152023 OWS 7-4 B-L
08152023 OWS 7-4 Presentation

7-5 Approve proposed amendment to Administrative Code section 6471 to increase the amount of the Ethics Officer's authority to obtain professional services for external investigations from $100,000 to $250,000; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA (EOP) **21-2563**

Attachments: 08152023 EOP 7-5 B-L
08152023 EOP 7-5 Presentation

7-6 Approve the nomination and renaming of Metropolitan's Pure Water Southern California Demonstration Plant as the Grace F. Napolitano Pure Water Southern California Innovation Center; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA **21-2572**

Attachments: 08152023 BOD 7-6 B-L

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

9. OTHER BOARD ITEMS - ACTION

8-1 Adopt Resolution establishing the Ad Valorem tax rate for fiscal year 2023/24; the General Manager has determined that the proposed action is either exempt or otherwise not subject to CEQA (FAIRP) **21-2565**

Attachments: 08152023 FAIRP 8-1 B-L (Revised Attachment)
08152023 FAIRP 8-1 Presentation
9347 Resolution

8-2 Authorize an agreement with Computer Aid Incorporated in an amount not to exceed $1,750,000 to provide staff augmentation support services for the operation and maintenance of the Metropolitan Cybersecurity Operations Center for a period of up to one year; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA [Consultation with Metropolitan Director of Info Tech Services, Information Technology, Jacob Margolis, or designated agents on threats to public services or facilities; may be heard in closed session pursuant to Gov. Code Section 54957(a)] (EOT) **21-2550**

Attachments: 08152023 EOT 8-2 B-L
08142023 EOT 8-2 Presentation

10. BOARD INFORMATION ITEMS

9-1 Conservation Program Board Report **21-2361**

Attachments: 08152023 BOD 9-1 Report

9-2 Review Draft 2023 Long-Range Finance Plan Needs Assessment. [SUBJECT CHANGE 8/10/2023] (FAIRP) **21-2567**

Attachments: 08152023 FAIRP 9-2 B-L
08152023 FAIRP 9-2 Presentation

11. OTHER MATTERS

NONE

12. FOLLOW-UP ITEMS

NONE

13. FUTURE AGENDA ITEMS

14. 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. (EOT). Board agendas may be obtained on Metropolitan's Web site https://mwdh2o.legistar.com/Calendar.aspx

Writings relating to open session agenda items distributed to Directors less than 72 hours prior to a regular meeting are available for public inspection at Metropolitan's Headquarters Building and on Metropolitan's Web site https://mwdh2o.legistar.com/Calendar.aspx.

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 Board Executive Secretary in advance of the meeting to ensure availability of the requested service or accommodation.

August 15, 2023 Board Meeting

Item 6A

Metropolitan Water District of Southern California
Summary of Events
Attended by Directors at Metropolitan's Expense in July 2023

Date(s)	Location	Meeting Hosted by:	Participating Director(s)
July 27-28	Sacramento, CA	Yuba/Delta Counties Directors Tour	Linda Ackerman Jacque McMillan Tana McCoy Adán Ortega Jr Tracy Quinn

- **Chair of the Board Adán Ortega Jr.'s Monthly Activity Report – July 2023**

Summary

This report highlights my activities as Chair of the Board during the month of July 2023 on matters relating to The Metropolitan Water District of Southern California's business.

Monthly Activities

Key Activities

- Visited Yolo County at the invitation of regional public water suppliers, the local farming community, regional associations, and environmental stakeholders and partners. Al Montna and Nicole Van Vleck from Montna Farms, along with representatives from Northern California Water Association, Yuba County Water Agency, California Rice Commission Vice Chair, Sites Reservoir Chair, and many other local agencies along with Metropolitan Board Directors Tracy Quinn, Linda Ackerman, Jacque McMillan, and General Manager Adel Hagekhalil, Bay-Delta Initiatives Group Manager Nina Hawk, Executive Legislative Representative Jay Jefferson along with other Metropolitan staff to reflect on past partnerships and potential future collaborations.

- Visited Sacramento Delta facilities in a tour hosted by the Delta Counties Coalition (DCC), where I was joined by General Manager Adel Hagekhalil, Directors Tracy Quinn, Linda Ackerman, Jacque McMillan, Tana McCoy, Bay-Delta Initiatives Group Manager Nina Hawk, and other Metropolitan staff. Delta County Supervisors Oscar Villegas, Tom Patti, Steven Ding, Mitch Mashburn, Ken Carlson, and Patrick Hume from Yolo, San Joaquin, Solano, Contra Costa, and Sacramento counties guided us and conducted a roundtable discussion. We also had the privilege of hearing from Topher Chan, a local pear farmer representing Chan Wallace Farms, who shared his perspective on pertinent issues. Additionally, we were enlightened by Chris Neudeck from Delta Cross Channel, who provided valuable insights on levees. Furthermore, Gia Moreno from Hood Community shared her perspective on the Delta and its relevance in the context of the Delta tunnel. Our delegation learned that we were the first in over a decade from Metropolitan to have an exchange with the Delta County Supervisors. Overall, this tour served as an essential platform for fostering dialogue and understanding the concerns and viewpoints of the Delta area opinion leaders and community members, which are vital to inform our future decisions and actions.



Speaking Engagements/Events

- Attended the swearing-in of longtime water professional Garry Bryant, who was appointed to represent the Foothill Municipal Water District after recently retiring from Metropolitan as a Principal Project Control Specialist. Director Bryant is a member of the Board of the Foot Hill Municipal Water District as well as Las Flores Mutual Water Company.


- Joined the swearing-in of attorney Carl E. Douglas who was appointed to the Metropolitan Board by Los Angeles Mayor Karen Bass. Director Douglas has been recognized by the Los Angeles/San Francisco Daily Journal, Consumer Attorneys Association of Los Angeles, and the John M. Langston Bar Association for his courtroom successes. Director Douglas, who specializes in personal injury, civil rights, and criminal law matters, represents Los Angeles on the Board of directors of the Metropolitan Water District of Southern California.


- I hosted a luncheon to recognize the efforts of our board committee coordinators. General Manager Adel Hagekhalil, General Counsel Marcia Scully, Ethics Officer Able Salinas, and General Auditor Scott Suzuki joined me in expressing appreciation for the staff's dedication, hard work, and commitment. The 50 committee coordinators track board letters, follow-up items, and handle preparation for monthly committee meetings. We would not be able to operate without their dedication and hard work.

- Attended the Southern California Leadership Council, a non-partisan organization bringing business and community leaders from throughout the region focused on public policies important to Southern California, including water. Membership includes two former California Governors and over three dozen Presidents and CEOs of top Southern California companies. I was introduced as a new member and had an opportunity to update members on Metropolitan's priorities, including the Climate Adaptation Master Plan.

- Served as a speaker at the California Department of Water Resources Statewide Meeting of Water Educators in collaboration with The Metropolitan Water District of Southern California, Municipal Water District of Orange County, West Basin Municipal Water District, and Water Energy Alliance. During my comments, I reflected on my experience overseeing student education programs on water, as well as the connection to our climate adaptation planning efforts. In addition, I answered questions from the instructor about Metropolitan's Climate Adaptation Plan for Water (CAMP4Water), workforce development, and the crucial role that education plays in achieving sustainability goals.

Delegation of Activities and Approvals

- I asked Director Dennis Erdman, Chair of the Engineering, Operations, and Technology Committee, to provide remarks on behalf of the Board at a check signing event at PureWater Southern California, where state officials presented an $80 million check to Metropolitan to help advance Pure Water Southern California. The event was attended by State Assemblymembers Lisa Calderon and Mike Gipson, State Water Resources Control Board Chair Joaquin Esquivel, Carson Mayor Pro Tem Jawane Hilton, Los Angeles County Sanitation Districts General Manager Robert Ferrante, Sanitation Districts Chair for District 2 Cathy Warner, Metropolitan General Manger Adel Hagekhalil, Board Director Dennis Erdman, Tana McCoy, Russell Lefevre, Carl Douglas, Art Chacon, Larry Dick, Brenda Dennstedt, along with many others.

- Board Vice Chair Michael Camacho and Director Jeffrey Armstrong, Chair of the Subcommittee on Demand Management and Conservation Programs and Priorities, congratulated five electricians and ten mechanics for completing eight semesters of academic study as members of Metropolitan's apprenticeship program during an event at the Apprentice Training Center, formally known as Diamond Valley Lake Visitor Center in Hemet, California.

- I approved a request for foreign travel for One Water & Stewardship Committee Chair Tracy Quinn, who will speak at the International World Water Conference in Paris, France, given her expertise in urban water management, water-use efficiency, and her leadership on our Board. Chair Quinn's comments will focus on a **study estimating residential end uses of water in Metropolitan Water District's service area.**

- Approved the Board co-sponsored Inspection Trip schedule for 2023-2024.

Regularly Scheduled/Ongoing Meetings

I continue to meet regularly to review issues and coordinate activities with the Board Vice Chairs, Department heads, and Directors.

Announcements

- **Conference Attendance:** Several directors have already exceeded their conference attendance limits. I will approve above the minimum for directors requesting attendance only if there are sufficient funds after all directors have requested the minimum conference attendance allowed. Registration has opened for the Fall '23 ACWA Conference in Indian Wells.

- **Expense Reports:** I have received numerous requests to approve expense reports past the 90-day submission requirement. I have the authority to waive such requests but will begin to report *the number* of such requests in future monthly reports.

General Manager's Monthly Report

Activities for the Month of July 2023

Table of Contents

Message from the General Manager

Safeguarding clean drinking water for our 26 member agencies and the 19 million Southern Californians who depend on us is paramount at Metropolitan.

In July, we released our 2023 Annual Drinking Water Quality Report, and as we observe National Water Quality Month in August, I am proud of the work we are doing to protect public health by providing the highest quality drinking water.

We will be recognizing this leadership in many ways, including a graphic series on our social media to:

- Showcase our rigorous monitoring program—more than 400 constituents, through more than 200,000 tests on samples drawn from our extensive water system—which ensures our treated water consistently surpasses regulatory requirements;
- Spotlight and thank our scientists and engineers who are pioneering innovative methods to protect our water supply; and
- Share how we apply the latest research to understand and solve the many emerging challenges to water quality.

Our staff continues to set the standard for excellence and is looked to as leaders in the field. Our involvement in state and national technical forums keeps us on the cutting edge. And through collaboration with our member agencies, we can both protect and promote the value and integrity of our shared water supplies.

It is my hope that through these efforts, we can bolster the public's trust in their tap water and confidence in Metropolitan's ability to deliver the highest quality water to Southern California.

We are one,

Adel

"The noblest search of today is the search for excellence. In every endeavor, there simply cannot be allowed any lessening in this search."

- Lyndon B. Johnson
35th U.S. President

THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA
WE ARE ONE

Strategic Priorities Update

The General Manager's Strategic Priorities guide actions in key areas of focus, investment, and transformation for Metropolitan.

Empower the workforce and promote diversity, equity, and inclusion

Build a safe, inclusive, and accountable workplace where all employees feel valued, respected, and able to meaningfully contribute to decisions about their work.

This month the National Safety Council was onsite to begin the implementation of the safety program recommendations. They met with the General Manager, management, bargaining units and employee focus groups. Metropolitan Management University held its second session for the 13th cohort of 21 new managers. The topic was Emotional Intelligence and Self Awareness. Participants completed an EQ assessment, and the training team will debrief them individually regarding the assessment.

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.

As part of the independent organizational assessment being conducted by the General Manager, a specific assessment of workforce development programs and opportunities has begun. The assessment will look at what's already happening within the workforce development function at Metropolitan and will consider opportunities to amplify and leverage efforts among member agencies toward a regional benefit. This assessment will serve to inform the expansion of a focused workforce development program, including the eventual recruitment of a program manager.

Sustain Metropolitan's mission with a strengthened business model

Manage rate pressure on member agencies through attention to programmatic costs, organizational efficiencies and efforts to secure external funding for projects with broad and multi-purpose benefits.

The General Manager announced a set of organizational changes and presented the changes at a virtual meeting open to all employees and attended by more than 900. Based on the organizational assessment, the changes are intended to better align staffing and resources and to better support several important functions, including grant funding, internal communications, water system operations, and safety. Implementation of the announced changes begins in August.

The application deadline was delayed from July to August for Inflation Reduction Act "Bucket 2" funding for long-term reduction of Colorado River water. Metropolitan is developing a proposal for significant funding, at the scale of $300–400 M.

Adapt to changing climate and water resources

Provide each member agency access to an equivalent level of water supply reliability through necessary adaptive implementation of the IRP findings.

The State Legislature broke for summer recess only after the legislation co-sponsored by Metropolitan to restrict watering of non-functional turf (AB 1572) passed out of the Senate Natural Resources and Water Committee. It is now pending in the Appropriations committee.

Significant milestones are being reached on projects identified during the drought emergency, which will help to close water supply gaps: Design is complete for the Inland Feeder/Rialto Pipeline Intertie, and bids open on August 9. Design has also been completed for the Inland Feeder Badlands Tunnel Surge Protection. And for improvements to the Sepulveda and Venice pump stations, staff has selected a preferred contractor and has begun negotiating an agreement for preconstruction design services under a progressive design-build contract. Board consideration of the Phase 1 agreement is scheduled for September.

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.

The CAMP4W Planning team is finalizing three technical memos for the Board that (1) lay out the CAMP4W process, (2) provide a working overview of the CAMP4W Themes, and (3) outline background information and assumptions of the IRP Needs Assessment. Monthly CAMP4W-focused member agency meetings continue, and staff has prepared two panel discussions for August board discussions including one on affordability at the EIA committee and one providing perspectives from other utilities on climate adaptation planning at the LRPPBM subcommittee.

More than 1.1 million AF of stormwater has been captured within Metropolitan's service area this water year to date, the most captured in 35 years! Two of the projects funded by Metropolitan in the stormwater recharge pilot, which were sponsored by IEUA and Western, completed their first full year of monitoring. As we set proactive targets for stormwater capture, this monitoring is critical to better understanding the water supply yield of stormwater in the service area.

Work on the Pure Water Southern California Draft EIR continues, but completion has been delayed by efforts to enable the potential integration with LADWP's Operation NEXT facilities, which involves analysis of possible upsizing of pipe.

The Reservoir Committee and Authority Board authorized submission for the Sites Reservoir Project to receive the Governor's certification as a Senate Bill 149-eligible infrastructure project. If certified, any CEQA litigation would be expedited, with the goal of completing trial court and appellate proceedings within 270 days of filing of the certified administrative record.

Among the other activities in support of our Bay Delta policies, science staff participated in the final presentations of multiple analyses covering topics including Delta smelt entrainment, management of longfin smelt, and habitat actions related to the 2020 ITP and 2019 BiOps. These presentations are part of our long-standing involvement in collaborations to share information among state and federal agencies and other interested parties. Metropolitan's Board approved the purchase of the remaining Delta Island flow meters in compliance with Senate Bill 88 and which continues to position Metropolitan as leaders in flow monitoring activity and technology. Staff are also developing recommendations for the Bouldin Island draft/final "Outcomes" report and preparing a board action to amend the CIP to add the Webb Tract Mosaic Landscape Project.

Protect public health, the regional economy, and Metropolitan's assets

Proactively identify, assess, and reduce potential vulnerabilities to Metropolitan's system, operations, and infrastructure.

All outstanding dam emergency action plans are on track for official submittal by the end of 2023. Staff is advancing seismic resilience projects identified in the CIP and identifying seismic vulnerabilities within the system. We executed agreement for professional services with HDR to conduct two dam risk assessments for Lake Mathews and Lake Skinner, which are expected to begin in August. Seismic upgrade work also continued with preliminary design for the Weymouth Water Quality Lab and design for Copper Basin Reservoir.

Physical security efforts this month focused on emerging possible security threats from drones by learning more about mitigation technologies, developing response options, and partnering with other organizations to exchange knowledge and best practices.

Apply innovation, technology, and sustainable practices across project lifecycles (design, construction, operations, maintenance, and replacement).

The organization, led by Contracting Services and SRI, this month finalized the revision to the operating policy that will help prioritize sustainability in our procurement activities. Contracting Services will revise the procedures manual to address sustainable procurement processes.

Partner with interested parties and the communities we serve

Grow and deepen collaboration and relationships among member agencies, interested parties, and leaders on the issues most important to them and toward mutual and/or regional benefits.

To advance local hiring and other goals of the Project Labor Agreement (PLA), Metropolitan has begun outreach efforts to City of Carson. Staff is on schedule to deliver the first annual PLA report in November.

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

In an effort to network, visit, and understand Metropolitan's many work environments and promote the Rideshare program, Rideshare Services staff participated in two field site Safety Events! First, at Diemer, on June 28, and then at Jensen on July 10. The Rideshare Team was present to answer program questions, encourage participation in one of our district-wide programs, and meet current Rideshare participants. In addition to the entire Rideshare team, our Vanpool partner, Commute with Enterprise, also attended to promote their program and meet current vanpool participants.

Bay-Delta Resources

At the July 21 joint Sites Project Authority (Authority) Board and Reservoir Committee Meeting, the Reservoir Committee and Authority Board authorized the Executive Director to submit a request for the Sites Reservoir Project to receive the Governor's certification as a Senate Bill 149-eligible infrastructure project. This request includes agreeing to pay the costs of trial court and court of appeal and to prepare the record of proceedings. Making the request to the governor now is necessary because the Senate Bill 149 certification must occur before the approval of the Final Environmental Impact Report/Environmental Impact Statement by the Authority, which is currently scheduled for certification in September 2023. If certified, any California Environmental Quality Act litigation would be expedited, with the goal of completing trial court and appellate proceedings within 270 days of filing of the certified administrative record.

Chief Financial Officer

On June 21, 2023, Metropolitan issued $258,410,000 in Water Revenue and Refunding Bonds, 2023 Series A. Bond proceeds funded a portion of Metropolitan's Capital Investment Plan, repaid a $35.6 million draw on a Wells Fargo Bank Revolving Credit Facility that was used to refund a like amount of subordinate lien bonds, and funded costs of issuance.

Colorado River Resources

Following the June 16, 2023, initiation of the Post-2026 National Environmental Policy Act process by publishing a Notice of Intent to prepare an Environmental Impact Statement in the Federal Register, the Basin States have been meeting to develop a consensus scooping letter. Concurrently, the Lower Basin executes additional contracts as part of its short-term plan to protect Lake Powell and Lake Mead through 2026.

Diversity, Equity & Inclusion

On July 20, the Business Outreach team attended the Paths to Leadership: AAPI Perspectives in the Water/Wastewater Sector in Los Angeles, California. Leaders within the Water/Wastewater sector join together to share their perspectives from an AAPI lens and discuss their pathway to becoming a leader in the industry. Panel speakers included Shivaji Deshmukh, General Manager of Inland Empire Utilities Agency; Eros Young, Engineering Manager of Orange County Sanitation District; Deven Upadhyay, Executive Officer and Assistant General Manager of Metropolitan Water District of Southern California; Phuong Watson, Senior Engineer of Water Replenishment District; and Sunny Wang, Water Resources Manager of the– City of Santa Monica.

Engineering Services

Two major pipeline rehabilitation projects were completed during the month. Construction of the third and final stage of the Orange County Feeder Extension Lining Replacement project was completed and the pipeline was returned to service in early July 2023. The completion of this contract finishes a three-stage rehabilitation effort that started in 2014 to reline approximately 11 miles of this critical pipeline. The Etiwanda Pipeline Relining project also made significant progress. This project replaces the deteriorated cement mortar lining with polyurethane lining. Construction is essentially complete, and the pipeline was returned to service in late July 2023, two months ahead of schedule, allowing Metropolitan to take advantage of available State Water supplies. The completion of this contract finishes a three-stage rehabilitation effort that started in 2008 to reline approximately 5.4 miles of the feeder.

External Affairs

On July 19, Metropolitan celebrated the presentation of $80 million from state officials to advance work on the Pure Water Southern California project. The event, which was livestreamed and covered by Spectrum News and Univision, was attended by: GM Hagekhalil; Assemblymember Calderon (D-Whittier); Assemblymember Gipson (D-Gardena); Directors Erdman, Chacon, Dennstedt, Dick, Douglas, Lefevre and McCoy; State Water Resources Control Board Chair Esquivel; Carson Mayor Pro Tem Hilton; community leaders and member agencies.

Human Resources

The Organizational Development & Training Unit (OD&T) hosted a new training program to help employees and managers develop assertive but respectful communication skills (Communicating Authentically and Effectively). These classes were attended by 18 employees and 14 managers.

Information Technology

The Design phase of the Payroll and Timekeeping project kicked off this month with the vendor onsite to work with the project team and stakeholders.

Real Property

Staff attended the IRWA 69th Annual Education Conference in Denver, Colorado. At the conference, staff attended numerous education sessions and networking opportunities. Staff's attendance bolstered their knowledge in the right-of-way industry and allowed valuable connections to be made with colleagues at other agencies and organizations around the country.

Security Management

New reinforced meter cabinets protect vulnerable electronic components well into future decades.

Sustainability, Resiliency and Innovation

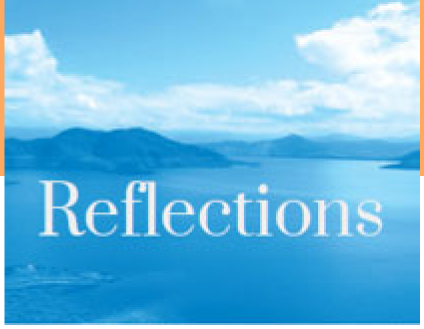
SRI, in partnership with other groups, led CAMP4W discussions at the Member Agency Meeting and initiated monthly Climate Science meeting with board leadership. SRI also continues to lead the EV Executive Task Force and will have a draft Roadmap for the EV Transition next month. SRI also completed its Sustainability Expo Roadshow in partnership with Safety Fairs reaching over 800 employees throughout the district. This month, the Innovation team and BDI launched a pilot using Water SAT technology with geospatial AI to remotely monitor levees on Bouldin Island. EPS continues to collaborate and ideate with ESG, LACSD, and others on completing a draft EIR for Pure Water Southern California.

Water Resource Management

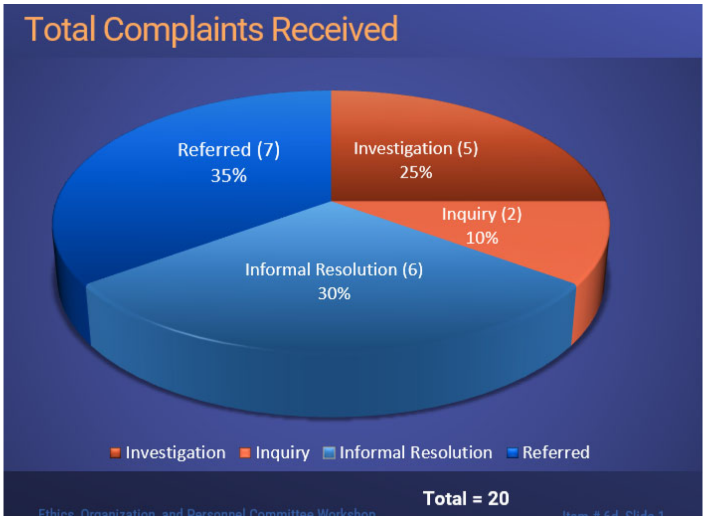
In response to surplus water supply conditions, Metropolitan staff is leading a Member Agency and Groundwater Manager process to identify ways to capture more of the available water supply. The goal of this workgroup is to develop new programs for the Board's consideration to provide the General Manager with more water capture opportunities for the upcoming water year.

Water System Operations

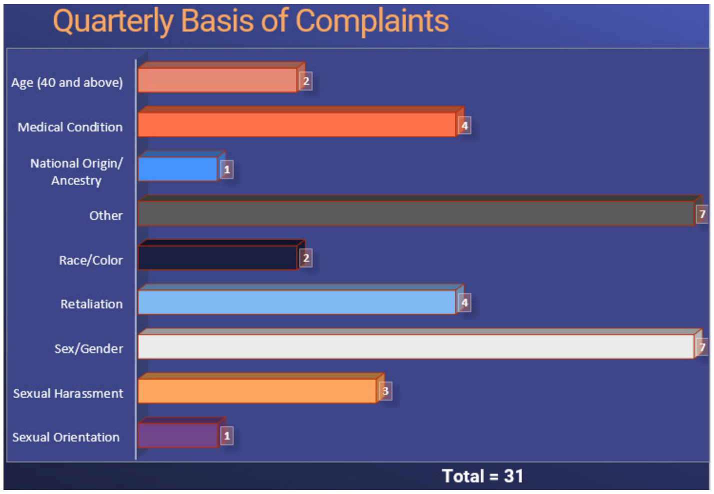
On July 12, the Apprenticeship Program celebrated the Class of 2023 by holding a completion ceremony at the new Apprenticeship Training Center. Five electricians and ten mechanics were recognized for successfully completing the Program's academic portion. The four-year program includes eight periods of classroom instruction and over 100 written and practical exams. Outstanding achievement awards were presented to the top-performing apprentice from each discipline. The class was commended for demonstrating persistence and flexibility by overcoming many challenges, including the pandemic. This year marked the 20th anniversary of the Apprenticeship Program. Since its inception in 2003, the Program has developed and graduated 154 journey-level technicians who compose over 50 percent of the current electrical and mechanical trades workforce responsible for maintaining Metropolitan's treatment and distribution facilities.



EEO COMPLAINT DATA COMPILED FROM CASE IQ (APRIL-JUNE)



Above: Total Complaints Received
Below: Basis of Complaints



"EEO's new case management system allows my team to work more efficiently and effectively to better meet the needs of our workforce, and to be proactive rather than reactive."

-Marisol Arzate, Deputy Chief EEO Officer

PROGRAM DESCRIPTION

As part of its ongoing commitment to improve essential services to better serve our workforce, Metropolitan has implemented an electronic recordkeeping system to accurately and completely track EEO complaints in one location.

The Equal Employment Opportunity (EEO) Office, in partnership with Case IQ, developed a customized case database system to track and manage EEO complaints and investigations. The electronic database system is only accessible to EEO investigative staff and has the capacity to confidentially and securely store documents, videos and audio recordings. It allows the EEO Office to track complaints, investigative findings, and disciplinary and settlement outcomes.

The system helps the EEO Office better monitor discrimination trends occurring in Metropolitan's workforce and gives the office the ability to submit quarterly reports to the Board on statistical EEO data to ensure the transparency, efficiency and accountability of its EEO program.

IMPORTANCE TO METROPOLITAN

In 2021, the California State Auditor (CSA) issued its report on Metropolitan's mishandling of EEO complaints from 2004 to 2021. Among the CSA's many recommendations, the CSA charged Metropolitan with implementing an electronic recordkeeping system. Prior to Case IQ, Metropolitan maintained physical case files in boxes and tracked EEO complaints across multiple Excel spreadsheets.

The development of the case database system complies with the CSA's recordkeeping recommendation and allows the EEO Office to keep the Board informed about EEO settlements and other relevant data. Other departments, including Employee Relations and General Counsel, have since implemented or are looking into Case IQ to meet their own needs, and the EEO Office has played a role in helping these departments streamline their set-up process.

MEMORABLE MOMENT

This year, the EEO Office submitted its first quarterly report to the Board of Directors utilizing statistical complaint data obtained from Case IQ.

The EEO Office looks forward to continuing to collect, analyze and report data for the benefit of Metropolitan's workforce and stakeholders.

Water Resources and Engineering

Water Resource Management

Ensure Access to Sufficient Water Supplies to Operate a Full Colorado River Aqueduct in Times of Drought

Staff participated in a three-day workshop in Manhattan Beach hosted by the Colorado River Board of California (CRB) to discuss California's interests and strategy ahead of interstate negotiations to determine guidelines that will govern the major reservoirs on the Colorado River once the current Interim Guidelines expire in 2026. Workshop participants included representatives from the six California agencies with rights to water or power from Colorado River facilities that sit on the CRB: Imperial Irrigation District, Palo Verde Irrigation District, Coachella Valley Water District, San Diego County Water Authority, Los Angeles Department of Water and Power, and Metropolitan. The operational guidelines governing Colorado River reservoirs significantly influence Metropolitan's supply of Colorado River water. Thus, the nature of the future guidelines is critical to Metropolitan's supply of imported water.

Implement Regional Conservation Program

Metropolitan held a workshop in the City of San Fernando to explain the Turf Replacement Program policies and procedures to city residents.

Manage Existing and Develop New Regional Water Management Programs to Maintain Water Supply Reliability in the Face of Increasing Water Supply Volatility.

Staff participated in a meeting hosted by Las Virgenes MWD on an alternative approach to seawater desalination using submerged, offshore buoys. Locating seawater desalination facilities offshore is a new approach with potential environmental and permitting benefits. This includes the ability to develop utility-scale desalination projects with a minimal on-shore footprint. Staff provided updates on Metropolitan's activities including the potential desalination studies. Las Virgenes is developing an MOU with an offshore technology vendor to perform a pilot test in Southern California. Several other water agencies within Metropolitan's service area also attended the meeting.

In response to surplus water supply conditions, Metropolitan staff is leading a Member Agency and Groundwater Manager process to identify ways to capture more of the available water supply. The goal of this workgroup is to develop new programs for the Board's consideration to provide the General Manager with more water capture opportunities for the upcoming water year.

Collaborate with Member Agencies, Water Agencies and Associations, and Provide Leadership for Policy Development, Advocacy, Outreach and Education

On July 6, staff participated in a speaker panel for the Southern California Association of Governments (SCAG)'s Energy and Environment Policy Committee. Staff gave a presentation on Metropolitan's Water Shortage Contingency Plan and other planning efforts to ensure water resilience and reliability for the region.
On July 6, staff presented at the Central/West/Gateway Caucus on how the 2020 IRP Needs Assessment is the analytical foundation for the Climate Action Master Plan for Water (CAMP4W).

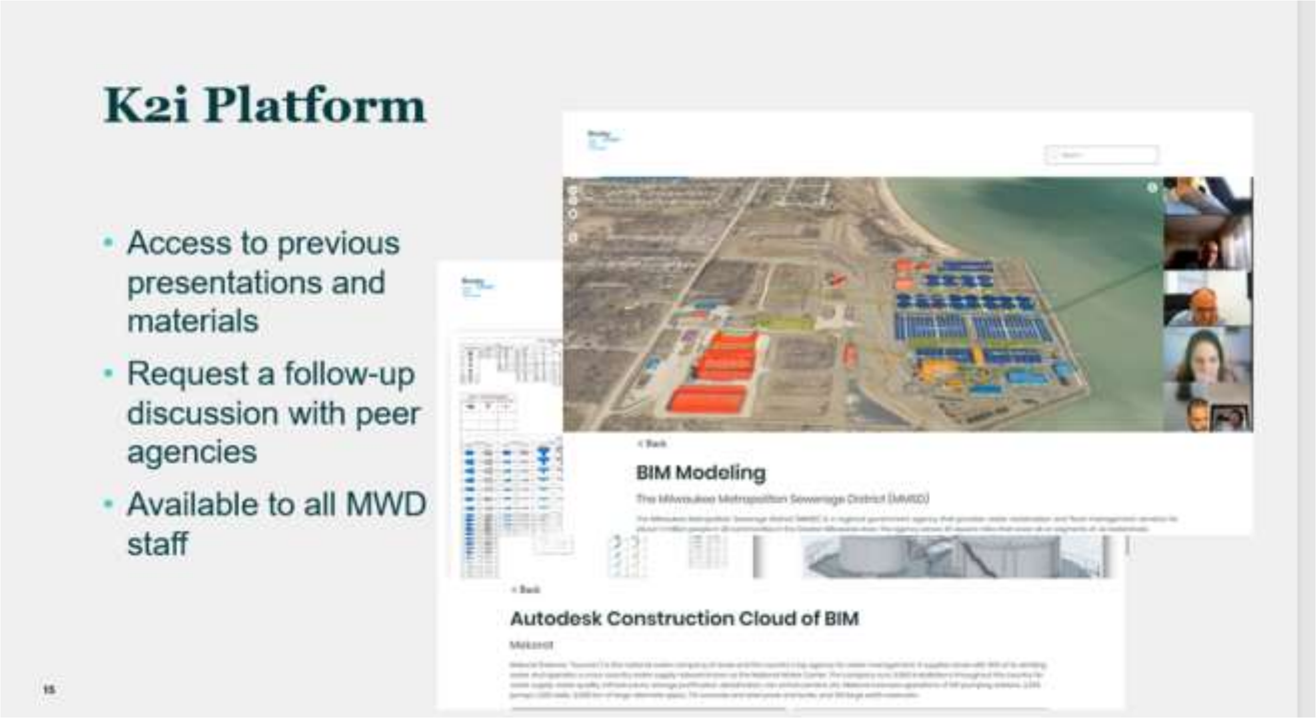
Staff collaborated with CalDesal and member agency staff to review and respond to proposed state siting criteria for seawater desalination projects. As part of the 2022 Water Supply Strategy, the Governor tasked state agencies in the Seawater Desalination Interagency Group to develop siting criteria for seawater desalination projects. The state agencies released draft criteria on July 12th and held an informational webinar on July 21. The draft criteria would provide concurrent, expedited permit reviews if proposed seawater desalination projects use subsurface intakes, dispose of brine in wastewater outfalls, and meet other requirements related to mitigation, environmental justice, tribal consultation, and other provisions. Staff participated in the drafting of CalDesal's comment letter and also prepared a Metropolitan comment letter on the provisions. Comments were due to the SWRCB on July 28.

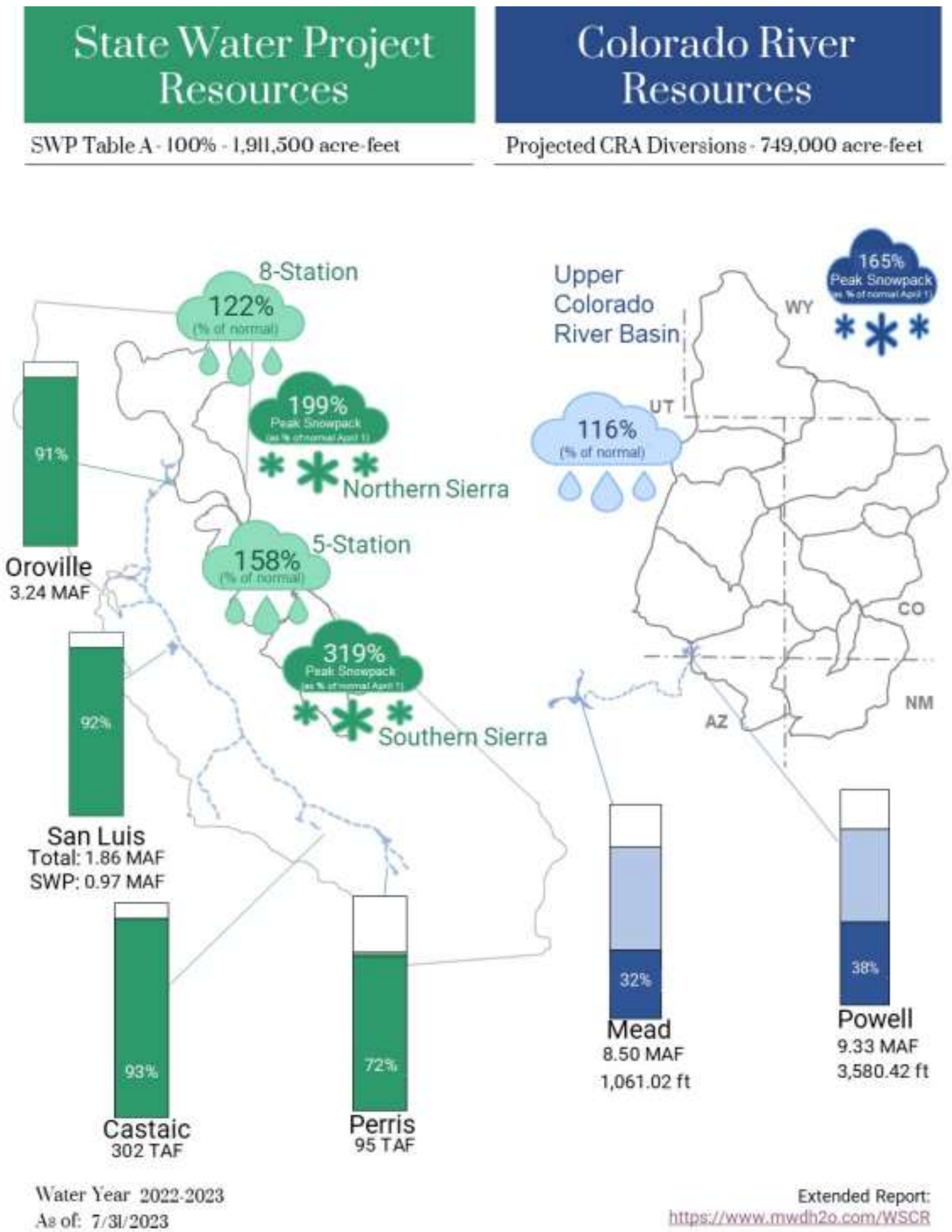
Implement Future Supply Actions Funding Program

Staff from WRM and Water Quality briefed representatives from Santa Margarita Water District on methodologies for estimating evaporation on large reservoirs. During the meeting, staff shared information on novel approaches for estimating evaporation discovered through innovation efforts and technology scans.

Promote Metropolitan's Technical Capabilities and Innovation Efforts to Advance the Understanding of Water Resources Management.

WRM staff initiated a soft rollout of an innovative video-sharing platform developed by Booky Oren GWT (BOGWT). The k2i platform allows Metropolitan staff to view over 100 peer-to-peer meetings between global water agencies participating in BOGWTs peer network. The videos cover a wide range of topics including water quality, asset management, resource planning, cyber security, and workforce development to name a few. The platform is currently available to all Metropolitan staff. Plans for a full roll-out are under development in partnership with the Sustainability, Resiliency, and Innovation Office.





As of July 31, 2023

Bay-Delta Resources

Core Functions

Delta Conveyance

The California Department of Water Resources (DWR) released a draft Environmental Impact Report (EIR) to comply with the California Environmental Quality Act for a public review that ended on December 16, 2022. DWR received more than 700 unique comment letters with over 6,000 individual comments. DWR is in the process of developing responses to the comments received. The Final EIR is expected at the end of 2023. It will include responses to all substantive comments on the Draft EIR and edits to the Draft EIR, as appropriate, to respond to the comments.

The U.S. Army Corps of Engineers (USACE), as part of its permitting review under the Clean Water Act and Rivers and Harbors Act, released a draft Environmental Impact Statement (EIS) to comply with the National Environmental Policy Act for a public review that ended on March 16, 2023. USACE is in the process of developing responses to the comments received.

Delta Conveyance related Joint Powers Authorities

The July 20 regularly scheduled Delta Conveyance Finance Authority meeting was cancelled.

Sites Reservoir

At the joint Sites Project Authority (Authority) Board and Reservoir Committee Meeting on July 21, the Reservoir Committee and Authority Board authorized the Executive Director to submit a request for the Sites Reservoir Project to receive the Governor's certification as a Senate Bill 149-eligible infrastructure project. This request includes agreeing to pay costs of trial court, court of appeal, and preparing the record of proceedings. Making the request to the Governor now is necessary because the Senate Bill 149 certification must occur before the approval of the Final EIR/EIS by the Authority, which is currently scheduled for certification in September 2023. If certified, any California Environmental Quality Act (CEQA) litigation would be expedited, with the goal of completing trial court and appellate proceedings within 270 days of filing of the certified administrative record.

The Authority is required under the Joint Powers Agreement to have an annual audit performed. Fechter and Company, Certified Public Accountants continues to be the Authority's auditor and has concluded an examination of the Authority's financial information, including fiscal year 2022. The 2022 financial audit, which included a single audit, found no significant or reportable findings. There were no recommended improvements for strengthening internal controls and operation efficiency identified in the 2022 report.

Science Activities

Throughout the month of July, science staff participated in the final presentations of multiple analyses covering topics including Delta smelt entrainment, management of longfin smelt, and habitat actions related to the 2020 Incidental Take Permit (ITP) and 2019 Biological Opinions (BiOp).

At the Delta Smelt Scoping Team on July 11, staff presented the final analysis of the Collaborative Adaptive Management Team (CAMT) Entrainment Studies. The analysis centered on the evaluation of estimates of proportional entrainment of adult Delta smelt in a lifecycle model. Although proportional entrainment could have been influential to the population in the past, the analysis ultimately concluded that recent low entrainment was not likely to be significant to the population. The results suggest that the current entrainment management may be effective.

On July 20 at the Estuarine Ecology Team meeting staff participated in the presentation of efforts by state and federal agencies to manage longfin smelt in the San Francisco Estuary. The presentations included updates on Priority Science Efforts as mandated by the 2020 ITP to operate the State Water Project. Efforts to improve entrainment risk predictions, lifecycle modeling, and culturing efforts were highlights of the presentation.

Metropolitan science staff is continuing to participate with state and federal agencies in developing the final analysis and presentations on the Summer Fall Habitat Actions from the 2019 BiOp/2020 ITP for independent review as part of the four-year review requirement from the permits. The analysis will include an evaluation of the North Delta Foodweb Subsidy, the Suisun Marsh Salinity Control Gate, and Fall X2. The analysis will be limited because of the limited times that each of these actions were implemented and may just be an update for the future panel to provide comment for future evaluations.

Delta Island Activities

On July 11, Metropolitan's Board approved the purchase of the remaining flow meters in compliance with Senate Bill 88 (2016). Once this phase of meters is installed by the end of 2024, Metropolitan will have fulfilled its obligation under the approved "Plan for Phased Measurement Implementation" for each of its Delta Islands. Continuous data collection for water diversions will be important for annual water use reporting to the Water Resources Control Board.

Staff is conducting final technical advisory meetings for the Delta Island Adaptations Project and developing concept-level adaptions recommendations for the draft/final "Outcomes" report for Bouldin Island. This phase of the project is looking at landscape opportunities with the objectives to stop land subsidence, reduce greenhouse gas emissions, provide for sustainable agriculture, promote habitat restoration, and build collaboration for community science, agriculture, and ecoculture education through land use opportunities. The project team will begin drafting the "Outcomes" report, with a final report completed by end of 2023. Future reports will inform the Board on input received and final adaptation opportunities (pilot/research projects) for Bouldin Island.

Following the Board's action to accept the $20.9 million dollar grant from the Delta Conservancy for the Webb Tract Mosaic Landscape Project (Project), staff is preparing a board action to be heard at the September 2023 Engineering, Operations, and Technology Committee meeting to amend the current biennial Capital Investment Plan to add the Project and award consultant agreements for design, environmental planning, and scientific analyses. Award of these agreements and signing of the finalized grant agreement with the Sacramento-San Joaquin Delta Conservancy will kick off Phase 1 of the Project. Staff will return to the Board for approval of environmental documentation before proceeding with Phase 2.

Colorado River Resources

Work Continues on Post-2026 Guidelines Process and Lower Basin Plan as Part of Revised Supplemental Environmental Impact Statement (EIS) for Short-Term Operations

On June 16, U.S. Bureau of Reclamation (Reclamation) initiated the process for developing the post-2026 Colorado River Guidelines. They laid out a schedule in which a Draft EIS would be prepared by the end of 2024, followed by a Final EIS and Record of Decision in time for the 2027 operating year. The initial step is to solicit scoping comments for the National Environmental Policy Act process. Reclamation has requested input on the scope, strategies, and other issues that should be considered in the development of the EIS. In July, the Colorado River Basin States (Basin States) have been meeting to develop a seven-state scoping comment letter. The letter does not include negotiating positions but does include what actions should be analyzed in the EIS. Metropolitan staff participates on an interstate workgroup that is drafting the letter, which, if approved, would be signed by the Chair of the Colorado River Board of California, along with the principal representatives from each of the other Basin States. Metropolitan is planning on sending a separate set of scoping comments that will focus on our agency's particular interest in the upcoming Guidelines. Comments are due August 15, and staff will share a copy of the comments with the Board when they are complete.

Work also continues on the development of the Lower Basin Plan to conserve an additional 3 million acre-feet of water above the existing shortage requirements. In July, Coachella Valley Water District (CVWD) executed a contract to conserve 105,000 acre-feet of water over the next 3 years, leaving the water in Lake Mead as system water. CVWD will receive funds under the Inflation Reduction Act (IRA) for water left in Lake Mead. Also in July, Imperial Irrigation District and the Fort Mojave Quechan Indian Tribe received draft water conservation contracts to conserve additional supplies. Palo Verde Irrigation District and Bard Water District are still waiting for their contracts. In July, Reclamation extended the deadline to submit longer-term conservation proposals for IRA funding, known as "Bucket 2 Projects," to August 18. Metropolitan staff is developing a proposal to submit to Reclamation and will incorporate feedback from the Board and member agencies in its final proposal. Staff will share a copy of the submittal with the Board when they are complete.

Engineering

Core Business Function – Execute Capital Investment Plan Projects

Engineering Services manages and executes projects within the Capital Investment Plan (CIP) to maintain infrastructure resiliency, ensure regulatory compliance, enhance sustainability, and provide flexibility in system operations to address uncertain water supply conditions.

Distribution System Reliability Program

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

- **Etiwanda Pipeline Relining—**This project removes damaged mortar lining in 5.5 miles of pipeline and replaces it with polyurethane lining. Stages 1 and 2, which relined 3 miles of the pipeline, have already been completed. Stage 3 relines the remaining 2.5 miles of pipeline and is currently under construction. The contractor has removed all mortar lining and is currently applying the polyurethane lining. Stage 3 construction is 91 percent complete and is scheduled to be complete in August 2023, two months ahead of schedule.
- **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. Metropolitan's Board awarded a construction contract for the third and final stage in April 2022. The contractor completed applying mortar lining, and the pipeline was returned to service. Construction is approximately 87 percent complete and is scheduled to be complete by September 2023.
- **Rialto Pipeline Rehabilitation—**This project replaces a 35 foot long, 121.5-inch diameter section of welded steel pipe on the Rialto Pipeline in the city of Upland, where the mortar lining has completely failed. This project also replaces the failed pipe spool and isolation valve at the CB-11 service connection. Final design is 90 percent complete and is scheduled to be complete in December 2024.
- **Upgrades at Three Sepulveda Feeder Structures—**This project replaces deteriorated electrical components, makes other upgrades at three Sepulveda Feeder underground structures, and installs two blind flanges after removing a spool on the West Valley Feeder No. 1. The contractor continued installing electrical conduits in the vaults and blind flanges in the West Valley No. 1 interconnection vault. Construction is 54 percent complete and is scheduled to be complete in December 2023.

Etiwanda Pipeline Relining—Clean up

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 be refurbished under this 20-year program. Recent activities include the following:

- **Lake Mathews PCCP Valve Warehouse—**This project constructs a warehouse for storage of large-diameter valves in support of the PCCP Rehabilitation Program. Metropolitan's Board awarded a construction contract in February 2022. The contractor is currently performing asphalt paving and installing the building's fire sprinkler system. Construction is 86 percent complete and is scheduled to be complete in September 2023.
- **Second Lower Feeder PCCP Rehabilitation Reach 3B—**This project installs steel lining along a 3.7-mile-long portion of the Second Lower Feeder that traverses the cities of Lomita, Los Angeles, and Torrance. A contract was awarded by Metropolitan's Board in January 2023. The contractor is currently forwarding contract submittals for review and obtaining permits. The contractor performed utility potholing work in May and June 2023. Major construction activities will commence in August 2023 with site work related to constructing the temporary bypass line around the Palos Verdes Reservoir. This bypass line will ensure that member agency service connections on this portion of the feeder remain in-service during the construction contract. Construction is 21 percent complete and is scheduled to be complete in September 2025.
- **Calabasas Feeder PCCP Rehabilitation—**This project rehabilitates the Calabasas Feeder, which is approximately 9 miles long, and delivers treated water from the Joseph Jensen Water Treatment Plant to the cities of Agoura Hills, Calabasas, Hidden Hills, and Westlake Village, and to areas of unincorporated western Los Angeles County. Preliminary design is 61 percent complete and scheduled to be complete in May 2024.
- **Sepulveda Feeder Urgent Carbon Fiber Lining—**This project will rehabilitate deteriorated PCCP segments using carbon fiber lining. In February 2023, a pipeline inspection discovered the three deteriorated segments which are located approximately three miles apart, in the Van Nuys, Sherman Oaks, and Brentwood neighborhoods of the City of Los Angeles. Design is complete and board award of a construction contract is scheduled for August 2023.

- **Sepulveda Feeder PCCP Rehabilitation Reach 1—**This project rehabilitates PCCP segments of the Sepulveda Feeder. Reach 1 of the Sepulveda Feeder spans 4.7 miles through several cities including the cities of Hawthorne, Inglewood, and Los Angeles. Final design is approximately 73 percent complete and is scheduled to be complete in August 2024.

Colorado River Aqueduct (CRA) Reliability Program

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

- **CRA Pumping Plants Overhead Crane Replacement—**This project consists of replacing five overhead bridge cranes and retrofitting the support structures within the pump bays located at all five of Metropolitan's Colorado River Aqueduct pumping plants. The contractor has completed the installation of the new crane at the Gene Pumping Plant and began work at Iron Mountain Pumping Plant. Construction is 37 percent complete and scheduled to be complete in December 2023.
- **Hinds Village Paving—**This project consists of replacing the asphalt paving within the village at the Hinds Pumping Plant. A contract was awarded under the General Manager's authority to award contracts under $250,000 in April 2023. The contract work is currently underway, and construction will be completed in September 2023.
- **Mile 12 Flow Monitoring Station—**This project will replace the CRA Mile 12 flow meter and upgrades the appurtenant facilities at the monitoring station. The contractor is completing the final terminations and testing of the electrical equipment. Construction is 99 percent complete and is scheduled to be complete in August 2023.
- **Freda Siphon Seals—**This project consists of installing internal seals at over 80 locations along the Freda Siphon to address existing cracks and leaks. While the cracks in the liners do not compromise the structural integrity of the conduits, over time the cracks may propagate through the siphon walls and leaks, which could cause damage to the siphons. Design is complete and board award of a construction contract is scheduled for September 2023.
- **CRA Erosion Control—**This project will install erosion control features at 19 conduit locations along the CRA that are vulnerable to erosion during storm events. Preliminary design is 70 percent complete and is scheduled to be complete in December 2023.

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.

- **Wadsworth Pumping Plant Bypass—**In conjunction with three other projects, this project enhances water supply reliability in the Rialto Pipeline service area by enabling water to be pumped from the Wadsworth Pumping Plant forebay to Rialto Pipeline by way of the Inland Feeder. This project will install a bypass pipeline and an isolation valve to interconnect the Wadsworth Pumping Plant with the Eastside Pipeline. Metropolitan's Board awarded a construction contract in January 2023. The contractor has mobilized onsite and started excavation for the valve structure. Construction is 8 percent complete and is scheduled to be complete in May 2024.

- **Badlands Tunnel Surge Tank—**In conjunction with three other projects, this project enhances water supply reliability in the Rialto Pipeline service area by enabling water to be pumped from the Wadsworth Pumping Plant forebay to Rialto Pipeline by way of the Inland Feeder. This project, which will install a new hydraulic surge tank at the south portal of the tunnel, will protect the Inland Feeder from excessive negative pressures that could develop from an unexpected shutting down of the pumps at Wadsworth Pumping Plant. Final design is complete and board award of a construction contract is scheduled for October 2023.
- **Inland Feeder-Rialto Pipeline Intertie—**In conjunction with three other projects, this project enhances water supply reliability in the Rialto Pipeline service area by enabling water to be pumped from the Wadsworth Pumping Plant forebay to Rialto Pipeline by way of the Inland Feeder. This project will install an interconnection pipeline and isolation valve structure between the Inland Feeder and Rialto Pipeline. Final design for this project is complete and board award of a construction contract is scheduled for September 2023.
- **Sepulveda Feeder Pumping Stations—**This project will install new pump stations at the existing Venice and Sepulveda Canyon Pressure Control Facilities providing the ability to reverse flow in the Sepulveda Feeder and deliver water from the Central Pool to portions of the Jensen plant-exclusive area. This project will use progressive design-build (PDB) for delivery. Staff has evaluated the SOQs for selection of the design-builder, interviewed the three respondents, and has selected a contractor based on qualifications-only process. Staff has initiated negotiating a final agreement for Phase 1 preconstruction design services under a PDB contract with the recommended design-builder. Board award of the Phase 1 agreement is scheduled for September 2023.

Badlands Tunnel Surge Tank Project—Valve inspection by Metropolitan staff and contractor personnel

Badlands Tunnel Surge Tank Project—Visual inspection by Metropolitan staff

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:

- **Weymouth Basins 5–8 and Filter Building No. 2 Rehabilitation—**This project rehabilitates major mechanical and structural components including the flocculation/sedimentation equipment, sludge pumps, baffle boards and walls, launders, inlet gates, and outlet drop gates at the Weymouth plant. Rehabilitation work also includes seismic upgrades of basin walls and inlet channel, hazardous material abatement, and replacement of filter valves and actuators in Filter Building No. 2. Metropolitan's Board awarded a construction contract in May 2022. The contractor continued installation of filter valves and piping in Filter Building No. 2 and other work under the first quarter-plant outage, including new concrete wall structural reinforcement and installation of new mechanical piping and electrical conduits. Construction is 35 percent complete and is scheduled to be complete in May 2025.
- **Mills Ozonation System PLC Upgrade—**This project replaces the outdated ozone generator control system at the Mills plant with new programmable logic controller equipment along with upgraded software. Installation of the new software and commissioning is complete, although continued system testing remains. The ozone system was returned to service, with ozone as the plant's primary disinfectant, in August 2023.
- **Mills Electrical Upgrades—**This project upgrades the electrical system with dual-power feeds to key process equipment to comply with current codes and industry practice, improve plant reliability, and enhance worker safety. Stage 1 construction is complete, and a construction contract for Stage 2 improvements was awarded in November 2021. Stage 2 improvements will add a second incoming 12 kV service from Riverside Public Utilities, reconfigure the existing 4160-volt switchgear, and replace the standby generator switchgear and the emergency generator programmable logic controller. Metropolitan's Board awarded a construction contract in November 2021. The contractor is installing the ORP switchgear building footing and is pulling

cables to the new Riverside Public Utility switchyard transformer pads. Construction is 27 percent complete and is scheduled to be complete in February 2025.

- **Jensen Ozone PSUs Replacement—**This project rehabilitates the ozone generation system at the Jensen plant by replacing four existing ozone power supply units (PSUs) and four sets of generator dielectrics. The project also makes required modifications to the associated electrical, control, and cooling water systems. Metropolitan's Board awarded a construction contract in June 2022. All PSUs and dielectrics have been manufactured and delivered. Installation of two PSUs is complete and dielectrics for two ozone generators have been replaced. The contractor continued working on the coordination study for start-up testing of the two newly installed PSUs and pipe fabrication and valve procurement to implement modifications to the cooling water system. Construction is 40 percent complete and is scheduled to be complete in December 2023.

System Reliability Program

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

- **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 is complete and provides enhanced security related to perimeter windows and doors. Stage 2 work is complete and provides security system upgrades inside the building with a focus on the main entry rotunda area, boardroom, executive dining lounge, and security control room. Stage 3 improvements will provide security system upgrades around the perimeter of the building. Metropolitan's Board awarded the Stage 3 construction contract in December 2022. The contractor continued demolition of the sidewalk around the building and removal of waterproofing at bollard locations and began installation of bollard baseplates. Construction is 25 percent complete and is scheduled to be complete in January 2024.
- **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 Metropolitan's Headquarters Building provide detection, notification, and control of building functions so that occupants and visitors can safely exit in the event of a fire. Metropolitan's Board awarded a construction contract in August 2020. The contractor began installation of the variable speed drives for the parking garage exhaust fans, air balance of duct system, and testing/commissioning of the smoke control system. Construction is 92 percent complete and is scheduled to be complete in September 2023.
- **SCADA System Upgrades—**This project will upgrade Metropolitan's entire control system in incremental stages, spanning the Colorado River Aqueduct, the five water treatment plants, and the conveyance and distribution system. The first stage of this project replaces the control system at the Mills plant, starting with a pilot effort on one of the plant's remote terminal units. The pilot effort will demonstrate the proposed technology and the consultant's approach for the plant and the overall project. The consultant continued providing submittals, performing equipment verification, and developing control narratives and a training plan. The pilot phase is approximately 40 percent complete and currently scheduled to be complete in December 2023. The system upgrades at the Mills plant are scheduled to be complete by April 2026.

- **Foothill Hydroelectric Plant and Control Building Seismic Upgrade—**This project strengthens the Foothill Hydroelectric Plant and Control Building to withstand a significant earthquake, by removing and replacing the roofing system, adding encasements to enlarge and strengthen concrete columns, and reinforcing shallow foundations. A construction contract was awarded in April 2023. The contractor's initial submittals have been reviewed, and mobilization is complete. The contractor is currently performing abatement activities on the building's roof and demolishing existing exhaust fans. Construction is 15 percent complete and is scheduled to be complete in December 2024.

Headquarters Building Fire Alarm and Smoke Control System Upgrades—Level P1 conduit installation

Protecting the Public and Metropolitan's Assets

Engineering Services continued to develop state-mandated Emergency Action Plans (EAPs) for Metropolitan's state-regulated dams to help ensure long-term public safety. The Lake Mathews EAP and the Lake Skinner and Skinner Finished Water Reservoir EAP were formally submitted to the Cal OES and are currently under review. The EAPs for Garvey Reservoir and Palos Verdes Reservoir are substantially complete and outreach to the local emergency management agencies and first responders is expected to begin this month.

Operations

Water System Operations

Core Business Objectives

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. On July 12, the Apprenticeship Program celebrated the Class of 2023 by holding a completion ceremony at the new Apprenticeship Training Center. Five electricians and ten mechanics, including one Eastern Municipal Water District apprentice, were recognized for successfully completing the Program's academic portion. The four-year program includes eight periods of classroom instruction and over 100 written and practical exams. Outstanding achievement awards were presented to the top-performing apprentice from each discipline. The class was commended for demonstrating persistence and flexibility by overcoming many challenges, including the pandemic. The ceremony was attended by Directors Camacho and Armstrong, program sponsors, Joint Apprenticeship & Training Committee members, various Water System Operations managers, and apprentices' families. This year marked the 20th anniversary of the Apprenticeship Program. Since its inception in 2003, the Program has developed and graduated 154 journey-level employees. These journeys composes over 50 percent of the current electrical and mechanical trades workforce responsible for maintaining Metropolitan's treatment and distribution facilities.

Class of 2023 Apprentices with Directors and WSO Management

Apprenticeship Program graduates, Ruben Lopez (left) and Kevin Loomis (right) receiving Outstanding Achievement Awards from the Electrical and Mechanical Instructors

Manage Vacancies

WSO filled six vacancies in June 2023.

Provide Reliable Water Deliveries

Metropolitan member agency water deliveries were 112,400 acre-feet (AF) for July with an average of 3,600 AF per day, which was about 700 AF per day higher than in June. In addition, Metropolitan delivered 24,600 AF to Cyclic and Conjunctive Use Programs. Treated water deliveries increased by around 10,000 AF from June for a total of 69,600 AF, or 51 percent of total deliveries for the month. The Colorado River Aqueduct (CRA) pumped a total of 70,000 AF in June. State Water Project (SWP) imports averaged 4,200 AF per day, totaling about 130,000 AF for the month. The target SWP blend is around 50 percent for Weymouth and Diemer plants and 55 percent for the Skinner plant.

Monitoring the CRA's water level is critical for accurately measuring the water delivered to the Lake Mathews Reservoir and providing system reliability. The communication equipment at one of the CRA-level monitoring stations located at the West Portal of the San Jacinto Tunnel will be upgraded to have two power sources and to use a new fiber communication line.

Partially upgraded communications equipment at the San Jacinto Tunnel

Manage Water Reserves

The 100 percent State Water Project (SWP) allocation when combined with Colorado River supplies provides the region with more water than normal demands. Water continues to be managed according to Water Surplus and Drought Management (WSDM) principles and operational objectives with an emphasis to position SWP supplies to meet future demands in the SWP-dependent area. Metropolitan continued filling Diamond Valley Lake, and the reservoir will be full or nearly full by the end of the year. Metropolitan also continued deliveries to Desert Water Agency and Coachella Valley Water District to meet Metropolitan’s exchange obligation. With the higher SWP allocation and low regional demands, Metropolitan is working to maximize its use of Table A supplies this year. Staff is working with member agencies to manage supplies through the Cyclic and Cyclic Cost Offset Program.

Support Imported Supply Reliability

The La Verne Shops received a request to refurbish 10 sets of stems, couplings, and clamps for the Department of Water Resources’ (DWR’s) San Luis Dam Head Gate. Each stem is about 12 feet long and weighs nearly 4,000 lbs. This work included disassembly, abrasive blasting, machining of the clamp bores, manufacturing new bushings, and finished industrial coating.

Operations (continued)

As-received stems (left), couplings (center), and clamps (right) for DWR's San Luis Dam Head Gate

Post abrasive blast condition of clamps (left), couplings (center), and stems (right) for DWR's San Luis Dam Head Gate

Fixturing of coupling assembly (left) and line boring of coupling hinge (center and right) for DWR's San Luis Dam Head Gate

Operations (continued)

Finished coating of couplings (left) and palletized refurbished couplings (right) for DWR's San Luis Dam Head Gate

Applying finished coating to the stems (left) and delivery of completed stems (right) for DWR's San Luis Dam Head Gate

Support the Pure Water Southern California Program

During July, Metropolitan completed volatile organic compound (VOC) spiking studies at the Pure Water Southern California demonstration plant. These innovative studies tested the ability of the membrane bioreactor to remove VOCs to support future direct potable reuse design studies, as well as ensure the performance of an indirect potable reuse facility at full scale when subject to atypical influent quality.

On July 19, Metropolitan hosted an event at the Pure Water Southern California facility in Carson to celebrate receipt of an $80 million grant from the state of California to support ongoing testing and future design of the full-scale treatment plant.

Staff also onboarded two new water quality technicians to support ongoing testing and ensure a smooth transition from consultant-led to Metropolitan-led operations at the demonstration plant and support full Metropolitan staffing at the facility.

Manage Power Resources and Energy Use in a Sustainable Manner

Energy markets in July 2023 trended upward, reflecting hotter summer weather, increased natural gas prices, and increased California Independent System Operator demand. Natural gas prices in Southern California spiked in the second half of July because of a forced outage of a major Southern California Gas Company pipeline supplying gas from the San Joaquin Valley into the Los Angeles Basin. Gas prices roughly doubled from the $7–10/MMBtu range to the $15–20/MMBtu range.

The total energy costs to operate the CRA for fiscal year 2022-23 was $138.2 million. The CRA energy cost budget for fiscal year 2023-24 is $82.6 million; the current cost forecast for the current fiscal year is somewhat lower at $74.6 million, because of reduced pumping and lower forward cost curves.

Because of system operating conditions focused on refilling water storage and low demands, daily generation output from Metropolitan's small hydroelectric plants (HEPs) averaged around 15 MW during the month of July, for a total energy output of about 11,000 megawatt-hours (MWh). HEP output is forecast to trend upwards later in 2023 as demands increase and Metropolitan receives deliveries from the 100 percent SWP allocation. Metropolitan's solar facilities, totaling 5.4 megawatts of capacity, generated approximately 1200 MWh in June 2023.

Ensure Water Quality Compliance, Worker Safety, and Environmental Protection

Metropolitan complied with all water quality regulations and primary drinking water standards during June 2023. On July 13, staff attended a meeting with a Division of Drinking Water (DDW) representative as part of a sanitary survey of the domestic water systems at the plants. The second part of the sanitary survey will be a field inspection, and DDW will provide a report including any recommendations for improvement after the field inspection.

Staff completed the rollout of new gas detectors district-wide. The detectors are used to confirm a safe atmosphere for employees working in confined spaces, such as pipelines and utility vaults.

New gas detector rolled out district-wide

Staff posted a revised MWD Safety Talk on Voluntary Use of Respirators. This safety talk provides information on when employees may want to wear a voluntary respirator, how to obtain one, and the limitations on use.

Revised Voluntary Use of Respirators Safety Talk posted on the IntraMet

Staff conducted a field test of a heavy-duty electric stake bed truck to transport valves during the Etiwanda Pipeline shutdown. This is the first of on-going field trials which will allow hands-on-testing of the emerging technologies to identify the operational criteria and proper fit of zero-emission vehicles specific to Metropolitan operations. This effort supports Metropolitan's climate goals and compliance with the state's Advanced Clean Fleet regulation.

Electric stake bed truck used during Etiwanda Pipeline shutdown

A three-year internal Process Hazard Analysis (PHA) was conducted at the Mills plant and Chemical Unloading Facility. A PHA is a thorough, step-by-step review of chlorine operations and maintenance procedures used to identify any potential deficiencies and evaluate their consequences. This process helps identify a range of risks from equipment failures to human error, ultimately improving safety of plant personnel along with the surrounding environment. The PHA allowed for new and existing staff to increase their vast knowledge of plant-specific piping and instrumentation diagrams together with the physical location of plant equipment. Although a laborious task, this process demonstrates Metropolitan's commitment to the health and safety of all employees and the public at large.

Optimize Maintenance

Jensen plant staff installed a new water quality panel at the Venice Pressure Control Structure (PCS) on the Sepulveda Feeder. The new water quality panel uses a reagentless analyzer to measure water quality. The old water quality panel was obsolete and labor intensive to keep online, and it also required monthly reagent replenishments. The new self-cleaning turbidity analyzer and reagentless equipment require less maintenance. This replacement should generate an overall cost savings because of the reduced labor, fewer failed parts, and no reagents.

Staff removing the old water quality panel (left) and staff with the new water quality panel (right) at Venice PCS

Staff replaced faulty microchips on the control boards of eight chemical flow meters at the Skinner plant. Replacement flow meters have a significant lead time for delivery, and these flow meters are an integral part of ensuring accurate chemical dosing for water treatment. As an alternative solution, individual components known to be the cause of failure were removed, and new chips were soldered in place. Repairing at the component level resulted in a significant cost-savings compared with replacing the eight meters.

Staff replacing faulty microchips on a flow meter used to dose water treatment chemicals at the Skinner plant

Weymouth plant staff replaced a failed Uninterruptible Power Supply (UPS) that services the main plant switchgear building. This building is a critical component of the electrical infrastructure for the Weymouth plant and La Verne facilities. This UPS had been in service for over 12 years and was beyond repair. The work involved installing a temporary electrical circuit to maintain service while the installation was completed. Staff removed the existing 50 kVA UPS and replaced it with a more modern and efficient 15 kVA unit. This reduced overall installation costs, as well as ongoing and future operational and maintenance costs. This will also provide the critical UPS equipment with another 12 to 15 years of expected service life.

Journey staff explaining transformer connections to an apprentice as part of UPS equipment replacement at the Weymouth plant

UPS and electrical equipment ready for start-up at the Weymouth plant

Staff recently installed two stainless steel, multi-orifice plates in the flow control system at Covina Pressure Control Structure (PCS). The Covina PCS on the Middle Feeder North controls flows up to 250 cfs using 10 valve trains ranging in size from 8 to 30 inches. Despite having two fully functioning 30-inch lines, use was limited because of concerns of potential damage to the conical valves and the pipe mortar liner from high velocities. Engineering Services designed two multi-orifice plates that were fabricated by the La Verne Shops. These orifice plates will accommodate a set flow of 35 or 50 cfs in the lines, to minimize the demand on the rest of the control system. This is especially helpful during the rehabilitation currently underway for smaller regulating valves on four other flow control lines.

Two multi-orifice plates being installed at Covina PCS

The multi-orifice plate installed into the 30-inch line at Covina PCS

The swimming pool at Iron Mountain is being refurbished and requires rapid refilling after new plaster is applied because of the high ambient desert temperatures. Staff coordinated delivery of temporary water tanks to facilitate domestic water production in advance to allow for the rapid filling requirements.

Staff unloading a water tank trailer for refilling the swimming pool at Iron Mountain pumping plant

The equipment in the Desert is mostly original with many parts that are no longer available for replacement, requiring them to be custom manufactured. Staff removed the lift nut from a discharge valve to take the exact measurements required for a replacement to be manufactured.

Staff measuring discharge valve components at a Desert facility

Aging infrastructure requires consistent maintenance and repair. Underground utility lines are at or near end of life at Desert facilities. This month, staff excavated and replaced a sewer line at the Iron Mountain pumping plant.

Staff excavating to replace an aging sewer line at the Iron Mountain pumping plant

Staff continued routine maintenance of the inland distribution system patrol roads. This month, staff completed vegetation mowing on the Orange County Feeder and routine grading of the Etiwanda and Rialto Feeder patrol roads. Routine maintenance on the San Diego and CRA patrol roads is ongoing. Routine maintenance includes vegetation removal, erosion repair, and grading of the patrol roads. Because of a significant spring rainfall, vegetation is very heavy this year.

Motor grader and water truck performing routine maintenance along the CRA (left) and San Diego Canal (right) patrol roads

Optimize Water Treatment and Distribution

The State Water Project (SWP) target blend entering the Weymouth and Diemer plants was approximately 50 percent in July. The Mills plant continued to receive a blend of water from Silverwood Lake and Lake Perris in July because of low alkalinity in the East Branch SWP. The SWP target entering Lake Skinner fluctuated to accommodate multiple operational needs and to maximize water delivery from the SWP. The SWP blend leaving Lake Skinner was in the range of 40 to 70 percent.

Flow-weighted running annual averages for total dissolved solids from June 2022 through May 2023 for Metropolitan's treatment plants capable of receiving a blend of supplies from the SWP and the Colorado River Aqueduct were 545, 558, and 620 mg/L for the Weymouth, Diemer, and Skinner plants, respectively.

Staff cleaned the sedimentation basin as part of the annual preventative maintenance work at the Diemer plant. The sedimentation basins are an essential part of the treatment process where the majority of suspended solids are removed. Preventative maintenance is critical to ensure the reliability and longevity of the equipment.

Staff washing down the sedimentation basin at the Diemer plant

Staff fabricated a new diffuser for the caustic soda injection system at the Skinner plant. The new diffuser uses a separate water line, which improves chemical mixing when injected. Historically, the Skinner plant finished water influent channel has accumulated calcium carbonated buildup in the form of very heavy scale, because of inadequate chemical mixing. The new diffuser is expected to help decrease the deposits of calcium carbonate in the channel.

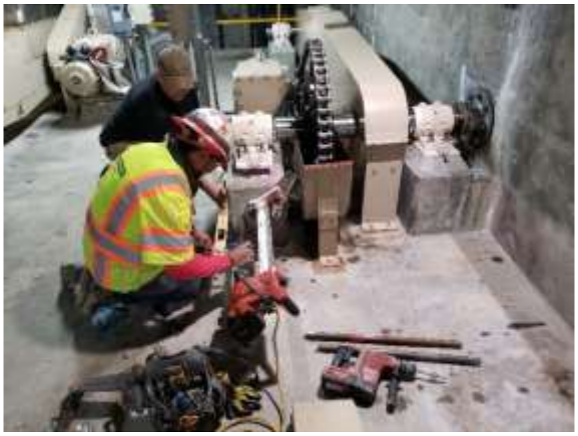
Staff constructing a new caustic soda diffuser at the Skinner plant

Weymouth plant staff replaced a failed chlorine leak detector located in the Ozone Demonstration Plant. During a monthly inspection check, the unit was found in a false alarm state. Staff verified that the unit was unable to be repaired and replaced it with a newer unit. The new unit was tested and verified locally and remotely through the SCADA system.

Failed chlorine leak detector (left); staff installing new chlorine leak detector (center); and newly installed chlorine leak detector (right) at the Weymouth plant

Staff, with the assistance of outside contractors, are working to align and reinforce the flocculator shafts and pillow block mounts at the Jensen plant. This effort will prepare for and enable the plant to treat the increased flows from the State Water Project as temperatures rise throughout the summer.

Staff disassembling wet side pillow block (left), and crane operators hoisting flocculation shafts (right) at the Jensen plant




The contractor core drilling pillow block pedestals (left) and performing alignment procedure (right) at the Jensen plant

Improve Emergency Preparedness and Response

On June 26, staff attended a special training on emergency management response strategies for mass shootings. It was hosted by the city of Temecula and featured the emergency manager from the Las Vegas Metropolitan Police Department who reviewed the events and the response to the *Route 19 Mass Shooting* incident that occurred in 2017. The training provided valuable insight into what to expect during and after a mass shooting incident, and what steps can be taken now to prepare for similar incidents in the future.

On July 13, staff participated in the meeting of California's Standardized Emergency Management System Training, Exercise and Credentialing Committee. This regular meeting was chaired by the California Office of Emergency Services and reviewed current emergency management training offered by the state, including a review of the criteria for the state's Emergency Operations Center Credentialing program. This type of standardized training is critical for all agencies that respond to emergencies.

Protect Source Water Quality

A rapidly developing cyanobacterial bloom in Diamond Valley Lake led to the posting of an advisory notice at the lake and on the DVL marina website on July 5 because of the detection of cyanotoxins throughout the lake. Problematic cyanobacterial blooms are relatively common in lakes nationwide during the summer months, and Metropolitan follows the state's voluntary guidance for cyanotoxin monitoring and posting advisory notices. There are no regulatory requirements for cyanotoxins in California. The bloom was a recreational water issue only. Drinking water was not affected because water was not being withdrawn from DVL in this high supply year. The advisory notices remained in place throughout the month.

The increase in SWP deliveries and sunny weather caused Lake Skinner to have an algae bloom early this month. An algae bloom in source water will cause taste and odor issues through the downstream system. Since Lake Skinner is the source for the Skinner plant as well as other treatment plants in the San Diego area, staff treated the lake with an 8-ton copper sulfate application to stop the growth. While the lake was being treated, the Skinner plant and downstream demand was being supplied by the San Diego Canal. Unfortunately, an algal bloom was also occurring on the canal where the growth can become thick enough to clog screens and starve downstream pipelines. Staff worked extended hours and through the night to clean the debris racks to ensure that there was no interruption of flows.

Staff refilling the helicopter's hopper with granular copper sulfate for application at Lake Skinner

Helicopter returning to the Lake Skinner to spread copper sulfate as directed by Water Quality staff

Staff removing algae from debris racks at the San Diego Canal

Manage the Power System

Metropolitan staff responsible for maintaining Bulk Electric System (BES) cybersecurity assets completed the annual NERC Critical Infrastructure Protection (NERC-CIP) cybersecurity awareness training in July. Over 200 Metropolitan employees took the web-based training on the importance of maintaining the security of these critical pieces of equipment, how to prevent unauthorized access, and how to ensure that Metropolitan meets stringent NERC cybersecurity standards. This training is required on an annual basis.

Prepare for Future Legislation and Regulation

On June 16, the Division of Drinking Water announced a proposed maximum contaminant level (MCL) for hexavalent chromium of 10 micrograms per liter (µg/L) and a detection limit for purposes of reporting (DLR) of 0.1 µg/L. Compliance timelines vary from 2 to 4 years, depending on system size. Staff will submit comments in support of the MCL a by the August 4, 2023, comment deadline.

On July 5, staff submitted written comments to the Senate Environment and Public Works Committee on a draft bill to address PFAS in the environment. The letter asked Congress to provide a more expansive definition of PFAS to protect against future PFAS contaminants; follow the tenants of the Safe Drinking Water Act rather than mandating various PFAS (namely PFNA, PFHxS, PFBS, and HFPO-DA) be regulated; provide grants or loans to help water systems install PFAS remediation systems; and most important, add a new section that exempts water and wastewater treatment facilities from liability under CERCLA. Staff will continue to engage both Congress and EPA with respects to regulating PFAS.

On July 21, the State Water Resources Control Board released proposed Direct Potable Reuse (DPR) regulations. The regulations provide the regulatory framework by which highly treated recycled water can be introduced either immediately upstream of a water treatment plant or directly into a public water system. Staff is coordinating with the Los Angeles County Sanitation Districts and the member agencies on comments to be submitted by the September 8, 2023, comment deadline.

Advance Education and Outreach Initiatives

Weymouth plant staff provided a tour of the La Verne facility for 19 student interns that were recently hired. As part of the tour, the students visited the treatment plant, watched a filter backwash, and observed the construction work for Basins 7 and 8. While visiting the MSU shops, ozone facility, and the valves at the Junction Structure, various crafts provided the students with demonstrations of their work. After lunch, the students also toured the Water Quality Lab. This tour was designed to increase the students' understanding of Metropolitan's diverse and talented work force, while making them aware of possible career opportunities after graduation.


Student interns during tour of the Weymouth plant

Monthly Update as of: 7/31/2023

Reservoir	Current Storage	Percent of Capacity
Colorado River Basin		
Lake Powell	9,327,824	38%
Lake Mead	8,501,000	33%
DWR		
Lake Oroville	3,236,641	91%
Shasta Lake	3,889,833	85%
San Luis Total	1,861,181	92%
San Luis CDWR	969,211	91%
Castaic Lake	301,649	93%
Silverwood Lake	72,092	96%
Lake Perris	94,649	72%
MWD		
DVL	622,815	77%
Lake Mathews	152,549	84%
Lake Skinner	39,709	90%

Hoover Dam

Information Technology

Project Highlights

LIMS TNI Implementation Project

The Laboratory Information Management Systems (LIMS) TNI Implementation project was initiated in September 2021 to modify the Water Quality LIMS database, workflows, and other components to adhere to new compliance requirements from The National Environment Laboratories Accreditation Conference Institute (TNI). More specifically, LIMS needed to be enhanced/revised to meet regulations in various areas including data integrity, traceability, audit logging, and process documentation. The agile project management approach was used to split this large complex project into smaller more manageable sprints, clarify/prioritize project objectives, accelerate the delivery of business value, and avoid the risks associated with the traditional waterfall or "big bang" project approach.

Because of the fulfillment of project sprints and other laboratory efforts, the Water Quality Laboratory was recognized by the Environmental Laboratory Accreditation Program (ELAP) as a TNI Early Adopter in April 2023. A GovTech innovation award was also received for using innovative agile project management techniques to comply with new regulatory requirements in the Water Quality Laboratory. In July 2023, the last project sprint was completed, and the project closure tasks were initiated. The successful completion of this project is largely credited to the collaboration among the IT LIMS technical lead and project management staff, Water Quality laboratory stakeholders, and supporting IT management for their diligent efforts and support throughout this challenging project.

Fuel Management System

As part of our Fuel Management System Upgrade Project, which enables management controls over fuel inventories, dispensing, and security to ensure operability, vendor support, and system reliability, the Information Technology Group recently completed the interface between the cloud-based fuel system, FM LIVE, and the MAXIMO system. This was needed to update the odometer and engine run time hours, which are used for setting preventative maintenance work orders. It is also used to determine condition index, which is an evaluation of all vehicles in terms of cost, age, and usage.

Real Property

Resiliency

Foster staff training and development.

Staff completed the International Right of Way Association (IRWA) Principles of Real Estate Appraisal course. This course enables participants to demonstrate a basic knowledge of the valuation process and its components.

Staff attended the IRWA 69th Annual Education Conference in Denver, Colorado. At the conference, staff attended numerous education sessions and networking opportunities. Attending the conference bolstered staff knowledge in the right-of-way industry and allowed valuable connections to be made with colleagues at other agencies and organizations around the country.

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

In conjunction with our partners in WSO and Security, manage and protect Metropolitan's real property land holdings and permanent easements while ensuring that Metropolitan's core operations are protected.

Thirty-four quitclaim deeds were obtained from the U.S. Department of the Interior, Bureau of Land Management (BLM), and recorded. These quitclaim deeds together cover approximately 36,000 acres of 1932 Act Lands in Riverside and San Bernardino Counties.

The 1932 Act authorized the Federal Government to grant Metropolitan lands to build and operate the Colorado River Aqueduct but included a reversionary interest clause. The clause reverts properties to the Federal Government if they are not used for the original intended purpose. The 2019 John D. Dingell Jr. Conservation, Management and Recreation Act and the Board-authorized Contributed Funds Agreement allow BLM to release the Federal Government's reversionary interest in these lands by quitclaim deeds. Recorded deeds bolster Metropolitan's records of clear legal title to lands granted to it by Congressional action and help prevent unlawful use of these lands by third parties.

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

The County of Riverside has been granted a permanent easement comprising 0.56 acres for public road purposes and the dedication of Fields Drive in unincorporated territory near Murrieta and French Valley. The public dedication and improvement of Fields Drive is an entitlement condition imposed by the county on a developer in connection with a residential subdivision project.

Issued a five-year license to JMS Sales, Inc. for the temporary storing of manufactured homes within the Upper Feeder right-of-way in Riverside. The license area of 1.3 acres was improved by a previous Metropolitan tenant for parking purposes, and the license does not entail additional improvements.

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

The Diamond Valley Lake Marina experienced an algae bloom that led staff from various Metropolitan groups to coordinate the installation of advisory notices around the marina facility. This voluntary response enabled

Metropolitan to alert the recreating public to the presence of cyanobacteria in the water. The bloom did not affect drinking water and was limited to recreation. The Marina remained open for recreation and anglers were able to safely enjoy boating and fishing on the lake.

District Housing Maintenance and Management.

Preoccupancy repairs on two district houses were completed this reporting period. Repairs to these houses consisted of new flooring, new appliances, and minor repairs and cleaning. Desert housing maintenance staff also completed tenant-requested work orders consisting of air conditioning unit repairs, irrigation repairs, and installation of garbage disposals and dishwashers.

Desert Housing and Recreation Interim Action Plan (DHRIAP) has been implemented, and work continues on several projects.

With the completion of all carport installations at Gene, carport installation efforts have transitioned to Iron Mountain. All concrete work is complete at Iron Mountain, and carport assembly has begun. All carports are expected to be assembled at Iron Mountain by July 31.

New pool table felt was installed and maintenance was performed on all pool tables at all four pump plant locations in efforts to maintain the game tables and provide for an optimal playing surface.

It was determined that the Iron Mountain pool plaster and pool drain line had failed. In expedited efforts to get the pool back into service, the existing plaster is being removed and replaced so that the pool so it can be re-opened for the summer months. The pool drain line was also replaced by site crews and is now complete.



The renovation of house 04-G has also begun; asbestos abatement has been completed and interior demo work has started. Exterior painting has also been completed.

The renovation of house 71-G has also begun, with asbestos and lead abatement occurring in July. Once the abatement work is complete, interior refurbishment will begin. The exterior of the house has been freshly painted.

Staff completed work at district housing located at Live Oak Reservoir. Work included the installation of new energy-efficient windows, which will help to control both heating and cooling of the residence. In addition, trimming of trees and bushes leading up to the property was done, with a total of 16 trees and 7 bushes being trimmed. Tree and bush trimming helps reduce fire danger and potential damage from fallen trees.


Operations

(continued)

Security

Project Highlights

Security and Emergency Response

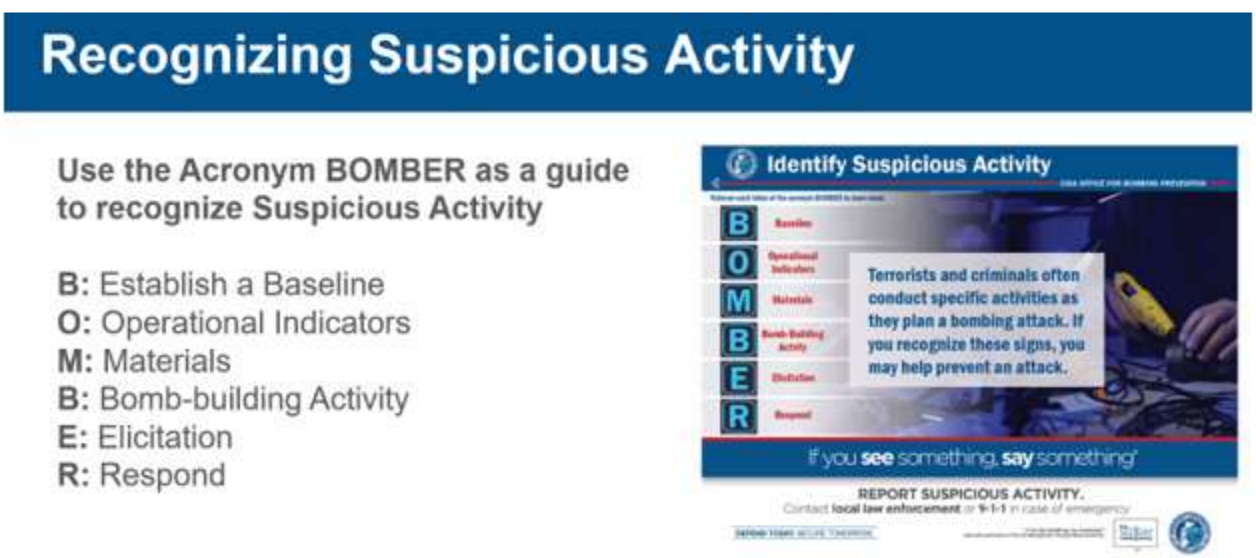
Metropolitan security staff attended a special virtual training presented by the Department of Homeland Security Cybersecurity & Infrastructure Security Agency (CISA) Office for Bombing Prevention, hosted by the American Water Works Association (AWWA).

The training focused on:

- Improvised Explosive Devices (IEDs)
- The latest threats
- Explosive effects
- Mitigation measures
- Suspicious activity recognition
- Available training resources

While the number of bomb threats increased 54 percent nationally in 2022, the number of actual device-related incidents decreased by 9 percent.

Metropolitan's Security Unit has worked diligently with internal stakeholders and consultants to implement explosive mitigation measures into new facility designs and security upgrade projects. A major prevention component is ensuring that all employees are trained to immediately report any suspicious activities to security and law enforcement personnel.



Employees should immediately report any suspicious activities to security and law enforcement

Security and Emergency Response

Meter cabinets placed along Metropolitan's feeders and remote substructures often attract vandals who break into them to steal the expensive items inside, including batteries, copper wire, monitoring equipment, and recyclable metal components. Real-time monitoring is inoperable, and without a significant protective encasement, replacement parts are stolen again.

To significantly mitigate damages to older meter cabinets, Security Specialists worked closely with Western Conveyance and Distribution (C&D) staff, designers, engineers, and a third-party metal fabrication vendor to design new reinforced, high-quality stainless-steel meter cabinets. These new meter cabinets have no exposed attachment hardware and lock shrouds and have been designed with other features to make battery-operated tool attacks extremely difficult.

Security investments such as these provide enhanced system resiliency, eliminate unintentional monitoring outages, and protect vulnerable electronic components into future decades.

Newly reinforced meter cabinets protect vulnerable electronic components well into the future

Finance and Administration

Finance

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.

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

The Risk Management Unit completed 55 incident reports communicating instances of Metropolitan property damage, liability, workplace injuries, regulatory visits, and spills.

Risk Management completed 46 risk assessments on contracts, including professional service agreements, construction contracts, entry permits, special events, and film permits.

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.

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

- Continued collaborative efforts to review and update process for Operating Policy A06, Business Continuity and Emergency Management.
- Continued collaboration with IT and Cybersecurity to develop cyber resiliency plans for the district to continue working in the event of a cyber-attack rendering systems and computers unavailable.
- Continued working with the Fusion software vendor to make updates to the guided workflows used by planning coordinators to update their business continuity plans.
- Received training on the Cash BVC report to proactively monitor budget expenditures.
- Continued development of the district-wide Local Hazard Mitigation Plan.
- Worked with Cybersecurity to implement Multi-Factor Authentication for accessing the Fusion business continuity software.

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.

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 June 2023 (for water delivered in April 2023) totaled 75.4 thousand acre-feet (TAF), which was 44.2 TAF lower than the budget of 119.6 TAF and translates to $75.2 million in receipts for June 2023, which was $40.6 million lower than budget of $115.8 million.

- Year-to-date water transactions through June 2023 (for water delivered in May 2022 through April 2023) were 1,385.8 TAF, which was 204.4 TAF lower than the budget of 1,590.2 TAF. Year-to-date water receipts through June 2023 were $1,322.7 million, which was $180.5 million lower than the budget of $1,503.2 million.
- In June 2023, Accounts Payable processed approximately 4,400 vendor invoices for payment.

Update capital financing plans and work with rating agencies and investors to communicate financial needs and capabilities, ensure cost-effective access to capital markets, and maintain long-term bond ratings of AA or better.

On June 21, 2023, Metropolitan issued $258,410,000 in Water Revenue and Refunding Bonds, 2023 Series A. Bond proceeds funded a portion of Metropolitan's Capital Investment Plan, repaid a $35.6 million draw on a Wells Fargo Bank Revolving Credit Facility that was used to refund a like amount of subordinate lien bonds, and funded costs of issuance. The 2023A bonds priced on June 6, 2023, and received a strong response from investors. Total bond orders were 3.3x oversubscribed, including $874 million in institutional orders from 49 different investors. The All-In True Interest Cost of the bonds was 3.88 percent. The underwriting team was Siebert Williams Shank & Co., LLC, senior manager; Ramirez & Co., Inc., co-senior manager; and Barclays and Cabrera Capital Markets, LLC, as co-managers.

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

As of June 30, 2023, Metropolitan's investment portfolio balance was $1.6 billion; in June 2023, Metropolitan's portfolio managers executed 29 trades.

In June 2023, Treasury staff processed 1,315 disbursements by check, 21 disbursements by Automated Clearing House (ACH), and 130 disbursements by wire transfer. Treasury staff also processed 59 receipts by check, 42 receipts by ACH, and 58 receipts by incoming wires and bank transfers.

In addition, there were 9,319 P-One Card transactions, totaling $1.4 million, recorded in the April bank statement.

Administrative Services

Accomplishments

In an effort to network, visit, and understand Metropolitan's many work environments and to promote the Rideshare program, Rideshare Services staff participated in two field site safety events, first at Diemer on June 28 and then at Jensen on July 10. The Rideshare Team was present to answer program questions, encourage participation in one of our district-wide programs, and meet current Rideshare participants. In addition to the entire Rideshare team, our Vanpool partner, Commute with Enterprise, also attended to promote their program and meet current vanpool participants.

Human Resources

HR Priorities

Partner with Metropolitan leadership to support learning, development, and adaptive workforce planning initiatives.

In July, 314 Metropolitan employees attended virtually facilitated classes, including Recruitment Procedure Training, Mechanics of Writing, High Rise Safety, Interviewing Skills, and Communicating Effectively in a Face-Paced World.

LinkedIn Learning, Metropolitan's online e-learning content platform, was accessed for such topics as Interpersonal Communication, Strategic Thinking Tips, Handling an Unruly Audience, Developing an Entrepreneurial Mindset, and Facilitation Skills.

The Organizational Development & Training Unit (OD&T) hosted a new training program to help employees and managers develop assertive but respectful communication skills (Communicating Authentically and Effectively). These classes were attended by 18 employees and 14 managers.

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

Recruitment received new staffing requisitions for 40 positions, resulting in 217 positions currently in recruitment.

HR Core Business: Comply with Employment Laws and Regulations

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.

In July, 17 new workers' compensation claims were received. Only five employees are currently 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 address accommodations, coordinate treatment, and work closely with our workers' compensation third party administrator, Tristar Risk Management.

HR Metrics	June 2022	July 2023	Prior Month June 2023
Headcount			
Regular Employees	1,762	1783	1,779
Temporary Employees	37	29	25
Interns	2	1	0
Recurrents	18	18	18
Annuitants	19	24	24

	July 2023	June 2023
Number of Recruitments in Progress (Includes Temps and Intern positions)	217	207
Number of New Staffing Requisitions	40	23
	July 2023	June 2023
Number of Job Audit Requests in Progress	7	6
Number of Completed/Closed Job Audits	1	1
Number of New Job Audit Requests	2	0

Transactions Current Month and Fiscal YTD (includes current month)			
External Hires	FY 22/23 Totals	July 2023	FISCAL YTD
Regular Employees	116	9	9
Temporary Employees	36	7	7
Interns	0	1	1
Internal Promotions	72	9	9
Management Requested Promotions	149	15	15
Retirements/Separations (regular employees)	98	5	5
Employee-Requested Transfers	19	0	0

Departures

Last	First Name	Classification	Eff Date	Reason	Group
Goodman	Geoffery	IT Enterprise App Analyst III	6/3/2023	Retirement - Service	INFORMATION TECHNOLOGY GROUP
Meyer	Trisha	Pr Emp Relations Specialist	5/20/2023	Resign	HUMAN RESOURCES GROUP
Nguyen	Jenny	Pr Admin Analyst (C)	5/18/2023	Resign	HUMAN RESOURCES GROUP
Kellough	Dyanne	Team Mgr-Power Ops& Scheduling	5/27/2023	Deceased	WATER SYSTEM OPERATIONS GROUP
Strong	Nicholas	O&M Tech IV	6/15/2023	Resign	WATER SYSTEM OPERATIONS GROUP

Diversity, Equity and Inclusion

Tribal Outreach & Engagement

On July 12, the DEI Tribal Engagement staff met with the California Indian Manpower Council (CIMC) officials and Metropolitan Project Labor Agreement (PLA) administrators to discuss plans and steps to engage tribal communities and sovereign individuals for training and eventual employment into Metropolitan workforce roles and construction-related positions in Metropolitan PLA-covered construction projects. An initial plan to engage Metropolitan contractors as well as trade unions was developed to support the program objective of placing American Indian workers in Metropolitan jobs.

On July 16, the DEI Tribal Engagement staff participated in the 20th annual expo of the American Indian Chamber of Commerce. Staff participated in coaching sessions with native-owned businesses and joined speaker panels to discuss procurement and contracting with public agencies.

On July 25, the DEI Tribal Engagement Staff met with representatives of the Pechanga tribal council to discuss workforce development issues as covered in Metropolitan's Indigenous Pathways program. The discussion centered on the job tours as well as training in water treatment operations. Parties agreed to meet with the Pechanga Water Quality staff to fully understand the tribe's requirements. Parties also agree to plan for Pechanga tribal youth members to join the job tours at Diamond Valley Lake as soon as the schoolyear opens

Business Outreach & Community Engagement

Ken Ashford, Pr. Public Affairs Representative, attended the National Association of Women Business Owners—Inland Empire Board Installation in Riverside, California.

On July 20, the Business Outreach team attended the Paths to Leadership: AAPI Perspectives in the Water/Wastewater Sector in Los Angeles, California. Leaders within the Water/Wastewater sector join together to share their perspectives from an AAPI lens and discuss their pathway to becoming a leader in the industry. Panel speakers included Shivaji Deshmukh, General Manager of Inland Empire Utilities Agency; Eros Young, Engineering Manager of Orange County Sanitation District; Deven Upadhyay, Executive Officer and Assistant General Manager of The Metropolitan Water District of Southern California; Phuong Watson, Senior Engineer of Water Replenishment District, and Sunny Wang, Water Resources Manager of the City of Santa Monica.

Wendy Barba, Sr. Administrative Analyst, and Ken Ashford, Pr. Public Affairs Representative, attended the National Association of Women Business Owners—Ventura County (NAWBO-VC) Board Installation in Camarillo, California. The NAWBO-VC came together to support new board and committee members and reconnect with community business partners.

On July 26, Ken Ashford, Pr. Public Affairs Representative, attended the WBEC-West 2023 Unconventional Women's Conference in Newport Beach, California. The conference included a discussion on various strategies to improve supplier diversity appeal, followed by a productive business networking activity focusing on building opportunities for future collaborations.

On July 27, staff presented at a panel session at the 2023 San Bernardino Small Business Conference in San Bernardino. The program featured a presentation on “How to do Business with Metropolitan.” About 375 people participated in the conference focusing on capital, marketing, procurement, and resource access.

External Affairs

Highlights

Launched Metropolitan's summer conservation advertising campaign in seven languages promoting rebates and California Friendly landscapes. Advertising includes digital, out-of-home, radio, social media, and a new video gaming application called Lawn Be Gone. All of the creative assets were produced in-house.

GM Hagekhalil and Chief Engineer Bednarski joined with U.S. EPA Regional Administrator Guzman, officials from the Los Angeles County Sanitation Districts, and Carson mayor Lula Davis-Holmes to accept a $2 million Brownfields cleanup grant from the federal Bipartisan Infrastructure Bill. The funds will help clean up a section of contaminated property on the site of the Pure Water Southern California project.

GM Hagekhalil joined with federal and LA County Sanitation Districts officials and local leaders to receive a US EPA Brownfields grant.

Colorado River Resources Manager Hasencamp was a featured presenter at the ACWA Region 8 meeting. (July 13)

Metropolitan celebrated the presentation of $80 million from state officials to advance work on the Pure Water Southern California project. GM Hagekhalil, Assemblymember Calderon (D-Whittier), Assemblymember Gipson (D-Gardena), Directors Erdman, Chacon, Dennstedt, Dick, Douglas, Lefevre, and McCoy, State Water Resources Control Board Chair Esquivel, Carson Mayor Pro Tem Hilton, community leaders, member agencies, and Metropolitan staff attended. The event was livestreamed and received press coverage from Spectrum News and Univision. (July 19)

State and local leaders joined MWD officials for the Pure Water Southern California Check Presentation Event.

A Metropolitan delegation with Chair Ortega, GM Hagekhalil, Directors Quinn, Ackerman, and McMillan, and staff visited Northern California farming operations to discuss sustainable ag. practices and they toured the proposed Sites Reservoir site and Delta communities. (July 27-28)

Metropolitan sponsored the Southern California Water Coalition quarterly meeting which presented Insights into Colorado River Water Management. Colorado River Resources Manager Hasencamp was a panelist, and Directors De Jesus, Dennstedt, Dick, Erdman, Fong-Sakai, Miller, and Smith, and AGM Zinke and other Metropolitan staff attended. (July 28)

Legislative Services

Federal

Comments were provided on a draft Senate bill to addresses per- and polyfluoroalkyl substances (PFAS) in the environment, requesting language be added to hold manufacturers and distributors of PFAS responsible for cleanup and costs.

Metropolitan worked with its Lower Colorado River Basin partners to secure $50 million in funding in the House and Senate FY24 Appropriations bill for the Bureau of Reclamation to carry out water conservation projects in the lower Colorado River. The funding will be finalized when the bill is enacted into law.

Staff briefed Representative Napolitano on current water supply conditions and Colorado River issues. (July 31)

State

Metropolitan negotiated changes consistent with board direction and became a co-sponsor of AB 1572 by Assemblymember Friedman (D-Glendale). Staff is working with the author's office on clarifying amendments.

Work continues with other agencies to advance Metropolitan's board-approved priorities (recycled water, regional conveyance, dam safety, and water use efficiency) for a proposed bond measure. LADWP also requested $100 million in the bond to support conveyance projects to serve the SWP-dependent areas.

Metropolitan staff is soliciting support for a $50 million budget request for projects to increase reliability in the SWP-dependent areas.

Local

AGM Zinke and Metropolitan staff participated in a Pure Water Southern California tour with Assemblymember Rubio (D-Baldwin Park) and Assemblymember Pacheco (D-Downey) and their district office staff. (July 7)

Metropolitan staff presented, monitored, and/or participated in 40 webinars, virtual meetings, and events this month with community organizations, trade associations, and local officials on water-specific topics.

Media and Communications

Coordinated Chair Ortega's participation on the Rebuild SoCal podcast.

Arranged a day-long interview/observation with Los Angeles Times reporter Ian James and GM Hagekhalil.

External Affairs (continued)

Set up an interview between writer Liz Smilor and GM Hagekhalil for publication in California Water, a supplemental section which runs in Southern California News Group publications.

Coordinated an interview with Capital & Main reporter Dan Ross and External Affairs' Team Manager Soni on Pure Water Southern California.

Set up an interview between KABC-TV Channel 7 News and WRM's Guerrero focused on what the public can do to conserve water and save on their water bills.

Arranged an interview between KNX-AM 1070 news radio and GM Hagekhalil on Pure Water Southern California.

Coordinated separate interviews with WSO's Assistant Group Manager Collins and CalMatters and One Water News regarding direct potable reuse at Pure Water Southern California and the proposed state regulations.

Highlighted on social media Metropolitan's new electric stake bed truck, part of the district's transition to a zero-emission fleet.

Press Releases

- Co-sponsoring AB1572 to restrict use of drinking water to irrigate non-functional turf
- Announcement of credit ratings from top three rating agencies
- New board directors Carl E. Douglas and Garry Bryant
- $80 million check presentation by state for Pure Water Southern California

Website and Social Media

Social media posts featured Angel City Football Club Captain Ali Riley, Metropolitan's summer interns, and summer recreation activities

Posted conservation-focused videos featuring social media influencer and designer/entrepreneur Justina Blakeney and Angel City Football Club team captain Ali Riley.

Highlighted Engineering Services' Co-Op interns on National Intern Day.

Shared information on the recreation activities at Diamond Valley Lake and Lake Skinner for National Parks and Recreation Month.

Public Outreach and Member Services

Pure Water Southern California

Conducted tours for City of Pasadena (July 27) and virtual tours for Witt O'Brien (July 14) and SoCal Gas employees. (July 24)

Provided a briefing for Assemblymember Gipson (July 7) and City of Long Beach Prosecutor Haubert. (July 7)

Met with Las Virgenes MWD and LADWP to discuss outreach to LA and Ventura County Medical Associations (July 24); made presentation to Nature for All Ambassador Program (July 26); met with Caltrans to discuss proposed conveyance pipeline. (July 28)

Metropolitan hosted community outreach booths to provide information and talk with community members about Pure Water Southern California at the Bellflower Street Fest (July 20) and the Love Long Beach Festival. (July 22)

Metropolitan was at several community events getting input from residents on the Pure Water Southern California Project: Metropolitan sponsored and staff supported a turf replacement workshop in San Fernando.

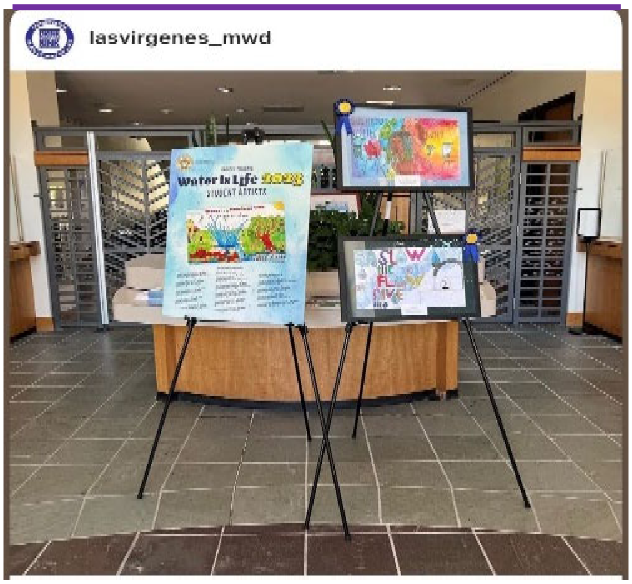
Other Outreach Activities

- Presented City of San Fernando Turf Replacement workshop (July 18)
- Provided tour of Jensen for American Society of Civil Engineers – LA Area chapter (July 28)
- Met with the Westside Regional Alliance of Councils regarding Sepulveda Feeder urgent repair project
- Notified homes and businesses about upcoming work for Second Lower Feeder Reach 3B and completion of Feeder Reach 3A

Education and Community Relations

In partnership with the Department of Water Resources, West Basin Municipal Water District, and the Water Energy Education Alliance, Metropolitan co-hosted a Water Education Committee meeting for water educators from agencies throughout California. During the two-day event, educators heard from Chair Ortega, and toured Pure Water Southern California and West Basin's Edward C. Little Recycling Facility and Visitors Center. The group also discussed the following:

- Metropolitan's Climate Adaptation Master Plan
- Water education priorities
- Augmented reality
- Diversity, equity, and inclusion in education
- Tribal water issues
- Career technical education and water industry workforce development. (July 31)



Traveling student art show at Las Virgenes MWD

The California Environmental Education Foundation hosted and Metropolitan staff participated in a focus group of middle and high school teachers to discuss STEM programs including Water Engineering 4 Good. (July 20)

The Water Is Life traveling student art show was displayed at Las Virgenes Municipal Water District and Western Municipal Water District offices. Member and retail agencies submitted 230 entries for the 35th Annual Student Art 2024 Poster Contest.

Metropolitan sponsored three events through the Community Partnering Program: Olivenhain MWD Water Treatment Educational Tour, Friends of the Los Angeles River RiverFest 2023, and Southern California Chinese American Environmental Protection Association Youth Summer Camp.

Sustainability, Resilience, Innovation and Environmental Planning

SRI Core Activities

Member Agency Managers Monthly CAMP4W Meeting
The Chief of Sustainability, Resilience, and Innovation (SRI) Officer presented the Climate Adaptation Master Plan for Water Themes to establish a planning framework that will express Metropolitan's board aspirations. The themes were developed based on discussions among the Board and Member Agencies regarding what concepts should be considered as the CAMP4W planning process progresses across reliability, resilience, financial sustainability, and affordability.

Metropolitan Board Climate Leadership Discussion Monthly Meeting
SRI and WRM presented to the board members on utilization of IRP Needs Assessment Scenarios (C and D) in climate adaptation planning. These monthly meetings will guide SRI's accelerated timeline and ensure that SRI continues to be aligned on critical issues. In addition, the purpose of these meetings is to have in-depth conversations on the climate issues.

Zero Emission Vehicle (ZEV) Transition
SRI continued to lead the ZEV Executive Task Force's cross-organizational work teams that are responsible for the transition of Metropolitan's fleet to zero emission vehicles.

- On July 5, 2023, Metropolitan's ZEV consultant, Gladstein, Neandross, and Associates (GNA), presented the ZEV Executive Task Force with an overview of the progress on development of the ZEV transition implementation roadmap. GNA is using information that was gathered in key stakeholder interviews conducted in June to compile a draft report that will be completed in late-July or early August.
- SRI worked with WSO, Finance, and Procurement to evaluate options for financing and procurement of Metropolitan's first ZEVs, two Ford F150 Lightning trucks.
- SRI continued to work with the ZEV Task Force Work Groups to evaluate and procure chargers that will be used for the new Ford F150 Lightning trucks. SRI, WSO, and ESG began working with Information Technology employees to develop a Request for Information (RFI) that will be used to evaluate charger software options.

Green Procurement
SRI and Administrative Services Section restarted efforts to incorporate sustainability into procurement practices in support of the Climate Action Plan.

Sustainability Expo and Roadshow
SRI concluded the first Metropolitan Sustainability Expo and Roadshow this month. Chief SRI Officer and Team presented SRI initiatives and CAMP4W, discussed innovation and resilience measures, collected and ensured that over 100 lbs. of electronic waste were properly recycled, and raised awareness of personal sustainable practices to over 800 staff across facilities, treatment, and pumping plants. It was a unifying effort across the district.

Sustainability Expo Roadshow at Jensen Treatment Plant

Envision Two-day Training

SRI and Human Resources offered the second staff training on Envision Sustainable Infrastructure Framework. Staff from cross-disciplines took the training, and those who passed the exam would earn an Envision Sustainability Professional (ENV-SP), a globally recognized credential that equipped the ENV-SPs with the knowledge to apply sustainable concepts to their daily work and Metropolitan infrastructure projects.

Envision Sustainable Infrastructure Two-day Training at Metropolitan Headquarters

Sustainability, Resilience and Innovation (continued)

Centralized Grants Management Office

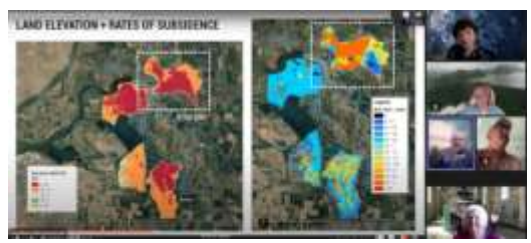
The Grants Unit successfully updated internal operating policy C-21, and grants are now centralized under the Sustainability, Resilience, and Innovation Office. The Centralized Grants Management Office (CGMO) will provide services and support to Metropolitan groups throughout the agency. The CGMO will serve as a repository of resources, expertise, and tools to ensure that Metropolitan's teams are well equipped to successfully acquire financial and technical assistance support for their projects and programs. The office will increase Metropolitan's opportunities to acquire outside funding while reducing risks associated with grant management and compliance.

The development of trainings and an updated Grants Procedures manual are underway. Meanwhile, the CGMO is already working with various groups to prepare grant applications and assist with the preparation of status reports, invoicing, and tracking of existing grants.

Innovation

Pilot Projects

On July 12, Bay Delta, SRI, WRM, and WaterStart had the kick-off pilot meeting with Rezatec. Rezatec is using Water SAT technology with geospatial AI to remotely monitor the levees on Bouldin Island. The team now has access to both historical and live data on a platform created for the pilot. Satellite data sourcing for the ground motion trend analysis has been completed, and processing of the timeseries data is underway. Satellite data for the vegetation aspects and compliance data remain ongoing. Rezatec is working in conjunction with the Sensoil Pilot, using sensors to analyze levee integrity. East Bay MUD is also a member of WaterStart and is interested in partnering on the pilot.



On July 13, SRI's Innovation Team met with our partner Braid Theory and the Cleveland Water Alliance (CWA) to discuss partnerships on pilots, grant opportunities, and to learn more about CWA's 2023 Open Innovation Challenge and Innovation Programs. Braid Theory has been helping one of our Pilot Entrepreneurs PRM participate in CWA's grant and pilot programs. CWA's current Open Innovation Challenge is focused on Detecting Lead Service Lines without Breaking Ground. SRI's Innovation Team also introduced our new H2O TECHCONNECT Community to CWA. The group discovered many ways we could partner with and help each other. CWA centrally connects 200-plus water industry partners, 30-plus utility partners, and 23 research institutions. CWA has also invested 500K in early-stage innovation and has 40-plus pilots ongoing.

Partnership with Braid Theory, AltaSea, and Achievement Rewards for College Scientists (ARCS-LA)
On July 29, SRI's Innovation Team was invited to participate in AltaSea's open house at the Port of Los Angeles. The event's theme was What is Happening Right Off Our Coast with presentations from the California Department of Fish and Wildlife and USC's Sea Life Program. Braid Theory also had a special event for Metropolitan's H2O TECHCONNECT-Channels for Innovation Community and ARCS-LA Scholarship Award Winners. Over 600 attendees participated in the event.

ALTASEA.ORG

https://channelsforinnovation-h2otechconnect.com/register/

Environmental Planning Section

Core Business: Environmental Planning and Regulatory Compliance Support

Bay Delta Initiatives

Delta Conveyance Project

- Continued supporting preparation of the responses to comments for the draft environmental impact report (EIR) for cultural resources and tribal cultural resources impact categories on behalf of Public Water Agencies.
- Continued coordination with California Department of Water Resources (DWR) on permitting efforts.

Webb Tract Multi-Benefit Mosaic Landscape Project

- Conducted kick-off meeting and site visit with Bay Delta Initiatives staff and consulting biologists to initiate spring season surveys on Webb Tract in support of preparation of the environmental documentation.
- Visited Holland Tract with Bay Delta Initiatives staff to evaluate future potential tule nursery sites.

Biologists Unloading at Webb Tract

CaptiScour Pond at Webb Tract

Potential future tule nursery site on Webb Tract

Engineering Services Group

Etiwanda Pipeline Relining Project

- Continued oversight of project construction monitoring and mitigation compliance.

Perris Valley Pipeline

- Continued oversight of project construction monitoring and mitigation compliance.

Prestressed Concrete Cylinder Pipe (PCCP) Rehabilitation Program

- Continued construction monitoring and mitigation compliance for the PCCP Lake Mathews Valve Storage Project and Second Lower Feeder Reaches 3A and 3B.
- Provided construction support to PCCP Sepulveda Feeder Urgent Carbon Fiber Rehabilitation Project.

Pure Water Southern California

- Prepared draft Noise Technical Report and continued revising draft technical reports.
- Continued tribal cultural resources consultation.
- Continued preparation of draft EIR project description.
- Continued biological surveys to capture alignment modifications.

Weymouth Water Treatment Plant and La Verne Site Improvements

- Continued preparation of the Administrative Draft Program EIR.

Design Support

- Provided design review and support for the Weymouth Hazardous Waste Storage Facility, Weymouth Machine Shop Upgrades, and the Lake Perris Seepage Recovery projects and provided support for Progressive Design Build for the Sepulveda Feeder Pump Stations project.

Construction Monitoring

- Continued environmental construction monitoring for the Weymouth Battery Energy Storage System and Foothill Hydroelectric Plant Seismic Upgrades projects.

Master Specifications

- Provided support for deployment of Master Specification 01065 (Environment Compliance Requirement) by ESG Technical Control Team (TCT).
- Provided edits to the following Master Specifications in TCT Master Spec Workflow: 01530 (Temporary Fences); 02950 (Landscaping); and 02951 (Hydroseeding).

External Affairs Group

- Reviewed and provided input on proposed state budget trailer bills and Governor's infrastructure package.
- Participated in California Council for Environmental and Economic Balance (CCEEB) Natural Resources Task Force (NRTF) monthly meeting.

<u>**Sustainability, Resilience, and Innovation Office**</u>

Climate Action Plan (CAP) Monitoring and Reporting

- Continued assisting in Scope 3 emissions data collection efforts in support of the CAP implementation phase, which includes development of an electronic database system to quantify contractor's construction emissions, an employee commute survey, and policies for net zero waste at Union Station.

<u>**Water System Operations Group**</u>

- Conducted biweekly bird surveys at Jensen Plant filtration basins to ensure compliance with the federal Migratory Bird Treaty Act and the Fish and Game Code in support of operational activities.
- Developed procedures for compliance with nesting bird regulations for Jensen Plant filtration basins.
- Provided environmental analysis and clearance for road grading activities along the Etiwanda Pipeline and Rialto Feeder patrol roads and throughout the Orange County conveyance and distribution area.

Surface Mining and Reclamation Act (SMARA) Compliance

- Submitted a New Mine Operation Report and associated fees to the California Division of Mine Reclamation as part of continued SMARA compliance.

<u>**Reserve Management**</u>

Lake Mathews Multiple Species Reserve

- The Reserve Management Committee approved the fiscal year 2023/2024 Annual Work Plan and Annual Operating Budget for reserve land management activities.
- Executed a new reserve management contract with the Riverside County Habitat Conservation Agency.
- Created a GIS database to map the Reserve's boundary fencing and assist with prioritizing locations for future fence installations.
- Conducted a prescribed burn on land south of El Sobrante Road and west of Palm Drive.

Prescribed burn at the Lake Mathews Reserve

Southwestern Riverside County Multi-Species Reserve

- Maintained brown-headed cowbird traps.
- Conducted invasive plant species removal, including stinknet.
- Conducted a prescribed burn on land south of Lake Skinner.

Prescribed burn at the Southwestern Riverside County Multi-Species Reserve

External Document Reviews

- Reviewed 16 CEQA notices for external projects and prepared comment letters for those that may affect Metropolitan facilities and/or operations.

Real Property Support

- Provided CEQA analysis and determinations in support of 13 real property agreements.

Water Resources Management Support

- Provided CEQA analysis in support of Eastern Municipal Water District local resource project (French Valley Recycled Water District Project).

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

***Gutierrez v. Metropolitan* (Los Angeles County Superior Court)**

On May 16, 2023, employee Encarnacion Gutierrez filed an employment lawsuit against Metropolitan in Los Angeles County Superior Court. The complaint was served on Metropolitan on June 12. The complaint alleges five causes of action; three of which are under the California Fair Employment and Housing Act (FEHA): race/color/national origin discrimination; retaliation; and failure to prevent discrimination. The fourth is for "failure to promote" based on a violation of public policy, and the fifth cause of action is for unfair business practice under the California Unfair Competition Act.

Plaintiff alleges he was discriminated against based on his race/color/national origin and Metropolitan failed to take reasonable steps to prevent these occurrences because Metropolitan failed to promote qualified Mexican American employees, including plaintiff, to management positions.

On July 13, plaintiff filed a first amended complaint after the Legal Department informed plaintiff's counsel that public agencies are entitled to government immunity under the Unfair Competition Act and are also immune from causes of action based upon a perceived violation of public policy. Accordingly, the lawsuit will proceed on the remaining three causes of action under FEHA. Metropolitan's answer or other responsive pleading is due on August 14. The Legal Department is representing Metropolitan.

***Zarate v. Metropolitan* (Los Angeles County Superior Court)**

On July 6, 2023, employee Maria Carmen Zarate filed an employment lawsuit against Metropolitan in Los Angeles County Superior Court. The complaint was served on Metropolitan on July 13. The complaint alleges five causes of action; three of which are under the California Fair Employment and Housing Act (FEHA): race/color/national origin discrimination; retaliation; and failure to prevent discrimination. The fourth is for "failure to promote" based on a violation of public policy, and the fifth cause of action is for unfair business practice under the California Unfair Competition Act.

Plaintiff alleges she was discriminated against based on her race/color/national origin, and Metropolitan failed to take reasonable steps to prevent these occurrences, because Metropolitan failed to promote her, a Mexican American employee, to a higher paying position when she was already performing the work of that position.

On July 27, plaintiff filed a first amended complaint after the Legal Department informed plaintiff's counsel that public agencies are entitled to government immunity under the Unfair Competition Act and are also immune from causes of action based upon a perceived violation of public policy. Accordingly, the lawsuit will proceed on the remaining three causes of action under FEHA. Metropolitan's answer or other responsive pleading is due on August 28. The Legal Department is representing Metropolitan.

Matters Concluded and/or Terminated

***Stronghold Engineering, Inc. v. Metropolitan* (San Bernardino County Superior Court)**

Stronghold alleged that Metropolitan breached the parties' construction contract for the Mills Water Treatment Plant Electrical Upgrade Project by failing to pay Stronghold for costs incurred due to Metropolitan-caused delays and by wrongfully withholding liquidated damages. Stronghold's complaint, filed on June 22, 2021, sought $1.35 million in damages.

By a settlement agreement signed on July 17, 2023, the parties resolved the dispute. Metropolitan agreed to return $260,000 in liquidated damages to Stronghold in exchange for a release of all claims and a dismissal of the lawsuit.

On August 2, 2023, the court issued a notice of dismissal of Stronghold's complaint, with prejudice.

Matters Received

Category	Received	Description	
Action in which MWD is a party and Government Code Claim	1	Complaint for Damages: (1) Discrimination on the Basis of Gender, Race, Color, and/or National Origin; (2) Retaliation; (3) Failure to Prevent Discrimination; (4) Failure to Promote; and (5) Unfair Business Practice, filed in Los Angeles County Superior Court, in the case Maria Carmen Zarate v. MWD, Case No. 23STCV15786	
Government Code Claims	2	Claims relating to accidents involving MWD vehicles	
Subpoenas	2	Workers' compensation subpoenas for two employees' personnel, wage, and medical records	
Requests Pursuant to the Public Records Act	12	Requestor	Documents Requested
		22nd Century Technologies	Contract for Skilled/Technical Staffing
		Allied Universal	Contract documents from MWD's current security guard services
		CCS Global Tech	Proposal and contract documents for Temp Labor Staffing Professional-Administrative
		Charles Taylor Environmental	Proposals submitted in 2018 in response to Request for Qualifications for On-Call General Industrial Hygiene and Safety Services
		Enterprise Solutions	Proposal and contract documents relating to Request for Proposal for Temp Labor Staffing Professional-Administrative, Scientific and Technical
		MWD Supervisors Association (2 requests)	(1) Information regarding MWD Human Resources' spreadsheet tracking matters of discipline; and (2) written transcript, digital media, and chats from Coffee with the General Manager session held on July 26, 2023
		PCL Construction	Records drawings for MWD pipeline near project at the Oliver P. Roemer Water Filtration Facility in Rialto
		Pinnacle Environmental	Documents, including effluent data, permitting, violations, and inspections, relating to the industrial property on Mountain Avenue in the city of Ontario

		<u>Requestor</u>	<u>Documents Requested</u>
		Private Citizens (2 requests)	(1) Proposal and contract documents for As-Needed Environmental Site Assessment and On-Call General Industrial Hygiene and Safety Services; and (2) technical paper titled, "A Guide to Geosmin and MIB Producing Cyanobacteria in the United States" prepared by former MWD Water Quality staff
		Tryfacta	Proposal and contract documents relating to Request for Proposal for Temp Labor Staffing Professional-Administrative, Scientific and Technical
Other Matters	2	(1) Letter from Metrohm USA appealing the July 5, 2023 Protest Decision regarding the award for Ion Chromatograph (IC) System with Dual Channels and Autosampler with Variable Wavelength Detector (RFB-PR-420564); and (2) Wage garnishment	

PLEASE NOTE

- ADDITIONS ONLY IN THE FOLLOWING TWO TABLES WILL BE SHOWN IN RED.
- ANY CHANGE TO THE *OUTSIDE COUNSEL AGREEMENTS* TABLE WILL BE SHOWN IN REDLINE FORM (I.E., ADDITIONS, REVISIONS, DELETIONS).

Bay-Delta and SWP Litigation

Case	Status
Consolidated DCP Revenue Bond Validation Action and CEQA Case *Sierra Club, et al. v. California Department of Water Resources* (CEQA, designated as lead case) *DWR v. All Persons Interested* (Validation) Sacramento County Superior Ct. (Judge Kenneth C. Mennemeier)	• **Validation Action** • 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 Associatiosn, 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 • Dec. 9, 2022 DWR's motion for summary adjudication of Delta Reform Act and public trust doctrine affirmative defenses granted; NCRA's motion for summary judgment re same denied • Trial on the merits held May 15-18, 2023 • Supplemental briefing ordered on three issues with final brief due June 30, 2023 • **CEQA Case** • 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

Subject	Status
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 • Federal defendants reinitiated consultation on Oct 1, 2021 • February 24, 2023 court approved the 2023 Interim Operations Plan proposed by federal defendants and state plaintiffs, denied all alternative proposed operations and extended the stay until December 31, 2023
CESA Incidental Take Permit Cases **Coordinated Case Name *CDWR Water Operations Cases*, JCCP 5117 (Coordination Trial Judge Gevercer)** *Metropolitan & Mojave Water Agency v. Calif. Dept. of Fish & Wildlife, et al*. (CESA/CEQA/Breach of Contract) *State Water Contractors & Kern County Water Agency v. Calif. Dept. of Fish & Wildlife, et al*. (CESA/CEQA) *Tehama-Colusa Canal Auth., et al. v. Calif. Dept. of Water Resources* (CEQA) *San Bernardino Valley Municipal Water Dist. v. Calif. Dept. of Water Resources, et al.* (CEQA/CESA/ Breach of Contract/Takings) *Sierra Club, et al. v. Calif. Dept. of Water Resources* (CEQA/Delta Reform Act/Public Trust) *North Coast Rivers Alliance, et al. v. Calif. Dept. of Water Resources* (CEQA/Delta Reform Act/Public Trust) *Central Delta Water Agency, et. al. v. Calif. Dept. of Water Resources* (CEQA/Delta Reform Act/Public Trust/ Delta Protection Acts/Area of Origin) *San Francisco Baykeeper, et al. v. Calif. Dept. of Water Resources, et al.* (CEQA/CESA)	• 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 • Certified administrative records lodged March 4, 2022 • State Water Contractors et al. granted leave to intervene in Sierra Club, North Coast Rivers Alliance, Central Delta Water Agency, and San Francisco Baykeeper cases by stipulation • SWC, et al. granted leave to intervene as respondents in *Tehama-Colusa Canal Auth., et al. v. Calif. Dept. of Water Resources* CEQA case • SWC's renewed motion to augment the administrative records granted in part; a court-appointed referee will review withheld records to determine if the deliberative process privilege applies

CDWR Environmental Impact Cases **Sacramento Superior Ct. Case No. JCCP 4942, 3d DCA Case No. C091771** **(20 Coordinated Cases)** Validation Action *DWR v. All Persons Interested* CEQA 17 cases CESA/Incidental Take Permit 2 cases (Judge Arguelles)	• 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 • May 11, 2022, court of appeal reversed the trial court's denial of attorney fees and costs in an unpublished opinion • Opinion ordered published • Coordinated cases remitted to trial court for re-hearing of fee motions consistent with the court of appeal's opinion • Sept.15, 2023 re-hearing on fee motions
COA Addendum/ **No-Harm Agreement** *North Coast Rivers Alliance v. DWR* Sacramento County Superior Ct. (Judge Rockwell)	• 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 last extended to Nov. 18, 2022
Delta Plan Amendments and Program EIR 1 of 4 Consolidated Cases Sacramento County Superior Ct. remaining on appeal Court of Appeal for the Third App. Dist. Case No. C097948 *North Coast Rivers Alliance, et al. v. Delta Stewardship Council*	• 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 *North Coast Rivers Alliance v. Delta Stewardship Council* • SWC granted leave to intervene • Metropolitan supports SWC • Nov. 7, 2022 court ruled in favor of Delta Stewardship Council on all claims • Orders denying all claims and final judgments entered Nov. 22, 2022 • Notice of appeal filed in *North Coast Rivers Alliance, et al*. case

	• August 8, 2023 Appellant North Coast Rivers Alliance's appendix and opening brief past due, clerk's notice provides an additional 15 days to file
SWP Contract Extension Validation Action Court of Appeal for the Third App. Dist. Case No. C096316 *DWR v. All Persons Interested in the Matter, etc.*	• 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 entered and served • C-WIN et al., County of San Joaquin et al. and North Coast Rivers Alliance et al. filed notices of appeal • Validation and CEQA cases consolidated on appeal • Briefing completed May 30, 2023
SWP Contract Extension CEQA Cases Court of Appeal for the Third App. Dist. Case Nos. C096384 & C096304 *North Coast Rivers Alliance, et al. v. DWR* *Planning & Conservation League, et al. v. DWR*	• 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 entered and served • North Coast Rivers Alliance et al. and PCL et al. filed notices of appeal • Appeals consolidated with the validation action above

Delta Conveyance Project Soil Exploration Cases *Central Delta Water Agency, et al. v. DWR* Sacramento County Superior Ct. (Judge Chang) *Central Delta Water Agency, et al. v. DWR (II)*, Sacramento County Super. Ct. (Judge Acquisto)	• Original case filed August 10, 2020; new case challenging the second addendum to the CEQA document filed Aug. 1, 2022 • 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 • DWR's petition to add the 2020 CEQA case to the *Department of Water Resources Cases*, JCCP 4594, San Joaquin County Superior Court denied • Hearing on the merits held Oct.13, 2022 • Dec. 2, 2022 ruling on the merits granting the petition with respect to two mitigation measures and denying on all other grounds • Dec. 23, 2022 court order directing DWR to address the two mitigation measures within 60 days while declining to order DWR to vacate the IS/MND • March 27, 2023 court entered judgment and issued a writ after ordering and considering supplemental briefing • May 5, 2023 court granted DWR's motion to discharge the writ and dismiss the case • May 18, 2023 Notice of Appeal filed • ~~July 28, 2023~~ Hearing on motion for attorneys' fees continued to September 1, 2023
Water Management Tools Contract Amendment *California Water Impact Network et al. v. DWR* Sacramento County Superior Ct. (Judge Aquisto) *North Coast Rivers Alliance, et al. v. DWR* Sacramento County Super. Ct. (Judge Aquisto)	• 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 • SWC motion to intervene in both cases granted • Dec. 20, 2022 DWR filed notice of certification of the administrative record and filed answers in both cases

Date of Report: August 9, 2023

San Diego County Water Authority v. Metropolitan, et al.		
Cases	**Date**	**Status**
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.
	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.

Cases	Date	Status
2018 (cont.)	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.
	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.
	April 11, 2022	Court entered order of voluntary dismissal of parties' WaterFix claims and cross-claims.
2014, 2016, 2018	June 11, 2021	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.

Cases	Date	Status
2014, 2016, 2018 (cont.)	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.
	April 18	Parties filed supplemental briefs regarding their respective motions for summary adjudication, as directed by the court.
	April 18	Court issued order resetting pre-trial deadlines as proposed by the parties.
	April 29	Parties filed pre-trial briefs.
	April 29	Metropolitan filed motions in limine.
	May 4	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.
	May 11	Court issued order granting SDCWA's motion for summary adjudication on cross-claim for declaratory relief in the 2018 case regarding lawfulness of the Water Stewardship Rate's inclusion in the wheeling rate and transportation rates in 2019-2020; certain cross-claims and affirmative defenses on the ground that Metropolitan has a duty to charge no more than fair compensation, which includes reasonable credit for any offsetting benefits, with the court also stating that whether that duty arose and whether Metropolitan breached that duty are issues to be resolved at trial; affirmative defenses that SDCWA's claims are untimely and SDCWA has not satisfied claims presentation requirements; affirmative defense in the 2018 case that SDCWA has not satisfied contract dispute resolution requirements; claim, cross-claims, and affirmative defenses regarding applicability of Proposition 26, finding that Proposition 26 applies to Metropolitan's rates and charges, with the court also stating that whether Metropolitan violated Proposition 26 is a separate issue; and cross-claims and affirmative defenses regarding applicability of Government Code section 54999.7, finding that section 54999.7 applies to Metropolitan's rates. Court denied SDCWA's motion on certain other cross-claims and affirmative defenses.
	May 13	Pre-trial conference; court denied Metropolitan's motions in limine.
	May 16	Court issued order setting post-trial brief deadline and closing arguments.
	May 16-27	Trial occurred but did not conclude.

Date of Report: August 9, 2023

Cases	Date	Status
2014, 2016, 2018 (cont.)	May 23, June 21	SDCWA filed motions in limine.
	May 26, June 24	Court denied SDCWA's motions in limine.
	June 3, June 24, July 1	Trial continued, concluding on July 1.
	June 24	SDCWA filed motion for partial judgment.
	July 15	Metropolitan filed opposition to motion for partial judgment.
	Aug. 19	Post-trial briefs filed.
	Sept. 14	Court issued order granting in part and denying in part SDCWA's motion for partial judgment (granting motion as to Metropolitan's dispute resolution, waiver, and consent defenses; denying motion as to Metropolitan's reformation cross-claims and mistake of fact and law defenses; and deferring ruling on Metropolitan's cost causation cross-claim).
	Sept. 21	Metropolitan filed response to order granting in part and denying in part SDCWA's motion for partial judgment (requesting deletion of Background section portion relying on pleading allegations).
	Sept. 22	SDCWA filed objection to Metropolitan's response to order granting in part and denying in part SDCWA's motion for partial judgment.
	Sept. 27	Post-trial closing arguments.
	Oct. 20	Court issued order that it will rule on SDCWA's motion for partial judgment as to Metropolitan's cost causation cross-claim simultaneously with the trial statement of decision.
	Dec. 16	The parties' filed proposed trial statements of decision.
	Dec. 21	SDCWA filed the parties' stipulation and proposed order for judgment on Water Stewardship Rate claims for 2015-2020.
	Dec. 27	Court entered order for judgment on Water Stewardship Rate claims for 2015-2020 as proposed by the parties.
	March 14, 2023	Court issued tentative statement of decision (tentatively ruling in Metropolitan's favor on all claims litigated at trial, except for those ruled to be moot based on the rulings in Metropolitan's favor)
	March 14	Court issued amended order granting in part and denying in part SDCWA's motion for partial judgment (ruling that Metropolitan's claims

		for declaratory relief regarding cost causation are not subject to court review).
	March 29	SDCWA filed objections to tentative statement of decision
	April 3	Metropolitan filed response to amended order granting in part and denying in part SDCWA's motion for partial judgment (requesting deletion of Background section portion relying on pleading allegations).
	April 25	Court issued statement of decision (ruling in Metropolitan's favor on all claims litigated at trial, except for those ruled to be moot based on the rulings in Metropolitan's favor)
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**
Albright, Yee & Schmit, APC	Employment Matter	211923	05/23	$60,000
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	$1,277,187
	Delta Conveyance Project Bond Validation-CEQA Litigation	185899	09/21	$250,000
	MWD Drone and Airspace Issues	193452	08/20	$50,000
	Equal Employee Opportunity Commission Charge	200462	03/21	$20,000
	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 202109-14694608)~~	~~203460~~	~~02/22~~	~~$35,000~~
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	$100,000
	Grant Compliance Issues	211921	05/23	$75,000
	Pure Water Southern California	207966	11/22	$100,000

Date of Report: August 9, 2023

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	$75,000
	General Real Estate Matters	180209	08/19	$200,000
	Rancho Cucamonga Condemnation Actions (Grade Separation Project)	207970	05/22	$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~~ $100,000
~~Cummins & White LLP~~	~~Board Advice~~	~~207941~~	~~05/22~~	~~$10,000~~
Curls Bartling P.C.*	Bond Counsel	200470	07/21	N/A
Duane Morris LLP	SWRCB Curtailment Process	138005	09/14	$615,422
Duncan, Weinberg, Genzer & Pembroke	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
Greines, Martin, Stein & Richland LLP	SDCWA v. MWD	207958	10/22	$100,000
	Colorado River Matters	207965	11/22	$100,000
Haden Law Office	Real Property Matters re Agricultural Land	180194	01/19	$50,000
Hanna, Brophy, MacLean, McAleer & Jensen, LLP	Workers' Compensation	211926	06/23	$100,000

Firm Name	Matter Name	Agreement No.	Effective Date	Contract Maximum
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	$500,000
	Tax Issues	180200	04/19	$50,000
	Alternative Project Delivery (ADP)	207961	10/22	$250,000
	Faith v. MWD	207963	10/22	$100,000
Hausman & Sosa, LLP	MOU Hearing Officer Appeal	201892	09/21	$95,000
	MOU Hearing Officer Appeal	207949	07/22	$25,000
Hawkins Delafield & Wood LLP*	Bond Counsel	193469	07/21	N/A
Horvitz & Levy	SDCWA v. MWD	124100	02/12	$1,250,000
	General Appellate Advice	146616	12/15	$100,000
	Colorado River	203464	04/22	$100,000
Innovative Legal Services, P.C.	Employment Matter	211915	01/19/23	$100,000
Internet Law Center	Cybersecurity and Privacy Advice and Representation	200478	04/13/21	$100,000
	Systems Integrated, LLC v. MWD	201875	05/17/21	$100,000
Amira Jackmon, Attorney at Law*	Bond Counsel	200464	07/21	N/A
Jackson Lewis P.C.	Employment: Department of Labor Office of Contract Compliance	137992	02/14	$45,000
Jones Hall, A Professional Law Corp*	Bond Counsel	200465	07/21	N/A
Kegel, Tobin & Truce	Workers' Compensation	180206	06/19	$250,000
Kronenberger Rosenfeld, LLP	Systems Integrated, LLC v. MWD	211920	04/23	$50,000

Firm Name	Matter Name	Agreement No.	Effective Date	Contract Maximum
Kutak Rock LLP	Delta Islands Land Management	207959	10/22	$10,000
Liebert Cassidy Whitmore	Labor and Employment	158032	02/17	$229,724
	FLSA Audit	180199	02/19	$50,000
Manatt, Phelps & Phillips	SDCWA v. MWD rate litigation	146627	06/16	$4,400,000
	Raftelis-Subcontractor of Manatt, Agr. #146627: Per 5/2/22 Engagement Letter between Manatt and Raftelis, MWD paid Raftelis Financial Consultants, Inc.	Invoice No. 23949		$56,376.64 for expert services & reimbursable expenses in *SDCWA v. MWD*
Meyers Nave Riback Silver & Wilson	OCWD v. Northrop Corporation	118445	07/11	$2,300,000
	Pure Water Southern California	207967	11/22	$100,000
	PFAS Compliance Issues	207968	11/14/22	$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	$1,700,000
	Arvin-Edison v. Dow Chemical	203452	01/22	$100,000
	Semitropic TCP Litigation	207954	09/22	$75,000
Nixon Peabody LLP*	Bond Counsel [re-opened]	193473	07/21	$100,000
	Special Finance Project	207960	10/22	$50,000
Norton Rose Fulbright US LLP*	Bond Counsel	200466	07/21	N/A

Firm Name	Matter Name	Agreement No.	Effective Date	Contract Maximum
Olson Remcho LLP	Government Law	131968	07/14	$400,000
	Executive Committee/Ad Hoc Committees Advice	207947	08/22	$60,000
	Public Records Act	207950	08/22	$45,000
	Advice/Assistance re Proposition 26/Election Issues	211922	05/23	$100,000
Paul Hastings LLP	MWD v. California Department of Fish and Wildlife	207969	3/23	$100,000
Rains Lucia Stern St. Phalle & Silver, PC	Employment Matter	211919	4/23	$60,000
Renne Public Law Group, LLP	ACE v. MWD (PERB Case No. LA-CE-1574-M)	203466	05/22	$100,000
	ACE v. MWD (PERB Case No. LA-CE-1611-M)	207962	10/22	$50,000
Ryan & Associates	Leasing Issues	43714	06/01	$200,000
	Oswalt v. MWD	211925	05/23	$100,000
Seyfarth Shaw LLP	Claim (Contract #201897)	201897	11/04/21	$200,000
	Claim (Contract #203436)	203436	11/15/21	$350,000
	Claim (Contract #203454)	203454	01/22	$160,000
	Claim (Contract #203455)	203455	10/21	$175,000
	Reese v. MWD	207952	11/22	$400,000
	General Labor/Employment Advice	211917	3/23	$100,000
Sheppard Mullin Richter & Hampton	Rivers v. MWD	207946	07/22	~~$100,000~~ $250,000
Stradling Yocca Carlson & Rauth*	Bond Counsel	200471	07/21	N/A
Theodora Oringher PC	Construction Contracts - General Conditions Update	185896	07/20	$100,000
Thompson Coburn LLP	NERC Energy Reliability Standards	193451	08/20	$300,000

Date of Report: August 9, 2023

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
	Colorado River Issues	211924	05/23	$100,000
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

Date of Report: August 9, 2023

THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

Report
Office of General Auditor

General Auditor's Report for July 2023

Summary

This report highlights significant activities of the Office of the General Auditor for the month ended July 31, 2023.

Audit & Advisory Services

Eight projects are in progress and seven projects are in the reporting phase.

No final reports were issued during this period.

Additionally, two advisory services projects are in process.

Other General Auditor Activities

1. **Audit Project Management System Upgrade**
   Completed. The upgrade to TeamMate+ went live this month.

2. **External Auditor Support**
   Assistance to external auditor Macias Gini & O'Connell LLP continues in accordance with their work plan.

3. **General Auditor Department Assessment**
   The development of a strategic plan driving future focus and optimal service delivery is in progress. The expected completion of this plan is August 2023.

4. **Quality Assessment & Improvement Program**
   Board and management surveys were requested and internal document submittal preparation was completed.

5. **Audit Manual Updates**
   Revised procedures for planning audits, follow-up audits, advisory engagements, and staff scheduling are underway.

6. **New Director Orientation to Internal Audit**
   A presentation to orient new Board members to the Office of the General Auditor was introduced.

7. **Performance Evaluations**
   Staff performance evaluations are underway for FY 2022/23 including goal setting and individual training plan development for FY 2023/24.

8. **FY 2024/25 & 2025/26 Budget**
   Departmental budget preparation is in progress to meet the submittal due date in August 2023.

Date of Report: July 31, 2023

Ethics Office Monthly Report

JULY 2023

EDUCATION

Provided education on an ethics policy at the July meeting of the Ethics, Organization, and Personnel Committee.

Presented an overview of Ethics Office services to new hires at Metropolitan's New Employee Orientation.

COMPLIANCE

Convened first meeting of contracting staff to discuss implementation of new Contractor Code of Conduct.

Reviewed proposed new job descriptions to determine applicable financial disclosure requirements under the Conflict of Interest Code.

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. Sent notices to four current employees and three former employees; obtained compliance from four current employees.

ADVICE

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

INVESTIGATIONS

Received five complaints involving the following allegations:

- An employee bullied/harassed a coworker
- A Metropolitan official holds incompatible offices
- A supervisor retaliated against an employee for reporting a potential workplace violation
- A supervisor retaliated against an employee for filing an EEO complaint
- A Metropolitan official improperly released confidential information

Referred EEO-related complaints to the EEO Office.

ADVICE AND INVESTIGATIVE DATA

Advice Matters	18
Compliance Assistance	36
Complaints Received	5
Investigations Opened	0
Pending Investigations	9

THE METROPOLITAN WATER DISTRICT
OF SOUTHERN CALIFORNIA

INFORMATION

- **Board of Directors**
  Finance, Audit, Insurance, and Real Property Committee

8/15/2023 Board Meeting

6G

Subject

Report on list of certified assessed valuations for fiscal year 2023/24 and tabulation of assessed valuations, percentage participation, and vote entitlement of member agencies as of August 15, 2023

Executive Summary

Every year, Metropolitan receives the certified assessed valuation from the county auditors for the six counties where Metropolitan provides water service. All county auditors have until the 14th day of August to provide the certified assessed valuation to Metropolitan, which is why Metropolitan's Board adjourns its August regular and committee meetings to the third week of the month. Metropolitan received the last of the counties' information for fiscal year (FY) 2023/24 on August 8, 2023.

Based on the information received, staff reports that certified assessed valuations (net of homeowners exemptions) for Metropolitan's six-county service area totaled $3.86 trillion for FY 2023/24. The percentage participation and vote entitlement by member agencies as of August 15, 2023, have been updated accordingly and are reported in this letter and in **Attachment 1**. Assessed valuation is also used to determine how many representatives an agency has on the Metropolitan Board. Based on the assessed valuations for FY 2023/24, the number of representatives for each agency remains the same and is also reported in **Attachment 1**.

Details

Background

This letter reports the certified assessed valuations for FY 2023/24 and member agency percentage participation, vote, and director entitlement (**Attachment 1**), which become effective for all purposes at the August 15, 2023, regular board meeting.

As part of the Metropolitan Water District Act, the process of determining assessed valuation is made each August based on submissions from the auditors of each of the six counties in the Metropolitan service area. Metropolitan uses a weighted voting system based on assessed valuation. Under Section 55 of the Metropolitan Water District Act, each member agency gets one vote for every $10 million of assessed valuation of property taxable for Metropolitan's purposes. Under Section 52 of the Metropolitan Water District Act, assessed valuation is also used to determine how many representatives an agency has on the Metropolitan Board. Each member agency is entitled to one board member and may appoint an additional representative for each full 5 percent of Metropolitan's assessed valuation of taxable property that is within such member agency's service area. Section 52 also sets the minimum number of representatives for each member public agency as the amount they had as of January 1, 2019. The Section 52 minimum for representatives does not affect voting percentages set by Section 55. Based on the assessed valuations for FY 2023/24, neither the assessed valuations nor Section 52 affects the current number of directors of any member agencies.

The certificates of the county auditors for the six counties covering Metropolitan's area, certifying the FY 2023/24 assessed valuations of all property used for calculating Metropolitan's FY 2023/24 vote and director entitlement, are on file in the office of the Manager of Treasury and Debt.

The net assessed valuations by the respective county auditors are as follows:

COUNTY	Net Assessed Valuations Taxable by Metropolitan
Los Angeles	$ 1,863,383,103,502
Orange	766,647,744,023
Riverside	263,340,254,865
San Bernardino	160,301,386,680
San Diego	677,016,967,276
Ventura	130,730,622,244
Total Net A.V.s within MWD	**$ 3,861,420,078,590**

A comparison of FY 2022/23 and FY 2023/24 net assessed valuations and the percentage of change (**Attachment 2**) and a comparison of FY 2022/23 and FY 2023/24 vote entitlement and the percentage change (**Attachment 3**) are attached for your information.

Policy

Metropolitan Water District Act Section 52: Additional Directors

Metropolitan Water District Act Section 55: Voting by Board

Metropolitan Water District Act Section 305: Certification of Assessed Valuations; Segregation of Valuations

Fiscal Impact

None

8/10/2023

Katano Kasaine — *Date*
Assistant General Manager/
Chief Financial Officer

8/10/2023

Adel Hagekhalil — *Date*
General Manager

Attachment 1 – Assessed Valuations, Percentage Participation, and Vote and Director Entitlement of Member Public Agencies as of August 15, 2023

Attachment 2 – Comparison of Net Assessed Valuations for Fiscal Years 2022/23 and 2023/24

Attachment 3 – Comparison of Vote Entitlement Percentage for Fiscal Years 2022/23 and 2023/24

Ref# cfo12695405

The Metropolitan Water District of Southern California
Assessed Valuations, Percentage Participation, and
Vote and Director Entitlement of Member Public Agencies
As of August 15, 2023

Member Agency		*Assessed Valuation Amount Certified	Percent of Total	** Vote Entitlement	*** Director Entitlement
Anaheim	$	60,384,239,089	1.56%	6,038	1
Beverly Hills		44,925,471,380	1.16%	4,493	1
Burbank		31,747,985,559	0.82%	3,175	1
Calleguas MWD		130,730,622,244	3.39%	13,073	1
Central Basin MWD		193,242,928,112	5.00%	19,324	2
Compton		6,413,398,218	0.17%	641	1
Eastern MWD		115,592,411,711	2.99%	11,559	1
Foothill MWD		24,094,186,106	0.62%	2,409	1
Fullerton		25,613,995,600	0.66%	2,561	1
Glendale		39,846,531,370	1.03%	3,985	1
Inland Empire Utilities Agency		160,301,386,680	4.15%	16,030	1
Las Virgenes MWD		30,903,464,678	0.80%	3,090	1
Long Beach		65,577,549,323	1.70%	6,558	1
Los Angeles		801,720,255,259	20.76%	80,172	5
MWD of Orange County		646,336,513,093	16.74%	64,634	4
Pasadena		38,640,474,384	1.00%	3,864	1
San Diego County Water Authority		677,016,967,276	17.53%	67,702	4
San Fernando		2,596,234,164	0.07%	260	1
San Marino		8,004,717,057	0.21%	800	1
Santa Ana		34,312,996,241	0.89%	3,431	1
Santa Monica		48,607,667,263	1.26%	4,861	1
Three Valleys MWD		86,341,467,819	2.24%	8,634	1
Torrance		35,904,604,824	0.93%	3,590	1
Upper San Gabriel Valley MWD		134,179,397,217	3.47%	13,418	1
West Basin MWD		270,636,770,769	7.01%	27,064	2
Western MWD		147,747,843,154	3.83%	14,775	1
TOTAL ASSESSED VALUATIONS WITHIN METROPOLITAN	$	3,861,420,078,590	100%	386,141	38

Percentage may not foot due to rounding.

The Metropolitan Water District of Southern California
Comparison of Assessed Valuations Net of HOE for Fiscal Years 2022/23 and 2023/24

Member Agency	FY 2022/23 Net Assessed Valuation	FY 2023/24 Net Assessed Valuation	Percentage Change
Los Angeles County:			
Beverly Hills	$ 42,674,597,044	$ 44,925,471,380	5.3%
Burbank	28,930,674,618	31,747,985,559	9.7%
Glendale	38,135,312,336	39,846,531,370	4.5%
Los Angeles	756,988,951,892	801,720,255,259	5.9%
Pasadena	37,161,819,093	38,640,474,384	4.0%
San Marino	7,698,613,665	8,004,717,057	4.0%
Santa Monica	46,186,316,289	48,607,667,263	5.2%
Long Beach	61,510,103,081	65,577,549,323	6.6%
Torrance	34,159,203,429	35,904,604,824	5.1%
Compton	5,986,309,227	6,413,398,218	7.1%
West Basin MWD	254,528,802,947	270,636,770,769	6.3%
Three Valleys MWD	82,538,322,114	86,341,467,819	4.6%
Foothill MWD	22,900,325,902	24,094,186,106	5.2%
Central Basin MWD	182,159,170,598	193,242,928,112	6.1%
Las Virgenes MWD	29,271,920,993	30,903,464,678	5.6%
Upper San Gabriel Valley MWD	126,877,023,875	134,179,397,217	5.8%
San Fernando	2,381,877,804	2,596,234,164	9.0%
Total Los Angeles County	**1,760,089,344,907**	**1,863,383,103,502**	**5.9%**
Orange County:			
Anaheim	56,269,073,437	60,384,239,089	7.3%
Santa Ana	32,281,865,954	34,312,996,241	6.3%
Fullerton	23,900,520,075	25,613,995,600	7.2%
MWD of Orange County	609,134,298,271	646,336,513,093	6.1%
Total Orange County	**721,585,757,737**	**766,647,744,023**	**6.2%**
Riverside County:			
Eastern MWD	105,024,028,930	115,592,411,711	10.1%
Western MWD	135,413,345,350	147,747,843,154	9.1%
Total Riverside County	**240,437,374,280**	**263,340,254,865**	**9.5%**
San Bernardino County:			
Inland Empire Utilities Agency	**146,634,414,955**	**160,301,386,680**	**9.3%**
San Diego County:			
San Diego County Water Authority	**632,321,979,224**	**677,016,967,276**	**7.1%**
Ventura County:			
Calleguas MWD	**123,683,835,701**	**130,730,622,244**	**5.7%**
Total Within Metropolitan	**3,624,752,706,804**	**3,861,420,078,590**	**6.5%**
Excluded Areas	**82,867,799**	**87,104,636**	**5.1%**
***Total Taxable by Metropolitan**	**$ 3,624,835,574,603**	**$ 3,861,507,183,226**	**6.5%**

The Metropolitan Water District of Southern California
Comparison of Vote Entitlement Percentage for Fiscal Years 2022/23 and 2023/24

	FY 2022/23		FY 2023/24		Change	
Member Agency	Vote Entitlement	Vote Entitlement Percentage	Vote Entitlement	Vote Entitlement Percentage	Vote Entitlement	Vote Entitlement Percentage
Anaheim	5,627	1.55%	6,038	1.56%	411	0.01%
Beverly Hills	4,267	1.18%	4,493	1.16%	226	-0.01%
Burbank	2,893	0.80%	3,175	0.82%	282	0.02%
Calleguas MWD	12,368	3.41%	13,073	3.39%	705	-0.03%
Central Basin MWD	18,216	5.03%	19,324	5.00%	1,108	-0.02%
Compton	599	0.17%	641	0.17%	42	0.00%
Eastern MWD	10,502	2.90%	11,559	2.99%	1,057	0.10%
Foothill MWD	2,290	0.63%	2,409	0.62%	119	-0.01%
Fullerton	2,390	0.66%	2,561	0.66%	171	0.00%
Glendale	3,814	1.05%	3,985	1.03%	171	-0.02%
Inland Empire Utilities Agency	14,663	4.05%	16,030	4.15%	1,367	0.11%
Las Virgenes MWD	2,927	0.81%	3,090	0.80%	163	-0.01%
Long Beach	6,151	1.70%	6,558	1.70%	407	0.00%
Los Angeles	75,699	20.88%	80,172	20.76%	4,473	-0.12%
MWD of Orange County	60,913	16.80%	64,634	16.74%	3,721	-0.07%
Pasadena	3,716	1.03%	3,864	1.00%	148	-0.02%
San Diego County Water Authority	63,232	17.44%	67,702	17.53%	4,470	0.09%
San Fernando	238	0.07%	260	0.07%	22	0.00%
San Marino	770	0.21%	800	0.21%	30	-0.01%
Santa Ana	3,228	0.89%	3,431	0.89%	203	0.00%
Santa Monica	4,619	1.27%	4,861	1.26%	242	-0.02%
Three Valleys MWD	8,254	2.28%	8,634	2.24%	380	-0.04%
Torrance	3,416	0.94%	3,590	0.93%	174	-0.01%
Upper San Gabriel Valley MWD	12,688	3.50%	13,418	3.47%	730	-0.03%
West Basin MWD	25,453	7.02%	27,064	7.01%	1,611	-0.01%
Western MWD	13,541	3.74%	14,775	3.83%	1,234	0.09%
Total	**362,474**	**100%**	**386,141**	**100%**	**23,667**	**0.00%**

Percentages may not foot due to rounding.

Finance, Audit, Insurance, and Real Property Committee

Certified Assessed Valuations FY 2023/2024

Item 6G
August 15, 2023

Purpose of Report

- Metropolitan receives certified assessed valuations (AV) from each of the county auditor-controllers, or equivalent, within its service area
  - All six counties have provided the requested AV information
  - The last submitted AV information arrived on Aug 8th

Riverside County
July 5, 2023

San Diego County
July 17, 2023

Orange County
July 31, 2023

San Bernadino County
August 1, 2023

Los Angeles County
August 7, 2023

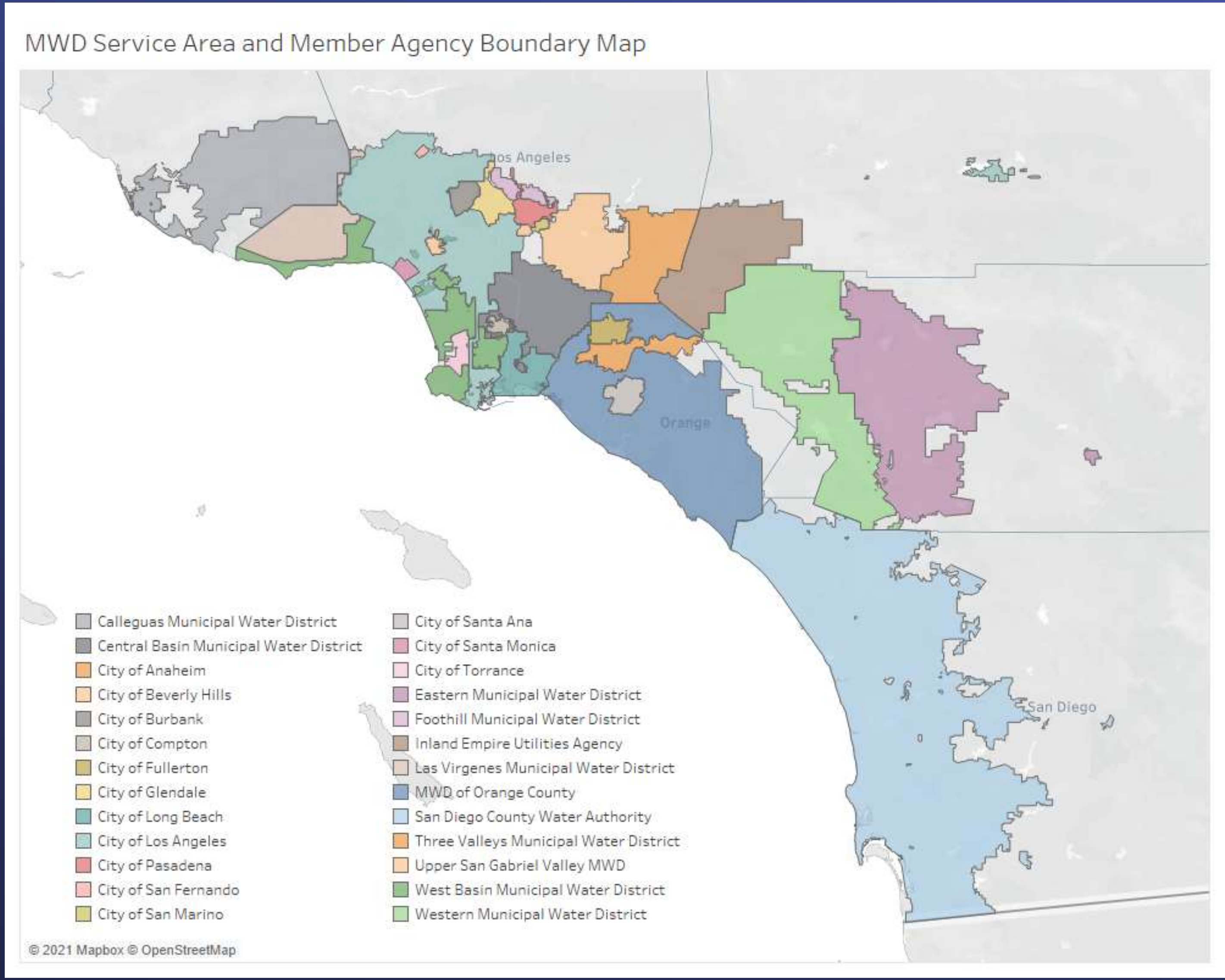
Ventura County
August 8, 2023

  - The last unitary tax data and certifications confirmed on Aug 8th

- Assessed valuations are a key component to determining Board Director Entitlement and Member Agency Vote Entitlement

Background

- Our District boundaries are composed of tax rate areas within each county.
- Our Change of Statement of Boundaries establishes the current legal definition of what tax rate areas fall within our District in a given tax year.



Current Assessed Valuations and Entitlements

The Metropolitan Water District of Southern California
Assessed Valuations, Percentage Participation, and
Vote and Director Entitlement of Member Public Agencies
As of August 15, 2023

Member Agency		*Assessed Valuation Amount Certified	Percent of Total	** Vote Entitlement	*** Director Entitlement
Anaheim	$	60,384,239,089	1.56%	6,038	1
Beverly Hills		44,925,471,380	1.16%	4,493	1
Burbank		31,747,985,559	0.82%	3,175	1
Calleguas MWD		130,730,622,244	3.39%	13,073	1
Central Basin MWD		193,242,928,112	5.00%	19,324	2
Compton		6,413,398,218	0.17%	641	1
Eastern MWD		115,592,411,711	2.99%	11,559	1
Foothill MWD		24,094,186,106	0.62%	2,409	1
Fullerton		25,613,995,600	0.66%	2,561	1
Glendale		39,846,531,370	1.03%	3,985	1
Inland Empire Utilities Agency		160,301,386,680	4.15%	16,030	1
Las Virgenes MWD		30,903,464,678	0.80%	3,090	1
Long Beach		65,577,549,323	1.70%	6,558	1
Los Angeles		801,720,255,259	20.76%	80,172	5
MWD of Orange County		646,336,513,093	16.74%	64,634	4
Pasadena		38,640,474,384	1.00%	3,864	1
San Diego County Water Authority		677,016,967,276	17.53%	67,702	4
San Fernando		2,596,234,164	0.07%	260	1
San Marino		8,004,717,057	0.21%	800	1
Santa Ana		34,312,996,241	0.89%	3,431	1
Santa Monica		48,607,667,263	1.26%	4,861	1
Three Valleys MWD		86,341,467,819	2.24%	8,634	1
Torrance		35,904,604,824	0.93%	3,590	1
Upper San Gabriel Valley MWD		134,179,397,217	3.47%	13,418	1
West Basin MWD		270,636,770,769	7.01%	27,064	2
Western MWD		147,747,843,154	3.83%	14,775	1
TOTAL ASSESSED VALUATIONS WITHIN METROPOLITAN	$	3,861,420,078,590	100%	386,141	38

Percentage may not fit due to rounding.

CFY and PFY Vote Entitlements

The Metropolitan Water District of Southern California
Comparison of Vote Entitlement Percentage for Fiscal Years 2022/23 and 2023/24

	FY 2022/23		FY 2023/24		Change	
Member Agency	Vote Entitlement	Vote Entitlement Percentage	Vote Entitlement	Vote Entitlement Percentage	Vote Entitlement	Vote Entitlement Percentage
Anaheim	5,627	1.55%	6,038	1.56%	411	0.01%
Beverly Hills	4,267	1.18%	4,493	1.16%	226	-0.01%
Burbank	2,893	0.80%	3,175	0.82%	282	0.02%
Calleguas MWD	12,368	3.41%	13,073	3.39%	705	-0.03%
Central Basin MWD	18,216	5.03%	19,324	5.00%	1,108	-0.02%
Compton	599	0.17%	641	0.17%	42	0.00%
Eastern MWD	10,502	2.90%	11,559	2.99%	1,057	0.10%
Foothill MWD	2,290	0.63%	2,409	0.62%	119	-0.01%
Fullerton	2,390	0.66%	2,561	0.66%	171	0.00%
Glendale	3,814	1.05%	3,985	1.03%	171	-0.02%
Inland Empire Utilities Agency	14,663	4.05%	16,030	4.15%	1,367	0.11%
Las Virgenes MWD	2,927	0.81%	3,090	0.80%	163	-0.01%
Long Beach	6,151	1.70%	6,558	1.70%	407	0.00%
Los Angeles	75,699	20.88%	80,172	20.76%	4,473	-0.12%
MWD of Orange County	60,913	16.80%	64,634	16.74%	3,721	-0.07%
Pasadena	3,716	1.03%	3,864	1.00%	148	-0.02%
San Diego County Water Authority	63,232	17.44%	67,702	17.53%	4,470	0.09%
San Fernando	238	0.07%	260	0.07%	22	0.00%
San Marino	770	0.21%	800	0.21%	30	-0.01%
Santa Ana	3,228	0.89%	3,431	0.89%	203	0.00%
Santa Monica	4,619	1.27%	4,861	1.26%	242	-0.02%
Three Valleys MWD	8,254	2.28%	8,634	2.24%	380	-0.04%
Torrance	3,416	0.94%	3,590	0.93%	174	-0.01%
Upper San Gabriel Valley MWD	12,688	3.50%	13,418	3.47%	730	-0.03%
West Basin MWD	25,453	7.02%	27,064	7.01%	1,611	-0.01%
Western MWD	13,541	3.74%	14,775	3.83%	1,234	0.09%
Total	**362,474**	**100%**	**386,141**	**100%**	**23,667**	**0.00%**

Percentages may not foot due to rounding.

As a result of these updated certified assessed valuations:

- ✓ No Changes to Director Entitlements, consistent with Assembly Bill No. 1220 minimum requirements
- ✓ Vote Entitlements percentages among Member Agencies have only had modest changes ranging from +0.11% to -0.12%

THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

1928

MINUTES

BOARD OF DIRECTORS WORKSHOP
SUBCOMMITTEE ON LONG-TERM REGIONAL PLANNING PROCESSES AND BUSINESS MODELING

THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

May 23, 2023

1. CALL TO ORDER

Committee Chair Atwater called the meeting to order at 2:45 p.m.

Committee Chair Atwater announced that we do not have any Directors participating in the meeting using AB 2449.

2. ROLL CALL

Interim Board Executive Secretary Hudson administered the roll call.

Board Members present: Abdo, Ackerman, Alvarez, Atwater, Camacho, Chacon (entered after roll call), Cordero, Erdman, Fellow, Garza, Goldberg, Kurtz, Lefevre (entered after roll call), McCoy, McMillan (entered after roll call), Miller, Morris, Ortega, Ramos, Repenning, Seckel, Smith, and Sutley

Board Members absent: Directors Armstrong, De Jesus, Dennstedt, Dick, Faessel, Fong-Sakai, Gray, Jung, Kassakhian, Luna, Petersen, Peterson, Phan, Pressman, and Quinn.

3. DETERMINATION OF QUORUM

Interim Board Executive Secretary Hudson determined that a quorum was present.

4. OPPORTUNITY FOR MEMBERS OF THE PUBLIC TO ADDRESS THE BOARD LIMITED TO THE ITEMS LISTED ON THE AGENDA.

No members of the public requested to speak.

Director Lefevre and Chacon entered the meeting.

Chair Ortega and Vice Chair of the Board Goldberg addressed the Board on matters pertaining to this Workshop.

Director McMillan entered the meeting.

5. WORKSHOP ITEMS

A. Subject: Climate Adaptation Master Plan for Water: Terminology and Interests Workshop

Presented by: Liz Crosson, Chief Sustainability, Resilience, and Innovation Officer
Brad Coffey, Group Manager-Water Resource Management
Sam Smalls, Manager of Treasury and Debt Management
Joan Isaacson, Principal at Kearns & West
Kit Batten, Kit Batten Consulting

Ms. Crosson introduced Joan Isaacson, Kearns & West, who moderated today's Workshop.

Ms. Isaacson presented the Board with an overview of the workshop agenda, initiated a lightning round table discussion, and provided her background.

Next, Ms. Isaacson introduced Ms. Crosson, who presented item 5a.1 to the committee with an overview of the climate adaptation master planning process and agenda. Mr. Coffey continued the presentation with an overview of resilience and reliability. His presentation included how Metropolitan defines these terms, how they are used in practice, and the effect evolving climate conditions impact the understanding of these terms. Lastly, Mr. Smalls continued the presentation with how Metropolitan defines financial sustainability and affordability, how they are used in practice, and how climate change affects them.

Ms. Crosson introduced item 5a.2 and overviewed the input received from the Member Agency Questionnaire. She then introduced the Member Agency Panel: Shivaji Deshmukh from Inland Empire Utilities Agency, Sandy Kerl from San Diego County Water Authority, Dave Pedersen from LVMWD, Alex Rojas from Central Basin Municipal Water District, and Stacy Takeguchi from Pasadena Water and Power. Ms. Isaacson asked the panel the following questions: 1. What are your thoughts on the interrelationship between resilience and reliability; 2. How does conservation fit into reliability at Metropolitan and at your Member Agency; 3. How do you see conservation and efficiency impacting affordability for your customers; 4. What are the most important elements of financial sustainability for water agencies; 5. Do you have any recommendations about programs; Metropolitan or Member Agencies can implement to help low-income and disadvantage community members on affordability issues.

Next, Ms. Isaacson gave Directors an opportunity to write their thoughts regarding the key elements for Metropolitan that relate to the four terms: reliability, resilience, financial stability, and affordability.

Ms. Isaacson then initiated a small group discussion on guiding principles. The Directors broke into small groups with Metropolitan staff as facilitators. Upon completion of the small group discussion, the facilitators provided an overview of their groups guiding themes.

Lastly, Kit Batten provided an overview of next steps.

The following Directors made comments or asked questions:

1. McMillan
2. Garza
3. Ramos
4. Camacho
5. Kurtz
6. Ackerman
7. McCoy
8. Sutley
9. Ortega
10. Goldberg
11. Atwater
12. Fellow
13. Cordero
14. Abdo
15. Smith
16. Lefevre
17. Seckel
18. Alvarez
19. Morris
20. Chacon
21. Erdman

Staff responded to the Directors questions and comments.

6. FOLLOW-UP ITEMS

None

7. FUTURE AGENDA ITEMS

None

8. ADJOURNMENT

Meeting adjourned at 4:59 p.m.

RICKITA HUDSON
INTERIM BOARD EXECUTIVE SECRETARY
ON BEHALF OF LOIS FONG-SAKAI
SECRETARY OF THE BOARD

RICHARD ATWATER
COMMITTEE CHAIR

MINUTES

BOARD OF DIRECTORS WORKSHOP - SUBCOMMITTEE ON LONG-TERM REGIONAL PLANNING PROCESSES AND BUSINESS MODELING

THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

June 27, 2023

1. CALL TO ORDER

Committee Vice Chair Petersen called the meeting to order at 11:34 a.m.

Committee Vice Chair Petersen announced that we do not have any Directors participating in the meeting using AB 2449.

2. ROLL CALL

Board Secretary Fong-Sakai administered the roll call.

Board Members present: Abdo, Ackerman, Alvarez, Armstrong, Camacho, Cordero, De Jesus, Dennstedt, Dick, Erdman, Fong-Sakai, Garza (entered after roll call), Goldberg, Kassakhian, Kurtz, Lefevre, McCoy, McMillan, Miller (teleconference posted location), Morris, Ortega (entered after roll call, teleconference posted location) Petersen, Peterson, Pressman, Quinn, Ramos, Seckel, Smith, and Sutley

Board Members absent: Directors Chacon, Faessel, Fellow, Gray, Jung, Luna, Phan, and Repenning

3. DETERMINATION OF QUORUM

Board Secretary Fong-Sakai determined that a quorum was present.

4. OPPORTUNITY FOR MEMBERS OF THE PUBLIC TO ADDRESS THE BOARD LIMITED TO THE ITEMS LISTED ON THE AGENDA.

Name	Affiliation	Item
1. Justin Breck	L.A. Waterkeeper	5a

Chair Ortega entered the meeting.

General Manager Hagekhalil and Chair Ortega addressed the Board on matters pertaining to this Workshop.

Director Garza entered the meeting.

5. WORKSHOP ITEMS

A. Subject: Climate Adaptation Master Plan for Water: Member Agency Alignment and Gap Analysis Workshop

Presented by: Liz Crosson, Chief Sustainability, Resilience and Innovation Officer

Ms. Crosson introduced Joan Isaacson, Facilitator, Kearns & West who moderated the Workshop.

Liz Crosson, Chief Sustainability, Resilience, and Innovation Officer presented a PowerPoint overview of the Climate Adaptation Master Plan for Water: Member Agency Alignment and Gap Analysis Workshop. The presentation explained the Climate Adaptation Master Plan for Water Timeline, Process Chart, Member Agency Questionnaire Feedback, and Member Agency Panel.

The Member Agency Panel was introduced as follows: Henry Graumlich from Calleguas Municipal Water District, Joe Mouawad from Eastern Municipal Water District, Craig Parker from City of Anaheim, Sunny Wang from City of Santa Monica, and Sabrina Tsui from Los Angeles Department of Water and Power. Each panel member was provided the following questions: 1. Agency type, number of customers each agency has, two of your largest sources of water supply; 2. How do you incorporate climate impacts with your financial planning; 3. State one sentence you would like to accomplish for the Climate Adaptation Master Plan for Water.

Demetri Polyzos, Team Manager for Resource Planning presented a PowerPoint overview of the Integrated Resources Plan (IRP) Needs Assessment: An Analytical Foundation for the Climate Adaptation Master Plan for Water. The presentation explained what the IRP Assessment is, what the findings were and how they can inform the Climate Adaptation Master plan for Water Process, and how the needs assessment was done.

The following Directors made comments or asked questions:

1. Sutley
2. Smith
3. Ortega
4. Petersen
5. Pressman
6. Seckel
7. Dick
8. Fong-Sakai

Staff responded to the Directors questions and comments.

6. FOLLOW UP ITEMS

None

7. FUTURE AGENDA ITEMS

None

8. ADJOURNMENT

Meeting adjourned at 1:32 p.m.

LOIS FONG-SAKAI
SECRETARY OF THE BOARD

MATT PETERSEN
COMMITTEE VICE CHAIR

MINUTES

BOARD OF DIRECTORS WORKSHOP ON
ETHICS, ORGANIZATION, AND PERSONNEL

THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

June 27, 2023

1. CALL TO ORDER

Chair Ortega called the meeting to order at 8:33 a.m.

2. ROLL CALL

Board Secretary Fong-Sakai administered the roll call.

Board Members present: Directors Abdo (teleconference posted location), Ackerman, Alvarez, Armstrong, Camacho (entered after roll call), Cordero, Dennstedt, Dick, Erdman, Fong-Sakai, Goldberg, Gray (entered after rollcall, teleconference posted location), Kassakhian (entered after rollcall), Kurtz (entered after rollcall), McCoy, McMillan (entered after rollcall), Miller (teleconference posted location), Morris, Ortega (teleconference posted location), Peterson, Ramos, Seckel, Smith and Sutley (entered after rollcall).

Board Members absent: Directors Chacon, De Jesus, Faessel, Fellow, Garza, Jung, Lefevre, Luna, Petersen, Phan, Pressman, Quinn, and Repenning.

3. DETERMINATION OF QUORUM

Board Secretary Fong-Sakai determined that a quorum was present.

4. OPPORTUNITY FOR MEMBERS OF THE PUBLIC TO ADDRESS THE BOARD LIMITED TO THE ITEMS LISTED ON THE AGENDA

No members of the public requested to speak.

Ethics Officer Abel Salinas addressed the Board on matters pertaining to this Workshop.

5. WORKSHOP ITEMS

Director Camacho, Gray, Kassakhian, Kurtz, McMillan, and Sutley entered the meeting.

A. Subject: Framework for Ethical Decision Making

Presented by: Abel Salinas, Ethics Officer

Mr. Salinas introduced Dr. Brian Green, Director of Technology Ethics at the Markkula Center for Applied Ethics at Santa Clara University who moderated today's Workshop. Dr. Green presented the Markkula Center's framework for ethical decision making.

The following Directors made comments or asked questions:

1. Ramos
2. Smith
3. Petersen
4. Abdo
5. Ortega
6. Erdman
7. Goldberg
8. Ramos
9. Dennstedt
10. Ramos
11. Ortega
12. Ramos
13. Fong-Sakai
14. Kurtz
15. Ramos
16. Erdman
17. Cordero

Committee Chair Ramos addressed the Board and stated that this matter may be brought back to the Board for continued discussions.

6. FOLLOW UP ITEMS

Director Erdman requested information on MWD ethical standards, where are they published and how are they communicated to the Board and employees.

Director Ramos requested Dr. Green review MWD ethics policy and provide feedback.

Director Erdman requested Ethics Offer to review the Oath of Office that Directors take and provide feedback to how it relates to Director's responsibilities

7. FUTURE AGENDA ITEMS

None.

Meeting adjourned at 11:20 a.m.

LOIS FONG-SAKIA
SECRETARY OF THE BOARD

MARSHA RAMOS
COMMITTEE CHAIR

MINUTES

REGULAR MEETING OF THE

BOARD OF DIRECTORS

THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

July 11, 2023

53295 The Board of Directors of The Metropolitan Water District of Southern California met in a regular session on Tuesday, July 11, 2023.

Chair Ortega called the meeting to order at 1:01 p.m.

Chair Ortega announced that we do not have any Directors participating in the meeting using AB 2449.

53296 The Meeting was opened with an invocation by John Morris, City of San Marino.

53297 The Pledge of Allegiance was given by Director Fong-Sakai, San Diego County Water Authority.

Chair Ortega welcomed Director McMillan, Calleguas Municipal Water District to introduce the guest Member Agency Manager Tony Goff, General Manager of Calleguas Municipal Water District. Director McMillan and Mr. Goff made brief remarks.

Chair Ortega announced that Metropolitan will be showcasing on social media the newest class of eleven engineering interns and feature the employee resources group VOICE to highlight Disabilities Independence Day which marks the signing of the Americans with Disabilities Act in 1990.

53298 Board Secretary Fong-Sakai administered the roll call. Those responding present were: Directors Abdo, Alvarez, Armstrong, Bryant, Camacho, Chacon, De Jesus, Dennstedt, Dick, Douglas, Faessel, Fellow, Fong-Sakai, Garza, Goldberg, Jung (teleconference posted location), Kassakhian, Kurtz, Lefevre, Luna, McCoy (teleconference posted location), McMillan, Miller, Morris, Ortega, Petersen, Peterson, Phan (teleconference posted location), Pressman, Quinn, Ramos, Seckel, Smith, and Sutley.

Those not responding were: Directors Ackerman, Cordero, Erdman, and Gray.

Board Secretary Fong-Sakai declared a quorum present.

53299 Jordan D. Joaquin, President Fort Yuma Quechan Indian Tribe

Chair Ortega introduced Jordan D. Joaquin, President of Fort Yuma Quechan Indian Tribe. President Joaquin made remarks regarding the tribal perspective on the ongoing negotiations of the Colorado River.

53300 Chair Ortega invited members of the public to address the Board on matters within the Board's jurisdiction (in-person and via teleconference). None were made.

Chair Ortega addressed the following: Other Matters and Reports.

53301 Chair Ortega asked if there were any changes to the report of events attended by Directors at Metropolitan's expense during the month of June as previously posted and distributed to the Board. Chair Ortega asked the Directors if there were any corrections on the item. No amendments were made.

53302 Chair Ortega referred to Chair's monthly report was previously posted and distributed to the Board.

Chair Ortega announced that the department head evaluations are due July 24, 2023. Due to technical issues, an email link was forwarded from Debra Gill, Human Resources Group Manager. A reminder that the Board Office is sending surveys every two weeks to remind Directors of the requirements to use Zoom, when using traditional Brown Act teleconferencing procedures and when plans change to notify the Board Office on a timely basis.

Chair Ortega asked the Directors if there were any questions on the item. None were made.

53303 General Manager Hagekhalil referred to the General Manager's monthly report, which was previously posted and distributed to the Board. In addition, General Manager Hagekhalil reported on the following:

1. Acknowledged the Fourth of July holiday weekend and welcomed Director Bryant and Douglas to the Board.
2. The Climate Adaptation Master Plan and information is on the mwdh2o website.
3. The State Audit completion.
4. The Organizational Assessment and upcoming organizational changes.

53304 General Counsel Scully's monthly report was previously posted and distributed to the Board. In addition, General Counsel Scully reported on the following:

1. Litigation settlement of the case *Stronghold Engineering vs. Metropolitan.*
2. Reminder regarding Directors' tours and visits to the desert, that there should be less than a quorum, and that members refrain from discussing the visit until they are at a noticed meeting.
3. Supreme Court decisions regarding the *Students for Fair Admissions, Inc. v. President and Fellows of Harvard College*; and *303 Creative LLC v. Elenis* cases; a joint report from legal, DEI, and EEO will be forthcoming to the Board on how the two matters may or may not impact Metropolitan.
4. Staffing for the fourth Tuesday Committee meetings.
5. New Director Carl E. Douglas and Director Garry E. Bryant credentials were received and in order.

53305 General Auditor Suzuki's monthly report, which was previously posted and distributed to the Board. In addition, General Auditor Suzuki reported on the following:

1. The quality assessment and improvement program confidential survey that will be distributed to the Board.

53306 Ethics Officer Salinas stated he had nothing to add to the written report.

53307 Induction of new Director Gary E. Bryant of Foothill Municipal Water District.

Chair Ortega called on Nina Jazmadrian, General Manager of Foothill Municipal Water District to introduce Director Bryant.

Director Bryant made brief remarks.

Chair Ortega called on Director Sutley, to introduce Director Douglas.

Director Douglas made brief remarks.

53308 Presentation of 5-year Service Pin to Director Tim M. Smith, San Diego County Water Authority.

Director Smith made brief remarks.

53309 Chair Ortega asked the Directors if there were any comments or discussions on the Approval of the Minutes of the Board of Directors Meeting for June 13, 2023. (Copies have been submitted to each Director, any additions, corrections, or omissions) (Agenda Item 7A). No amendments were made.

53310 Approve Commendatory Resolution for Director Richard Atwater representing Foothill Municipal Water District. Chair Ortega made brief remarks regarding Director Atwater tenure at Metropolitan (Agenda Item 7B).

53311 Approval of Committee Assignments (Agenda Item 7C). Director Pressman was removed from the Equity, Inclusion, and Affordability Committee and he was appointed to the One Water Stewardship Committee. Board Vice Chair Camacho was appointed to Engineering, Operations, and Technology Committee as Vice Chair; Director Petersen was removed from that Committee. Director Sutley was appointed to be the Board Vice Chair for Climate Action. Establish an Ad Hoc Committee on Policy Impacts of Third Party Changes to Member Agency Boundaries. The committee membership appointment was Director Miller, Chair; Director Armstrong, Vice Chair; Directors Erdman, McMillan, and McCoy are members.

Chair Ortega called on Finance, Audit, Insurance, and Real Property Committee Chair Smith. Director Smith appointed Director Petersen as Chair and Director Seckel as Vice Chair to the Subcommittee on Long-Term Regional Processes and Business Modeling.

Chair Ortega called on Committee Chairs to give a report on Consent Calendar Action Items and to hear abstentions or recusals before any discussion on the items.

53312 Authorize an increase of $950,000 in change order authority for the contract with W.A. Chester LLC to terminate 6.9 kV power cables at all five CRA pumping plants, as set forth in Agenda Item 7-1 board letter.

53313 Authorize an increase of $2 million to an existing agreement with Jacobs Engineering Group Inc., for a new not-to-exceed amount of $2.65 million for final design of the first stage of security upgrades at all five CRA pumping plants and the Camino Electrical Switching Station, as set forth in Agenda Item 7-2 board letter.

53314 Award a $452,886 contract to Best Contracting Services Inc. to replace the roofs of the administration and warehouse buildings at the Lake Mathews site, as set forth in Agenda Item 7-3 board letter.

53315 Award a $349,527.80 procurement contract to TechnoFlo Systems Inc. for 50 flow meters to comply with surface water diversion regulations on Metropolitan's Delta Island properties, as set forth in Agenda Item 7-4 board letter.

53316 By two-thirds vote, adopt Ordinance No. 152, determining that the interests of Metropolitan require the use of revenue bonds in the aggregate principal amount of $500 million to finance a portion of Metropolitan's capital expenditures and waive the full reading of Ordinance No. 152, as set forth in Agenda Item 7-5 board letter.

53317 Review and consider the Lead Agency's adopted Mitigated Negative Declaration and take related CEQA actions, and adopt resolution for 114th Fringe Area Annexation to Eastern Municipal Water District and Metropolitan, as set forth in Agenda Item 7-6 board letter.

53318 Award a $359,725 contract to Mesa Energy Systems Inc. for the repair of heating, ventilation, and air conditioning chiller #2 located at the Metropolitan Headquarters Building, as set forth in Agenda Item 7-7 board letter.

53319 Approve General Auditor's Business Plan for fiscal year 2023-2024, as set forth in Agenda Item 7-8 board letter.

Chair Ortega called for a vote to approve Consent Calendar Items 7A, 7B, 7C, 7-1 through 7-8 (**M.I. No. 53309 through 53319**).

Director Quinn left the meeting.

Director Garza moved, seconded by Director Morris that the Board approve the Consent Calendar Items 7A, 7B, 7C, 7-1 through 7-8 as follows:

The following is a record of the vote:

Record of Vote on Consent Item(s):	7A, 7B, 7C and 7-1 through 7-8								
Member Agency	**Total Votes**	**Director**	**Present**	**Yes**	**Yes Vote**	**No**	**No Vote**	**Abstain**	**Abstain Vote**
Anaheim	5627	Faessel	x	x	5627				
Beverly Hills	4267	Pressman	x	x	4267				
Burbank	2893	Ramos	x	x	2893				
Calleguas Municipal Water District	12368	McMillan	x	x	12368				
Central Basin Municipal Water District	18216	Garza	x	x	9108				
		Chacon	x	x	9108				
			Subtotal:		18216				
Compton	599	McCoy	x	x	599				
Eastern Municipal Water District	10502	Armstrong	x	x	10502				
Foothill Municipal Water District	2290	Bryant	x	x	2290				
Fullerton	2390	Jung	x	x	2390				
Glendale	3814	Kassakhian	x	x	3814				
Inland Empire Utilities Agency	14663	Camacho	x	x	14663				
Las Virgenes	2927	Peterson	x	x	2927				
Long Beach	6151	Cordero							
Los Angeles	75699	Sutley	x	x	18925				
		Petersen	x	x	18925				
		Quinn							
		Luna	x	x	18925				
		Douglas	x	x	18925				
			Subtotal:		75699				
Municipal Water Dist. of Orange County	60913	Ackerman							
		Seckel	x	x	30457				
		Dick	x	x	30457				
		Erdman							
			Subtotal:		60913				
Pasadena	3716	Kurtz	x	x	3716				
San Diego County Water Authority	63232	Fong-Sakai	x	x	15808				
		Goldberg	x	x	15808				
		Miller	x	x	15808				
		Smith	x	x	15808				
			Subtotal:		63232				
San Fernando	238	Ortega	x	x	238				
San Marino	770	Morris	x	x	770				
Santa Ana	3228	Phan	x	x	3228				
Santa Monica	4619	Abdo	x	x	4619				
Three Valleys Municipal Water District	8254	De Jesus	x	x	8254				
Torrance	3416	Lefevre	x	x	3416				
Upper San Gabriel Valley Mun. Wat. Dist	12688	Fellow	x	x	12688				
West Basin Municipal Water District	25453	Alvarez	x	x	25453				
		Gray							
			Subtotal:		25453				
Western Municipal Water District	13541	Dennstedt	x	x	13541				
Total	**362474**				**356323**				
Present and not voting									
Absent	**6151**								

The motion to approve the Consent Calendar Items 7A, 7B, 7C, and 7-1 through 7-8 (**M.I. No. 53309 through 53319**)***** passed by a vote of 356,323 ayes; 0 noes; 0 abstain; 0 not voting; and 6,151 absent.

***Note: Individual vote tally for Item 7-5**

Item 7-5 required two-thirds vote of the Board. The motion to approve the Consent Calendar Item 7-5 passed by a vote of 356,323 ayes; 0 noes; 0 abstain; 0 not voting; and 6,151 absent.

Chair Ortega called on the Committee Chairs to give a report on Board Items for action and to hear recusals, abstentions, and disclosures before any discussion on the items.

53320 Award a $3,740,792 contract to M.S. Construction Management Group Inc. to replace a portion of the existing fire sprinkler system's piping and network components at Metropolitan's Headquarters Building, as set forth in Agenda Item 8-1 board letter.

Director Quinn returned to the meeting.

Chair Ortega called for a vote to approve Board Item 8-1 (**M.I. No. 53320)**

Director Camacho moved, seconded by Director Chacon that the Board approve the Board Item 8-1 as follows:

The following is a record of the vote:

Record of Vote on Item:	8-1								
Member Agency	**Total Votes**	**Director**	**Present**	**Yes**	**Yes Vote**	**No**	**No Vote**	**Abstain**	**Abstain Vote**
Anaheim	5627	Faessel	x	x	5627				
Beverly Hills	4267	Pressman	x	x	4267				
Burbank	2893	Ramos	x	x	2893				
Calleguas Municipal Water District	12368	McMillan	x	x	12368				
Central Basin Municipal Water District	18216	Garza	x	x	9108				
		Chacon	x	x	9108				
			Subtotal:		18216				
Compton	599	McCoy	x	x	599				
Eastern Municipal Water District	10502	Armstrong	x	x	10502				
Foothill Municipal Water District	2290	Bryant	x	x	2290				
Fullerton	2390	Jung	x	x	2390				
Glendale	3814	Kassakhian	x	x	3814				
Inland Empire Utilities Agency	14663	Camacho	x	x	14663				
Las Virgenes	2927	Peterson	x	x	2927				
Long Beach	6151	Cordero							
Los Angeles	75699	Sutley	x	x	15140				
		Petersen	x	x	15140				
		Quinn	x	x	15140				
		Luna	x	x	15140				
		Douglas	x	x	15140				
			Subtotal:		75699				
Municipal Water Dist. of Orange County	60913	Ackerman							
		Seckel	x	x	30457				
		Dick	x	x	30457				
		Erdman							
			Subtotal:		60913				
Pasadena	3716	Kurtz	x	x	3716				
San Diego County Water Authority	63232	Fong-Sakai	x	x	15808				
		Goldberg	x	x	15808				
		Miller	x	x	15808				
		Smith	x	x	15808				
			Subtotal:		63232				
San Fernando	238	Ortega	x	x	238				
San Marino	770	Morris	x	x	770				
Santa Ana	3228	Phan	x	x	3228				
Santa Monica	4619	Abdo	x	x	4619				
Three Valleys Municipal Water District	8254	De Jesus	x	x	8254				
Torrance	3416	Lefevre	x	x	3416				
Upper San Gabriel Valley Mun. Wat. Dist	12688	Fellow	x	x	12688				
West Basin Municipal Water District	25453	Alvarez	x	x	25453				
		Gray							
			Subtotal:		25453				
Western Municipal Water District	13541	Dennstedt	x	x	13541				
Total	**362474**				**356323**				
Present and not voting									
Absent	**6151**								

The motion to approve the Board Item 8-1 (**M.I. No. 53320**) passed by a vote of 356,323 ayes; 0 noes; 0 abstain; 0 not voting; and 6,151 absent.

53321 Award a $16,490,000 contract to J. F. Shea Construction Inc. for furnishing and installation of pre-engineered storage buildings at the Hinds, Eagle Mountain, and Iron Mountain pumping plants, as set forth in Agenda Item 8-3 board letter.

Chair Ortega called for a vote to approve Board Item 8-3 (**M.I. No. 53321)**

Director Camacho moved, seconded by Director Morris that the Board approve the Board Item 8-3 as follows:

The following is a record of the vote:

Record of Vote on Item:	8-3								
Member Agency	**Total Votes**	**Director**	**Present**	**Yes**	**Yes Vote**	**No**	**No Vote**	**Abstain**	**Abstain Vote**
Anaheim	5627	Faessel	x	x	5627				
Beverly Hills	4267	Pressman	x	x	4267				
Burbank	2893	Ramos	x	x	2893				
Calleguas Municipal Water District	12368	McMillan	x	x	12368				
Central Basin Municipal Water District	18216	Garza	x	x	9108				
		Chacon	x	x	9108				
			Subtotal:		18216				
Compton	599	McCoy	x	x	599				
Eastern Municipal Water District	10502	Armstrong	x	x	10502				
Foothill Municipal Water District	2290	Bryant	x	x	2290				
Fullerton	2390	Jung	x	x	2390				
Glendale	3814	Kassakhian	x	x	3814				
Inland Empire Utilities Agency	14663	Camacho	x	x	14663				
Las Virgenes	2927	Peterson	x	x	2927				
Long Beach	6151	Cordero							
Los Angeles	75699	Sutley	x	x	15140				
		Petersen	x	x	15140				
		Quinn	x	x	15140				
		Luna	x	x	15140				
		Douglas	x	x	15140				
			Subtotal:		75699				
Municipal Water Dist. of Orange County	60913	Ackerman							
		Seckel	x	x	30457				
		Dick	x	x	30457				
		Erdman							
			Subtotal:		60913				
Pasadena	3716	Kurtz	x	x	3716				
San Diego County Water Authority	63232	Fong-Sakai	x	x	15808				
		Goldberg	x	x	15808				
		Miller	x	x	15808				
		Smith	x	x	15808				
			Subtotal:		63232				
San Fernando	238	Ortega	x	x	238				
San Marino	770	Morris	x	x	770				
Santa Ana	3228	Phan	x	x	3228				
Santa Monica	4619	Abdo	x	x	4619				
Three Valleys Municipal Water District	8254	De Jesus	x	x	8254				
Torrance	3416	Lefevre	x	x	3416				
Upper San Gabriel Valley Mun. Wat. Dist.	12688	Fellow	x	x	12688				
West Basin Municipal Water District	25453	Alvarez	x	x	25453				
		Gray							
			Subtotal:		25453				
Western Municipal Water District	13541	Dennstedt	x	x	13541				
Total	**362474**				**356323**				
Present and not voting									
Absent	**6151**								

The motion to approve the Board Item 8-3 (**M.I. No. 53321**) passed by a vote of 356,323 ayes; 0 noes; 0 abstain; 0 not voting; and 6,151 absent.

53322 Approve amendment of the Metropolitan Water District Administrative Code to delete the requirement that matters may not be placed on consent if a roll call is required and increase the cost of items that may be placed on the Consent Calendar from $2 million to $10 million (Agenda Item 8-2).

Director Luna left the meeting.

Chair Ortega called for a vote to approve Board Item 8-2 (**M.I. No. 53322)**

Director Sutley moved, seconded by Director Chacon that the Board approve the Board Item 8-2 as follows:

The following is a record of the vote:

Record of Vote on Item:	8-2								
Member Agency	**Total Votes**	**Director**	**Present**	**Yes**	**Yes Vote**	**No**	**No Vote**	**Abstain**	**Abstain Vote**
Anaheim	5627	Faessel	x	x	5627				
Beverly Hills	4267	Pressman	x	x	4267				
Burbank	2893	Ramos	x	x	2893				
Calleguas Municipal Water District	12368	McMillan	x	x	12368				
Central Basin Municipal Water District	18216	Garza	x	x	9108				
		Chacon	x	x	9108				
			Subtotal:		18216				
Compton	599	McCoy	x	x	599				
Eastern Municipal Water District	10502	Armstrong	x	x	10502				
Foothill Municipal Water District	2290	Bryant	x	x	2290				
Fullerton	2390	Jung	x	x	2390				
Glendale	3814	Kassakhian	x	x	3814				
Inland Empire Utilities Agency	14663	Camacho	x	x	14663				
Las Virgenes	2927	Peterson	x	x	2927				
Long Beach	6151	Cordero							
Los Angeles	75699	Sutley	x	x	18925				
		Petersen	x	x	18925				
		Quinn	x	x	18925				
		Luna							
		Douglas	x	x	18925				
			Subtotal:		75699				
Municipal Water Dist. of Orange County	60913	Ackerman							
		Seckel	x	x	30457				
		Dick	x	x	30457				
		Erdman							
			Subtotal:		60913				
Pasadena	3716	Kurtz	x	x	3716				
San Diego County Water Authority	63232	Fong-Sakai	x	x	15808				
		Goldberg	x	x	15808				
		Miller	x	x	15808				
		Smith	x	x	15808				
			Subtotal:		63232				
San Fernando	238	Ortega	x	x	238				
San Marino	770	Morris	x	x	770				
Santa Ana	3228	Phan	x	x	3228				
Santa Monica	4619	Abdo	x	x	4619				
Three Valleys Municipal Water District	8254	De Jesus	x	x	8254				
Torrance	3416	Lefevre	x	x	3416				
Upper San Gabriel Valley Mun. Wat. Dist	12688	Fellow	x	x	12688				
West Basin Municipal Water District	25453	Alvarez	x	x	25453				
		Gray							
			Subtotal:		25453				
Western Municipal Water District	13541	Dennstedt	x	x	13541				
Total	**362474**				**356323**				
Present and not voting									
Absent	**6151**								

The motion to approve Agenda Item 8-2 (**M.I. No. 53322**) passed by a vote of 356,323 ayes; 0 noes; 0 abstain; 0 not voting; and 6,151 absent.

53323 Chair Ortega asked if there were questions or need for discussion for Board Information Item 9-1 or wish to see the presentation on Item 9-2. No requests were made.

53324 Chair Ortega asked if there were any Other Matters Items. There were none.

53325 Chair Ortega asked if there were any Follow-Up Items. There were none.

53326 Chair Ortega asked if there were any Future Agenda Items. There were none.

53327 There being no objection, the meeting was adjourned at 2:13 p.m.

LOIS FONG-SAKAI
SECRETARY OF THE BOARD

ADÁN ORTEGA
CHAIR OF THE BOARD

THE METROPOLITAN WATER DISTRICT
OF SOUTHERN CALIFORNIA

BOARD ACTION

Board of Directors
Engineering, Operations, and Technology Committee

8/15/2023 Board Meeting

7-1

Subject

Award a $1,962,691 contract to Structural Preservation Systems for urgent relining of three pipe segments on the Sepulveda Feeder; and authorize an increase of: (1) $280,000 to an agreement with HDR Engineering Inc. for a new not-to-exceed amount of $15,780,000; and (2) $240,000 to a land lease agreement with Los Angeles Community College District for a new not-to-exceed amount of $1,090,000; the General Manager has determined that the proposed actions are exempt or otherwise not subject to CEQA

Executive Summary

The Prestressed Concrete Cylinder Pipe (PCCP) Rehabilitation Program is a comprehensive, long-term effort to manage the rehabilitation of Metropolitan's PCCP feeders. An electromagnetic inspection conducted in early 2023 as part of the regular PCCP monitoring effort identified three locations with increasing wire breaks on the Sepulveda Feeder. This action: (1) awards a construction contract to perform urgent relining of three PCCP segments on the Sepulveda Feeder; (2) authorizes an amendment to an existing professional services agreement with HDR Engineering Inc. for engineering support during this construction contract; and (3) authorizes an amendment to an existing property lease agreement with Los Angeles Community College District for construction staging and pipe storage associated with additional ongoing PCCP rehabilitation projects.

Details

Background

In response to several PCCP failures experienced within the water industry, Metropolitan's Board authorized the PCCP Rehabilitation Program in September 2011 to develop a comprehensive, long-term plan for replacing or relining Metropolitan's at-risk PCCP lines. Metropolitan's strategy for maintaining PCCP reliability under this program consists of four coordinated elements: (1) continued assessment and monitoring of PCCP lines; (2) monitoring of stray currents near PCCP lines and installation of cathodic protection as necessary; (3) near-term repair of individual PCCP segments as needed; and (4) long-term comprehensive rehabilitation of priority pipelines.

The Sepulveda Feeder is an 84-inch to 96-inch diameter treated water pipeline stretching 40 miles from the Jensen Plant in Granada Hills south to an intertie with the Second Lower Feeder near the boundary between the city of Torrance and the city of Los Angeles. It was constructed in the early 1970s and supplies water through six service connections to Los Angeles, Santa Monica, Torrance, and the West Basin Municipal Water District. This line is included in the PCCP Rehabilitation Program as one of five priority PCCP pipelines slated for comprehensive rehabilitation. While designs for the rehabilitation are currently underway at various stages of completion, recent pipeline inspections have identified three pipe segments on the feeder that need urgent relining.

In February 2023, electromagnetic inspections of the 10.29-mile-long North Reach of Sepulveda Feeder identified three distressed PCCP segments with up to 20 breaks of prestressing wires in each segment. Pipe segments with this level of distress, exhibited by wire breaks, warrant prompt repair to avoid a potential structural failure of the segment. The three segments are located approximately three miles apart, in the Van Nuys, Sherman Oaks, and Brentwood neighborhoods of the city of Los Angeles.

Carbon fiber reinforced polymer (CFRP) internal lining will be used to reinforce the three pipe segments. Metropolitan has successfully used this approach in the past, and the use of this approach will allow rehabilitation of the feeder to be completed expeditiously so that the feeder can be returned to service promptly and take advantage of high State Water Project supplies. Implementation of urgent relining on an as-needed basis is consistent with Metropolitan's overall approach to conducting the overall PCCP Rehabilitation Program. Urgent repairs of this nature have been conducted as recently as 2016 on the Second Lower Feeder. CFRP lining is a cost-effective and efficient manner to rehabilitate short sections of PCCP and is usually limited to applications involving only a few segments of pipe as in this application on the Sepulveda Feeder.

Final design for the urgent relining of the three Sepulveda Feeder locations was completed under an existing professional services agreement with HDR Engineers for design of Sepulveda Feeder PCCP Rehabilitation projects, as discussed below. Staff recommends proceeding with construction to reline the three segments of PCCP to reduce the risk of pipeline failure, minimize repair costs, and prevent unplanned shutdowns.

Budget Impact

In accordance with the April 2022 action on the biennial budget for fiscal years 2022/23 and 2023/24, the General Manager will authorize staff to proceed with the actions described below, pending board award of the construction contract. Based on the current Capital Investment Plan (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 2022/23 and 2023/24 (Appropriation No. 15525). This project anticipates an expenditure of approximately $3,700,000 in capital funds. All costs will be incurred in the current biennium. 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 PCCP Reliability Program.

Sepulveda Feeder PCCP, Urgent Relining – Construction

The scope of the contract includes lining three PCCP segments with CFRP that will accommodate full internal and external pressures on the line. Each PCCP segment is 96 inches in diameter, with lengths varying from 18 to 24 feet long. The work also includes installing and removing temporary traffic controls and pipe ventilation fans and disinfection of the pipeline upon completion. Access to the segments will be through existing maintenance holes on the feeder.

Metropolitan forces will perform pipeline shutdown work, including isolation and dewatering of the pipe in preparation for the contractor's work and refilling of the pipeline. The planned shutdown for a portion of the Sepulveda Feeder extends from late November through mid-December 2023.

A total of $3.7 million is required for this work. In addition to the amount of the construction contract described below, other funds allocated for professional services include $199,000 for submittal review and preparation of record drawings; $280,000 for engineering support during construction by HDR Engineers Inc., as described below, and $25,000 for community outreach services by Alliance Outreach LLC, under an existing board authorized agreement. Allocated funds for Metropolitan staff include $510,000 for Metropolitan force work, as described above; $370,000 for construction management and inspection; $121,000 for contract administration, environmental support, and project management; and $232,209 for remaining budget.

Award of Construction Contract (Structural Preservation Systems)

Specifications No. 2088 for urgent PCCP relining on the Sepulveda Feeder was advertised for bids on June 23, 2023. Due to the specialized nature of this rehabilitation work, three general contractors were prequalified prior to the advertisement of the bidding documents to ensure qualified contractors performed the work during the specified shutdown durations. As shown in **Attachment 2**, two bids were received and opened on July 25, 2023. The apparent low bidder requested to be released from its bid in accordance with the Public Contract Code due to an inadvertent clerical error made during the bidding process, which materially changed its bid. The second low bid from Structural Preservation Systems in the amount of $1,962,691 complies with the requirements of the specifications. The engineer's estimate was $1,570,000. Staff investigated the difference between the engineer's estimate and the low bid. The key differences are attributed to increased costs for the greater-than-expected staffing level required to complete construction simultaneously at three sites within the shutdown window and the limited contractors capable of performing this highly specialized work. Due to the urgent nature of the work, no Small Business Enterprise (SBE) participation level was established for this work.

Metropolitan staff will perform construction management and inspection. Engineering Services' performance metric target range for construction management and inspection of projects with construction less than $3 million is 9 to 15 percent. For this project, the performance metric goal for inspection is 15 percent of the total construction cost. The total cost of construction for this project is $2,472,691, which includes the cost of the contract ($1,962,691) and Metropolitan force construction ($510,000).

Design and Construction Support (HDR Engineering Inc.) – Amendment to Existing Agreement

HDR Engineering Inc. (HDR) prepared the final design of the Sepulveda Feeder urgent relining through an existing agreement for PCCP rehabilitation of the Sepulveda Feeder. As the engineer of record, HDR is recommended to provide engineering support during construction. This support includes review of submittals received from the contractor, responding to requests for information, advising the inspectors on technical issues as they may arise, and preparing record drawings.

This action authorizes an increase of $280,000 to the existing agreement with HDR for a new not-to-exceed amount of $15.78 million to provide engineering design, construction, and post-construction services to rehabilitate PCCP portions of the Sepulveda Feeder. The increase in the HDR agreement covers costs for design of the urgent repair and technical support during construction. For this agreement, Metropolitan has established an SBE participation level of 25 percent. HDR has agreed to meet this level of participation. The planned subconsultants for this work are Cotton, Shires and Associates Inc.; DRP Engineering; and Simpson Gumpertz & Heger.

Land Lease Agreement (Los Angeles Community College District) – Amendment to Existing Agreement

This action authorizes an amendment to an existing land lease agreement with the Los Angeles Community College District that will increase the not-to-exceed amount payable by $240,000, from $850,000 to $1,090,000 and extend the terms of the lease by 19 months, from February 2025 to August 2026. This amount is based on a $12,000 per month lease with a CPI-based escalation starting the second year of the lease. All other terms of the previously authorized agreement remain in place, including use restrictions and property maintenance requirements. This property is currently being used for construction trailers and equipment storage for the Second Lower Feeder PCCP Rehab Reach 3B project, which will be completed in June 2025, and is planned to be used for construction of the Sepulveda Feeder PCCP Rehab Reach 2 project, which will be the subject of a future board action. No additional funds are required for this action as funds exist within the PCCP Reliability Program.

Alternatives Considered

Staff evaluated two alternatives for relining of the three distressed PCCP segments. The first alternative would be to reline the existing PCCP pipe segments with new steel segments. With this option, several large shafts would be required to reline the PCCP segment with a new steel segment. As a result, an extended design phase and permitting to identify and possibly relocate existing utilities near the large shafts necessary for a pipe segment replacement would be required. It would also result in a longer shutdown of the feeder. The extended shutdown of the feeder would significantly hamper Metropolitan's ability to move the currently abundant State Water Project supplies into the distribution system. This alternative would also generate more significant construction impacts on the communities due to the large equipment required for this type of construction. Under this approach, these communities would then be impacted a second time when long-term rehabilitation of the feeder takes place in the future.

The selected alternative will instead utilize CFRP technology to reline the distressed pipe segments. This technology requires no excavations and minimizes impact on the local communities. All work can be performed through existing maintenance access locations along the pipe alignment. The selected approach allows the rehabilitation work to be completed in a relatively short time, thereby ensuring the early return to service of the feeder. The CFRP has been demonstrated to provide a structurally competent solution for these types of urgent repairs. Finally, the selected alternative is a cost-effective approach for rehabilitation of short pipe segments that minimizes community impacts and service interruptions to member agencies. This alternative is consistent with the objectives of Metropolitan's PCCP Rehabilitation Program and will enhance the reliability of Metropolitan's distribution system. In the future, these CRRP rehabilitated sections will be lined with a new steel pipe liner when the work on lining this portion of the PCCP Sepulveda Feeder takes place in the 2026 to 2030 timeframe.

Summary

This action: (1) awards a $1,962,691 construction contract to Structural Preservation Systems to reline three PCCP pipe segments within the Sepulveda Feeder; (2) authorizes a $280,000 increase to an existing agreement with HDR Engineering Inc. for a new not-to-exceed amount of $15,780,000; and (3) authorizes a $240,000 increase to an existing land lease agreement with Los Angeles Community College District for a new not-to-exceed amount of $1,090,000. See **Attachment 1** for the Allocation of Funds, **Attachment 2** for the Abstract of Bids, and **Attachment 3** for the Location Map.

Project Milestone

December 2023 – Completion of the urgent PCCP relining of three locations on the Sepulveda Feeder

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 Minute Item 48801, dated September 13, 2011, the Board authorized initiation of the PCCP Rehabilitation Program.

By Minute Item 50699, dated January 10, 2017, the Board certified the Final PEIR for the PCCP Rehabilitation Program, and approved the program for the Second Lower Feeder, Sepulveda Feeder, Calabasas Feeder, Rialto Pipeline, and AMP for the purposes of CEQA.

By Minute Item 51860, dated January 14, 2020, the Board authorized a lease agreement with Los Angeles Community College in an amount not-to-exceed $850,000 for a five-year term for property to be used for construction staging and storage of steel liner pipe.

By Minute Item 52790, dated April 12, 2022, the Board appropriated a total of $600 million for projects identified in the Capital Investment Plan for Fiscal Years 2022/23 and 2023/24.

By Minute Item 52936, dated August 16, 2022, the Board authorized a $6 million increase to an agreement with HDR Engineering Inc. for a new not-to-exceed amount of $12.5 million to rehabilitate PCCP and steel portions of the Sepulveda Feeder.

California Environmental Quality Act (CEQA)

CEQA determination for Option #1:

The proposed actions to award a construction contract and to amend the existing agreement for engineering design, construction, and post-construction services for relining of the Sepulveda Feeder are exempt under the provisions of CEQA and the State CEQA Guidelines. The proposed actions involve the urgent repair of existing pipelines with the same purpose and capacity. Accordingly, the proposed actions qualify under a statutory exemption (Section 21080(b)(2) and (4) of the California Public Resources Code and Section 15269 of the State CEQA Guidelines).

Additionally, the acquisition of the land lease agreement was authorized by the Board on 1/14/2020, and any environmental impacts were determined to have been addressed under the Prestressed Concrete Cylinder Pipe Program Environmental Impact Report approved by the Board on 1/10/2017. No additional or expanded use will occur with this proposed amendment to the land lease agreement. Accordingly, no further CEQA documentation is necessary for the Board to act on this proposed action.

CEQA determination for Option #2:

None required

Board Options

Option #1

a. Award a $1,962,691 contract to Structural Preservation Systems for urgent relining of Sepulveda Feeder;
b. Authorize a $280,000 increase to a professional services agreement with HDR Engineering Inc. for a new not-to-exceed amount of $15,780,000; and
c. Authorize a $240,000 increase to an existing land lease agreement with Los Angeles Community College District for a new not-to-exceed amount of $1,090,000.

Fiscal Impact: Expenditure of $3,700,000 in capital funds. All costs will be incurred in the current biennium.
Business Analysis: This option will reduce the risk of PCCP pipeline failure, minimize repair costs, and prevent unplanned shutdowns.

Option #2

Do not proceed with this project at this time.
Fiscal Impact: None
Business Analysis: This option would reduce system reliability and operational flexibility within this portion of Metropolitan's distribution system and may result in higher repair costs.

Staff Recommendation

Option #1

7/27/2023
John V. Bednarski *Date*
Manager/Chief Engineer
Engineering Services

7/31/2023
Adel Hagekhalil *Date*
General Manager

Attachment 1 – Allocation of Funds

Attachment 2 – Abstract of Bids

Attachment 3 – Location Map

Ref# ES12690664

Allocation of Funds for Sepulveda Feeder Urgent Relining

	Current Board Action (Aug. 2023)
Labor	
Studies & Investigations	$ -
Final Design	-
Owner Costs (Program mgmt., envir. monitoring)	121,000
Submittals Review & Record Drwgs.	199,000
Construction Inspection & Support	370,000
Metropolitan Force Construction	500,000
Materials & Supplies	-
Incidental Expenses	10,000
Professional/Technical Services	
HDR Engineering Inc.	280,000
Alliance Outreach LLC	25,000
Right-of-Way	-
Equipment Use	-
Contracts	
Structural Preservation Systems	1,962,691
Remaining Budget	232,309
Total	**$ 3,700,000**

The total amount expended for Sepulveda Feeder CFRP Urgent Relining is approximately $410,000. The total estimated cost to complete this project, including funds spent to date and funds allocated for the work described in this action, is $4.11 million.

The Metropolitan Water District of Southern California

Abstract of Bids Received on July 25, 2023, at 2:00 P.M.

Specifications No. 2088
Sepulveda Feeder Urgent Relining

The work includes relining of three 24-foot-long prestressed concrete cylinder pipe (PCCP) segments with carbon fiber reinforced polymer, including disinfecting the pipeline, controlling traffic, and abating hazardous materials[1].

Engineer's estimate: $1,570,000

Bidder and Location	Total
Insituform Technologies LLC Santa Fe Springs, CA[2]	$890,673
Structural Preservation Systems **Anaheim, CA**	**$1,962,691**

1. Due to the urgent nature of the work, no Small Business Enterprise participation level was established for this work.
2. Insituform Technologies LLC requested to be released from its bid in accordance with the Public Contract Code due to an inadvertent clerical error made during the bidding process, which materially changed its bid.

Distribution System

Engineering, Operations, & Technology Committee

Sepulveda Feeder PCCP Urgent Relining

Item 7-1

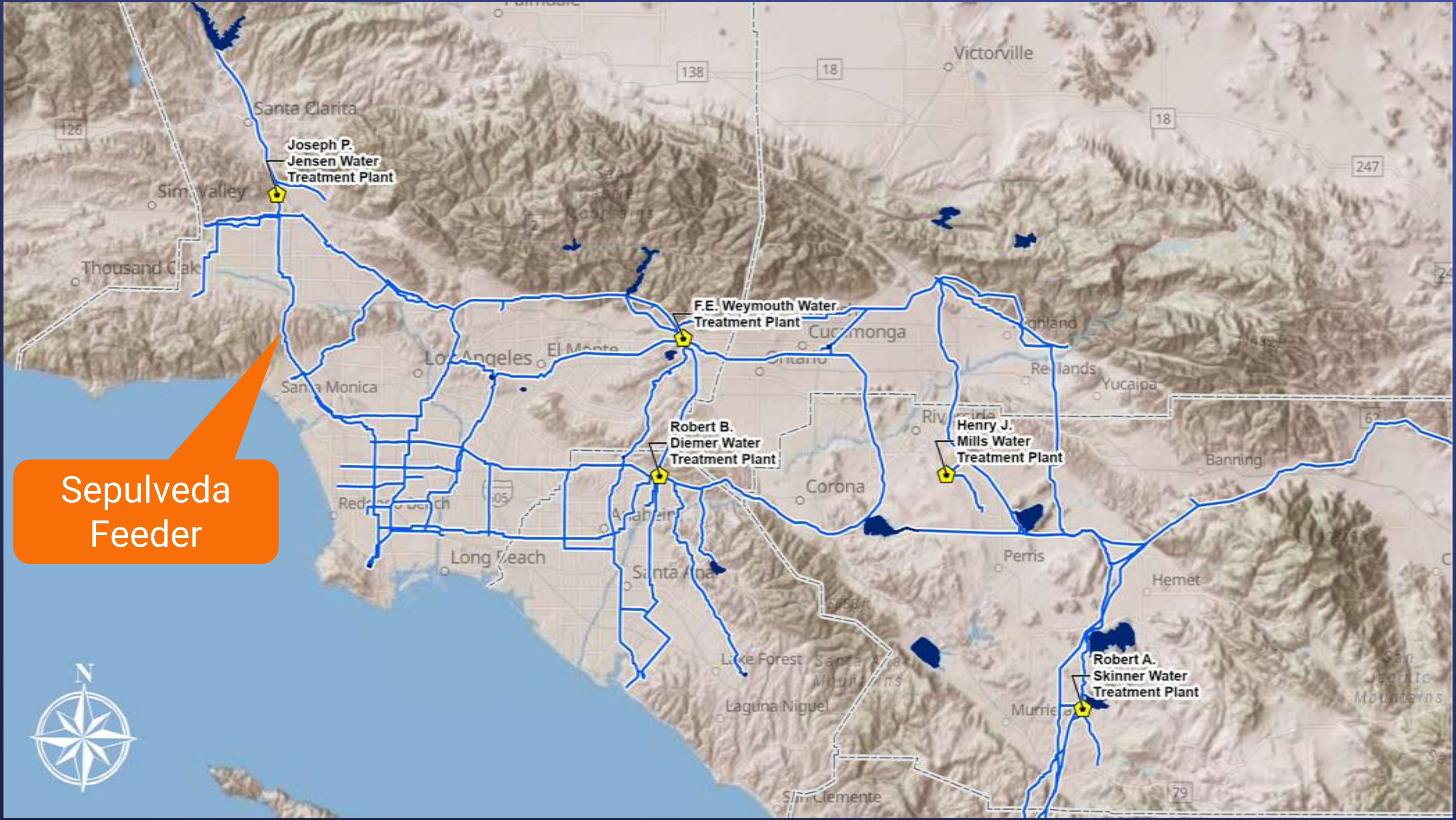
August 14, 2023

Sepulveda Feeder PCCP Urgent Relining

Current Action

- Award a $1,962,691 contract to Structural Preservation Systems for urgent relining of three pipe segments on the Sepulveda Feeder
- Authorize an increase of $280,000 to an existing agreement with HDR Engineering Inc. for technical services
- Authorize an increase of $240,000 to an existing land lease agreement with Los Angeles Community College District

Distribution System



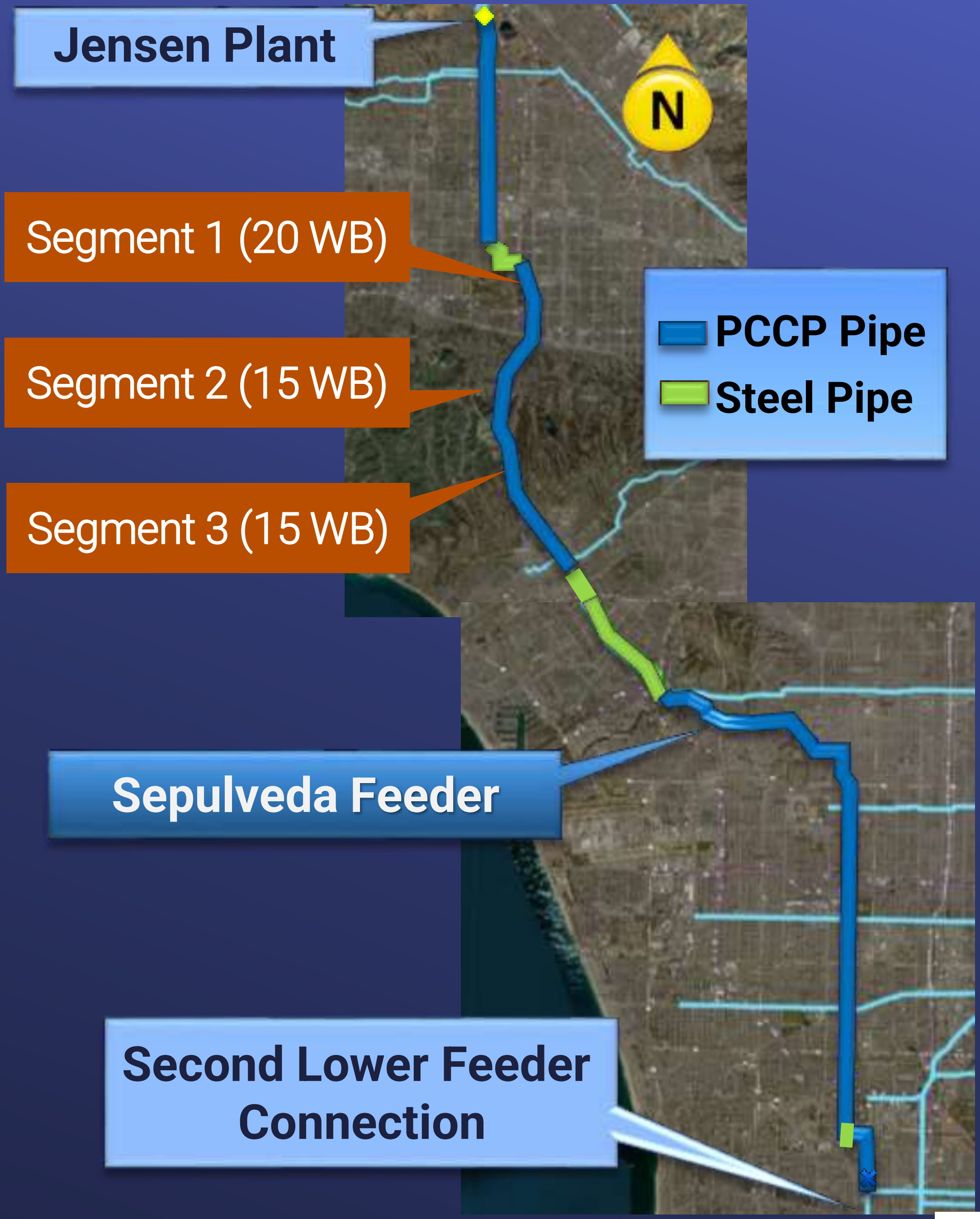
Elements of PCCP Rehab Program

- The comprehensive strategy of the program has four components:
  - Continue inspection & monitoring
  - Limit corrosion by installing cathodic protection where appropriate
  - Perform individual urgent segment repairs (such as this action)
  - Plan & execute long-term rehabilitation in a cost-effective manner

Previous Carbon Fiber Repair
Second Lower Feeder

Background

- February 2023 – electromagnetic inspection performed
- Report delivered in March 2023
- Three distressed segments identified with significant wire breaks which require prompt rehabilitation
- Design is complete & construction contract is recommended at this time



WB= wire breaks

Sepulveda Feeder PCCP
Urgent Relining

Alternatives Considered

- Staff investigated replacing distressed PCCP with steel segments
  - Requires excavation of large shafts
  - Possible relocation of existing utilities
  - Requires extensive permitting & longer shutdown
- Selected Option – Use carbon fiber lining
  - Work can be performed through existing maintenance access holes
  - Requires less permitting & shorter shutdown
  - Allows Metropolitan to move more SWP supplies within distribution system

Bid Results
Specifications No. 2088

Bids Received	July 25, 2023
No. of Bidders	2
Lowest Responsible Bidder	Structural Preservation Systems
Low Bid	$1,962,691
Other Bid	$890,000**
Engineer's Estimate	$1,570,000

*Due to the urgent nature of the work, no Small Business Enterprise participation level was established for this work.

**Other bidder requested to be released from its bid in accordance with the Public Contract Code due to an inadvertent clerical error made during the bidding process, which materially changed its bid

Sepulveda Feeder PCCP

Urgent Relining

Metropolitan Scope

- Construction management & inspection
- Contract admin., outreach & PM
- Force Construction
  - Pipeline shutdown including isolation, dewatering & refilling pipeline

HDR Engineering Inc. – Agreement Amendment

Sepulveda Feeder PCCP
Urgent Relining

- Engineer of record
- Provide technical support during construction
  - Review submittals & respond to requests for information
- Increase of $280,000 for a new NTE amount of $15.78 M
- SBE participation level: 25%

Land Lease to Support PCCP Program– Agreement Amendment

- Property leased from Los Angeles Community College District
  - 12-acre site
  - Area for pipe storage & contractor staging
  - Supports multiple PCCP contracts
  - 19-month lease extension recommended
    - February 2025 – August 2026
  - Estimated cost of lease extension – $240,000
  - New total lease amount not to exceed $1,090,000
- Site currently being used for construction of Second Lower Feeder Reach 3B
- No additional funding required

Storage Site with Steel Pipe Liners

Allocation of Funds

Sepulveda Feeder PCCP Urgent Relining

Metropolitan Labor	
Owner Costs (Proj. Mgmt., Contract Admin.)	$ 121,000
Submittals Review, Tech. Support, Record Dwgs.	199,000
Construction Inspection & Support	370,000
Metropolitan Force Construction	510,000
Professional/Technical Services	
HDR Engineering Inc.	280,000
Alliance Outreach LLC (Public Outreach)	25,000
Contract – Structural Preservation Systems	1,962,691
Remaining Budget	232,309
Total	$ 3,700,000

Project Schedule

Project	2023	2024
Sepulveda Feeder PCCP Urgent Relining		

Construction

Board Action

Completion

Board Options

- Option #1
  a. Award a $1,962,691 contract to Structural Preservation Systems for urgent relining of Sepulveda Feeder;
  b. Authorize a $280,000 increase to a professional services agreement with HDR Engineering Inc. for a new not-to-exceed amount of $15,780,000; and
  c. Authorize a $240,000 increase to an existing land lease agreement with Los Angeles Community College District for a new not-to-exceed amount of $1,090,000.
- Option #2
  - Do not proceed with this project at this time.

Staff Recommendation

- Option #1

THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

1928

THE METROPOLITAN WATER DISTRICT
OF SOUTHERN CALIFORNIA

BOARD ACTION

- **Board of Directors**
  Engineering, Operations, and Technology Committee

8/15/2023 Board Meeting

7-2

Subject

Authorize an agreement with Nth Generation Computing, Inc. in an amount not to exceed $367,448 for the Datacenter Backup Infrastructure Upgrade; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA

Executive Summary

Metropolitan's Information Technology Group will need to deploy a faster and cloud-compatible backup infrastructure to support and safeguard the backup of all applications. Backup is a critical service that provides the ability to restore enterprise business and water systems in case of a disaster or a major outage. The new backup infrastructure will provide a robust solution to reduce both the risk of backup failure and to improve the restoration of critical IT systems in case of a major outage and business data loss.

Timing and Urgency

The current solution is at end-of-life and very slow. Due to the ever increasing volume of business data, it is getting slower with each passing week and taking a considerable time to complete each backup job. The long execution time to complete the backup increases the risk of job failures. All job failures require the restart of the backup, further aggravating the risk to all business-critical applications.

Details

Background

The current backup infrastructure at Metropolitan relies on outdated and obsolete magnetic tape technology. Metropolitan is gradually moving applications from its on-premises data centers to Microsoft, Oracle, and other cloud infrastructure providers. The existing backup solution is unable to support the backup function for cloud technologies.

The benefits of replacing the existing backup infrastructure are:

- Eliminating risk due to dependence on an outdated magnetic tape medium
- Reducing data security risk by adapting new data protection methods
- Reducing backup duration which will provide savings from reduction in infrastructure utilization, restoration time, cybersecurity breach risks, and human effort
- Enabling Metropolitan in the handling of both the current data volume and future growth of Metropolitan data
- The new solution will cater to the backup of cloud-hosted applications

Award a Contract ($367,448)

A Request for Proposals (RFP), RFP-RB-408231, for Datacenter Backup Infrastructure Upgrade was issued on August 4, 2022. There were six respondents in the competitive procurement process. The small and/or disabled veteran business enterprise goal designated for this solicitation was twenty-five percent. Proposals were reviewed and short listed. The short-listed firms were evaluated, and Nth Generation Computing Inc. is recommended to be awarded a contract in the total amount not to exceed $367,448.

Summary

This action authorizes $772,605 for the Datacenter Backup Infrastructure Upgrade project. The total project budget is $772,605 and includes funds for awarding a new contract with Nth Generation Computing Inc. for $367,448 for professional and technical services. Other costs included are $334,920 for labor costs by Metropolitan staff, including project management, and $70,237 for remaining budget.

This project has been evaluated and recommended by Metropolitan's CIP Evaluation Team, and funds are available within the fiscal year 2022/23 capital expenditure plan. See **Attachment 1** for the Financial Statement.

Project Milestones

Project kickoff and planning – Sep 2023

Complete build and test backup solution for Secondary Data Center (DC) – Nov 2023

Complete deployment of backup solution for Secondary DC – End of Jan 2024

Complete build and test backup solution for Primary DC, US HQ, communication hub and small sites – Feb 2024

Complete deployment of backup solution for Primary DC and all remaining sites – April 2024

Policy

Metropolitan Water District Administrative Code Section 5108: Appropriations

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 Minute Item 52778, dated April 12, 2022, the Board appropriated a total of $600 million for projects identified in the Capital Investment Plan for Fiscal Years 2022/23 and 2023/24.

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. Where it can be seen with certainty that there is no possibility that the activity in question may have a significant effect on the environment, the activity is not subject to CEQA (Section 15061(b)(3) of the State CEQA Guidelines).

CEQA determination for Option #2:

None required

Board Options

Option #1

Authorize an agreement with Nth Generation Computing Inc. in an amount not to exceed $367,448 for the Datacenter Backup Infrastructure Upgrade.

Fiscal Impact: Expenditure of $772,605 in capital funds
Business Analysis: This option will replace an outdated data center backup solution with newer and faster backup and storage technology. The upgrade will reduce the risk of backup failure and support the future growth of Metropolitan data volumes.

Option #2

Do not proceed with this project at this time

Fiscal Impact: No additional expenditure of capital funds

Business Analysis: Dependence on outdated system that increases data security and data recovery risks. Delays in data recovery and restore time for business-critical applications like SCADA and Oracle Financials in case of loss of data due to data center interruptions or a disaster.

Staff Recommendation

Option #1

7/25/2023

Charlie Eckstrom *Date*
Group Manager, Information Technology

7/30/2023

Adel Hagekhalil *Date*
General Manager

Attachment 1 – Financial Statement

Ref# it126859735973

Allocated Funds for Datacenter Backup Infrastructure Upgrade

	Current Board Action (Aug. 2023)
Labor	
Studies & Investigations	$ -
Final Design	334,920
Owner Costs (Program mgmt.)	-
Submittals Review & Record Drwgs	-
Construction Inspection & Support	-
Metropolitan Force Construction	-
Materials & Supplies	-
Incidental Expenses	-
Professional/Technical Services	367,448
Equipment Use	-
Contracts	-
Remaining Budget	70,237
Total	**$ 772,605**

The total amount expended to date for the Datacenter Backup Infrastructure upgrade is approximately $0.

Engineering, Operations and Technology Committee

IT Datacenter Backup Infrastructure Upgrade

Item 7-2

August 14, 2023

Current Action

Authorize an agreement with Nth Generation Computing, Inc. in an amount not to exceed $367,447 for the Datacenter Backup Infrastructure Upgrade project

Background

The current backup infrastructure at MWD relies on outdated and obsolete magnetic tape technology. IT is gradually moving applications from its on-premise datacenter to Microsoft, Oracle and other cloud infrastructure providers. The existing backup solution is unable to support the backup function for cloud technologies.

MWD has 300+ applications with approximately 400 terabytes of data. Applications data is backed up daily, weekly and monthly. These backups are used to recover applications/files when necessary.

IT Customer support gets a couple of requests every month to recover and restore accidently deleted or corrupted files.

Reasons for Replacement

- Eliminate risk due to dependence on an outdated magnetic tape medium
- Reduce data security risk by adapting new data protection methods
- Reduce backup duration, restoration time, cyber security breach risks and human effort
- Enable the handling of both the current data volume and future growth of Metropolitan data
- The new solution will cater to the backup of cloud hosted applications

Solicitation Process

- RFP 408231 was issued on August 4, 2022
- Qualifications-based selection
- Seven proposals received, one disqualified
- Responses were evaluated by MWD evaluation committee. Business Outreach program (SBE/DVBE & RBE) was included in the evaluation score
- Shortlisted two highest scoring respondents
- Final selection completed on June 20, 2023

Vendor Selection

Nth Generation Computing, Inc. is selected due to its offering of a robust and mature solution (already implemented and used by large number of public and private organizations) and its configuration and implementation expertise in data center backup solutions.

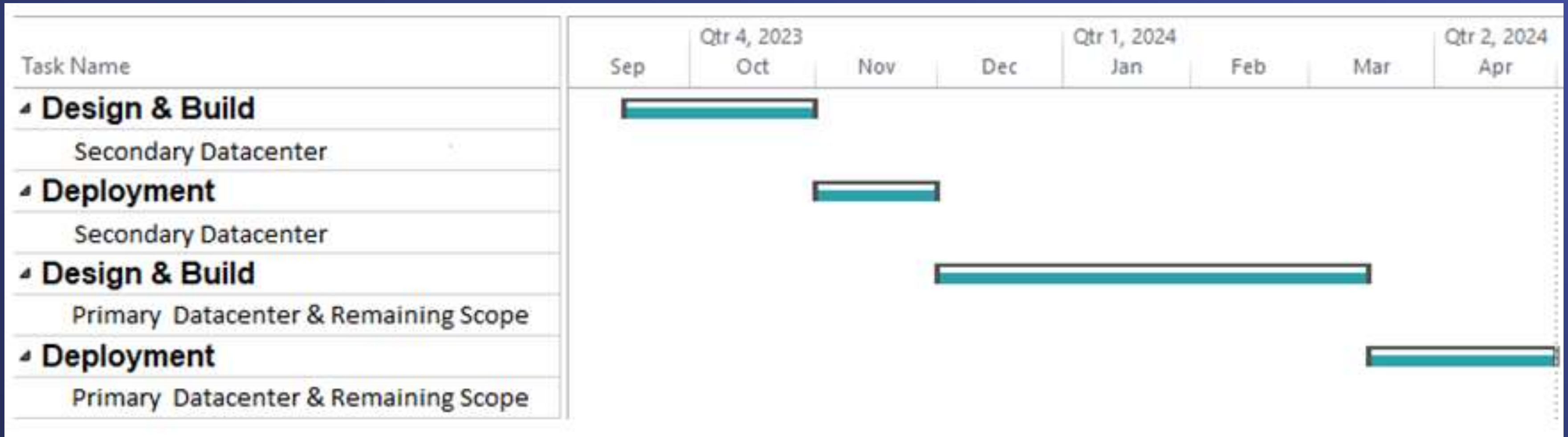
Agreement Scope

To implement the backup/restore system with infrastructure capabilities to support on-premises and cloud-based applications. The implementation includes Primary & Secondary Data Center, Union Station Headquarters Facility.

Project Cost

Project Cost Breakdown	
Vendor (Nth Generation Computing, Inc.)	$367,447
MWD Staff	$334,920
Contingency	$70,236
Total Project Budget	$772,604

Project Timeline



Board Options

- Option #1
  - Authorize an agreement with Nth Generation Computing, Inc. in an amount not to exceed $367,447 for the Datacenter Backup Infrastructure Upgrade project
- Option #2
  - Do not proceed with this project at this t

Staff Recommendation

- Option #1

THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

1928

- **Board of Directors**
  One Water and Stewardship Committee

8/15/2023 Board Meeting

7-3

Subject

Authorize amendments to the Cyclic Cost-Offset Program terms; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA

Executive Summary

Staff seeks authorization to amend the Cyclic Cost-Offset Program (CCOP) terms. Metropolitan's Board authorized the current terms for cyclic agreements in 2017. Cyclic agreements allow the pre-delivery of imported water for groundwater replenishment or surface storage in excess of normal deliveries, thus increasing the use of local infrastructure. This water is then purchased later when the agency needs groundwater replenishment, later pumps the water, or uses the water stored in any other way.

In 2019, the Board approved creating the CCOP to credit an agency for the increased costs to deliver water to cyclic accounts in times of surplus as designated by the General Manager. The credit for additional costs reduces a financial barrier for member agencies and enhances Metropolitan's capture of surplus water when Metropolitan seeks to maximize its local water storage. Feedback from member agency managers and the One Water and Stewardship Committee indicated that more water could be captured if terms of the CCOP were modified. Although Metropolitan is currently exercising all existing Water Surplus Drought Management actions and is looking into new storage options, there are over 400,000 acre-feet (AF) of State Water Project (SWP) supplies that could be lost.

This action amends the CCOP by: (1) increasing the maximum credit amount from \$264 to \$354/ AF; (2) extending the time to purchase the water from 5 to 10 ten years; (3) increasing the maximum credit for documented evaporative or groundwater losses; and (4) providing the General Manager and staff additional flexibility to initiate deliveries and report to the Board. These changes would provide additional flexibility and encourage more participation to capture additional surplus supplies that may otherwise be lost. This action does not amend the terms of the cyclic agreements for water stored when the CCOP is not implemented by the General Manager.

Background

Winter storms this year greatly improved SWP supplies, and the Department of Water Resources announced they could deliver 100 percent of the SWP allocation (nearly 2 million AF for Metropolitan). This allocation—combined with low demands, additional interruptible SWP supplies (Article 21), and abundant local runoff to replenish groundwater basins—resulted in more than 400,000 AF at risk of loss to the region. Staff continues to look for opportunities to capture more of this excess.

Metropolitan uses cyclic agreements to capture surplus water by delivering imported water to local cyclic accounts. Member agencies then purchase water from the cyclic accounts over a specified payment schedule. While member agencies are taking actions to capture surplus supplies at Metropolitan's request during designated times of surplus, some actions increase costs incurred by the cyclic participants. The Board approved the CCOP in 2019 to provide credits to member agencies to offset costs in times of water surplus for Metropolitan so as to increase deliveries into cyclic accounts. In March 2023, staff projected that supplies would exceed Metropolitan's ability to store water and recommended the General Manager initiate the CCOP. The CCOP became available to offset increased member agency costs incurred when storing above base deliveries. Although member agencies are currently participating in the CCOP, program modifications would streamline implementation and further encourage participation. It is in Metropolitan's best interest to maximize usage of the CCOP in a year when approximately more than 400,000 AF could be lost. Although the CCOP will capture only a small portion of that amount, it remains a cost-effective local storage option for the region's benefit compared to other storage programs. For example, existing storage programs such as Metropolitan's groundwater banking programs in the Central Valley have full cycle costs between $350 to $500/AF.

Cyclic Program and Cyclic Cost-Offset Program

On April 11, 2017, the Metropolitan Board of Directors authorized the General Manager to enter into cyclic agreements with member agencies, based on updated terms. Cyclic agreements provide Metropolitan with flexibility to respond quickly to surplus conditions by pre-delivering water into groundwater basins and surface reservoirs ahead of agency demands, making the water available to help in the event of an emergency or future dry year. Deliveries to the cyclic accounts are at Metropolitan's discretion but are made under mutual agreement. Prior to making the deliveries, Metropolitan and the member agency agree on a delivery amount and enter into a purchase schedule that provides the agency time to purchase the amount delivered. Metropolitan waives the Capacity Charge but bills the member agency the full-service water rate in effect when the water is purchased from the cyclic account, as well as all other components of Metropolitan's full-service water rate, including the addition of those purchases to the determination of that agency's Readiness-to-Serve Charge. The Capacity Charge is waived because the pre-deliveries are made at Metropolitan's discretion. There are no charges to Metropolitan to put or to recover water from the cyclic accounts. Since there are no storage costs, the program is cost competitive with other storage alternatives. Metropolitan currently has eleven cyclic agreements with a total cyclic storage capacity of up to 545,000 AF. Metropolitan is not required to deliver the maximum amount of water in each agreement and may terminate deliveries under the Program with 15 days' notice.

On April 9, 2019, Metropolitan's Board approved a program authorizing the General Manager to enter into agreements to provide a credit to offset costs associated with increased deliveries to cyclic accounts when the General Manager determines that availability of imported supplies exceeds Metropolitan's ability to manage those supplies for the region. The CCOP addressed member agency feedback that cyclic agreements do not have a mechanism to offset the higher cost of actions needed to capture the increased volumes of imported water. To determine the amount of credit for each agency, staff considers additional costs the agency incurs (including potential avoided costs) to capture supplies beyond the amount originally expected. Credits are only made available to offset the increased costs a member agency incurs to accommodate Metropolitan's delivery. The credits do not reduce the full-service cost of purchasing water from Metropolitan and are instead a cost of service incurred by Metropolitan. Staff determines which costs are eligible for an offset credit. Staff is working with member agencies to execute new agreements and amend existing agreements to incorporate the proposed 2023 credit rate and other proposed terms if approved by the Board. Metropolitan currently has nine CCOP agreements and plans to deliver about 76,000 AF this calendar year.

Proposed Changes

This action item builds off the May oral report provided to the One Water and Stewardship Committee and includes feedback from the committee and member agency managers. Staff recommends the following changes to the CCOP:

Increase Credit Amount. Currently, a cost-offset credit is available for up to $264/ AF, which represents the initial board-approved amount of $225 in 2019, adjusted per Consumer Price Index (CPI) each year as also approved by the Board. The proposed modified cost-offset credit would be $354 in 2023, adjusted pursuant to CPI in future years. The new credit amount would be made available to agencies that completed cyclic deliveries beginning July 1, 2023. The final credit will be based on performance and the estimated additional costs incurred by the member agency as a result of taking delivery of additional water supplies at Metropolitan's request.

The $354/AF cost to Metropolitan is competitive compared to the unit cost for other storage alternatives, such as Metropolitan's SWP groundwater storage programs. Unit storage costs for alternative programs range from $350 to $500 per acre-foot. In subsequent years, the credit amount will be adjusted every year per CPI as is the case with the current approved credit amount.

Increase the time allowed to purchase water out of the cyclic account. Currently, member agencies must purchase supplies delivered under the CCOP within five years. Increasing the time allowed to purchase supplies out of the account to ten years provides the member agencies with added flexibility in generating the revenues to purchase the pre-delivered supplies and thus encouraging the member agencies to take delivery of increased supplies. Cyclic agreements already have a term of ten years.

Modify the Loss Credit. Currently, a cost-offset credit is available for surface storage, recognizing a five percent loss for each year the water stays in the cyclic account for up to two years. The current evaporative loss is capped at a maximum of ten percent if an agency purchases the water over a period longer than two years. Modifying the loss credit is recommended based on feedback from the One Water and Stewardship Committee and member agency managers that evaporative losses for surface water reservoirs are dependent on reservoir size and shape, and weather. In addition, consideration for groundwater losses was suggested. The loss credit will be modified to include consideration of groundwater losses and to recognize evaporative and groundwater losses the member agency can demonstrate and is approved by staff. The loss credit would be assessed each year the agency makes a purchase out of the cyclic account for up to ten years and will be reconciled each year it is used. The sum of all the cost-offset credit components provided under the CCOP shall not exceed the maximum CCOP credit amount in effect at the time Metropolitan delivers the water to the agency.

Change Initiation and Reporting Process. Currently, the window to capture surplus supplies is often limited. For example, Article 21 supplies on the SWP can become available with little notice and only be available for a few weeks. The General Manager initiates the CCOP once the available supplies are expected to exceed available management actions, which means waiting for changes in SWP allocations or other availability rather than changes in conditions that indicate a likely surplus. Allowing the General Manager to initiate the CCOP once water supply conditions change and staff projects that water may be spilled—without waiting for official changes in allocations or other availability—may increase water delivered and stored in the region, thus improving reliability for all member agencies and providing a regional benefit in the same manner as other water management programs. The added flexibility will provide more time for taking water resource management actions.

Staff is also proposing a change in the manner of presenting the CCOP implementation to the Board. Currently, following the General Manager’s initiation of the CCOP, staff brings an item to the next regularly scheduled board meeting. This item includes supporting information that led to the General Manager’s decision and provides two alternatives: (1) a default take-no-action to allow CCOP deliveries; or (2) discontinue CCOP deliveries. The process will be modified to have the WRM Group Manager report on the CCOP initiation in their oral report and seek feedback if the Board wishes to review the decision and take an action at the next board meeting. This modification eases the requirement to automatically bring an item for action to the next regularly scheduled board meeting. If no director requests such an item, then deliveries will continue until the General Manager determines it is no longer necessary.

Summary

Under certain supply conditions, Metropolitan cannot manage all supplies and risks losing supply to the region that otherwise could help mitigate the effects of dry years that occur within ten years of delivery. By providing a higher cost-offset credit for surplus deliveries into cyclic accounts, providing a longer time to purchase the water out of the account, and more broadly recognizing losses, member agencies can increase the amount of water delivered to the region while benefiting all member agencies in the same manner as other local storage programs. Additionally, the streamlining of the process to report to the Board on the CCOP implementation will avoid confusion and save staff time. With these amendments to the CCOP, Metropolitan has added flexibility to administer the program, and member agencies are further supported and encouraged to help manage additional supplies.

Policy

Metropolitan Water District Administrative Code Section 4209: Contracts

Metropolitan Water District Administrative Code Section 11104: Delegation of Responsibilities

By Minute Item 50793, dated April 10, 2017, the Board authorized the General Manager to enter into cyclic agreement with Metropolitan's member agencies.

By Minute Item 50888, dated July 11, 2017, the Board authorized the General Manager to enter into cyclic agreements providing a credit of up to $225 per acre-foot for in-lieu deliveries.

By Minute Item 51563, dated April 9, 2019, the Board approved the General Manager to enter into Cyclic Cost-Offset Credit Program Agreements providing a credit of up to $225 per acre-foot for deliveries, to be escalated per CPI.

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. In particular, the proposed action consists of amending existing cyclic agreements for the delivery of surplus water at existing public or private facilities with negligible or no expansion of use and no possibility of significantly impacting the physical environment. Accordingly, the 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 amendments to the Cyclic Cost-Offset Program terms.

Fiscal Impact: Up to $354/ AF cost-offset credit to participating member agencies in 2023. The cost of the credit to Metropolitan represents a storage cost comparable to other costs for local and out-of-region storage. This program is included in the FY 23/24 Water Supply Program budget. The potential future cost of issuing credits would be included as a Supply Program line item of future biennial budget proposals in a fashion consistent with other storage programs. If cost-offset programs are issued in a given year, they would be accounted for similarly to other supply programs. These costs would be captured in the Chief Financial Officer's quarterly financial report under supply program costs.

Business Analysis: Metropolitan would improve regional reliability through the delivery of water to the region that would have otherwise been lost. Member agencies have informed staff that the current credit amount does not sufficiently cover the additional costs incurred due to taking action at Metropolitan's request. Increasing the cost-offset credit to $354 per acre-foot will allow member agencies with low local supply production costs to be made financially whole when accepting cyclic deliveries. Further, the delivery of the supplies to the region incurs lower power costs in wet years than in dry years because of higher hydroelectric generation on the State Water Project. Metropolitan will also generate additional revenue in the future from its ability to sell the additional water it is able to receive and store pursuant to the Program.

Option #2

Do not authorize amendments to the Cyclic Cost-Offset Program terms.

Fiscal Impact: None at this time. However, foregoing the storage of water available in the present may create additional water acquisition costs in the future.

Business Analysis: Not implementing the credit in cyclic agreements could decrease the water supplies available to the region and result in a potential loss of a future full-service water sale and an increase in costs to acquire other additional water for the region.

Staff Recommendation

Option #1

Brad Coffey 8/3/2023

Brad Coffey *Date*
Manager, Water Resource Management

8/8/2023

Adel Hagekhalil *Date*
General Manager

Ref# wrm12694296

One Water and Stewardship Committee

Authorize Amendments to the Cyclic Cost-Offset Program Terms

Item 7-3

August 14, 2023

One Water and Stewardship Committee

Committee Feedback

- Changes to the credit amount
  - Consideration of larger evaporative and other losses
- Process for reporting to the Board
  - Once the Program is implemented
- DAC or equity-related access to the Program
- SWP Dependent area priority

Cyclic Cost-Offset Program (CCOP)

Background

- Board Authorization April 2019
- General Manager authority to:
  - Issue cost offset in form of a credit to member agencies to capture additional water in cyclic accounts when
    - Risk of not capturing all available imported supplies
    - Member agency increases capture and incurs costs above normal supplies

CCOP Current Terms

- Member agency must:
  - Receive more water than originally projected
  - Purchase the delivered water on an agreed-upon schedule within 5 years
- Cost offset up to $264 per acre-foot.
  - Includes evaporative loss credit of 5% for up to two years
- Water purchased at the full-service water rate in effect at time of purchase
- Deliveries at Metropolitan's discretion
  - No capacity charge

Proposed Changes

Increase Purchase Time

Current	Proposed
5 Year Purchase Schedule	10 Year Purchase Schedule

Metropolitan and the agency would agree on the purchase schedule prior to making deliveries.

Proposed Changes

Increase Credit Amount

Current	Proposed
$264 / AF	$354 / AF

The available credit amount will increase annually by CPI. The final credit will be based on performance.

Proposed Changes

Modify the Loss Credit

Current	Proposed
Evaporative loss credit of 5% for up to 2 years of storage	Loss credit available for cumulative evaporative and groundwater losses • Agency must provide documentation of losses • Limited by max credit in effect at time of delivery • Applied each year a purchase is made

Proposed Changes

Change Initiation and Reporting Process

Current	Proposed
• When available supplies are expected to exceed available management actions. • Staff report to the Board following initiation.	• As soon as staff project we will spill water. • WRM Group Manager to report in their oral report on the CCOP initiation and seek feedback from Board on taking an action at the next Board meeting.

Cyclic Cost-Offset Program (CCOP)

Summary

- Proposed modifications formed from feedback received from member agency managers and the OWS Committee
- Member agencies help increase the amount of water brought to the region
  - Supplies managed locally within ten years
    - Dry-years
    - Emergencies
- Increased flexibility to administer the program further supports member agency participation

Board Options

Options

Option #1:

Authorize amendments to the Cyclic Cost-Offset Program terms.

Option #2:

Do not authorize amendments to the Cyclic Cost-Offset Program terms.

Board Options

Staff Recommendation

Option #1

THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

BOARD ACTION

- **Board of Directors**
  One Water and Stewardship Committee

8/15/2023 Board Meeting

7-4

Subject

Authorize implementation of a tree rebate modification to the Turf Replacement Program; the General Manager has determined that the proposed actions are exempt or otherwise not subject to CEQA

Executive Summary

On February 12, 2019, Metropolitan's Board of Directors authorized several modifications to the Turf Replacement Program. Metropolitan Board, staff, and member agencies designed this conservation element as an annually offered program, which included sustainability requirements for removing turf and replacing it with drought-tolerant landscapes. This letter describes a proposed approach to add a tree rebate as another feature to increase the environmental sustainability and benefits of the program.

Timing and Urgency

Upon approval, the tree rebate is expected to be added to the program by the end of 2023.

Details

Background

Conservation and water use efficiency have played a key part in Metropolitan's Integrated Water Resources Plan (IRP) for decades and will continue to move forward through the Climate Adaptation Master Plan for Water (CAMP4W). Metropolitan's regional conservation program is an important tool to help meet the conservation goals established by the IRP. This program provides financial incentives to encourage the installation of drought-tolerant landscapes and water-saving fixtures and devices.

During the last drought, the most popular water efficiency program was the Turf Replacement Program. Turf replacement provided long-term benefits by focusing public attention on a necessary transition to more drought-tolerant landscapes throughout Southern California. The Turf Replacement Program provides water savings while ensuring that these new landscapes are environmentally sustainable gardens.

The environmental benefit and importance of trees have been well established in the landscaping industry. Trees provide benefits such as urban cooling, carbon sequestration, and air quality improvements. The promotion of trees in the Turf Replacement Program will increase the environmental sustainability of these landscapes. It also directly addresses concerns about an increase in the urban heat island effect due to the removal of grass lawns.

Proposed Approach

The tree rebate will be added to the Turf Replacement Program as an additional optional incentive on top of the base $2 per square foot incentive currently offered. All previously set program controls, such as the $43 million funding cap, required project elements, and pre- and post-inspections, will remain in place.

Proposed Changes

- Add $100 rebate per tree.
    - Maximum of five trees, or up to $500 rebate per application.
    - 15-gallon minimum tree size required to be eligible for rebate.
- Change program guidelines to allow each newly planted tree to equal three plants.
    - Current guidelines require three plants per 100 square feet of rebated project area.

Supporting Information

The average cost of a 15-gallon tree ranges from $80 to $150, depending on the species of tree. The chosen rebate of $100 per tree will cover most or all of the cost of the tree. The tree rebate option will include resources and guidelines such as a tree definition, recommended tree list, and tree exclusion list. The focus of the rebate will be on native trees with the greatest environmental benefits while allowing flexibility for applicants to choose trees based on size, firescaping needs, and other concerns.

Project Milestone

If approved by the Board, staff will implement the proposed changes. Staff will monitor data from the program and report progress and results to the Board.

Policy

Metropolitan Water District Administrative Code Section 11104: Delegation of Responsibilities

By Minute Item 51496, dated February 12, 2019, the Board authorized changes to the Turf Replacement Program.

By Minute Item 51166, dated April 10, 2018, the Board authorized the Landscape Transformation Program.

By Minute Item 50358, dated January 12, 2016, the Board adopted the 2015 Integrated Water Resources Plan Update, as set forth in Agenda Item 8-3 board letter.

By Minute Item 50134, dated May 26, 2015, the Board authorized a budget increase and modifications to the Turf Removal Program.

By Minute Item 49542, dated September 10, 2013, the Board authorized new conservation program initiatives.

By Minute Item 49068, dated May 8, 2012, the Board authorized changes to Metropolitan's Water Conservation Program.

By Minute Item 48772, dated August 16, 2011, the Board adopted the Long-Term Conservation Plan and revisions to the water conservation policy principles.

California Environmental Quality Act (CEQA)

CEQA determination for Option #1:

The proposed actions are not defined as a project under CEQA because they involve 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 subject to CEQA because they involve 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).

CEQA determination for Option #2:

None required

Board Options

Option #1

Authorize implementation of the tree rebate option for the Turf Replacement Program.

Fiscal Impact: Estimated $830,000 increase in Turf Replacement Program expenditures per year, which equates to 3 percent of total program budget.

Business Analysis: The proposed changes may increase participation in the Turf Replacement Program.

Option #2

Take no action

Fiscal Impact: None

Business Analysis: Staff would explore other ways to encourage tree installation as part of the Turf Replacement Program.

Staff Recommendation

Option #1

Brad Coffey 8/3/2023

Brad Coffey *Date*
Manager, Water Resource Management

8/7/2023

Adel Hagekhalil *Date*
General Manager

Ref# wrm12689101

One Water and Stewardship Committee

Addition of Tree Rebate to Turf Replacement Program

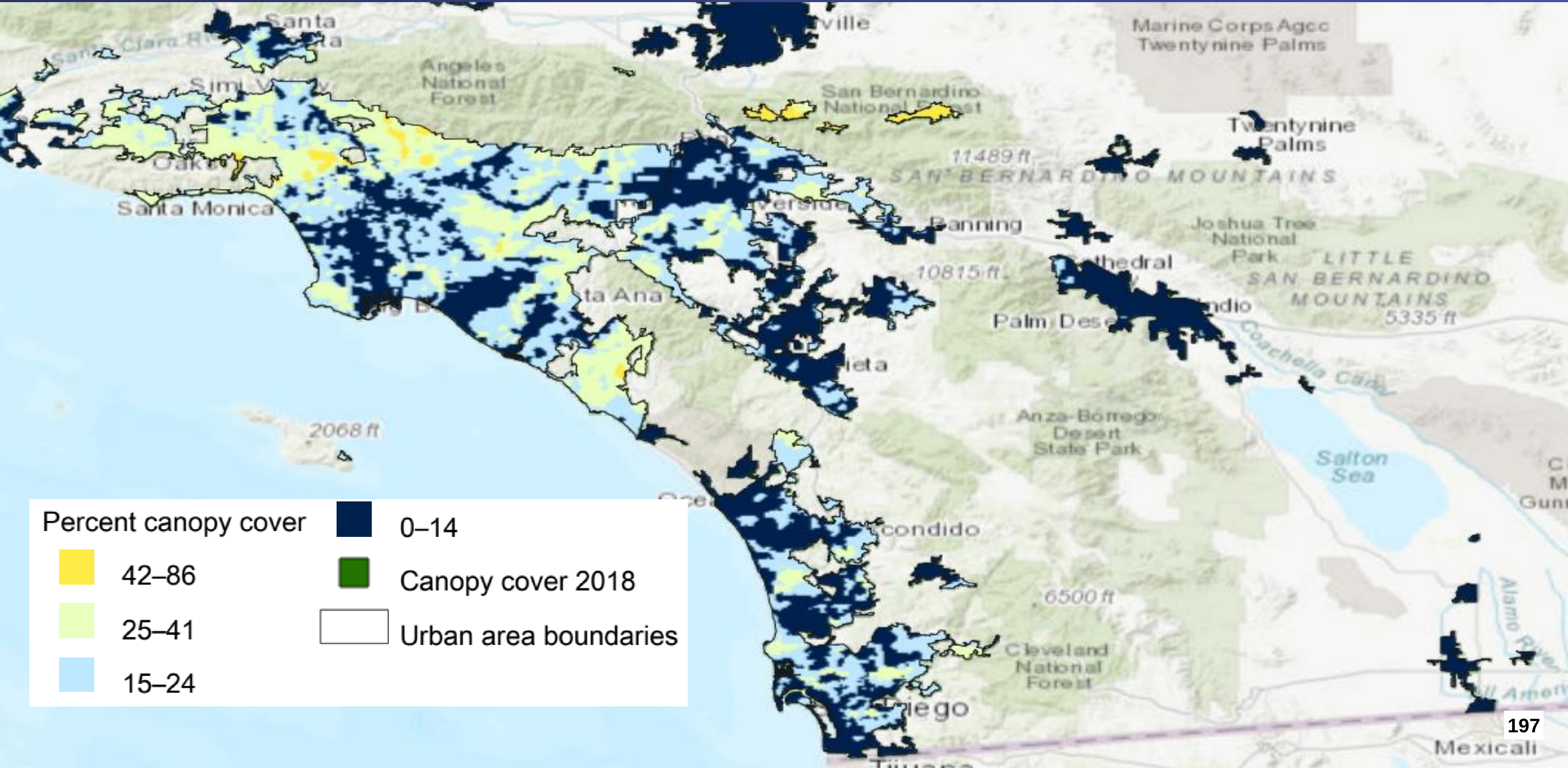
Item 7-4

August 14, 2023

Program Development

- Water use efficiency program advisory committee request
  - Details developed by sub-committee of 6 agencies
- Met with NGOs to discuss program details and resources
  - Positive feedback on program idea and details
  - Provided resources and expertise on recommended tree list and exclusion list

USDA Urban Tree Canopy Map



Benefits of Trees in Turf Replacement Program

Tree Rebate Program

- Urban cooling
  - Trees reduce temperatures by 2-6° F
- Tree root infiltration increases water storage in soil
- Replacing lawn with trees and CA Friendly landscaping reduces water use by at least 30%
- Increases green spaces and urban forests in urban areas

Tree Rebate Program

Other Benefits of Trees

- Urban cooling and energy conservation
- Carbon sequestration
  - Removes 48 lbs. of carbon dioxide per year
- Promotes healthy soil and reduces erosion
- Air quality improvements
  - Filters up to 43 lbs. of particle pollutants per year
- Increases and protects biodiversity
- Increases neighborhood property values
- Reduces stress and improves health

Program Details

- Rebate added to Turf Replacement Program for Residential and Commercial, Industrial, and Institutional properties
- $100 rebate per tree planted; max 5 trees
  - 15-gallon minimum size
  - Edible fruit trees allowed in residential projects
- 1 new tree = 3 plants

Tree Rebate Program

Program Resources

- Tree definition
- Exclusion list – hedges, invasives, non-native palms
- Recommended tree plant list
- Care and maintenance/watering guide

Equivalent Incentive Estimation

	Residential	Commercial
Avg # of Apps Received Per Month(3-month AVG)	516	54
Avg Square Ft. Per Application	1,732	14,725
MWD Turf Replacement Incentive	$2.00	$2.00
Equivalent Additional Incentive Per Sq Ft. w 1 Tree Bonus	$0.06	< $0.01
Equivalent Additional Incentive Per Sq Ft. w 5 (max) Tree Bonuses	$0.29	$0.03

Budget Impacts

	Residential	Commercial
Avg # of Apps Received Per Month (3-month AVG)	516	54
Avg Square Ft. Per Application	1,732	14,725
Dropout Rate	40%	40%
Additional Annual Expenditures for Tree Rebate (Assumes 2 Trees/App)	~$750k	~$78k

- Annual Tree Rebate expenditures expected to cost up to $830K based on current activity and dropout rates = 3% of total projected annual expenditures for TRP

Options

Staff Recommendation

- Option #1
  Authorize Implementation of the Tree Rebate Option for the Turf Replacement Program
- Option #2
  Take no action

THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

1928

- **Board of Directors**
  Ethics, Organization, and Personnel Committee

8/15/2023 Board Meeting

7-5

Subject

Approve proposed amendment to Administrative Code Section 6471 to increase the amount of the Ethics Officer's authority to obtain professional services for external investigations from $100,000 to $250,000; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA

Executive Summary

In March 2023, the Ethics Office requested, and the Board approved, an increase to the Ethics Officer's authority to obtain outside investigators from $50,000 to $100,000 to account for the added investigation responsibilities, new investigation timeframes, and caseload management. Since March 2023, the investigation caseload has increased in amount and complexity.

This action therefore requests that the Board approve an increase to the amount of the Ethics Officer's authority to obtain outside investigators from $100,000 to $250,000 per contract annually.

Timing and Urgency

A delay in approval would likely impact the Ethics Office's ability to meet 90- and 180-day timeframes for investigations and require investigation firms to temporarily stop ongoing investigations until additional funds become available during the annual contract renewal process.

Details

Background

In 2018, the Board approved an increase to the amount of the Ethics Officer's authority to obtain professional services to conduct external investigations from $40,000 to $50,000 per contract per year. The Committee acknowledged that the Board could further amend the Ethics Office contracting amount if it ultimately proved insufficient for future needs. Subsequently, the Board approved changes to the Administrative Code which give the Ethics Officer responsibilities for conducting investigations through outside investigators for ethics investigations and certain Equal Employment Opportunity (EEO) investigations. Further, the Board has since adopted new deadlines for resolution of ethics investigations.

In March 2023, the Board approved a $50,000 increase to $100,000 to account for the increased investigative responsibilities, caseload, and shortened investigation timeframes. After several months of conducting investigations under the $100,000 authorization, it has become clear that the current amount of authorized funds for outside investigation services is not meeting evolving needs. The Ethics Office continues to see an increase in complaints and has been managing multiple ethics and EEO investigations through outside firms.

Summary of Changes Requiring Outside Investigations and Stricter Timeframes

In 2021, the Board approved amendments to the Administrative Code including a requirement that ethics investigations involving directors and direct reports be managed by the Ethics Office through outside investigation firms, as opposed to internal Ethics Office staff.

In November 2022, the Board and internal policies delegated to the Ethics Officer the responsibility of managing certain EEO investigations of directors and employees through outside investigation firms when an EEO complaint should be handled outside of the EEO Office to avoid real or perceived conflicts of interest, or to avoid potential bias or threats to impartiality.

In addition to added investigation responsibilities delegated to the Ethics Officer in 2021, the Board approved a 180-day deadline for most ethics investigations; EEO investigations are expected to be completed within 90 days.

Need for Increase in Authorized Contract Amount for Outside Investigation Services

Increasing the authority from $100,000 to $250,000 would allow staff greater flexibility to meet the office's mandates of additional investigation responsibilities and timely resolution of matters. The number and complexity of investigations are difficult to predict but have been steadily increasing. Without this authorization, staff would need to either place certain investigations on hold until a firm's one-year contract renewal period or come to the Board separately each time a firm is approaching $100,000. In our view, these options are not an efficient approach.

In addition to this authorization request, staff is currently seeking contracts with additional firms. However, due to the complexity of cases, staff does not believe that adding more firms to the roster will on its own resolve the issue presented.

The authorization amount requested would bring the Ethics Office in alignment with the EEO Office's authorization amount for outside investigation firms. The EEO Office is currently authorized to expend up to the General Manager's contracting authority, or $250,000.

In summary, this request is intended to more fully address:

- 2021 amendments to the Administrative Code requiring the use of external investigators for ethics investigations of directors and department heads.
- 2022 amendments to EEO policies delegating to the Ethics Officer responsibility to investigate certain EEO complaints involving directors, direct reports, and employees through external investigators.
- 2021 amendments to the Administrative Code requiring that ethics investigations generally be completed and resolved within 180 days, and internal procedures adopted in 2022 indicating that EEO investigations are expected to be completed within 90 days.
- Board and staff resources involved in seeking board authority to increase individual contracts on a case-by-case basis each time an outside investigator is approaching the $100,000 contract limit. This option would require pausing investigations until additional funding is approved for each firm.

Further, with only one internal ethics investigator evaluating complaints, conducting ethics investigations, and managing contracts with outside investigation firms for ethics and EEO investigations, an increased contract limit would give the Ethics Officer flexibility to hire external firms to investigate routine ethics investigations as needed to avoid a backlog.

See **Attachment 1** for a redlined version of the proposed Administrative Code amendment.

Policy

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

Metropolitan Water District Administrative Code Section 6471: Authority to Obtain Professional Services.

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 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).

CEQA determination for Option #2:

None required

Board Options

Option #1

Approve proposed amendment to Administrative Code Section 6471 to increase the amount of the Ethics Officer's authority to obtain professional services for external investigations from $100,000 to $250,000 per contract per year.

Fiscal Impact: This authorization would not modify the Ethics Office's authorized budget for FY 2023/24.
Business Analysis: This option will help avoid unnecessary delays in resolving investigations.

Option #2

Do not approve recommended amendment to the Administrative Code.
Fiscal Impact: None
Business Analysis: This option will delay resolution of Ethics Office investigations.

Staff Recommendation

Option #1

Abel Salinas 8/8/2023
Abel Salinas *Date*
Ethics Officer

Attachment 1 – Redline Version, Proposed Administrative Code Amendment

Ref# e12692064

§6471. Authority to Obtain Professional Services.

(a) The Ethics Officer is authorized to contract for independent legal counsel as they deem necessary in fulfilling duties and responsibilities of the Ethics Office. The Ethics Officer may contract with one or more attorneys or law firms depending on the areas of expertise needed. The amount to be expended in fees, costs and expenses under any one contract in any one-year period shall not exceed $100,000. The General Counsel shall review such contracts solely for consistency with Metropolitan's contract requirements. The General Counsel shall not have the authority to deny the Ethics Officer's ability to contract with any given party.

(b) The Ethics Officer is authorized to contract for professional services of outside investigators and investigation firms to conduct investigations under the Ethics Officer's purview. The amount to be expended in fees, costs, and expenses under any one contract in any one-year period shall not exceed $25~~10~~0,000.

(c) The Ethics Officer is authorized to employ the services of other professional or technical consultants for advice and assistance in performing the duties assigned as may be required or as deemed necessary, provided that the amount to be expended in fees, costs and expenses under any one contract in any one year shall not exceed $50,000.

(d) The Ethics Officer shall inform the Ethics, Organization and Personnel Committee whenever the authority granted under this section is exercised, and shall further report quarterly on activities concerning any agreements entered into under this section. Any such contracts shall be consistent with Metropolitan contract requirements and shall be reviewed by the General Counsel.

M. I. 45285 - April 8, 2003; amended by M. I. 46064 – January 11, 2005; amended by M.I. 46983 - February 13, 2007; amended by M. I. 47636 - September 9, 2008; renumbered from Section 6472 to 6471 and amended same by M.I. 51391 - November 6, 2018; added paragraph numbering to Section, added new paragraph (a) by M.I. 52941- August 16, 2022; amended paragraph (a) by M.I. 53014 – October 11, 2022; amended paragraphs (a) and (c) by M.I. 53064 – December 13, 2022; added new paragraph (b), and renumbered paragraphs (c) – (d) by M.I. 53185 - March 14, 2023.

Ethics, Organization, and Personnel Committee

Ethics Officer Contracting Authority for Outside Investigations

Item 7-5

August 15, 2023

Proposed Amendment to Administrative Code

§6471. Authority to Obtain Professional Services.

(b) The Ethics Officer is authorized to contract for professional services of outside investigators and investigation firms to conduct investigations under the Ethics Officer's purview. The amount to be expended in fees, costs, and expenses under any one contract in any one-year period shall not exceed $25~~10~~0,000.

Board Options

Option #1

Approve proposed amendment to Administrative Code section 6471 to increase the amount of the Ethics Officer's authority to obtain professional services for external investigations from $100,000 to $250,000 per contract per year.

Option #2

Do not approve recommended amendment to the Administrative Code.

THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

1928

THE METROPOLITAN WATER DISTRICT
OF SOUTHERN CALIFORNIA

BOARD ACTION

- **Board of Directors**
  Ad Hoc Committee on Facilities Naming

8/15/2023 Board Meeting

7-6

Subject

Approve the nomination and renaming of Metropolitan's Pure Water Southern California Demonstration Plant as the Grace F. Napolitano Pure Water Southern California Innovation Center; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA

Executive Summary

Metropolitan's Facilities Naming Policy Principle establishes approved standard criteria and procedures to submit a naming request for consideration by Metropolitan's Board. The Board has received a nomination to rename the Pure Water Southern California Demonstration Plant in honor of Representative Grace F. Napolitano. The facility would be renamed the Grace F. Napolitano Pure Water Southern California Innovation Center.

Timing and Urgency

As soon as practical.

Details

Background

The Metropolitan Water District of Southern California (Metropolitan) is responsible for its facilities, including the construction of new facilities and operations and maintenance of existing facilities. A Metropolitan facility may be named or renamed after an individual, group of individuals, or an organization. The criteria shall include but are not limited to: (1) Substantial, important, and positive impact upon Metropolitan as a member of its board or personnel; (2) Personal achievements of the highest distinction in a public service role, while maintaining close ties with and providing significant support to MWD; and (3) Names that have historical or regional significance to the facility or location.

Grace F. Napolitano Nomination

U.S. House of Representative, Grace F. Napolitano, a staunch advocate for securing clean, reliable, and sustainable water supplies in Southern California, has proven to be an invaluable ally to Metropolitan. With unwavering dedication, she has championed causes such as increased water recycling, enhanced water conservation, innovation, and the safeguarding of our precious sources of drinking water. Her personal and professional achievements in a public service role are many, and the nomination is consistent with the established criteria for naming or renaming a Metropolitan facility.

Having been elected to the California Assembly in 1992, Napolitano swiftly established herself as a diligent worker and a staunch defender of environmental preservation, economic growth, and social equality. Since joining the U.S. House of Representatives in 1999, Napolitano has committed herself to improving the communities under her purview, with a particular focus on water-related matters, innovation, environmental protection, labor and economic development initiatives, and social equity issues. Notably, she has served as the lead Democrat on the Subcommittee on Water Resources and Environment for the past eight years, overseeing the Environmental Protection Agency's Clean Water Act programs, the U.S. Army Corps of Engineers' water initiatives, and the development of the biannual Water Resources and Development Act (WRDA).

Ms. Napolitano's influence has been instrumental in securing the passage of the bipartisan WRDA bill, which empowers local agencies to spearhead U.S. Army Corps of Engineering projects. Moreover, as a member of the House Committee on Natural Resources, Representative Napolitano actively advocates for conservation, water recycling, desalination, and effective groundwater management as viable solutions to address Southern California's water requirements. Her relentless efforts extend to advancing water recycling initiatives and consistently advocating for annual funding allocations to support these projects.

The protection of the Colorado River's water quality has been a focal point of Napolitano's endeavors, and she tirelessly ensures that the U.S. Department of Energy receives essential funding to remediate uranium mill tailings near the Colorado River. She also played a pivotal role in establishing the U.S. Bureau of Reclamation's large-scale water recycling program, which facilitates the progress of projects like the transformative Pure Water Southern California initiative and other statewide endeavors focused on recycled water implementation.

Ms. Napolitano's contributions to securing hydroelectric power allocations for Metropolitan and other historic power contractors, including granting Native American tribes access to new power resources, were pivotal in the passage of the Hoover Dam Power Allocation Act (P.L. 112-72). In addition, she co-sponsored key legislation aimed at bolstering the reliability of Metropolitan's imported water supply, such as the Water Supply, Reliability, and Environmental Improvement Act (P.L. 108-361), which established the CALFED program, and the Colorado River Drought Contingency Plan Authorization Act (P.L. 116-14).

Throughout her career, Representative Napolitano has been honored by many professional organizations and has raised public awareness, promoted innovative activities, and brought increased attention to water quality and supply issues **(Attachment 1.)** Representative Napolitano is a determined advocate who ardently serves her constituents, working diligently and transparently to address the pressing challenges faced by Metropolitan and other water agencies, both in the present and in preparation for the future.

Attachment 2 is the nomination submittal for Grace F. Napolitano, submitted by Metropolitan's Chair of the Board of Directors. **Attachment 3** is a resolution signed by Metropolitan's Chair of the Board of Directors, two Vice Chairs, and the Secretary of the Board, as well as Metropolitan's General Manager, in support of this nomination. **Attachment 4** is a letter of support for this facility's renaming request in honor of Grace F. Napolitano from Central Basin Municipal Water District.

Policy

Metropolitan Water District Administrative Code Section 11104: Delegation of Responsibilities

By Minute Item 51324, dated September 11, 2018, the Board adopted the proposed Metropolitan Facilities Naming Policy Principle as a Board-Adopted Policy Principle.

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 it would not cause either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment, and it involves organizational or administrative activities of governments that will not result in direct or indirect physical changes in the environment. (Section 15378(b)(5) of the State CEQA Guidelines).

CEQA determination for Option #2:

None required

Board Options

Option #1

Approve the nomination and renaming of Metropolitan's Pure Water Southern California Demonstration Plant as the Grace F. Napolitano Pure Water Southern California Innovation Center.

Fiscal Impact: Minimal costs consisting of the estimated cost to provide signage for the facility. Staff work would be required to update the name of the project/facility on documents and information materials.

Business Analysis: Approval of nomination and renaming as the Grace F. Napolitano Pure Water Southern California Innovation Center will demonstrate her civic achievements of the highest distinction in a public service role, while maintaining close ties with and providing significant support to Metropolitan.

Option #2

Do not approve the nomination and renaming of Metropolitan's Pure Water Southern California Demonstration Plant.

Fiscal Impact: None

Business Analysis: If the nomination and renaming are not approved, Metropolitan would forgo the opportunity to acknowledge the civic achievements of Grace F. Napolitano and her support to Metropolitan.

Staff Recommendation

Option #1

8/10/2023

Sue Sims *Date*
Group Manager – External Affairs

8/10/2023

Adel Hagekhalil *Date*
General Manager

Attachment 1 – Napolitano Awards Hearings

Attachment 2 – MWD Facilities Naming Nomination

Attachment 3 – Representative Grace F. Napolitano Resolution

Attachment 4 – Napolitano CBMWD

Ref# ea12694540

Facilities Naming Ad Hoc Committee – Grace F. Napolitano

Background Information on Honors, Congressional Hearings and Public Forums

Throughout her career, U.S. House Representative Napolitano has been actively involved in efforts to fund and secure clean and reliable water supplies for communities within her congressional district and throughout California. A few of the many examples of her leadership are detailed below and include:

- West Basin MWD Legislator of the Year Award for advancing legislation that addresses water supply reliability (March 2023)
- Gold de Fluery Medal by U.S. Army Corps of Engineers (December 2020)
- Congressional Champion Award from Vinyl Institute in recognition of longstanding support of investing in the nation's water infrastructure (July 2020)
- Harriett Wieder Leadership Award by the Southern California Water Committee (November 2011)
- Award of Merit by the American Water Works Association (March 2009)

Ms. Napolitano has also convened several Congressional hearings and public forums in Southern California on policy issues and to discuss opportunities to ensure a sustainable water future. These have provided local residents with an opportunity to learn about programs and resources on water supplies, conservation and water efficiency, federal funding and water quality.

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March 21, 2023

WEST BASIN BOARD ANNOUNCES LEGISLATORS OF THE YEAR

State and Federal Awardees Recognized for their Advocacy on California Water Issues

CARSON, Calif. – The West Basin Municipal Water District (West Basin) Board of Directors announced its Legislator of the Year awardees. This award recognizes legislators who have been influential in advocating for and advancing legislation that addresses water supply resiliency.

West Basin Board President, and Division IV Director, Scott Houston thanked this year's recipients for their prudent and supportive efforts, stating "Our congressional and state delegations are vital in assisting West Basin to carry out our mission of delivering reliable, high-quality water to the communities we serve. These awards recognize the critical work of our legislators for their advocacy and commitment to water resiliency and long-term sustainability for California."

At the state level, West Basin honors three legislators for their ongoing support of water industry initiatives:

- Laura Friedman, Assemblymember, 44th District
- Jesse Gabriel, Assemblymember, 46th District
- Reginald Jones-Sawyer, Assemblymember, 57th District

On the federal level, West Basin recognizes the leadership of the following members of Congress:

- Dianne Feinstein, U.S. Senator for Calif.
- Alex Padilla, U.S. Senator for Calif.
- Grace Napolitano, U.S. Representative, 31st District of Calif.
- Ted Lieu, U.S. Representative, 36th District of Calif.
- Sydney Kamlager-Dove, U.S. Representative, 37th District of Calif.
- Maxine Waters, U.S. Representative, 43rd District of Calif.

The West Basin Board of Directors and legislative team will present the awards to this year's recipients during the District's spring legislative trips to Sacramento, Calif. and Washington, D.C.

PDF:

- 3-21-23-Press-Release-Legislator-of-the-Year-Awards-FINAL.pdf

Print

Napolitano Awarded Gold de Fleury Medal by U.S. Army Corps of Engineers

December 18, 2020 **Press Release**

(WASHINGTON, DC) Today, Rep. Grace F. Napolitano (D-CA-32) announced she had been **selected by the U.S. Army Corps of Engineers to receive the Gold Order of the de Fleury Medal** for her significant contributions to Army Engineering.

"I am incredibly humbled and honored to receive this medal from the U.S. Army Corps of Engineers on behalf of all my hardworking personal and Transportation Subcommittee staff," **Napolitano said**. "The Corps of Engineers embodies the best of our nation—soldiers and civilians working every day domestically to protect us from flooding and to maintain our harbors, lakes, and rivers for the economic, recreational and environmental benefit of our country. The Corps designs and constructs our military bases, Veterans hospitals, and other key federal infrastructure, from the California delta to the Florida Everglades. And when abroad, the Corps provides the engineering and implementation support in the most difficult and dangerous places around the globe to keep our military safe, secure, and ready."

"The greatness of the Corps is found in the soldiers and civilians I have had a pleasure to work with during my 22 years in Congress and the past 6 years leading the Water Resources and Environment Subcommittee. It is seen in their willingness to work with our communities to better service the needs of the people in all our areas," **Napolitano continued**. "These incredible public servants in the Los Angeles District, the South Pacific Division, and throughout the nation devote their lives to protecting the American people and improving our natural resources. They are an unseen, dedicated, and critical part of our government."

"It is truly a highlight of my career to be recognized by these invaluable public servants, and I commit to continue advocating in Congress for their best interests, which are the best interests of the nation, and to support their mission," **Napolitano concluded**.

Lt. Gen. Scott Spellmon, 55th Chief of Engineers and Commanding General of the U.S. Army Corps of Engineers, notified Napolitano of her selection to receive the award on December 7.

"Rep. Napolitano has been a staunch supporter of U.S. Army Corps of Engineers projects," said **Lt.Gen. Spellmon**. "Most recently she made securing funding for the Whittier Narrows Dam one of her top priorities. She understands the importance of dam safety work and water supply operations. She has spent years working with the Corps and advocating for this project and other infrastructure of national significance."

The 54th Chief of Engineers, retired Lt. Gen. Todd Semonite, selected Napolitano to receive the award. The award was scheduled to be presented in July 2020, however due to COVID-19, the award presentation is now scheduled for July 2021.

The Order of the de Fleury was established in 1779 in honor of Francois Louis Tesseidre de Fleury, a French engineer, who volunteered to serve during the American Revolution. There are four different levels of the award, which are steel, bronze, silver and gold, with gold being the most prestigious.

The chief of engineers selects one gold award recipient from inside the Engineer Regiment, and one recipient from outside the regiment, each year.

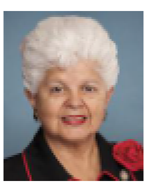
# # #

Vinyl Institute Presents Congressional Champion Award to Congresswoman Napolitano

Grace Flores Napolitano is being honored for her tireless efforts advancing legislation that addresses the critical needs of water infrastructure.

Clare Goldsberry | Jul 08, 2020

The Vinyl Institute (VI) announced the presentation of its Congressional Champion Award to Chairwoman Grace Flores Napolitano in recognition of her longstanding support of investing in the nation's water infrastructure.



Grace Flores Napolitano is US Representative for California's 32nd congressional district. Image courtesy Vinyl Institute.

"We are honoring Chairwoman Napolitano for her tireless efforts in advancing legislation that addresses the critical needs of our nation's water infrastructure," said Ned Monroe, VI President and CEO. "As an original co-sponsor of both the Water Quality and Job Creation Act and the SMART Infrastructure Act, Chairwoman Napolitano is adept at finding common ground on both sides of the aisle to effect legislation that has a positive impact on communities, jobs, and the economy."

Chairwoman Napolitano represents California's 32nd district, which employs nearly 1,900 people at 12 facilities with an economic impact of more than $289 million. Her Los Angeles County-based district covers several cities and communities in the San Gabriel Valley. She currently serves as chairwoman on the Subcommittee on Water Resources and Environment, which oversees the US

Rep. Napolitano Recognized with Southern California Water Committee Award

November 17, 2011 **Press Release**

Today, Rep. Grace F. Napolitano was honored with the 2011 Harriett Wieder Water Leadership Award by the Southern California Water Committee.

"I am honored and humbled to receive this award," Napolitano said. "Many challenges to our water supply remain for us to overcome, including climate change, a growing population, and the rising price of water. With continued cooperation at the local, state, and federal level, we can develop the reliable and inexpensive water supply we need to grow our economy. I thank the Southern California Water Committee and look forward to working together on these issues."

Napolitano was selected for her leadership on the Hoover Power Allocation Act of 2011, which reauthorizes the Hoover Dam to continue providing power to communities across California, Nevada, and Arizona through 2067. The bill also sets aside 5% of the dam's power to allow Native American tribes and other groups to access it for the first time. The House and Senate passed the bill last month after a multi-year effort

Napolitano is the top Democrat on the House Water and Power Subcommittee.

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Water

Rep. Napolitano Honored by American Water Works Association

March 24, 2009 **Press Release**

(Washington, DC) On March 24th, Rep. Napolitano was given an Award of Merit by the American Water Works Association (AWWA).

The award is given to "recognize achievement of those outside the water profession who have demonstrated outstanding service in support of the principles of AWWA in providing better water for people."

Rep. Napolitano is chair of the House Water and Power Subcommittee and Co-Chair of the House Water Caucus.

# # # #

Water

Napolitano Holds Forum on SoCal's Water Future

August 31, 2017 **Press Release**

(BALDWIN PARK, CA) Today, Rep. Grace F. Napolitano (D-El Monte) held a public forum with local residents and leaders of industry, government, research, and academia at the Performing Arts Center of Baldwin Park to discuss how to achieve a sustainable water future for Southern California.

"Today's forum is truly a team effort with the central goal of securing a reliable, sustainable water supply for the San Gabriel Valley and all of Southern California," **Napolitano said**. "Universities, water agencies, cities, businesses, farmers, and residents must all work together, and science must continue to be at the root of our water policy discussions. We are grateful to have many of the brightest minds in their respective fields with us today, whose innovative approaches may help us address our toughest water supply challenges and infrastructure needs right here in the San Gabriel Valley. We thank all of our panelists for sharing their time and expertise and all who have come to learn, dialogue, and advance solutions for our region."

Approximately 125 people attended the forum and heard from more than a dozen speakers and panelists. Presentations highlighted ongoing challenges facing the region with unpredictable drought cycles and climate change, while offering insights into how to continue expanding Southern California's water portfolio with the emphasis on sustainability.

"This is a continuation of the Congresswoman's commitment to annually hold a water forum that brings together local water districts, government officials, and academic institutions to discuss the opportunities and issues of water importance to the 32nd District," **said Dave Wegner of the Water Science Technology Board, National Academy of Sciences**. "It allows for discussions between the users and regulators, and fosters an environment to look at innovative opportunities and approaches to water issues before they become problematic, while helping to educate young people on interacting with the government on water issues."

"As we work collaboratively to address our water supply needs, success will come through the sharing of information and resources," **said Anthony Zampiello, the Executive Officer of the Main San Gabriel Basin Watermaster.** "Events such as this increase partnership opportunities and help area water leaders to preserve and improve the water quality and quantity for our communities."

"It is critical that we work together to address our water problems," **said Thomas Wong, President of the Board of Directors for the San Gabriel Valley Municipal Water District.** "Today's forum was an excellent opportunity to learn about and engage with what's happening at the federal, state, and local levels as we prepare for our region's water future."

"Today was great to hear about all of the innovative and exciting water projects that will be important solutions to help with our water supply challenges," **said Sam Pedroza, Claremont City Councilman.** "I was happy to be here representing Claremont to explore ways to secure funding for local governments, from state and federal sources, to maintain affordable water prices for the San Gabriel Valley."

Napolitano is a long-time promoter of conservation, water recycling, desalination, and groundwater management as solutions to Southern California's water needs. She is the top Democrat on the House Transportation and Infrastructure Subcommittee on Water Resources and Environment, and a current member and former Ranking Member of the House Natural Resources Water, Power, and Oceans Subcommittee.

All presentations by panelists will be uploaded following the event and available here: **https://napolitano.house.gov/2017-socal-water-forum-presentations-panelists.**

# # #

Community Event Environment Water

HOME / MEDIA / PRESS RELEASES

Napolitano Holds SoCal Stormwater Forum

November 21, 2016 **Press Release**

(San Dimas, CA) On Friday, November 18, 2016, Rep. Grace F. Napolitano (D-El Monte) held a public forum with local residents and leaders of industry, government, research, and academia in the City of San Dimas to discuss how to achieve a sustainable water future for Southern California while meeting stormwater regulations.

"Southern California residents, cities and water agencies have made extraordinary efforts to tackle our current drought by conserving water and implementing alternative water supply projects, such as water recycling, stormwater capture, and groundwater management," **Napolitano said.** "We are so grateful to our speakers whose time and expertise are invaluable contributions to the discussion. As a product of forums like this one, I have introduced multiple bills in Congress to support our constituents by investing in these cost-effective, long-term solutions to address the drought and stormwater crisis. Congress must act to provide a sustainable water supply for our future and create good paying jobs in water construction and operations."

The forum was the combination of a series of workshops Napolitano has held on the Los Angeles County Municipal Storm Sewer Systems (MS4) permit and forums on developing a sustainable water future for Southern California. Eleven speakers and panelists offered proposals as to how to expand Southern California's water portfolio in a sustainable manner, stressing the importance of collaboration.

"It was great to come together with the Congresswoman today to hear about all of the exciting stormwater projects that are going to be important solutions to help with our drought conditions," **said Dr. Adam L. Smith, Assistant Professor at the University of Southern California School of Engineering.** "I was happy to be here representing USC to share the different campus initiatives we have to collect and reuse stormwater."

"As we work collaboratively to address our stormwater needs, the power comes through sharing resources and maximizing the inclusiveness of compliance," **said Dr. Alex Rojas, Superintendent of Bassett Unified School District.** "Whether between cities, counties, school districts, or universities, increasing the amount of compliance opportunities would be beneficial to all."

"It is wonderful to be brought together in a forum like this where we can share ideas," **said Alexandra Paxton, Program Manager at the Water Foundation.** "The solution to our stormwater quality issues and our water supply issues is only going to be achieved through collaboration and shared out of the box thinking."

"I was happy to participate in the SoCal Stormwater Forum having been invited to share the vast and professional experience of our 30,000 hardworking, well-trained men and women, as it relates to the stormwater issue in California," **said Robert Lizarraga, Marketing Representative at LECET (Laborers Employers Cooperation and Educators Trust) Southwest.** "We look forward to being a vital and important partner in utilizing our resources in bringing viable and realistic solutions to this issue."

Approximately 100 people attended the forum with the goal of continuing a water conversation and setting a different tone in addressing Southern California's water future. Panelist presentations and discussions among participants also highlighted ongoing challenges the region faces in working toward a sustainable water future.

Rep. Napolitano Holds Forum on SoCal's Water Future

August 27, 2015 **Press Release**

(Pomona, CA) Today, Rep. Grace F. Napolitano (D-El Monte) held a public forum with local residents and leaders of industry, government, research, and academia at Cal Poly Pomona University to discuss how to achieve a sustainable water future for Southern California.

"We must collaborate to address our state's ongoing drought crisis and prepare for the future," **Napolitano said.** "Today we continue the important dialogue from two years ago, and we are pleased to bring together so many entities invested in water. Our drought challenges are more severe now, and a stronger, more comprehensive approach is needed."

Today's forum grew out of the water workshop held two years ago at Metropolitan Water District of Southern California Headquarters and coincided with the **State Water Resources Control Board's announcement of conservation numbers for July 2015** , indicating a 28.3% reduction in water use in the South Coast hydrologic region, which encompasses Napolitano's San Gabriel Valley-based district. More than a dozen speakers and panelists offered insights into how to expand Southern California's water portfolio in a sustainable manner.

"It was great to see how we are working together to talk about these problems, how what we are doing at the state level is informed by NOAA, NASA and others," **saidJanelle Beland**, California Natural Resources Agency Undersecretary. "Today's forum was a really good opportunity to showcase the coordination taking place as we consider our water future."

Approximately 150 people attended the forum with the goal of continuing a water conversation and setting a different tone in addressing Southern California's water future. Panelist presentations and discussions among participants also highlighted ongoing challenges the region faces in working toward a sustainable water future.

"The largest obstacle we face is cost," **said Caitrin Phillips Chappelle**, Associate Director of the Public Policy Institute of California." Everything Southern California and other parts of the state want to do to diversify water supplies is expensive. Raising funds locally, getting state and federal support, and trying to maintain affordable water prices are our greatest challenges."

"It is critical that we fund and share new technologies, research, and innovation; science must be a part of our policy discussions," **Napolitano added**. "We must continue to educate each other and the public because without water, we have nothing."

Napolitano is the top Democrat on the House Transportation and Infrastructure Subcommittee on Water Resources and Environment and a current member and former Ranking Member of the House Natural Resources Water and Power Subcommittee.

All presentations by panelists will be uploaded following the event and can be accessed **here**.

Community Event Water

Rep. Napolitano's Congressional Hearing in L.A. Highlights Need for Increased Water Efficiency

January 26, 2010 **Press Release**

(**Washington D.C.**)- Yesterday, the Subcommittee on Water and Power, headed by Congresswoman Grace Napolitano, held an oversight field hearing on California's water problems in the Metropolitan Water District boardroom in Los Angeles. Three panels of expert witnesses testified to the complexity of California's water system and the effect its failures have had on water users ranging from farmers to fishermen to urban communities. It was clear from their testimony that California's water system is not up to the task of providing cheap, reliable water in times of drought. Looking to the future, witnesses identified long term trends of population growth and climate change that require new measures in conservation, water recycling, and reuse to make California's water supply more stable and reliable during future drought cycles.

"We need to change the way we think about water. The public has to be informed and educated so that they know the facts, and realize that we have to look to new solutions for our future," Napolitano said. "Growing population and climate change mean that we need to continue to install water conservation, recycling, and reuse measures as a safety net for times when water is tight."

"By 2050, scientists project a loss of at least 25 percent of the Sierra snowpack," said Director of California's Department of Water Resources Lester Snow, speaking about a critical source of water for the state that fills streams and underground aquifers. "Our new reality is that we must manage a resource characterized by uncertainty and vulnerability due to climate change."

"Drought in California is a fact of life," said Lucy Dunn, President of the Orange County Business Council. "Drought will return, and without investment the effect will be to hurt the quality of life and economic competitiveness of the state."

"We have to do the most effective, most cost effective things first," said Dr. Peter Gleick, President of the Pacific Institute and an expert on water issues. "Improving the efficiency of our water use is the cheapest, easiest, fastest, and least destructive way to meet California's current and future water supply needs."

The hearing was held in Southern California due to the success local water agencies there have had in dealing with drought. Los Angeles cut its water usage 18.4% this summer, its lowest water usage in 18 years at a time when its population has increased by 500,000 people. San Diego and Riverside Counties reduced their water usage by 13%, and the city of Long Beach reduced its usage 21% from its ten-year average.

"Here in Southern California, local governments and agencies have responded by partnering with state and Federal agencies to achieve tremendous reductions in per capita water use," said Mike Connor, Commissioner in the Bureau of Reclamation in the US Department of the Interior. "We know that an emphasis on water conservation is key to the sustainability of the state of California."

"Despite the welcome recent rains and the good effort on local conservation, the underlying crisis remains and will be readily apparent in the months and years ahead," said Jeffrey Kightlinger, General Manager of the Metropolitan Water District of Southern California.

"It is clear that there is a critical role in California for assistance from Congress," Napolitano said. "We have listened to experts, government officials, and people whose livelihoods rely on the cheap flow of water and will continue to do so. With this knowledge we can work on behalf of California to support an efficient water system that provides cheap, reliable water even in times of drought."

(###)

Water

THE METROPOLITAN WATER DISTRICT
OF SOUTHERN CALIFORNIA

Metropolitan Facilities Naming Request Form

It is the policy of The Metropolitan Water District of Southern California ("Metropolitan") acting through its Board of Directors to name and rename facilities. The naming and renaming criteria and procedures are available in the **Metropolitan Facilities Naming Policy Principle.** This form shall be used by an individual, groups of individuals or organization proposing names for new Metropolitan facilities or the renaming of existing Metropolitan facilities.

1. **Name for consideration:** Grace F. Napolitano
   - ☐ Board to select appropriate Metropolitan facility
   - ■ Facility proposed for naming or renaming: Grace F. Napolitano Pure Water Southern California Innovation Center (currently the PWSC Demonstration Facility)
2. **The criteria which the proposed name meets or satisfies:** (check all that apply)
   - ☐ Substantial, important and positive impact upon Metropolitan as a member of its Board or staff
   - ■ Personal achievements of highest distinction in a public service role, while maintaining close ties with and providing significant support to Metropolitan
   - ☐ Names that have historical or regional significance to the facility or location, ordinarily not for living persons
   - ☐ Other: ____________________
3. **Provide supporting documentation, as available:**
   a. A memorandum giving the particulars of the naming request that includes the rationale for the naming, referring to relevant criteria;
   b. Background and information about the individual, group of individuals, or organization for which the facility is to be named or renamed;
   c. Letters of support for this request;
   d. Other information that may be relevant to the potential implementation of the request such as historical photographs and articles;
   e. A list of other facilities named, or being proposed to be named or renamed after the same individual, group of individuals or organizations, including location and date.

You may be contacted by Metropolitan staff for additional information, if needed.

Name of Requestor: Adan Ortega
Mailing Address: 1370 N Brea Blvd #235, Fullerton, CA 92835
Telephone: 714-600-4683 **Email:** AOrtegaJr@mwdh2o.com
Signature: ____________________ **Date:** __________

Please mail this application and supporting documents to: Metropolitan Board of Directors, P.O. 54153, Los Angeles, CA 90054-053 or **ssims@mwdh2o.com**

The Metropolitan Water District of Southern California

REPRESENTATIVE GRACE NAPOLITANO

Whereas, Grace Flores Napolitano was first elected to Congress in 1998 and has served in the U.S. House of Representatives for 24 years representing San Gabriel Valley and parts of Los Angeles County.

Whereas, Representative Napolitano is the highest-ranking California member the U.S. House Committee on Transportation and Infrastructure. For the last eight years, she has been the lead Democrats on the Subcommittee on Water Resources and Environment.

Whereas, in this role Representative Napolitano oversees EPA's Clean Water Act programs and US Army Corps of Engineers water programs and develops the biannual Water Resources and Development Act (WRDA).

Whereas, Representative Napolitano plays an instrumental role in passage of the bipartisan WRDA bill, authorizing locally driven Army Corps of Engineering projects, every two years since 2014.

Whereas, Representative Napolitano also serves on the House Committee on Natural Resources and is a long-time advocate for conservation, water recycling, desalination, and groundwater management as solutions to Southern California's water needs.

Whereas, she helps advance water recycling projects throughout California and champions yearly appropriations for water recycling projects.

Whereas, Representative Napolitano works to protect the quality of Colorado River water and ensures the Department of Energy receives critical funding to clean up uranium mill tailings near the Colorado River.

Whereas, she helped create the Bureau of Reclamations new large-scale water recycling program to help advance our Pure Water Southern California project and other large-scale recycled water projects throughout California.

Whereas, Representative Napolitano played a pivotal role in passage of the Hoover Dam Power Allocation Act (P.L. 112-72) providing power to Metropolitan and other historical power contractors and allowing new access to power for Native American tribes.

Whereas, she also co-sponsored legislation to improve the reliability of Metropolitan's imported water supply including the Water Supply, Reliability, and Environmental Improvement Act (P.L. 108-361) that created the CALFED program, and the Colorado River Drought Contingency Plan Authorization Act (P.L. 116-14).

Whereas, Representative Napolitano works diligently and forthrightly on behalf of her constituents and helps water agencies address their current challenges and prepare for the future.

Now, therefore, be it resolved, The Metropolitan Water District of Southern California commends Representative Grace Napolitano for her leadership and guidance on California water issues.

Adán Ortega
Chairman

Adel Hagekhalil
General Manager

David DeJesus
Vice Chair

Cynthia Kurtz
Vice Chair

Judy Abdo
Secretary

Central Basin
Municipal Water District

Central Basin MWD
P.O. Box 911579
Los Angeles, CA 90091

Office: 323.201.5500
www.centralbasin.org

July 24, 2023

Director Michael Camacho
Chair, Adhoc on Facilities Naming
Metropolitan Water District Board of Directors
700 N. Alameda Street
Los Angeles, CA 90012

Re: Support for Facilities Naming Request in Honor of Grace Napolitano

Dear Chairman Camacho:

On behalf of the Central Basin Municipal Water District, we are pleased to submit a letter to name a Metropolitan Water District (Metropolitan) facility in honor of Grace F. Napolitano, a devoted advocate for securing clean, reliable, and sustainable water supplies in Southern California. Congresswoman Napolitano's unwavering dedication, contributions, and leadership have championed many causes that have impacted our service territory and the entire State of California.

Congresswoman Napolitano quickly gained a reputation as a dedicated advocate for the environment, economic growth, and social equality after being elected to the State Assembly in 1992. She personally worked with local water suppliers to expand the use of recycled water in state and commercial facilities. After joining the U.S. House of Representatives in 1999, she focused on helping not only her constituents but the entire Western United States with safe and secure water supplies. She was among the first to recognize the need to supplement the aging workforce in the water supply arena and to drive funding towards training opportunities aimed at youth, veterans, women, and other potential talent pools.

Congresswoman Napolitano actively advocates for conservation, water recycling, desalination, and effective groundwater management as viable solutions to address Southern California's water requirements. Her relentless efforts extend to advancing water recycling initiatives and consistently advocating for billions in annual funding allocations to support these projects.

Our agency and our customers have greatly benefitted from Congresswoman Napolitano's outstanding leadership. For these efforts and many others, we respectfully request your consideration in naming a Metropolitan facility in honor of Grace F. Napolitano.

Sincerely,

Arturo Chacon

Art Chacon
Board President

- **Board of Directors**
  Finance, Audit, Insurance, and Real Property Committee

8/15/2023 Board Meeting

8-1

Subject

Adopt resolution establishing the Ad Valorem tax rate for fiscal year 2023/24; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA

Executive Summary

Metropolitan collects ad valorem property taxes from all non-exempt properties within its service area to pay for debt service on its general obligation bonds and to pay a portion of its State Water Contract obligations for participation in the State Water Project (SWP). Since Fiscal Year (FY) 2012/13, the tax rate has been maintained at 0.0035 percent, which is approximately $25 per year for a property assessed at $700,000. Metropolitan's current tax rate is the lowest rate Metropolitan has ever assessed. The adopted budget assumed that continuance of the property tax rate would generate approximately $168.3 million in revenue during FY 2023/24. Based on the recently received county tax assessors' reports, the estimated revenue to be collected is approximately $187.9 million in FY 2023/24. This is $19.6 million more than the budgeted amount for property tax revenues for FY 2023/24. While the amount of property taxes actually collected will vary, it is important to note that estimated SWP costs of $761 million far exceed the estimated tax revenues generated by the levy.

To collect the estimated ad valorem property tax revenue, staff recommends the Board fix the rate for FY 2023/24 at 0.0035 percent. **Attachment 1**, Resolution Levying Ad Valorem Property Taxes for the Fiscal Year Commencing July 1, 2023 and Ending June 30, 2024 for the Purposes of The Metropolitan Water District of Southern California (Option 1), supports this recommendation.

If the Board does not maintain the existing 0.0035 percent ad valorem property tax rate, it has the option to adopt a resolution at a different tax rate, direct staff to transmit that resolution to the county auditors for the levy and collection of the tax, and direct staff to set a process to revisit the FY 2023/24 portion of the biennial budget, as well as the water rates and charges for calendar year (CY) 2024, which were adopted based on the assumption that the existing .0035 percent ad valorem property tax rate would continue. **Attachment 2**, Resolution Levying Ad Valorem Property Taxes for the Fiscal Year Commencing July 1, 2023 and Ending June 30, 2024 for the Purposes of The Metropolitan Water District of Southern California (Option 2) supports this alternative option. Staff would report back to the Board at its regular September 2023 meeting on the estimated amounts to be derived from respective areas pursuant to the tax rate adopted by the Board under Option 2, in accordance with the Board's direction.

Details

Background

Metropolitan has assessed ad valorem property taxes in its service area since its inception. Metropolitan has constitutional and statutory authority, as well as voter authorization, to collect revenues through ad valorem taxes assessed on real property within its service territory. Pursuant to Section 305 of the Metropolitan Water District Act ("MWD") Act, each fiscal year Metropolitan applies the Board-determined tax rate to the certified assessed valuations received from the county auditors for the six counties that include portions of Metropolitan's service area to produce the gross tax levy.

Section 124.5 of the MWD Act, effective since FY 1990/91, limits property tax collections to the amount necessary to pay the total annual debt service on Metropolitan's general obligation bonds and a portion of its State Water Contract (SWC) payment obligation, limited to the preexisting debt service on state general obligation bonds (Burns-Porter bonds) used to finance the construction of SWP facilities for the benefit of Metropolitan. However, Section 124.5 also provides that "the restrictions contained in this section do not apply if Metropolitan's Board of Directors, 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." The ad valorem property tax rate limit under Section 124.5 has been decreasing, and will continue to decrease, as the bonds are paid off. In the meantime, Metropolitan's SWC obligations have been increasing over the long term and will continue to increase.

Every year, Metropolitan receives the certified assessed valuation from the county auditors for the six counties where Metropolitan provides water service to its member agencies. All county auditors have until the 15th day of August to provide the certified assessed valuation to Metropolitan, which is why Metropolitan's Board adjourns its August regular and committee meetings to the third week of the month. This year, Metropolitan received the last of the counties' information on August 8, 2023. On or before the 20th day of August, Metropolitan's Board is required to determine, based on the information received, the amount of money necessary to be raised by taxation during the fiscal year and fix the ad valorem property tax rates.

Proposal

This letter recommends continuing the ad valorem property tax rate at the existing rate of .0035 percent for FY 2023/24 to collect approximately $187.9 million in property tax revenues. The Board adopted a budget for FY 2023/24 and has also adopted rates and charges for CY 2023 and the upcoming CY 2024, based on the assumption that the ad valorem property tax rate would continue at the existing rate of .0035percent. The Board has made a finding since FY 2012/13 that Section 124.5 of the MWD Act does not apply to allow it to maintain the current 0.0035 percent property tax rate, the lowest tax rate ever assessed by Metropolitan. On April 12, 2022, the Board again determined that it is essential to Metropolitan's fiscal integrity to collect more property tax revenue than the statutory limit for the current and next biennial budget period. See supporting documentation, available at: https://www.mwdh2o.com/budget-finance/property-tax-rate-for-fy-202021/.

The biennial budget assumed ad valorem tax revenues of $168.3 million in FY 2023/24. Based on the certified assessed valuations recently provided by the six counties in Metropolitan's service area, the estimated ad valorem property tax revenue to be collected in FY 2023/24 is $187.9 million. While the amount of property taxes actually collected will vary, it is important to note that estimated SWP costs of $761 million far exceed the estimated tax revenues generated by the levy.

If the tax rate is not maintained and instead the Board limits tax rates to annual debt service on Metropolitan's general obligation bonds and its portion of preexisting debt service on Burns-Porter bonds, then overall rate increases for CY 2024 would need to be increased significantly more than the amounts already approved.

This letter proposes that the Board: (1) adopt the resolution determining the amount necessary to be raised by taxation in FY 2023/24, fixing the combined rate of ad valorem property taxation for FY 2023/24 at the existing rate of 0.0035 percent of assessed valuation, and applying the .0035 percent tax rate to the certified assessed valuation; and (2) direct staff to transmit the resolution to county auditors. The tax rate computations and the tax rate schedules supporting the rate of 0.0035 percent, based upon assessed valuations of property taxable by Metropolitan, are provided in the proposed resolution. The continuation of the ad valorem property tax rate at the existing rate of 0.0035 percent would generate tax revenues for Metropolitan to pay the annual debt service on its general obligation bonds and a portion of its obligations under its SWC, which offsets capital expenses of the SWP. Additional financial information supporting the proposed tax rate is available at: https://www.mwdh2o.com/budget-finance/property-tax-rate-for-fy-202021/

Policy

Metropolitan Water District Act Section 61: Ordinances, Resolutions and Orders

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 305: Certification of Assessed Valuations; Segregation of Valuations
Metropolitan Water District Act Section 307: Tax Levies – Determination of Rates

Metropolitan Water District Act Section 310: Statement of Tax Rates

Metropolitan Water District Act Section 311: Collection of Taxes

Metropolitan Water District Administrative Code Section 4301: Cost of Service and Revenue Requirement

Metropolitan Water District Administrative Code Section 11104: Delegation of Responsibilities

By Minute Item No. 52789, the Board, at its April 12, 2022 meeting, adopted the Resolution Finding that for Fiscal Years 2022/23 through 2025/26, the Ad Valorem Property Tax Rate Limitation in Section 124.5 of the Metropolitan Act is Not Applicable Because it is Essential to Metropolitan's Fiscal Integrity to Collect Ad Valorem Property Taxes in Excess of that Limitation (Resolution 9301), adopted charges for Calendar Year 2023 (Resolutions 9303 and 9304), and adopted water rates for Calendar Years 2023 and 2024 (Resolution 9302).

California Environmental Quality Act (CEQA)

CEQA determination for Option #1 and Option #2:

The proposed action is not defined as a project under CEQA (Public Resources Code Section 21065, State CEQA Guidelines Section 15378) because it would not cause either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment, and 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).

Board Options

Option #1

a. Adopt the Resolution Levying Ad Valorem Property Taxes for the Fiscal Year Commencing July 1, 2023 and ending June 30, 2024 for the Purposes of The Metropolitan Water District of Southern California (**Attachment 1**) maintaining the tax rate at .0035 percent of assessed valuation, the same rate levied in FY 2022/23; and
b. Direct staff to transmit that resolution to the county auditor-controllers, or equivalent, for the levy and collection of the ad valorem property tax.

Fiscal Impact: No impact to the adopted biennial budget for fiscal years 2022/23 and 2023/24 and water rates and charges for calendar years 2023 and 2024 as they were based on a tax rate of 0.0035 percent.

Option #2

a. Adopt the Resolution Levying Ad Valorem Property Taxes for the Fiscal Year Commencing July 1, 2023 and ending June 30, 2024 for the Purposes of The Metropolitan Water District of Southern California (**Attachment 2**) at a tax rate different than the existing tax rate, applied to assessed valuation; and
b. Direct staff to transmit that resolution to the county auditor-controllers, or equivalent, for the levy and collection of the ad valorem property tax.

Fiscal Impact: A loss of fixed revenue, dependent upon Board action, would require revisiting the adopted biennial budget for fiscal years 2023/24 and water rates and charges for calendar years 2024 and potentially 2025.

Staff Recommendation

Option #1

8/10/2023

Katano Kasaine *Date*
Assistant General Manager/
Chief Financial Officer

8/10/2023

Adel Hagekhalil *Date*
General Manager

Attachment 1 – Resolution Levying Ad Valorem Property Taxes for The Fiscal Year Commencing July 1, 2023 and Ending June 30, 2024 for the Purposes of The Metropolitan Water District of Southern California (Option 1) – (Revised)

Attachment 2 – Resolution Levying Ad Valorem Property Taxes for The Fiscal Year Commencing July 1, 2023 and Ending June 30, 2024 for the Purposes of The Metropolitan Water District of Southern California (Option 2) – (Revised)

Ref# cfo12692440

THE METROPOLITAN WATER
DISTRICT OF SOUTHERN CALIFORNIA

RESOLUTION _____

A RESOLUTION LEVYING AD VALOREM PROPERTY TAXES FOR THE FISCAL YEAR COMMENCING JULY 1, 2023 AND ENDING JUNE 30, 2024 FOR THE PURPOSES OF THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

The Board of Directors of The Metropolitan Water District of Southern California, after receiving, considering, and evaluating evidence and all material factors pertaining thereto, including budget requirements and estimated revenues from water rates, charges, and ad valorem property tax rates, finds, determines, and resolves:

Section 1.

RECITALS

Effective Water Rates and Charges during Fiscal Year 2023/24

The Board of Directors fixes water rates and charges on a calendar year basis and adopts its biennial budget and ad valorem property taxes on a fiscal year basis. During fiscal year (FY) 2023/24, the applicable rates and charges are those set by the Board for calendar year (CY) 2023 and CY 2024. The Board of Directors, with full review of (1) evidence presented, and (2) all material factors and considerations, has adopted water rates and charges for CYs 2023 and 2024, which, in the debated, informed and considered discretion of the Board, are in compliance with Section 134 of the Metropolitan Water District Act (the MWD Act), in that the Board, so far as practicable, has fixed such rates and charges as will result in revenue which will pay the District's operating expenses, provide for maintenance and repairs, provide for payment of the purchase price or other charges for property or services or other rights acquired by the District, and provide for the payment of the interest and principal of District bonds, notes and other evidences of indebtedness under the applicable provisions of the Act authorizing debt issuance and retirement, assuming the ad valorem property tax rate for FYs 2022/23 and 2023/24 continues at the existing rate of .0035 percent. This Resolution establishes the tax rate for FY 2023/24.

Applicability of Ad Valorem Property Tax Limitations Pursuant to the MWD Act

Section 124.5 of the MWD Act limits property tax collections to the amount necessary to pay the total annual debt service on Metropolitan's general obligation bonds and only a portion of its State Water Contract (SWC) payment obligation, limited to the preexisting debt service on state general obligation bonds (Burns-Porter bonds) used to finance construction of State Water Project (SWP) facilities for the benefit of Metropolitan. However, the limitation of Section 124.5 does not apply if, following a public hearing, the Board of Directors finds that collection of tax revenue in excess of that limitation is essential to the fiscal integrity of the District. The Board held the public hearing pursuant to Section 124.5 of the Act on March 8, 2022 to determine the applicability of the limitation for FYs 2022/23 through 2025/26. On April 12, 2022, the Board adopted Resolution No. 9301, through which the Board:

1. Found and determined 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 FYs 2022/23 through 2025/26;

2. Resolved and determined that pursuant to its finding, the tax rate restriction in Section 124.5 of the MWD Act is inapplicable when setting the ad valorem property tax rate for FYs 2022/23 through 2025/26, allowing the Board to maintain the current ad valorem property tax rate for those fiscal years (.0035 percent of assessed valuation, excluding annexation levies); and

3. Waived compliance with Section 4301(b) of Metropolitan's Administrative Code for any tax levy that utilizes the April 2022 finding regarding Section 124.5 of the MWD Act.

FY 2023/24 Ad Valorem Property Tax Levy

In its informed discretion, based upon full review of evidence presented and all material factors and considerations, the Board of Directors determines that the District's revenues for FY 2023/24 from water transactions and sources other than ad valorem property taxes, after payment of the District's operation and maintenance expenses, the payment of the purchase price or other charges for property or services or other rights acquired by the District, the operation, maintenance, power, and replacement charges due under the District's state contract, revenue bond service, deposits to the revenue bond reserve fund, short term revenue certificate (commercial paper note) service, net costs of operating equipment, and net inventory costs during the fiscal year, as well as the maintenance of prudent reserves for unforeseen District expenditures or unforeseen reduction in District revenue, will be insufficient to provide for general obligation bond service and to pay the District's contract obligations to the state for sale and delivery of water. Therefore, the Board levies ad valorem property taxes for FY 2023/24 as provided in this Resolution at sections 4 through 7 and the exhibits attached, sufficient, when taken with other revenues available for the purpose, to meet all the foregoing obligations and financial requirements, in the amounts and rates set forth in this Resolution and the schedules attached and incorporated therein.

Section 2.

DEFINITIONS

The following terms as used herein shall have the following meanings:

(1) "MWD OF SC" shall mean The Metropolitan Water District of Southern California

"MWD" shall mean Municipal Water District

"SDCWA" shall mean the San Diego County Water Authority

"ID" shall mean Irrigation District

"PUD" shall mean Public Utility District.

(2) "Fiscal Year" or "FY 2023/24" shall mean the fiscal year commencing July 1, 2023 and ending June 30, 2024.

(3) "Schedule A and B" as shown in Section 9 shall mean:

Schedule A - a tabulation setting forth for the Fiscal Year the estimated funds to be produced by MWD of SC ad valorem property tax levies made by this Resolution.

Schedule B - a tabulation setting forth for the Fiscal Year ad valorem property tax rates as set forth in Sections 4, 5, and 6 hereof, the total tax rates, and the amounts of money to be derived from respective areas from the tax levies made by this Resolution.

(4) The following city areas represent the corporate areas of cities within the County of Los Angeles at their respective times of annexation to MWD of SC, and may include areas subsequently annexed to said city areas at times when such areas were not within MWD of SC, and may include those areas which, at the time of their respective annexation to said city areas, were within non-city member public agencies and subsequently excluded from such non-city member public agencies:

"City of Beverly Hills Area" December 6, 1928

"City of Burbank Area"	December 6, 1928
"City of Glendale Area"	December 6, 1928
"City of Los Angeles Area" (Including portion of Original Area of Las Virgenes MWD excluded from Las Virgenes MWD on November 9, 1962)	December 6, 1928
"City of Pasadena Area"	December 6, 1928
"City of San Marino Area"	December 6, 1928
"City of Santa Monica Area"	December 6, 1928
"City of Long Beach Area"	February 27, 1931
"City of Torrance Area"	February 27, 1931
"City of Compton Area"	June 23, 1931
"City of San Fernando Area"	November 12, 1971

(5) "West Basin MWD" shall include the following areas; annexed to West Basin MWD and to MWD of SC on the dates cited:

Original Area	July 23, 1948
City of Gardena Area	December 9, 1948
Inglewood Area	June 9, 1952
Dominguez Area	October 16, 1952
Hawthorne Area	October 23, 1953
La Casa Territory Area	November 23, 1953
A B C Territory Area	January 11, 1955
Culver City-County Territory Area	January 11, 1955
Frawley Territory Area	January 13, 1958
Imperial Strip Territory Area	November 22, 1960
Marina Area	January 10, 1962
Belle View Area	November 12, 1963
Municipal Parking Area	November 12, 1963
La Tijera Area	December 21, 1965
Jefferson Blvd. Area	October 30, 1969
Marina Second Fringe Area	May 3, 1978
West Hollywood Area	June 23, 1981
Reorganization No. 2014-10, Parcel A, and concurrently detached from the city of Torrance	December 22, 2014
Reorganization No. 2009-16, and concurrently detached from Las Virgenes MWD	February 19, 2015
Reorganization No. 2014-06, and concurrently detached from Las Virgenes MWD	July 19, 2016

(6) "Three Valleys MWD" shall include the following areas, annexed to Three Valleys MWD (formerly Pomona Valley MWD) and to MWD of SC on the dates cited:

Original Area	November 15, 1950
Glendora Area	October 2, 1952
Rowland Area	June 15, 1953
Stephens Area	November 27, 1957

(7) "Foothill MWD" shall include the following areas, annexed to Foothill MWD and to MWD of SC on the dates cited:

Original Area of Foothill MWD	January 15, 1953
Foothill First Fringe Area	March 21, 1968
Foothill Second Fringe Area	November 21, 1968
La Vina Annexation	July 13, 1993

(8) "Central Basin MWD" shall include the following areas, annexed to Central Basin MWD and to MWD of SC

on the dates cited:

Original Area	November 12, 1954
Compton Territory Area	January 4, 1957
Bellflower Territory Area	December 30, 1958
Shoestring Strip Territory Area	January 23, 1961
Signal Hill Territory Area	November 14, 1963
Lakewood Area	November 14, 1963
Vernon Area	June 24, 1965
Dairy Valley Area	June 21, 1967
Boyle Heights Area	July 24, 1967
Cerritos Area	December 22, 1969
Hawaiian Gardens Area	November 22, 1977

(9) "Las Virgenes MWD" shall include the following areas annexed to Las Virgenes MWD and to MWD of SC on the dates cited, excluding that portion annexed to the City of Los Angeles on November 9, 1962:

Original Area	December 1, 1960
Twin Lakes Area	March 12, 1965
Bell Canyon Area	March 16, 1966
Hidden Hills Annexation 87-1	April 22, 1988
Reorganization No. 2017-10, and concurrently detached from West Basin MWD	February 16, 2021

(10) "Upper San Gabriel Valley MWD" shall include the following areas annexed to Upper San Gabriel Valley MWD and to MWD of SC on the dates cited:

Original Area	March 27, 1963
West Covina Area	November 1, 1965
Garvey Reservoir Area	December 1, 1976
Mountain Cove Annexation	July 17, 2002

(11) The following city areas represent the corporate areas of cities within the County of Orange at their respective times of annexation to MWD of SC, and may include areas subsequently annexed to said city areas at times when such areas were not within MWD of SC, and may include those areas which, at the time of their respective annexation to said city areas, were within non-city member public agencies and subsequently excluded from such non-city member public agencies:

City of Anaheim Area — December 6, 1928

Including:

Serrano/Nohl Ranch Rd. Reorganization (RO 01-05), Parcel 2, detached from MWD of Orange County on April 19, 2001;

Reorganization Area 1 (RO 03-17) detached from MWD of Orange County on August 26, 2003;

Reorganization Area 2 (RO 03-17) detached from MWD of Orange County on August 26, 2003;

Reorganization Brookhurst ARCO (RO 02-02) detached from MWD of Orange County on July 8, 2003;

North-Central Islands Annexation (IA 04-08) detached from MWD of Orange County on August 20, 2004;

Serrano Heights Reorganization (RO 04-01) detached from MWD of Orange County on May 28, 2004;

Ball Road/Santa Ana River Reorganization (RO 04-02) detached from MWD of Orange County on

December 13, 2004
Meyer Reorganization (RO 15-01) and concurrently detached from MWD of Orange County on May 16, 2016

City of Santa Ana Area Including:	December 6, 1928

Reorganization Area 4 (RO 03-17) detached from MWD of Orange County on August 26, 2003

City of Fullerton Area Including:	February 27, 1931

Hawks Point Reorganization (RO 00-11) detached from MWD of Orange County on April 19, 2001;
Reorganization Area 3 (RO 03-17) detached from MWD of Orange County on August 26, 2003;
Page Avenue Island Annex. (IA 04-14) detached from MWD of Orange County on November 3, 2004;
Somerset Island Annex. (IA 04-15) detached from MWD of Orange County on November 3, 2004

(12) "Remainder of MWD of Orange County" shall include the following areas, annexed to MWD of Orange County and to MWD of SC on the dates cited excluding that portion thereof of Reorganization No. 62 annexed to Coastal MWD on March 7, 1984:

Original Area	November 26, 1951
Annexation No. 1 Territory Area	November 25, 1957
Annexation No. 4 Territory Area	December 11, 1958
Annexation No. 5 Territory Area	December 7, 1959
Annexation No. 7 Territory Area	December 8, 1960
Annexation No. 10 Territory Area	December 11, 1961
Annexation No. 11 Territory Area	January 6, 1964
Annexation No. 8A Territory Area	March 29, 1965
Annexation No. 8B Territory Area	March 29, 1965
Annexation No. 8D Territory Area	March 29, 1965
Annexation No. 8E Territory Area	March 29, 1965
Annexation No. 8F Territory Area	March 29, 1965
Annexation No. 8G Territory Area	March 29, 1965
Annexation No. 8H Territory Area	March 29, 1965
Annexation No. 13 Territory Area (Excluded from Coastal MWD for purpose of such annexation)	June 30, 1969
Annexation No. 16 Territory Area	November 7, 1972
Annexation No. 15 Territory Area	November 15, 1972
Annexation No. 18 Territory Area	December 16, 1982
Annexation No. 19 Territory Area	December 27, 1983
Annexation No. 17 Territory Area	December 29, 1983
City of Brea Area	March 7, 1984
Brea Fringe Annexation Area	March 7, 1984
Serrano/Nohl Ranch Road Reorganization Parcel 1 (RO 01-05) detached from City of Anaheim	April 19, 2001

Coastal MWD	January 17, 2001

Coastal MWD and MWD of Orange County have been consolidated into a single district (RO 97-06) effective January 17, 2001. It shall include the following areas, annexed to Coastal MWD and to MWD of SC on the dates cited:

Original Area	June 15, 1942
Fairview Farms Area	September 21, 1946
Irvine Subdivision Areas	November 26, 1948
1948 Portion of City of Newport Beach Area	November 29, 1948
Parts of Dana Point Area	August 3, 1949
Capistrano Beach-San Clemente Area	October 28, 1954
Tri-Cities Annexation No. 2 Area	December 12, 1962
Laguna Canyon Annexation Area	December 20, 1962
Lido Sands Annexation Area	January 6, 1964
Laguna Niguel Area (Including Reorganization 32 Parcel A Area excluded from Annexation No. 4 on January 4, 1977)	June 30, 1969
Tri-Cities Annexation No. 79-1 Area	December 22, 1982
Reorganization No. 62 Parcel C and that portion of Parcel B Area excluded from Annexation No. 5 of MWD of Orange County	March 7, 1984
Reorganization No. 64 Area excluded from Annexation No. 7 of MWD of Orange County	March 18, 1983
Reorganization No. 123 excluded from Annexation No. 7 of MWD of Orange County	August 6, 1990

(13) "Remainder of Eastern MWD" shall include the following areas, annexed to Eastern MWD and to MWD of SC on the dates cited:

Original Area (Portion of area excluded from Eastern MWD and annexed to Western MWD)	July 20, 1951
Adjacent Area	May 22, 1953
First Fringe Area (Portion of area excluded from Eastern MWD and annexed to Western MWD)	April 20, 1956
Third Fringe Area (Area excluded from Original Area of Western MWD)	November 20, 1958
Fourth Fringe Area	December 6, 1960
Fifth Fringe Area (Portion of area excluded from Eastern MWD and annexed to Western MWD)	May 31, 1962
Sixth Fringe Area	December 10, 1962
Seventh Fringe Area	March 11, 1963
Eight Fringe Area	April 23, 1963
Ninth Fringe Area	April 23, 1963
Tenth Fringe Area	September 22, 1964
Eleventh Fringe Area	September 22, 1964
Twelfth Fringe Area	October 22, 1965
Thirteenth Fringe Area (Portion of area excluded from Eastern MWD and annexed to Western MWD)	October 13, 1967
Fourteenth Fringe Area	October 23, 1967
Sixteenth Fringe Area (Area excluded from First Fringe Area of Western MWD)	July 1, 1969
Fifteenth Fringe Area	August 12, 1969
Seventeenth Fringe Area	March 5, 1970
Eighteenth Fringe Area	March 5, 1970
Nineteenth Fringe Area	May 8, 1970
Twentieth Fringe Area	September 29, 1971
Twenty-First Fringe Area	September 30, 1971
Twenty-Second Fringe Area	April 27, 1972

Twenty-Third Fringe Area	May 23, 1975
Twenty-Fourth Fringe Area	December 30, 1975
Twenty-Fifth Fringe Area	April 26, 1983
Twenty-Sixth Fringe Area	November 27, 1985
Twenty-Seventh Fringe Area	December 19, 1985
Twenty-Eighth Fringe Area	November 18, 1986
Twenty-Ninth Fringe Area	May 4, 1987
Thirty-First Fringe Area	July 9, 1987
Thirty-Second Fringe Area	July 9, 1987
Thirty-Third Fringe Area	August 27, 1987
Thirtieth Fringe Area	December 15, 1987
Thirty-Fourth Fringe Area	March 16, 1988
Thirty-Fifth Fringe Area	May 2, 1988
Thirty-Eighth Fringe Area	October 14, 1988
Thirty-Sixth Fringe Area	December 5, 1988
Fortieth Fringe Area	August 1, 1989
Forty-Second Fringe Area	May 25, 1990
Forty-Third Fringe Area	June 19, 1990
Thirty-Ninth Fringe Area	July 13, 1990
Forty-First Fringe Area	July 27, 1990
Forty-Fifth Fringe Area	March 13, 1991
Forty-Seventh Fringe Area	June 3, 1991
Forty-Eighth Fringe Area	November 21, 1991
Forty-Ninth Fringe Area	November 21, 1991
Fiftieth Fringe Area	November 21, 1991
Fifty-First Fringe Area	December 19, 1991
Forty-Fourth Fringe Area	June 3, 1992
Fifty-Second Fringe Area	June 29, 1992
Forty-Sixth Fringe Area	July 7, 1992
Fifty-Third Fringe Area	August 27, 1992
Fifty-Fifth Fringe Area	April 29, 1993
Fifty-Sixth Fringe Area	June 22, 1993
Fifty-Eighth Fringe Area	June 22, 1993
Fifty-Ninth Fringe Area	June 22, 1993
Sixtieth Fringe Area	November 29, 1993
Fifty-Seventh Fringe Area	December 9, 1994
Sixty-Second Fringe Area	July 3, 1996
Sixty-Third Fringe Area	October 28, 1996
Sixty-Fourth Fringe Area	August 28, 1997
Sixty-Fifth Fringe Area	December 28, 2000
Seventieth Fringe Area	August 29, 2001
Sixty-Seventh Fringe Area Reorganization (Area detached from portion of Original Area of Western MWD)	August 29, 2001
Sixty-Eighth Fringe Area	January 15, 2002
Seventy-First Fringe Area	June 20, 2002
Sixty-Ninth Fringe Area	November 27, 2002
Seventy-Second Fringe Area	October 21, 2003
Sixty-Sixth Fringe Area	November 17, 2003
Seventy-Third Fringe Area	November 17, 2003
Seventy-Fourth Fringe Area	November 17, 2003
Seventy-Fifth Fringe Area	June 2, 2004
Seventy-Sixth Fringe Area	April 6, 2004
Seventy-Eighth Fringe Area	April 19, 2005
Eighty-Third Fringe Area	December 15, 2005
Seventy-Ninth Fringe Area	December 20, 2005
Eighty-First Fringe Area	December 20, 2005
Eighty-Fourth Fringe Area	December 20, 2005

Eighty-Seventh Fringe Area	February 14, 2006
Eighty-Sixth Fringe Area	March 24, 2006
Eighty-Fifth Fringe Area	May 22, 2006
Eighty-Eighth Fringe Area	May 22, 2006
Eighty-Ninth Fringe Area	June 28, 2006
Ninety-Second Fringe Area	August 2, 2006
Ninety-First Fringe Area	November 28, 2006
Ninety-Fifth Fringe Area	December 14, 2006
Ninetieth Fringe Area	December 19, 2006
Ninety-Seventh Fringe Area	April 16, 2007
Ninety-Third Fringe Area	July 26, 2007
101st Fringe Area	January 24, 2008
Ninety-Ninth Fringe Area Reorganization (Area detached from Western Municipal Water District)	September 10, 2008
100th Fringe Area	November 17, 2008
Ninety-Sixth Fringe Area	December 11, 2008
102nd Fringe Area	December 22, 2009
103rd Fringe Area	October 1, 2013
104th Fringe Area	September 22, 2015
105th Fringe Area (2015-11-3 Reorganization)	September 19, 2017
107th Fringe Area (2017-04-5 Reorganization)	September 12, 2017
106th Fringe Area (2017-12-3 Reorganization)	December 14, 2017
108th Fringe Area (2017-24-3 Reorganization)	November 8, 2018
110th Fringe Area (2019-03-3 Reorganization	July 17, 2019
109th Fringe Area (2019-06-3 Reorganization)	November 22, 2019
111th Fringe Area (2020-25-3 Reorganization)	February 11, 2021

(14) "Remainder of Western MWD" shall include the following areas, annexed to Western MWD and to MWD of SC on the dates cited:

Original Area (Portion of area excluded from Western MWD and annexed to Eastern MWD)	November 12, 1954
First Fringe Area (Portion of area excluded from Western MWD and annexed to Eastern MWD)	December 20, 1957
Second Fringe Area	December 18, 1961
Third Fringe Area	June 27, 1962
Fifth Fringe Area	July 2, 1964
Fourth Fringe Area	December 19, 1966
Seventh Fringe Area	December 19, 1966
Eighth Fringe Area (Area excluded from Fifth Fringe Area of Eastern MWD on July 26, 1967)	September 18, 1967
Sixth Fringe Area	September 27, 1967
Ninth Fringe Area	November 17, 1967
Tenth Fringe Area	June 12, 1968
Thirteenth Fringe Area (Area excluded from Fifth Fringe Area of Eastern MWD)	June 23, 1969
Twelfth Fringe Area (Area excluded from First Fringe Area of Eastern MWD)	July 1, 1969
Eleventh Fringe Area	July 17, 1969
Fifteenth Fringe Area (Area lying entirely within the County of Orange)	July 13, 1972
Fourteenth Fringe Area	October 11, 1973

Sixteenth Fringe Area (Area excluded from Thirteenth Fringe Area of Eastern MWD)	August 30, 1977
Seventeenth Fringe Area	December 23, 1980
Eighteenth Fringe Area	December 15, 1981
Twentieth Fringe Area	December 4, 1987
Twenty-Second Fringe Area	October 14, 1988
Twenty-First Fringe Area	December 5, 1988
Twenty-Third Fringe Area	November 3, 1989
Twenty-Fourth Fringe Area	May 18, 1990
Twenty-Seventh Fringe Area	May 18, 1990
Twenty-Sixth Fringe Area	June 6, 1990
Twenty-Fifth Fringe Area	July 13, 1990
Twenty-Eighth Fringe Area	January 28, 1991
Thirtieth Fringe Area	March 13, 1991
Twenty-Ninth Fringe Area	November 4, 1991
Thirty-First Fringe Area	February 19, 1992
Thirty-Third Fringe Area	May 26, 1993
Thirty-Fourth Fringe Area (Area excluded from Fifth Fringe Area of Eastern MWD)	October 31, 1994
Thirty-Sixth Fringe Area (Area excluded from Original Area of Eastern MWD)	September 29, 1997
Thirty-Seventh Fringe Area	December 30, 1997
Thirty-Eighth Fringe Area	June 29, 1999
Fortieth Fringe Area	November 22, 1999
Thirty-Ninth Fringe Area	October 24, 2000
Forty-First Fringe Area	December 28, 2000
Forty-Fifth Fringe Area	June 20, 2002
Forty-Second Fringe Area (Area excluded from Fifth Fringe Area of Eastern MWD)	February 7, 2002
Forty-Sixth Fringe Area	November 24, 2003
Forty-Eighth Fringe Area	December 15, 2003
Forty-Ninth Fringe Area	April 28, 2004
Fiftieth Fringe Area	May 27, 2005
Forty-Seventh Fringe Area	June 21, 2005
Forty-Fourth Fringe Area	June 22, 2006
Forty-Third Fringe Area	October 21, 2014
Fifty-First Fringe Area Annexation	October 16, 2018
Fifty-Second Fringe Area Annexation	June 16, 2020

(15) "Original Area of Chino Basin MWD" shall mean the area of Chino Basin MWD annexed to MWD of SC on November 26, 1951.

(16) "Mid-Valley Area of Chino Basin MWD" shall mean the Mid-Valley area annexed to Chino Basin MWD and to MWD of SC on April 20, 1954.

(17) "Bryant Annexation Area of Chino Basin MWD" shall mean the "Bryant Annexation area annexed to Chino Basin MWD and to MWD of SC on November 25, 1957.

(18) "North Perimeter No. 1 Annexation Area of Chino Basin MWD" shall mean the North Perimeter No. 1 Annexation area annexed to Chino Basin MWD and to MWD of SC on November 28, 1969.

(19) "Remainder of SDCWA" shall include the following areas annexed to SDCWA and to MWD of SC on the dates cited:

Original Area of SDCWA Annexation (Including areas subsequently annexed to city public agencies which were included within Original Area of SDCWA at times when such areas were not within MWD of SC, and areas excluded from non-city public agencies of SDCWA at times when such areas were within said city public agencies)	December 17, 1946
Crest PUD Territory Area	December 13, 1948
San Dieguito ID Area	December 13, 1948
Santa Fe ID Area	December 13, 1948
1950 Fallbrook PUD Annexation Area (Including De Luz Heights MWD Reorganization, originally De Luz Heights MWD annexed to MWD of SC on June 28, 1967 and dissolved on July 1, 1990)	August 1, 1950
City of Escondido Area	October 9, 1950
San Diego Gas and Electric Company Area	May 14, 1952
San Diego Eucalyptus Company's Lands Area	July 18, 1952
South Bay ID Area	November 3, 1952
Rainbow MWD Area	April 10, 1954
City of Poway Area	April 21, 1954
Bueno Colorado MWD Area (Area dissolved and annexed to Rainbow MWD, Vista Irrigation District, Carlsbad MWD and Vallecitos Water District on November 24, 1993)	June 11, 1954
Rincon Del Diablo MWD	June 14, 1954
Costa Real MWD Area	June 16, 1954
El Cajon Valley-Dry Island Area (Including Lakeside-Boukai Joint Venture Reorganization detached from Padre Dam MWD on September 11, 1996)	December 20, 1954
Valley Center MWD Area	May 9, 1955
Sweetwater Reservoir Area	October 10, 1955
Padre Dam MWD Area	June 7, 1956
Bueno Colorado Annexation No. 1 Area	June 11, 1956
Otay MWD Area	October 26, 1956
Original Area of Ramona MWD within MWD of SC	August 27, 1957
Fallbrook No. 2 Annexation Area	November 24, 1958
Helix Watson Ranch-Island Area	February 20, 1959
Rainbow No. 1 Annexation Area	May 12, 1959
Ramona No. 1 Annexation Area	May 29, 1959
Helix-Fletcher Annexation Area	June 26, 1959
San Dieguito Concurrent Annexation No. 1 Area	September 15, 1959
Helix-Sunnyslope Heights Annexation Area	September 17, 1959
Poway No. 1 Annexation Area	September 21, 1959
Padre Dam MWD No. 2 Annexation Area	November 6, 1959
Padre Dam MWD No. 1 Annexation Area	November 10, 1959
San Dieguito Local Inclusion Annexation Area	November 18, 1959
Santa Fe No. 1 Annexation Area	November 30, 1959
Olivenhain MWD Area (Including Encinitas Municipal Services Reorganization Parcels 1, 2, & 3 detached from San Dieguito No. 2 Annexation Area of SDCWA on June 16, 1995)	July 25, 1960
Helix-Willis-Houston Annexation Area	August 10, 1960
Padre Dam MWD No. 3 Annexation Area	October 16, 1960
Otay No. 3 Annexation Area	October 20, 1960
Valley Center No. 1 Annexation Area	December 12, 1960
Rincon del Diablo No. 1 Annexation Area	December 12, 1960
Ramona No. 2 Annexation Area within MWD of SC	September 22, 1961

Rincon del Diablo No. 2 Annexation Area	September 29, 1961
City of Del Mar Area	November 23, 1962
Ramona No. 3 Annexation Area	September 20, 1963
Yuima MWD Area (Excluding Adams/Fitzsimmons Reorganization Parcel 1 annexed to Valley Center MWD, including Adams/Fitzsimmons Reorganization Parcel 2 excluded from Valley Center MWD on March 26, 1991)	December 16, 1963
Rincon del Diablo No. 3 Annexation Area	August 27, 1964
Olivenhain No. 1 Annexation Area	February 11, 1965
South Bay Tidelands Area	May 11, 1965
De Luz Heights Annexation Area (Reorganization)	June 28, 1967
Olivenhain No. 4 Annexation Area	November 13, 1967
Yuima No. 1 Annexation Area	November 21, 1967
Ramona Dos Picos Area	November 27, 1967
Ramona No. 4 Annexation Area	November 27, 1967
Valley Center No. 2 Annexation Area	November 29, 1967
Valley Center No. 3 Annexation Area	November 30, 1967
Rainbow No. 3 Annexation Area of SDCWA within MWD of SC" shall mean the Rainbow No. 3 Annexation area annexed to SDCWA and to MWD of SC; omitting therefrom the Werner Detachment excluded on August 4, 1980, the Brown Detachment excluded on January 1, 1981, and the Mann- Gosser Detachment excluded on March 4, 1981 from SDCWA and MWD of SC.	December 6, 1967
De Luz Heights No. 1 Annexation Area	October 15, 1969
Yuima No.2 Annexation Area	November 24, 1969
Fallbrook Community Air Park Annexation Area of SDCWA shall mean the Fallbrook Community Air Park Annexation area annexed to SDCWA and to MWD of SC	December 22, 1969
Padre Dam MWD No. 4	August 3, 1970
Ramona No. 5 Annexation Area	May 17, 1972
Rincon del Diablo No. 4 Annexation Area	November 2, 1972
San Dieguito No. 2 Annexation Area (Including Encinitas Municipal Services Reorganization on June 16, 1995)	December 8, 1972
Santa Fe No. 2 Annexation Area	April 11, 1973
Valley Center No. 4 Annexation Area	November 5, 1973
Rainbow No. 5 Annexation Area	November 22, 1973
San Onofre State Beach and Park Area	December 16, 1977
Pendleton Military Reservation Area -Nuclear Generating Plant Portion	December 16, 1977
Remainder of Pendleton Military Reservation Area	December 16, 1977
Rancho Jamul Estates Annexation Area	March 13, 1979
Lake Hodges Estates Annexation Area	June 26, 1980
Burdick Annexation No. 5 Area to Padre Dam MWD	July 26, 1982
Palo Verde Annexation No. 6 Area to Padre Dam MWD	November 15, 1983
Lake Ranch Viejo Annexation to Rainbow MWD	December 13, 1983
Honey Springs Ranch Annexation Area to Otay MWD	December 14, 1983
Thweatt Annexation Area to Rincon del Diablo MWD	December 30, 1983
Hewlett-Packard Annexation Area to Rainbow MWD	December 31, 1985
4S Ranch Annexation Area to Olivenhain MWD	November 5, 1986
Quail Park Reorganization Area Annexed to San Dieguito Water District and excluded from Olivenhain MWD	July 11, 1989
Paradise Mountain Area Annexed to Valley Center MWD	January 11, 1993
Boathouse Area Annexed to Otay Water District	September 6, 1994

Guajome Regional Park Annexation to Vista Irrigation District	October 23, 1998
Podrasky Ohlson Annexation to Valley Center MWD	March 11, 2004
San Elijo Ridge Reorganization (Altman) to Vallecitos Water District	August 9, 2004
Baxter Annexation (RO 03-19) to Padre Dam MWD	July 9, 2005
Citrus Heights Annexation	March 4, 2008
Erreca Annexation	November 4, 2009
Meadowood Reorganization (RO12-11) to SDCWA	December 4, 2014
Lake Wohlford Reorganization (R014-16) to SDCWA	April 21, 2015
Greenwood Memorial Park Island Reorganization (City of San Diego, RO 17-01)	May 26, 2017
Campus Park West (RO 14-08)	December 13, 2017
SVBF Temple Reorganization (LAFCO RO20-16 et al.)	December 16, 2021
Rancho Corrido RV Park Reorganization (LAFCO RO20-21 et al.)	February 14, 2022

(20) “Remainder of Calleguas MWD” shall include the following areas annexed to Calleguas MWD and to MWD of SC on the dates cited:

Original Area of Calleguas MWD	December 14, 1960
Calleguas Annexation No. 1 Area	March 16, 1961
Lake Sherwood Area	March 14, 1963
Annexation No. 3 Territory	March 15, 1963
Oxnard Mandalay Area	December 8, 1964
Oxnard First Fringe Area	December 8, 1964
Annexation No. 6 Territory	October 17, 1968
Oxnard Second Fringe Area	November 7, 1969
Camarillo First Fringe Area	December 19, 1969
Oxnard Third Fringe Area	December 14, 1970
Oxnard Fourth Fringe Area	December 19, 1972
Point Mugu State Park Area	June 22, 1973
Oxnard Fifth Fringe Area	December 16, 1974
Oxnard Sixth Fringe Area	December 30, 1975
Oxnard Seventh Fringe Area	December 17, 1976
Ventura School for Girls Area	December 17, 1976
Oxnard Eighth Fringe Area	December 12, 1977
Calleguas Annexation No. 17 Area	December 28, 1979
Calleguas Annexation No. 19 Area	December 9, 1981
Calleguas Annexation No. 20 Area	December 21, 1981
Calleguas Annexation No. 18 Area	December 29, 1981
Calleguas Annexation No. 21 Area	March 24, 1982
Calleguas Annexation No. 22 Area	December 2, 1983
Calleguas Annexation No. 23 Area	November 30, 1984
Calleguas Annexation No. 24 Area	June 19, 1985
Calleguas Annexation No. 25 Area	November 27, 1985
Calleguas Annexation No. 26 Area	July 25, 1986
Calleguas Annexation No. 27 Area	December 31, 1987
Calleguas Annexation No. 28 Area	October 4, 1988
Calleguas Annexation No. 29 Area	October 10, 1989
Calleguas Annexation No. 30 Area	July 6, 1990
Calleguas Annexation No. 31 Area	September 25, 1990
Calleguas Annexation No. 33 Area	November 27, 1991
Calleguas Annexation No. 34 Area	June 24, 1992
Calleguas Annexation No. 35 Area	February 26, 1993
Calleguas Annexation No. 36 Area	February 26, 1993

Calleguas Annexation No. 39 Area	February 2, 1994
Calleguas Annexation No. 40 Area	May 16, 1994
Calleguas Annexation No. 41 Area	August 16, 1994
Calleguas Annexation No. 43 Area	August 16, 1994
Calleguas Annexation No. 45 Area	August 16, 1994
Calleguas Annexation No. 46 Area	September 27, 1994
Calleguas Annexation No. 38 Area	December 19, 1994
Calleguas Annexation No. 44 Area	December 19, 1994
Calleguas Annexation No. 47 Area	September 19, 1995
Calleguas Annexation No. 48 Area	December 21, 1995
Calleguas Annexation No. 32 Area	March 5, 1996
Calleguas Annexation No. 49 Area	December 18, 1996
Calleguas Annexation No. 52A Area	November 4, 1997
Calleguas Annexation No. 53 Area	December 19, 1997
Calleguas Annexation No. 52B Area	December 23, 1997
Calleguas Annexation No. 51 Area	June 9, 1998
Calleguas Annexation No. 54 Area	January 26, 1999
Calleguas Annexation No. 55 Area	January 27, 1999
Calleguas Annexation No. 61 Area	October 27, 1999
Calleguas Annexation No. 57 Area	December 29, 1999
Calleguas Annexation No. 58 Area	December 29, 1999
Calleguas Annexation No. 60 Area	December 29, 1999
Calleguas Annexation No. 65 Area	August 2, 2000
Calleguas Annexation No. 66 Area	August 4, 2000
Calleguas Annexation No. 63 Area	December 27, 2000
Calleguas Annexation No. 68 Area	April 17, 2001
Calleguas Annexation No. 69 Area	July 20, 2001
Calleguas Annexation No. 70 Area	July 27, 2001
Calleguas Annexation No. 74 Area	November 26, 2001
Calleguas Annexation No. 72 Area	December 17, 2001
Calleguas Annexation No. 75 Area	April 24, 2002
Calleguas Annexation No. 76-A Area	July 2, 2002
Calleguas Annexation No. 76-B Area	July 26, 2002
Calleguas Annexation No. 79	May 27, 2003
Calleguas Annexation No. 81	August 11, 2003
Calleguas Annexation No. 82	September 22, 2003
Calleguas Annexation No. 80	December 9, 2002
Calleguas Annexation No. 67	December 22, 2003
Calleguas Annexation No. 73	December 22, 2003
Calleguas Annexation No. 77	June 4, 2004
Calleguas Annexation No. 78	March 3, 2004
Calleguas Annexation No. 84	October 22, 2004
Calleguas Annexation No. 83	November 23, 2005
Calleguas Annexation No. 85	January 3, 2006
Calleguas Annexation No. 92	November 28, 2007
Calleguas Annexation No. 91	April 7, 2008
Calleguas Annexation No. 90	May 21, 2008
Calleguas Annexation No. 89	September 25, 2008
Calleguas Annexation No. 87	December 28, 2009
Calleguas Annexation No. 93	December 28, 2009
Calleguas Annexation No. 94	September 21, 2010
Calleguas Annexation No. 96	April 23, 2012
Calleguas Annexation No. 95	December 20, 2012
Calleguas Annexation No. 97	December 12, 2013
Calleguas Annexation No. 98	April 8, 2014
Calleguas Annexation No. 100	January 26, 2017
Calleguas Annexation No. 102	July 30, 2018

Calleguas Annexation No. 103	December 17, 2019
Calleguas Annexation No. 104	July 25, 2022
Calleguas Annexation No. 106	October 26, 2022

(21) "Exclusions from City of Los Angeles Area" shall mean the following areas excluded from the City of Los Angeles and from MWD of SC on the dates cited:

Alhambra Hills Annexation to City of Alhambra	January 27, 1964
Portion of Reorganization No. 85-2 of City of Los Angeles	December 30, 1985
Creekside Condominiums (Reorganization 98-01)	September 11, 2002

(22) "Exclusion from Las Virgenes MWD" shall mean the following area excluded from Las Virgenes MWD and from MWD of SC on the date cited:

Portion of Reorganization No. 85-2 of Original Area of Las Virgenes MWD	December 30, 1985

(23) "Exclusion from Three Valleys MWD" shall mean the following area excluded from Three Valleys MWD and from MWD of SC on the date cited:

Azusa Reorganization (Parcels 1, 2, 3 & 20)	May 21, 1996

(24) "Exclusions from Ramona No. 2 Annexation Area" shall mean the following areas excluded from Ramona No. 2 Annexation area of SDCWA and from MWD of SC on the dates cited:

Schlueter Detachment	December 19, 1977
Bonfils Detachment	December 29, 1978

(25) "Exclusions from Rainbow No. 3 Annexation Area" shall mean the following areas excluded from Rainbow No. 3 Annexation area of SDCWA and from MWD of SC on the dates cited:

Werner Detachment	August 4, 1980
Brown Detachment	January 1, 1981
Mann-Gosser Detachment	March 4, 1981

(26) "Exclusion from Original Area of Ramona MWD" shall mean the following area excluded from Ramona MWD Area of SDCWA and from MWD of SC on the date cited:

Meyer Detachment	March 10, 1983

(27) "Exclusion from Original Area of Western MWD" shall mean the following area excluded from Original Area of Western MWD and from MWD of SC on the date cited:

LAFCO 94-28-2 Detachment	January 21, 1997

(28) "Exclusion from Central Basin MWD" shall mean the following area excluded from Central Basin MWD and from MWD of SC on the date cited:

Reorganization No. 1-1998, Parcel 1 & 2 to San Gabriel Valley Water District	December 29, 1999

Section 3.

ASSESSED VALUATIONS

The county auditors of the counties of Los Angeles, Orange, Riverside, San Bernardino, San Diego and Ventura have certified the assessed valuations of all property taxable by MWD of SC, consistent with the areas described in definitions (4) through (28) of Section 2, for the Fiscal Year and their respective certificates have been filed with the Board of Directors.

Section 3.1

STATEMENT REGARDING ARTICLES XIII A, XIII C AND XIII D OF THE CONSTITUTION OF THE STATE OF CALIFORNIA

None of the property tax levies made by the Board of Directors of MWD of SC in the next succeeding sections fall within Section 1(a) of Article XIII A approved by the electorate on June 6, 1978 for addition to the California Constitution, effective July 1, 1978. All said levies fall under the Section 1(b) exemption to said Section 1(a) and are otherwise exempt from said Section 1(a) by reason of the impairment of contract clause of Article I, Section 10 of the United States Constitution. None of said levies fall within Articles XIII C and XIII D approved by the electorate on November 5, 1996, for addition to the California Constitution, by reason of the aforementioned provisions and exemptions and the provisions of Section 3(a)(1) of Article XIII D. All said levies are made pursuant to Revenue and Taxation Code Section 93(a) and are for the purpose of and shall be used for payment of “voter-approved indebtedness.”

Section 4.

ANNEXATION LEVY

For the dual purposes of raising the amounts required to be raised by means of levies on taxable properties as prescribed by resolutions of the Board of Directors of MWD of SC fixing terms and conditions for annexation to MWD of SC (or as such terms and conditions may have been modified in accordance with the Metropolitan Water District Act of the State of California, Statutes 1969, Chapter 209, as amended) and for raising funds necessary to provide for payment of a portion of the capital cost component of either the Transportation Charge or the Delta Water Charge, or both, billed to MWD of SC under the "State Water Contract" (as identified in Section 6 of this Resolution) due or to become due within the current fiscal year or within the following fiscal year before the time when money will be available from the next property tax levy, Metropolitan previously set:

a. the amount of money necessary to be raised by ad valorem property taxation for such annexed properties;

b. the rates of such taxation of MWD of SC upon secured taxable property in each of the areas subject to such levies; and

c. the amounts of money to be derived from said levies.

For FY 2023/24, there is no amount remaining to be raised under the Resolutions for annexed properties. Therefore, no annexation levies are shown in the attached schedules.

Section 5.

BOND LEVY

For the purposes of paying the annual interest on the outstanding bonded indebtedness of MWD of SC incurred as a result of approval by the voters residing within MWD of SC and such part of the principal of such bonds as shall become due before the time when money will be available from the next property tax levy, or such portion thereof as shall not be met from previous levies or other revenues of the District:

a. The amount of money necessary to be raised by ad valorem property taxation during FY 2023/24 is the sum set forth in the last line in Column #1 of Schedule A.

b. The rate of such taxation of MWD of SC for the FY 2023/24 upon secured taxable property within MWD of SC hereby is fixed and levied at .00002% of assessed valuation. The rate of such taxation for the FY 2023/24 upon unsecured taxable property is the rate fixed and levied for the preceding year applicable to secured taxable property, as required by operation of law and set forth in Column #2 of Schedule B.

c. The amounts of money necessary to be derived from said levy are set forth in Column #7 of Schedule B, including the amounts of money to be derived from the area of MWD of SC within each separate member agency.

Section 6.

STATE WATER CONTRACT LEVY

For the purpose of raising funds in excess of those funds raised under Section 5 of this Resolution, necessary and sufficient to provide for payments due or to become due within the current fiscal year or within the following fiscal year before the time when money will be available from the next property tax levy, or such portion thereof as shall not be met from previous levies or other revenues of the District, under the:

> "CONTRACT BETWEEN THE STATE OF CALIFORNIA DEPARTMENT OF WATER RESOURCES AND THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA FOR A WATER SUPPLY, dated November 4, 1960," as amended (State Water Contract),

a. The amount of money necessary to be raised by ad valorem property taxation during FY 2023/24 in excess of the sum raised under Section 5 of this Resolution is the sum set forth in the last line of Column #2 of Schedule A.

b. The rate of such taxation of MWD of SC for the FY 2023/24 upon secured taxable property within MWD of SC hereby is fixed and levied at .00348% of assessed valuation. The rate of such taxation for the FY 2023/24 upon the unsecured taxable property is the rate fixed for the preceding year applicable to secured taxable property, as required by operation of law and set forth in Column #4 of Schedule B.

c. The amounts of money necessary to be derived from said levy are set forth in column #8 of Schedule B, including the amounts of money to be derived from the area of MWD of SC within each separate member agency.

Section 7.

TOTALS

The total rates of ad valorem property taxation of MWD of SC for FY 2023/24 upon secured taxable property are set forth in Column #5 of Schedule B. The total rates of ad valorem property taxation of MWD of SC for FY 2023/24 upon unsecured taxable property are set forth in Column #6 of Schedule B. The total amounts of money to be derived by virtue of such tax levies for the Fiscal Year are set forth in Column #9 of Schedule B, including the amounts of money to be derived from the area of MWD of SC within each separate member agency.

Section 8.

REDEVELOPMENT AGENCIES

Pursuant to Assembly Bill X1 26 ("ABX1 26"), chaptered and effective on June 27, 2011, and as modified in part by the California Supreme Court in the decision of *California Redevelopment Association v. Matosantos,* Case No. S194681, redevelopment agencies in California were dissolved. Such dissolution laws were modified in part by Assembly Bill 1484 ("AB 1484"), chaptered and effective on June 27, 2012, and Senate Bill 107 ("SB 107"), chaptered and effective on September 22, 2015.

The total rates of taxation of MWD of SC for the Fiscal Year set forth in Column #5 of Schedule B are the rates of taxation upon taxable property taxable by MWD of SC within the areas shown in said Schedule, including taxable property formerly within redevelopment agencies as well as all other property so taxable by MWD of SC. The total amounts of money shown in Column #9 of Schedule B to be derived from some of said areas by virtue of tax levies of MWD of SC include monies to be allocated to the successor agencies of former redevelopment agencies for the payment of enforceable obligations and allowable administrative expenses approved by the State Department of Finance and local successor agency oversight boards, as well as amounts of money to be allocated to MWD of SC. The estimated adjustment to be made to account for the difference between the total amount levied and the amount to be derived is included in the provision for estimated collection delinquencies shown in Schedule A.

Section 9.

SCHEDULES A AND B

Schedules A and B are attached after the last page of this resolution and are incorporated herein.

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 August 15, 2023.

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

THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

SCHEDULE A

Estimated Funds to be Produced by Tax Levy, Fiscal Year 2023/24
(Cents Omitted)

		Bond Levy Column #1	State Contract Levy Column #2	Totals Column #3
Secured Property				
Assessed Value	$ 3,743,913,818,639			
Tax Rate		0.00002%	0.00348%	
Amount of Levy		$ 748,769	$ 130,288,201	$ 131,036,970
Unsecured Property				
Assessed Value	$ 132,061,410,657			
Tax Rate		0.00002%	0.00348%	
Amount of Levy		$ 26,412	$ 4,595,737	$ 4,622,149
All Property				
Assessed Value	$ 3,875,975,229,296			
Amount of Levy from Schedule B		$ 775,181	$ 134,883,938	$ 135,659,119
Allocation of County-wide Tax on Utilities		344,812	59,997,210	60,342,022
Total Tax Levy		$ 1,119,993	$ 194,881,148	$ 196,001,141
Estimated Collection Adjustments *		(46,232)	(8,044,310)	(8,090,542)
Estimated Funds to be Produced by Tax Levy		$ 1,073,761	$ 186,836,838	$ 187,910,599

* .5% allowance for delinquencies
7.2% allowance for allocations to successors of former redevelopment agencies
$2.5 million estimated supplemental tax collections
$4.5 million estimated prior years tax collections

Note: All rates expressed as percent of A.V.

Schedule B - Tax Rates and Amounts to be Derived from Respective Areas
for State Controller and MWD Board of Directors

Agency	Area (a)		Secured Bond Rate Col. 1	Unsecured Bond Rate Col. 2	Secured SWC Rate Col. 3	Unsecured SWC Rate Col. 4	Total Secured Rate Col. 5	Total Unsecured Rate Col. 6	Bond Levy Col. 7	SWC Levy Col. 8	Total Levy Col. 9
Included in MWD											
Los Angeles County											
City of Beverly Hills											
City of Beverly Hills Area		1-1-01-000-0	0.00002%	0.00002%	0.00348%	0.00348%	0.00350%	0.00350%	8,990.09	1,564,276.20	1,573,266.30
	Agency Totals:								8,990.09	1,564,276.20	1,573,266.30
City of Burbank											
City of Burbank Area		1-1-02-000-0	0.00002%	0.00002%	0.00348%	0.00348%	0.00350%	0.00350%	6,366.72	1,107,808.88	1,114,175.60
	Agency Totals:								6,366.72	1,107,808.88	1,114,175.60
City of Glendale											
City of Glendale Area		1-1-03-000-0	0.00002%	0.00002%	0.00348%	0.00348%	0.00350%	0.00350%	7,994.05	1,390,964.39	1,398,958.43
	Agency Totals:								7,994.05	1,390,964.39	1,398,958.43
City of Los Angeles											
City of Los Angeles Area		1-1-04-000-0	0.00002%	0.00002%	0.00348%	0.00348%	0.00350%	0.00350%	160,764.72	27,973,061.52	28,133,826.25
	Agency Totals:								160,764.72	27,973,061.52	28,133,826.25
City of Pasadena											
City of Pasadena Area		1-1-05-000-0	0.00002%	0.00002%	0.00348%	0.00348%	0.00350%	0.00350%	7,750.93	1,348,662.11	1,356,413.04
	Agency Totals:								7,750.93	1,348,662.11	1,356,413.04
City of San Marino											
City of San Marino Area		1-1-06-000-0	0.00002%	0.00002%	0.00348%	0.00348%	0.00350%	0.00350%	1,604.65	279,209.16	280,813.81
	Agency Totals:								1,604.65	279,209.16	280,813.81
City of Santa Monica											
City of Santa Monica Area		1-1-07-000-0	0.00002%	0.00002%	0.00348%	0.00348%	0.00350%	0.00350%	9,733.60	1,693,645.87	1,703,379.47
	Agency Totals:								9,733.60	1,693,645.87	1,703,379.47

Schedule B - Tax Rates and Amounts to be Derived from Respective Areas
for State Controller and MWD Board of Directors

Agency	Area (a)	Secured Bond Rate Col. 1	Unsecured Bond Rate Col. 2	Secured SWC Rate Col. 3	Unsecured SWC Rate Col. 4	Total Secured Rate Col. 5	Total Unsecured Rate Col. 6	Bond Levy Col. 7	SWC Levy Col. 8	Total Levy Col. 9
Included in MWD										
Los Angeles County										
City of Long Beach										
City of Long Beach Area	1-1-08-000-0	0.00002%	0.00002%	0.00348%	0.00348%	0.00350%	0.00350%	13,162.85	2,290,335.31	2,303,498.16
Agency Totals:								13,162.85	2,290,335.31	2,303,498.16
City of Torrance										
City of Torrance Area	1-1-09-000-0	0.00002%	0.00002%	0.00348%	0.00348%	0.00350%	0.00350%	7,210.07	1,254,552.73	1,261,762.80
Agency Totals:								7,210.07	1,254,552.73	1,261,762.80
City of Compton										
City of Compton Area	1-1-10-000-0	0.00002%	0.00002%	0.00348%	0.00348%	0.00350%	0.00350%	1,292.18	224,839.87	226,132.05
Agency Totals:								1,292.18	224,839.87	226,132.05
West Basin Municipal Water District										
West Basin Municipal Water District Area	1-1-11-000-0	0.00002%	0.00002%	0.00348%	0.00348%	0.00350%	0.00350%	54,270.27	9,443,027.29	9,497,297.57
Agency Totals:								54,270.27	9,443,027.29	9,497,297.57
Three Valleys Municipal Water District										
Three Valleys Municipal Water District Area	1-1-12-000-0	0.00002%	0.00002%	0.00348%	0.00348%	0.00350%	0.00350%	17,360.47	3,020,721.54	3,038,082.01
Agency Totals:								17,360.47	3,020,721.54	3,038,082.01
Foothill Municipal Water District Foothill Municipal Water District Area	1-1-13-000-0	0.00002%	0.00002%	0.00348%	0.00348%	0.00350%	0.00350%	4,839.81	842,127.49	846,967.30
Agency Totals:								4,839.81	842,127.49	846,967.30
Central Basin Municipal Water District Central Basin Municipal Water District Area	1-1-14-000-0	0.00002%	0.00002%	0.00348%	0.00348%	0.00350%	0.00350%	38,838.55	6,757,907.08	6,796,745.62
Agency Totals:								38,838.55	6,757,907.08	6,796,745.62

Schedule B - Tax Rates and Amounts to be Derived from Respective Areas
for State Controller and MWD Board of Directors

Agency	Area (a)	Secured Bond Rate Col. 1	Unsecured Bond Rate Col. 2	Secured SWC Rate Col. 3	Unsecured SWC Rate Col. 4	Total Secured Rate Col. 5	Total Unsecured Rate Col. 6	Bond Levy Col. 7	SWC Levy Col. 8	Total Levy Col. 9
Included in MWD										
Los Angeles County										
Las Virgenes Municipal Water District										
Las Virgenes Municipal Water District Area	1-1-15-000-0	0.00002%	0.00002%	0.00348%	0.00348%	0.00350%	0.00350%	6,197.68	1,078,395.72	1,084,593.40
Agency Totals:								6,197.68	1,078,395.72	1,084,593.40
Upper San Gabriel Valley MWD										
Upper San Gabriel Valley MWD Area	1-1-16-000-0	0.00002%	0.00002%	0.00348%	0.00348%	0.00350%	0.00350%	26,969.14	4,692,631.12	4,719,600.27
Agency Totals:								26,969.14	4,692,631.12	4,719,600.27
City of San Fernando										
City of San Fernando Area Area	1-1-17-000-0	0.00002%	0.00002%	0.00348%	0.00348%	0.00350%	0.00350%	521.71	90,777.68	91,299.40
Agency Totals:								521.71	90,777.68	91,299.40
County Totals:								373,867.49	65,052,943.97	65,426,811.47
Orange County										
City of Anaheim										
City of Anaheim Area Area	1-2-01-000-0	0.00002%	0.00002%	0.00348%	0.00348%	0.00350%	0.00350%	12,116.94	2,108,348.08	2,120,465.02
Agency Totals:								12,116.94	2,108,348.08	2,120,465.02
City of Santa Ana										
City of Santa Ana Area Area	1-2-02-000-0	0.00002%	0.00002%	0.00348%	0.00348%	0.00350%	0.00350%	6,889.95	1,198,851.86	1,205,741.81
Agency Totals:								6,889.95	1,198,851.86	1,205,741.81
City of Fullerton										
City of Fullerton Area Area	1-2-03-000-0	0.00002%	0.00002%	0.00348%	0.00348%	0.00350%	0.00350%	5,144.48	895,138.95	900,283.43
Agency Totals:								5,144.48	895,138.95	900,283.43
Municipal Water District of Orange County										
Remainder of MWD of Orange County	1-2-05-999-0	0.00002%	0.00002%	0.00348%	0.00348%	0.00350%	0.00350%	129,720.14	22,571,303.64	22,701,023.78
Agency Totals:								129,720.14	22,571,303.64	22,701,023.78
County Totals:								153,871.51	26,773,642.52	26,927,514.03

Schedule B - Tax Rates and Amounts to be Derived from Respective Areas
for State Controller and MWD Board of Directors

Agency	Area (a)	Secured Bond Rate Col. 1	Unsecured Bond Rate Col. 2	Secured SWC Rate Col. 3	Unsecured SWC Rate Col. 4	Total Secured Rate Col. 5	Total Unsecured Rate Col. 6	Bond Levy Col. 7	SWC Levy Col. 8	Total Levy Col. 9
Riverside County										
Eastern Municipal Water District										
Remainder of Eastern MWD	1-3-01-999-0	0.00002%	0.00002%	0.00348%	0.00348%	0.00350%	0.00350%	23,248.88	4,045,305.36	4,068,554.24
Agency Totals:								23,248.88	4,045,305.36	4,068,554.24
Western Municipal Water District										
Eleventh Fringe Area of Western MWD	1-3-02-011-0	0.00000%	0.00000%	0.00000%	0.00000%	0.00000%	0.00000%	0.00	0.00	0.00
Fifteenth Fringe Area of Western Mwd	1-3-02-012-0	0.00002%	0.00002%	0.00348%	0.00348%	0.00350%	0.00350%	0.08	14.29	14.37
Remainder of Western MWD	1-3-02-999-0	0.00002%	0.00002%	0.00348%	0.00348%	0.00350%	0.00350%	29,693.96	5,166,749.00	5,196,442.96
Agency Totals:								29,694.04	5,166,763.29	5,196,457.33
County Totals:								52,942.92	9,212,068.65	9,265,011.57
San Bernardino County										
Inland Empire Utilities Agency										
Original Area of Chino Basin MWD	1-4-01-001-0	0.00002%	0.00002%	0.00348%	0.00348%	0.00350%	0.00350%	13,114.86	2,281,985.31	2,295,100.17
Mid-valley Area of Chino Basin MWD	1-4-01-002-0	0.00002%	0.00002%	0.00348%	0.00348%	0.00350%	0.00350%	19,045.04	3,313,837.82	3,332,882.86
Bryant Annexation Area of Chino Basin MWD	1-4-01-003-0	0.00002%	0.00002%	0.00348%	0.00348%	0.00350%	0.00350%	15.77	2,744.29	2,760.07
North Perimeter No. 1 Annexation Area of Chino Basin MWD	1-4-01-004-0	0.00002%	0.00002%	0.00348%	0.00348%	0.00350%	0.00350%	9.94	1,728.85	1,738.78
Agency Totals:								32,185.61	5,600,296.26	5,632,481.87
County Totals:								32,185.61	5,600,296.26	5,632,481.87

Schedule B - Tax Rates and Amounts to be Derived from Respective Areas
for State Controller and MWD Board of Directors

Agency	Area (a)	Secured Bond Rate Col. 1	Unsecured Bond Rate Col. 2	Secured SWC Rate Col. 3	Unsecured SWC Rate Col. 4	Total Secured Rate Col. 5	Total Unsecured Rate Col. 6	Bond Levy Col. 7	SWC Levy Col. 8	Total Levy Col. 9
Included in MWD										
San Diego County										
San Diego County Water Authority Remainder of SDCWA +	1-5-01-999-9	0.00002%	0.00002%	0.00348%	0.00348%	0.00350%	0.00350%	136,026.03	23,668,529.58	23,804,555.61
Agency Totals:								136,026.03	23,668,529.58	23,804,555.61
County Totals:								136,026.03	23,668,529.58	23,804,555.61
Ventura County										
Calleguas Municipal Water District Remainder of Calleguas MWD	1-6-01-999-0	0.00002%	0.00002%	0.00348%	0.00348%	0.00350%	0.00350%	26,283.91	4,573,401.15	4,599,685.07
Agency Totals:								26,283.91	4,573,401.15	4,599,685.07
County Totals:								26,283.91	4,573,401.15	4,599,685.07
Included Totals:								775,177.48	134,880,882.13	135,656,059.62

Schedule B - Tax Rates and Amounts to be Derived from Respective Areas
for State Controller and MWD Board of Directors

Agency	Area (a)	Secured Bond Rate Col. 1	Unsecured Bond Rate Col. 2	Secured SWC Rate Col. 3	Unsecured SWC Rate Col. 4	Total Secured Rate Col. 5	Total Unsecured Rate Col. 6	Bond Levy Col. 7	SWC Levy Col. 8	Total Levy Col. 9
Excluded from MWD										
Los Angeles County										
City of Los Angeles										
Alhambra Hills	2-1-04-001-0	0.00000%	0.00000%	0.00348%	0.00348%	0.00348%	0.00348%	0.00	2,375.18	2,375.18
Portion of Reorganization No. 85-2	2-1-04-002-0	0.00002%	0.00002%	0.00348%	0.00348%	0.00350%	0.00350%	2.24	389.64	391.88
Agency Totals:								2.24	2,764.82	2,767.06
Las Virgenes Municipal Water District										
Portion of Reog No. 85-2 Exclusion from Las Virgines MWD	2-1-15-001-0	0.00002%	0.00002%	0.00348%	0.00348%	0.00350%	0.00350%	0.18	30.54	30.72
Agency Totals:								0.18	30.54	30.72
County Totals:								2.41	2,795.37	2,797.78

Schedule B - Tax Rates and Amounts to be Derived from Respective Areas
for State Controller and MWD Board of Directors

Agency	Area (a)	Secured Bond Rate Col. 1	Unsecured Bond Rate Col. 2	Secured SWC Rate Col. 3	Unsecured SWC Rate Col. 4	Total Secured Rate Col. 5	Total Unsecured Rate Col. 6	Bond Levy Col. 7	SWC Levy Col. 8	Total Levy Col. 9
Excluded from MWD										
San Diego County										
San Diego County Water Authority										
Exclusion from Original Area of Ramona MWD	2-5-01-017-0	0.00002%	0.00002%	0.00348%	0.00348%	0.00350%	0.00350%	0.03	4.77	4.80
Exclusions From Ramona No.2 Annexation Area	2-5-01-030-0	0.00002%	0.00002%	0.00348%	0.00348%	0.00350%	0.00350%	0.44	75.87	76.31
Rainbow No.3 Annexation Area	2-5-01-041-0	0.00002%	0.00002%	0.00348%	0.00348%	0.00350%	0.00350%	1.03	179.84	180.87
Agency Totals:								1.50	260.48	261.98
County Totals:								1.50	260.48	261.98
Excluded Totals:								3.91	3,055.84	3,059.76
Report Totals:								775,181.40	134,883,937.98	135,659,119.37

THE METROPOLITAN WATER
DISTRICT OF SOUTHERN CALIFORNIA

RESOLUTION ____

A RESOLUTION LEVYING AD VALOREM PROPERTY TAXES FOR THE FISCAL YEAR COMMENCING JULY 1, 2023 AND ENDING JUNE 30, 2024 FOR THE PURPOSES OF THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

The Board of Directors of The Metropolitan Water District of Southern California, after receiving, considering, and evaluating evidence and all material factors pertaining thereto, including budget requirements and estimated revenues from water rates, charges, and ad valorem property tax rates, finds, determines, and resolves:

Section 1.

RECITALS

Effective Water Rates and Charges during Fiscal Year 2023/24

The Board of Directors fixes water rates and charges on a calendar year basis and adopts its biennial budget and ad valorem property taxes on a fiscal year basis. During fiscal year (FY) 2023/24, the applicable rates and charges are those set by the Board for calendar year (CY) 2023 and CY 2024. The Board of Directors, with full review of (1) evidence presented, and (2) all material factors and considerations, has adopted water rates and charges for CYs 2023 and 2024, which, in the debated, informed and considered discretion of the Board, are in compliance with Section 134 of the Metropolitan Water District Act (the MWD Act), in that the Board, so far as practicable, has fixed such rates and charges as will result in revenue which will pay the District's operating expenses, provide for maintenance and repairs, provide for payment of the purchase price or other charges for property or services or other rights acquired by the District, and provide for the payment of the interest and principal of District bonds, notes and other evidences of indebtedness under the applicable provisions of the Act authorizing debt issuance and retirement, assuming the ad valorem property tax rate for FYs 2022/23 and 2023/24 continues at the existing rate of .0035 percent. This Resolution establishes the tax rate for FY 2023/24.

Applicability of Ad Valorem Property Tax Limitations Pursuant to the MWD Act

Section 124.5 of the MWD Act limits property tax collections to the amount necessary to pay the total annual debt service on Metropolitan's general obligation bonds and only a portion of its State Water Contract (SWC) payment obligation, limited to the preexisting debt service on state general obligation bonds (Burns-Porter bonds) used to finance construction of State Water Project (SWP) facilities for the benefit of Metropolitan. However, the limitation of Section 124.5 does not apply if, following a public hearing, the Board of Directors finds that collection of tax revenue in excess of that limitation is essential to the fiscal integrity of the District. The Board held the public hearing pursuant to Section 124.5 of the Act on March 8, 2022 to determine the applicability of the limitation for FYs 2022/23 through 2025/26. On April 12, 2022, the Board adopted Resolution No. 9301, through which the Board:

1. Found and determined 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 FYs 2022/23 through 2025/26;

2. Resolved and determined that pursuant to its finding, the tax rate restriction in Section 124.5 of the MWD Act is inapplicable when setting the ad valorem property tax rate for FYs 2022/23 through 2025/26, allowing the Board to maintain the current ad valorem property tax rate for those fiscal years (.0035 percent of assessed valuation, excluding annexation levies); and

3. Waived compliance with Section 4301(b) of Metropolitan's Administrative Code for any tax levy that utilizes the April 2022 finding regarding Section 124.5 of the MWD Act.

<u>FY 2023/24 Ad Valorem Property Tax Levy</u>

In its informed discretion, based upon full review of evidence presented and all material factors and considerations, the Board of Directors determines that the District's revenues for FY 2023/24 from water transactions and sources other than ad valorem property taxes, after payment of the District's operation and maintenance expenses, the payment of the purchase price or other charges for property or services or other rights acquired by the District, the operation, maintenance, power, and replacement charges due under the District's state contract, revenue bond service, deposits to the revenue bond reserve fund, short term revenue certificate (commercial paper note) service, net costs of operating equipment, and net inventory costs during the fiscal year, as well as the maintenance of prudent reserves for unforeseen District expenditures or unforeseen reduction in District revenue, will be insufficient to provide for general obligation bond service and to pay the District's contract obligations to the state for sale and delivery of water. Therefore, the Board levies ad valorem property taxes for FY 2023/24 as provided in this Resolution at sections 4 through 7 and the exhibits attached, sufficient, when taken with other revenues available for the purpose, to meet all the foregoing obligations and financial requirements, in the amounts and rates set forth in this Resolution and the schedules attached and incorporated therein.

Section 2.

DEFINITIONS

The following terms as used herein shall have the following meanings:

(1) "MWD OF SC" shall mean The Metropolitan Water District of Southern California

"MWD" shall mean Municipal Water District

"SDCWA" shall mean the San Diego County Water Authority

"ID" shall mean Irrigation District

"PUD" shall mean Public Utility District.

(2) "Fiscal Year" or "FY 2023/24" shall mean the fiscal year commencing July 1, 2023 and ending June 30, 2024.

(3) "Schedule A and B" as shown in Section 9 shall mean:

Schedule A - a tabulation setting forth for the Fiscal Year the estimated funds to be produced by MWD of SC ad valorem property tax levies made by this Resolution.

Schedule B - a tabulation setting forth for the Fiscal Year ad valorem property tax rates as set forth in Sections 4, 5, and 6 hereof, the total tax rates, and the amounts of money to be derived from respective areas from the tax levies made by this Resolution.

(4) The following city areas represent the corporate areas of cities within the County of Los Angeles at their respective times of annexation to MWD of SC, and may include areas subsequently annexed to said city areas at times when such areas were not within MWD of SC, and may include those areas which, at the time of their respective annexation to said city areas, were within non-city member public agencies and subsequently excluded from such non-city member public agencies:

"City of Beverly Hills Area" December 6, 1928

“City of Burbank Area”	December 6, 1928
“City of Glendale Area”	December 6, 1928
“City of Los Angeles Area” (Including portion of Original Area of Las Virgenes MWD excluded from Las Virgenes MWD on November 9, 1962)	December 6, 1928
“City of Pasadena Area”	December 6, 1928
“City of San Marino Area”	December 6, 1928
“City of Santa Monica Area”	December 6, 1928
“City of Long Beach Area”	February 27, 1931
“City of Torrance Area”	February 27, 1931
“City of Compton Area”	June 23, 1931
“City of San Fernando Area”	November 12, 1971

(5) “West Basin MWD” shall include the following areas; annexed to West Basin MWD and to MWD of SC on the dates cited:

Original Area	July 23, 1948
City of Gardena Area	December 9, 1948
Inglewood Area	June 9, 1952
Dominguez Area	October 16, 1952
Hawthorne Area	October 23, 1953
La Casa Territory Area	November 23, 1953
A B C Territory Area	January 11, 1955
Culver City-County Territory Area	January 11, 1955
Frawley Territory Area	January 13, 1958
Imperial Strip Territory Area	November 22, 1960
Marina Area	January 10, 1962
Belle View Area	November 12, 1963
Municipal Parking Area	November 12, 1963
La Tijera Area	December 21, 1965
Jefferson Blvd. Area	October 30, 1969
Marina Second Fringe Area	May 3, 1978
West Hollywood Area	June 23, 1981
Reorganization No. 2014-10, Parcel A, and concurrently detached from the city of Torrance	December 22, 2014
Reorganization No. 2009-16, and concurrently detached from Las Virgenes MWD	February 19, 2015
Reorganization No. 2014-06, and concurrently detached from Las Virgenes MWD	July 19, 2016

(6) “Three Valleys MWD” shall include the following areas, annexed to Three Valleys MWD (formerly Pomona Valley MWD) and to MWD of SC on the dates cited:

Original Area	November 15, 1950
Glendora Area	October 2, 1952
Rowland Area	June 15, 1953
Stephens Area	November 27, 1957

(7) “Foothill MWD” shall include the following areas, annexed to Foothill MWD and to MWD of SC on the dates cited:

Original Area of Foothill MWD	January 15, 1953
Foothill First Fringe Area	March 21, 1968
Foothill Second Fringe Area	November 21, 1968
La Vina Annexation	July 13, 1993

(8) “Central Basin MWD” shall include the following areas, annexed to Central Basin MWD and to MWD of SC

on the dates cited:

Original Area	November 12, 1954
Compton Territory Area	January 4, 1957
Bellflower Territory Area	December 30, 1958
Shoestring Strip Territory Area	January 23, 1961
Signal Hill Territory Area	November 14, 1963
Lakewood Area	November 14, 1963
Vernon Area	June 24, 1965
Dairy Valley Area	June 21, 1967
Boyle Heights Area	July 24, 1967
Cerritos Area	December 22, 1969
Hawaiian Gardens Area	November 22, 1977

(9) "Las Virgenes MWD" shall include the following areas annexed to Las Virgenes MWD and to MWD of SC on the dates cited, excluding that portion annexed to the City of Los Angeles on November 9, 1962:

Original Area	December 1, 1960
Twin Lakes Area	March 12, 1965
Bell Canyon Area	March 16, 1966
Hidden Hills Annexation 87-1	April 22, 1988
Reorganization No. 2017-10, and concurrently detached from West Basin MWD	February 16, 2021

(10) "Upper San Gabriel Valley MWD" shall include the following areas annexed to Upper San Gabriel Valley MWD and to MWD of SC on the dates cited:

Original Area	March 27, 1963
West Covina Area	November 1, 1965
Garvey Reservoir Area	December 1, 1976
Mountain Cove Annexation	July 17, 2002

(11) The following city areas represent the corporate areas of cities within the County of Orange at their respective times of annexation to MWD of SC, and may include areas subsequently annexed to said city areas at times when such areas were not within MWD of SC, and may include those areas which, at the time of their respective annexation to said city areas, were within non-city member public agencies and subsequently excluded from such non-city member public agencies:

City of Anaheim Area — December 6, 1928

Including:

Serrano/Nohl Ranch Rd. Reorganization (RO 01-05), Parcel 2, detached from MWD of Orange County on April 19, 2001;

Reorganization Area 1 (RO 03-17) detached from MWD of Orange County on August 26, 2003;

Reorganization Area 2 (RO 03-17) detached from MWD of Orange County on August 26, 2003;

Reorganization Brookhurst ARCO (RO 02-02) detached from MWD of Orange County on July 8, 2003;

North-Central Islands Annexation (IA 04-08) detached from MWD of Orange County on August 20, 2004;

Serrano Heights Reorganization (RO 04-01) detached from MWD of Orange County on May 28, 2004;

Ball Road/Santa Ana River Reorganization (RO 04-02) detached from MWD of Orange County on

December 13, 2004
Meyer Reorganization (RO 15-01) and concurrently detached from MWD of Orange County on May 16, 2016

City of Santa Ana Area Including:	December 6, 1928
Reorganization Area 4 (RO 03-17) detached from MWD of Orange County on August 26, 2003	
City of Fullerton Area Including:	February 27, 1931
Hawks Point Reorganization (RO 00-11) detached from MWD of Orange County on April 19, 2001; Reorganization Area 3 (RO 03-17) detached from MWD of Orange County on August 26, 2003; Page Avenue Island Annex. (IA 04-14) detached from MWD of Orange County on November 3, 2004; Somerset Island Annex. (IA 04-15) detached from MWD of Orange County on November 3, 2004	

(12) "Remainder of MWD of Orange County" shall include the following areas, annexed to MWD of Orange County and to MWD of SC on the dates cited excluding that portion thereof of Reorganization No. 62 annexed to Coastal MWD on March 7, 1984:

Original Area	November 26, 1951
Annexation No. 1 Territory Area	November 25, 1957
Annexation No. 4 Territory Area	December 11, 1958
Annexation No. 5 Territory Area	December 7, 1959
Annexation No. 7 Territory Area	December 8, 1960
Annexation No. 10 Territory Area	December 11, 1961
Annexation No. 11 Territory Area	January 6, 1964
Annexation No. 8A Territory Area	March 29, 1965
Annexation No. 8B Territory Area	March 29, 1965
Annexation No. 8D Territory Area	March 29, 1965
Annexation No. 8E Territory Area	March 29, 1965
Annexation No. 8F Territory Area	March 29, 1965
Annexation No. 8G Territory Area	March 29, 1965
Annexation No. 8H Territory Area	March 29, 1965
Annexation No. 13 Territory Area (Excluded from Coastal MWD for purpose of such annexation)	June 30, 1969
Annexation No. 16 Territory Area	November 7, 1972
Annexation No. 15 Territory Area	November 15, 1972
Annexation No. 18 Territory Area	December 16, 1982
Annexation No. 19 Territory Area	December 27, 1983
Annexation No. 17 Territory Area	December 29, 1983
City of Brea Area	March 7, 1984
Brea Fringe Annexation Area	March 7, 1984
Serrano/Nohl Ranch Road Reorganization Parcel 1 (RO 01-05) detached from City of Anaheim	April 19, 2001

Coastal MWD	January 17, 2001

Coastal MWD and MWD of Orange County have been consolidated into a single district (RO 97-06) effective January 17, 2001. It shall include the following areas, annexed to Coastal MWD and to MWD of SC on the dates cited:

Original Area	June 15, 1942
Fairview Farms Area	September 21, 1946
Irvine Subdivision Areas	November 26, 1948
1948 Portion of City of Newport Beach Area	November 29, 1948
Parts of Dana Point Area	August 3, 1949
Capistrano Beach-San Clemente Area	October 28, 1954
Tri-Cities Annexation No. 2 Area	December 12, 1962
Laguna Canyon Annexation Area	December 20, 1962
Lido Sands Annexation Area	January 6, 1964
Laguna Niguel Area (Including Reorganization 32 Parcel A Area excluded from Annexation No. 4 on January 4, 1977)	June 30, 1969
Tri-Cities Annexation No. 79-1 Area	December 22, 1982
Reorganization No. 62 Parcel C and that portion of Parcel B Area excluded from Annexation No. 5 of MWD of Orange County	March 7, 1984
Reorganization No. 64 Area excluded from Annexation No. 7 of MWD of Orange County	March 18, 1983
Reorganization No. 123 excluded from Annexation No. 7 of MWD of Orange County	August 6, 1990

(13) "Remainder of Eastern MWD" shall include the following areas, annexed to Eastern MWD and to MWD of SC on the dates cited:

Original Area (Portion of area excluded from Eastern MWD and annexed to Western MWD)	July 20, 1951
Adjacent Area	May 22, 1953
First Fringe Area (Portion of area excluded from Eastern MWD and annexed to Western MWD)	April 20, 1956
Third Fringe Area (Area excluded from Original Area of Western MWD)	November 20, 1958
Fourth Fringe Area	December 6, 1960
Fifth Fringe Area (Portion of area excluded from Eastern MWD and annexed to Western MWD)	May 31, 1962
Sixth Fringe Area	December 10, 1962
Seventh Fringe Area	March 11, 1963
Eight Fringe Area	April 23, 1963
Ninth Fringe Area	April 23, 1963
Tenth Fringe Area	September 22, 1964
Eleventh Fringe Area	September 22, 1964
Twelfth Fringe Area	October 22, 1965
Thirteenth Fringe Area (Portion of area excluded from Eastern MWD and annexed to Western MWD)	October 13, 1967
Fourteenth Fringe Area	October 23, 1967
Sixteenth Fringe Area (Area excluded from First Fringe Area of Western MWD)	July 1, 1969
Fifteenth Fringe Area	August 12, 1969
Seventeenth Fringe Area	March 5, 1970

Eighteenth Fringe Area	March 5, 1970
Nineteenth Fringe Area	May 8, 1970
Twentieth Fringe Area	September 29, 1971
Twenty-First Fringe Area	September 30, 1971
Twenty-Second Fringe Area	April 27, 1972
Twenty-Third Fringe Area	May 23, 1975
Twenty-Fourth Fringe Area	December 30, 1975
Twenty-Fifth Fringe Area	April 26, 1983
Twenty-Sixth Fringe Area	November 27, 1985
Twenty-Seventh Fringe Area	December 19, 1985
Twenty-Eighth Fringe Area	November 18, 1986
Twenty-Ninth Fringe Area	May 4, 1987
Thirty-First Fringe Area	July 9, 1987
Thirty-Second Fringe Area	July 9, 1987
Thirty-Third Fringe Area	August 27, 1987
Thirtieth Fringe Area	December 15, 1987
Thirty-Fourth Fringe Area	March 16, 1988
Thirty-Fifth Fringe Area	May 2, 1988
Thirty-Eighth Fringe Area	October 14, 1988
Thirty-Sixth Fringe Area	December 5, 1988
Fortieth Fringe Area	August 1, 1989
Forty-Second Fringe Area	May 25, 1990
Forty-Third Fringe Area	June 19, 1990
Thirty-Ninth Fringe Area	July 13, 1990
Forty-First Fringe Area	July 27, 1990
Forty-Fifth Fringe Area	March 13, 1991
Forty-Seventh Fringe Area	June 3, 1991
Forty-Eighth Fringe Area	November 21, 1991
Forty-Ninth Fringe Area	November 21, 1991
Fiftieth Fringe Area	November 21, 1991
Fifty-First Fringe Area	December 19, 1991
Forty-Fourth Fringe Area	June 3, 1992
Fifty-Second Fringe Area	June 29, 1992
Forty-Sixth Fringe Area	July 7, 1992
Fifty-Third Fringe Area	August 27, 1992
Fifty-Fifth Fringe Area	April 29, 1993
Fifty-Sixth Fringe Area	June 22, 1993
Fifty-Eighth Fringe Area	June 22, 1993
Fifty-Ninth Fringe Area	June 22, 1993
Sixtieth Fringe Area	November 29, 1993
Fifty-Seventh Fringe Area	December 9, 1994
Sixty-Second Fringe Area	July 3, 1996
Sixty-Third Fringe Area	October 28, 1996
Sixty-Fourth Fringe Area	August 28, 1997
Sixty-Fifth Fringe Area	December 28, 2000
Seventieth Fringe Area	August 29, 2001
Sixty-Seventh Fringe Area Reorganization (Area detached from portion of Original Area of Western MWD)	August 29, 2001
Sixty-Eighth Fringe Area	January 15, 2002
Seventy-First Fringe Area	June 20, 2002
Sixty-Ninth Fringe Area	November 27, 2002
Seventy-Second Fringe Area	October 21, 2003
Sixty-Sixth Fringe Area	November 17, 2003
Seventy-Third Fringe Area	November 17, 2003
Seventy-Fourth Fringe Area	November 17, 2003
Seventy-Fifth Fringe Area	June 2, 2004
Seventy-Sixth Fringe Area	April 6, 2004

Seventy-Eighth Fringe Area	April 19, 2005
Eighty-Third Fringe Area	December 15, 2005
Seventy-Ninth Fringe Area	December 20, 2005
Eighty-First Fringe Area	December 20, 2005
Eighty-Fourth Fringe Area	December 20, 2005
Eighty-Seventh Fringe Area	February 14, 2006
Eighty-Sixth Fringe Area	March 24, 2006
Eighty-Fifth Fringe Area	May 22, 2006
Eighty-Eighth Fringe Area	May 22, 2006
Eighty-Ninth Fringe Area	June 28, 2006
Ninety-Second Fringe Area	August 2, 2006
Ninety-First Fringe Area	November 28, 2006
Ninety-Fifth Fringe Area	December 14, 2006
Ninetieth Fringe Area	December 19, 2006
Ninety-Seventh Fringe Area	April 16, 2007
Ninety-Third Fringe Area	July 26, 2007
101st Fringe Area	January 24, 2008
Ninety-Ninth Fringe Area Reorganization (Area detached from Western Municipal Water District)	September 10, 2008
100th Fringe Area	November 17, 2008
Ninety-Sixth Fringe Area	December 11, 2008
102nd Fringe Area	December 22, 2009
103rd Fringe Area	October 1, 2013
104th Fringe Area	September 22, 2015
105th Fringe Area (2015-11-3 Reorganization)	September 19, 2017
107th Fringe Area (2017-04-5 Reorganization)	September 12, 2017
106th Fringe Area (2017-12-3 Reorganization)	December 14, 2017
108th Fringe Area (2017-24-3 Reorganization)	November 8, 2018
110th Fringe Area (2019-03-3 Reorganization	July 17, 2019
109th Fringe Area (2019-06-3 Reorganization)	November 22, 2019
111th Fringe Area (2020-25-3 Reorganization)	February 11, 2021

(14) "Remainder of Western MWD" shall include the following areas, annexed to Western MWD and to MWD of SC on the dates cited:

Original Area (Portion of area excluded from Western MWD and annexed to Eastern MWD)	November 12, 1954
First Fringe Area (Portion of area excluded from Western MWD and annexed to Eastern MWD)	December 20, 1957
Second Fringe Area	December 18, 1961
Third Fringe Area	June 27, 1962
Fifth Fringe Area	July 2, 1964
Fourth Fringe Area	December 19, 1966
Seventh Fringe Area	December 19, 1966
Eighth Fringe Area (Area excluded from Fifth Fringe Area of Eastern MWD on July 26, 1967)	September 18, 1967
Sixth Fringe Area	September 27, 1967
Ninth Fringe Area	November 17, 1967
Tenth Fringe Area	June 12, 1968
Thirteenth Fringe Area (Area excluded from Fifth Fringe Area of Eastern MWD)	June 23, 1969
Twelfth Fringe Area (Area excluded from First Fringe Area of Eastern MWD)	July 1, 1969

Eleventh Fringe Area	July 17, 1969
Fifteenth Fringe Area (Area lying entirely within the County of Orange)	July 13, 1972
Fourteenth Fringe Area	October 11, 1973
Sixteenth Fringe Area (Area excluded from Thirteenth Fringe Area of Eastern MWD)	August 30, 1977
Seventeenth Fringe Area	December 23, 1980
Eighteenth Fringe Area	December 15, 1981
Twentieth Fringe Area	December 4, 1987
Twenty-Second Fringe Area	October 14, 1988
Twenty-First Fringe Area	December 5, 1988
Twenty-Third Fringe Area	November 3, 1989
Twenty-Fourth Fringe Area	May 18, 1990
Twenty-Seventh Fringe Area	May 18, 1990
Twenty-Sixth Fringe Area	June 6, 1990
Twenty-Fifth Fringe Area	July 13, 1990
Twenty-Eighth Fringe Area	January 28, 1991
Thirtieth Fringe Area	March 13, 1991
Twenty-Ninth Fringe Area	November 4, 1991
Thirty-First Fringe Area	February 19, 1992
Thirty-Third Fringe Area	May 26, 1993
Thirty-Fourth Fringe Area (Area excluded from Fifth Fringe Area of Eastern MWD)	October 31, 1994
Thirty-Sixth Fringe Area (Area excluded from Original Area of Eastern MWD)	September 29, 1997
Thirty-Seventh Fringe Area	December 30, 1997
Thirty-Eighth Fringe Area	June 29, 1999
Fortieth Fringe Area	November 22, 1999
Thirty-Ninth Fringe Area	October 24, 2000
Forty-First Fringe Area	December 28, 2000
Forty-Fifth Fringe Area	June 20, 2002
Forty-Second Fringe Area (Area excluded from Fifth Fringe Area of Eastern MWD)	February 7, 2002
Forty-Sixth Fringe Area	November 24, 2003
Forty-Eighth Fringe Area	December 15, 2003
Forty-Ninth Fringe Area	April 28, 2004
Fiftieth Fringe Area	May 27, 2005
Forty-Seventh Fringe Area	June 21, 2005
Forty-Fourth Fringe Area	June 22, 2006
Forty-Third Fringe Area	October 21, 2014
Fifty-First Fringe Area Annexation	October 16, 2018
Fifty-Second Fringe Area Annexation	June 16, 2020

(15) “Original Area of Chino Basin MWD” shall mean the area of Chino Basin MWD annexed to MWD of SC on November 26, 1951.

(16) “Mid-Valley Area of Chino Basin MWD” shall mean the Mid-Valley area annexed to Chino Basin MWD and to MWD of SC on April 20, 1954.

(17) “Bryant Annexation Area of Chino Basin MWD” shall mean the “Bryant Annexation area annexed to Chino Basin MWD and to MWD of SC on November 25, 1957.

(18) “North Perimeter No. 1 Annexation Area of Chino Basin MWD” shall mean the North Perimeter No. 1 Annexation area annexed to Chino Basin MWD and to MWD of SC on November 28, 1969.

(19) "Remainder of SDCWA" shall include the following areas annexed to SDCWA and to MWD of SC on the dates cited:

Original Area of SDCWA Annexation (Including areas subsequently annexed to city public agencies which were included within Original Area of SDCWA at times when such areas were not within MWD of SC, and areas excluded from non-city public agencies of SDCWA at times when such areas were within said city public agencies)	December 17, 1946
Crest PUD Territory Area	December 13, 1948
San Dieguito ID Area	December 13, 1948
Santa Fe ID Area	December 13, 1948
1950 Fallbrook PUD Annexation Area (Including De Luz Heights MWD Reorganization, originally De Luz Heights MWD annexed to MWD of SC on June 28, 1967 and dissolved on July 1, 1990)	August 1, 1950
City of Escondido Area	October 9, 1950
San Diego Gas and Electric Company Area	May 14, 1952
San Diego Eucalyptus Company's Lands Area	July 18, 1952
South Bay ID Area	November 3, 1952
Rainbow MWD Area	April 10, 1954
City of Poway Area	April 21, 1954
Bueno Colorado MWD Area (Area dissolved and annexed to Rainbow MWD, Vista Irrigation District, Carlsbad MWD and Vallecitos Water District on November 24, 1993)	June 11, 1954
Rincon Del Diablo MWD	June 14, 1954
Costa Real MWD Area	June 16, 1954
El Cajon Valley-Dry Island Area (Including Lakeside-Boukai Joint Venture Reorganization detached from Padre Dam MWD on September 11, 1996)	December 20, 1954
Valley Center MWD Area	May 9, 1955
Sweetwater Reservoir Area	October 10, 1955
Padre Dam MWD Area	June 7, 1956
Bueno Colorado Annexation No. 1 Area	June 11, 1956
Otay MWD Area	October 26, 1956
Original Area of Ramona MWD within MWD of SC	August 27, 1957
Fallbrook No. 2 Annexation Area	November 24, 1958
Helix Watson Ranch-Island Area	February 20, 1959
Rainbow No. 1 Annexation Area	May 12, 1959
Ramona No. 1 Annexation Area	May 29, 1959
Helix-Fletcher Annexation Area	June 26, 1959
San Dieguito Concurrent Annexation No. 1 Area	September 15, 1959
Helix-Sunnyslope Heights Annexation Area	September 17, 1959
Poway No. 1 Annexation Area	September 21, 1959
Padre Dam MWD No. 2 Annexation Area	November 6, 1959
Padre Dam MWD No. 1 Annexation Area	November 10, 1959
San Dieguito Local Inclusion Annexation Area	November 18, 1959
Santa Fe No. 1 Annexation Area	November 30, 1959
Olivenhain MWD Area (Including Encinitas Municipal Services Reorganization Parcels 1, 2, & 3 detached from San Dieguito No. 2 Annexation Area of SDCWA on June 16, 1995)	July 25, 1960
Helix-Willis-Houston Annexation Area	August 10, 1960
Padre Dam MWD No. 3 Annexation Area	October 16, 1960
Otay No. 3 Annexation Area	October 20, 1960

Valley Center No. 1 Annexation Area	December 12, 1960
Rincon del Diablo No. 1 Annexation Area	December 12, 1960
Ramona No. 2 Annexation Area within MWD of SC	September 22, 1961
Rincon del Diablo No. 2 Annexation Area	September 29, 1961
City of Del Mar Area	November 23, 1962
Ramona No. 3 Annexation Area	September 20, 1963
Yuima MWD Area (Excluding Adams/Fitzsimmons Reorganization Parcel 1 annexed to Valley Center MWD, including Adams/Fitzsimmons Reorganization Parcel 2 excluded from Valley Center MWD on March 26, 1991)	December 16, 1963
Rincon del Diablo No. 3 Annexation Area	August 27, 1964
Olivenhain No. 1 Annexation Area	February 11, 1965
South Bay Tidelands Area	May 11, 1965
De Luz Heights Annexation Area (Reorganization)	June 28, 1967
Olivenhain No. 4 Annexation Area	November 13, 1967
Yuima No. 1 Annexation Area	November 21, 1967
Ramona Dos Picos Area	November 27, 1967
Ramona No. 4 Annexation Area	November 27, 1967
Valley Center No. 2 Annexation Area	November 29, 1967
Valley Center No. 3 Annexation Area	November 30, 1967
Rainbow No. 3 Annexation Area of SDCWA within MWD of SC" shall mean the Rainbow No. 3 Annexation area annexed to SDCWA and to MWD of SC; omitting therefrom the Werner Detachment excluded on August 4, 1980, the Brown Detachment excluded on January 1, 1981, and the Mann- Gosser Detachment excluded on March 4, 1981 from SDCWA and MWD of SC.	December 6, 1967
De Luz Heights No. 1 Annexation Area	October 15, 1969
Yuima No.2 Annexation Area	November 24, 1969
Fallbrook Community Air Park Annexation Area of SDCWA shall mean the Fallbrook Community Air Park Annexation area annexed to SDCWA and to MWD of SC	December 22, 1969
Padre Dam MWD No. 4	August 3, 1970
Ramona No. 5 Annexation Area	May 17, 1972
Rincon del Diablo No. 4 Annexation Area	November 2, 1972
San Dieguito No. 2 Annexation Area (Including Encinitas Municipal Services Reorganization on June 16, 1995)	December 8, 1972
Santa Fe No. 2 Annexation Area	April 11, 1973
Valley Center No. 4 Annexation Area	November 5, 1973
Rainbow No. 5 Annexation Area	November 22, 1973
San Onofre State Beach and Park Area	December 16, 1977
Pendleton Military Reservation Area -Nuclear Generating Plant Portion	December 16, 1977
Remainder of Pendleton Military Reservation Area	December 16, 1977
Rancho Jamul Estates Annexation Area	March 13, 1979
Lake Hodges Estates Annexation Area	June 26, 1980
Burdick Annexation No. 5 Area to Padre Dam MWD	July 26, 1982
Palo Verde Annexation No. 6 Area to Padre Dam MWD	November 15, 1983
Lake Ranch Viejo Annexation to Rainbow MWD	December 13, 1983
Honey Springs Ranch Annexation Area to Otay MWD	December 14, 1983
Thweatt Annexation Area to Rincon del Diablo MWD	December 30, 1983
Hewlett-Packard Annexation Area to Rainbow MWD	December 31, 1985
4S Ranch Annexation Area to Olivenhain MWD	November 5, 1986
Quail Park Reorganization Area Annexed to San Dieguito Water District and excluded from	July 11, 1989

Olivenhain MWD	
Paradise Mountain Area Annexed to Valley Center MWD	January 11, 1993
Boathouse Area Annexed to Otay Water District	September 6, 1994
Guajome Regional Park Annexation to Vista Irrigation District	October 23, 1998
Podrasky Ohlson Annexation to Valley Center MWD	March 11, 2004
San Elijo Ridge Reorganization (Altman) to Vallecitos Water District	August 9, 2004
Baxter Annexation (RO 03-19) to Padre Dam MWD	July 9, 2005
Citrus Heights Annexation	March 4, 2008
Erreca Annexation	November 4, 2009
Meadowood Reorganization (RO12-11) to SDCWA	December 4, 2014
Lake Wohlford Reorganization (R014-16) to SDCWA	April 21, 2015
Greenwood Memorial Park Island Reorganization (City of San Diego, RO 17-01)	May 26, 2017
Campus Park West (RO 14-08)	December 13, 2017
SVBF Temple Reorganization (LAFCO RO20-16 et al.)	December 16, 2021
Rancho Corrido RV Park Reorganization (LAFCO RO20-21 et al.)	February 14, 2022

(20) "Remainder of Calleguas MWD" shall include the following areas annexed to Calleguas MWD and to MWD of SC on the dates cited:

Original Area of Calleguas MWD	December 14, 1960
Calleguas Annexation No. 1 Area	March 16, 1961
Lake Sherwood Area	March 14, 1963
Annexation No. 3 Territory	March 15, 1963
Oxnard Mandalay Area	December 8, 1964
Oxnard First Fringe Area	December 8, 1964
Annexation No. 6 Territory	October 17, 1968
Oxnard Second Fringe Area	November 7, 1969
Camarillo First Fringe Area	December 19, 1969
Oxnard Third Fringe Area	December 14, 1970
Oxnard Fourth Fringe Area	December 19, 1972
Point Mugu State Park Area	June 22, 1973
Oxnard Fifth Fringe Area	December 16, 1974
Oxnard Sixth Fringe Area	December 30, 1975
Oxnard Seventh Fringe Area	December 17, 1976
Ventura School for Girls Area	December 17, 1976
Oxnard Eighth Fringe Area	December 12, 1977
Calleguas Annexation No. 17 Area	December 28, 1979
Calleguas Annexation No. 19 Area	December 9, 1981
Calleguas Annexation No. 20 Area	December 21, 1981
Calleguas Annexation No. 18 Area	December 29, 1981
Calleguas Annexation No. 21 Area	March 24, 1982
Calleguas Annexation No. 22 Area	December 2, 1983
Calleguas Annexation No. 23 Area	November 30, 1984
Calleguas Annexation No. 24 Area	June 19, 1985
Calleguas Annexation No. 25 Area	November 27, 1985
Calleguas Annexation No. 26 Area	July 25, 1986
Calleguas Annexation No. 27 Area	December 31, 1987
Calleguas Annexation No. 28 Area	October 4, 1988
Calleguas Annexation No. 29 Area	October 10, 1989
Calleguas Annexation No. 30 Area	July 6, 1990
Calleguas Annexation No. 31 Area	September 25, 1990
Calleguas Annexation No. 33 Area	November 27, 1991

Calleguas Annexation No. 34 Area	June 24, 1992
Calleguas Annexation No. 35 Area	February 26, 1993
Calleguas Annexation No. 36 Area	February 26, 1993
Calleguas Annexation No. 39 Area	February 2, 1994
Calleguas Annexation No. 40 Area	May 16, 1994
Calleguas Annexation No. 41 Area	August 16, 1994
Calleguas Annexation No. 43 Area	August 16, 1994
Calleguas Annexation No. 45 Area	August 16, 1994
Calleguas Annexation No. 46 Area	September 27, 1994
Calleguas Annexation No. 38 Area	December 19, 1994
Calleguas Annexation No. 44 Area	December 19, 1994
Calleguas Annexation No. 47 Area	September 19, 1995
Calleguas Annexation No. 48 Area	December 21, 1995
Calleguas Annexation No. 32 Area	March 5, 1996
Calleguas Annexation No. 49 Area	December 18, 1996
Calleguas Annexation No. 52A Area	November 4, 1997
Calleguas Annexation No. 53 Area	December 19, 1997
Calleguas Annexation No. 52B Area	December 23, 1997
Calleguas Annexation No. 51 Area	June 9, 1998
Calleguas Annexation No. 54 Area	January 26, 1999
Calleguas Annexation No. 55 Area	January 27, 1999
Calleguas Annexation No. 61 Area	October 27, 1999
Calleguas Annexation No. 57 Area	December 29, 1999
Calleguas Annexation No. 58 Area	December 29, 1999
Calleguas Annexation No. 60 Area	December 29, 1999
Calleguas Annexation No. 65 Area	August 2, 2000
Calleguas Annexation No. 66 Area	August 4, 2000
Calleguas Annexation No. 63 Area	December 27, 2000
Calleguas Annexation No. 68 Area	April 17, 2001
Calleguas Annexation No. 69 Area	July 20, 2001
Calleguas Annexation No. 70 Area	July 27, 2001
Calleguas Annexation No. 74 Area	November 26, 2001
Calleguas Annexation No. 72 Area	December 17, 2001
Calleguas Annexation No. 75 Area	April 24, 2002
Calleguas Annexation No. 76-A Area	July 2, 2002
Calleguas Annexation No. 76-B Area	July 26, 2002
Calleguas Annexation No. 79	May 27, 2003
Calleguas Annexation No. 81	August 11, 2003
Calleguas Annexation No. 82	September 22, 2003
Calleguas Annexation No. 80	December 9, 2002
Calleguas Annexation No. 67	December 22, 2003
Calleguas Annexation No. 73	December 22, 2003
Calleguas Annexation No. 77	June 4, 2004
Calleguas Annexation No. 78	March 3, 2004
Calleguas Annexation No. 84	October 22, 2004
Calleguas Annexation No. 83	November 23, 2005
Calleguas Annexation No. 85	January 3, 2006
Calleguas Annexation No. 92	November 28, 2007
Calleguas Annexation No. 91	April 7, 2008
Calleguas Annexation No. 90	May 21, 2008
Calleguas Annexation No. 89	September 25, 2008
Calleguas Annexation No. 87	December 28, 2009
Calleguas Annexation No. 93	December 28, 2009
Calleguas Annexation No. 94	September 21, 2010
Calleguas Annexation No. 96	April 23, 2012
Calleguas Annexation No. 95	December 20, 2012
Calleguas Annexation No. 97	December 12, 2013

Calleguas Annexation No. 98	April 8, 2014
Calleguas Annexation No. 100	January 26, 2017
Calleguas Annexation No. 102	July 30, 2018
Calleguas Annexation No. 103	December 17, 2019
Calleguas Annexation No. 104	July 25, 2022
Calleguas Annexation No. 106	October 26, 2022

(21) "Exclusions from City of Los Angeles Area" shall mean the following areas excluded from the City of Los Angeles and from MWD of SC on the dates cited:

Alhambra Hills Annexation to City of Alhambra	January 27, 1964
Portion of Reorganization No. 85-2 of City of Los Angeles	December 30, 1985
Creekside Condominiums (Reorganization 98-01)	September 11, 2002

(22) "Exclusion from Las Virgenes MWD" shall mean the following area excluded from Las Virgenes MWD and from MWD of SC on the date cited:

Portion of Reorganization No. 85-2 of Original Area of Las Virgenes MWD	December 30, 1985

(23) "Exclusion from Three Valleys MWD" shall mean the following area excluded from Three Valleys MWD and from MWD of SC on the date cited:

Azusa Reorganization (Parcels 1, 2, 3 & 20)	May 21, 1996

(24) "Exclusions from Ramona No. 2 Annexation Area" shall mean the following areas excluded from Ramona No. 2 Annexation area of SDCWA and from MWD of SC on the dates cited:

Schlueter Detachment	December 19, 1977
Bonfils Detachment	December 29, 1978

(25) "Exclusions from Rainbow No. 3 Annexation Area" shall mean the following areas excluded from Rainbow No. 3 Annexation area of SDCWA and from MWD of SC on the dates cited:

Werner Detachment	August 4, 1980
Brown Detachment	January 1, 1981
Mann-Gosser Detachment	March 4, 1981

(26) "Exclusion from Original Area of Ramona MWD" shall mean the following area excluded from Ramona MWD Area of SDCWA and from MWD of SC on the date cited:

Meyer Detachment	March 10, 1983

(27) "Exclusion from Original Area of Western MWD" shall mean the following area excluded from Original Area of Western MWD and from MWD of SC on the date cited:

LAFCO 94-28-2 Detachment	January 21, 1997

(28) "Exclusion from Central Basin MWD" shall mean the following area excluded from Central Basin MWD and from MWD of SC on the date cited:

Reorganization No. 1-1998, Parcel 1 & 2 to San Gabriel Valley Water District	December 29, 1999

Section 3.

ASSESSED VALUATIONS

The county auditors of the counties of Los Angeles, Orange, Riverside, San Bernardino, San Diego and Ventura have certified the assessed valuations of all property taxable by MWD of SC, consistent with the areas described in definitions (4) through (28) of Section 2, for the Fiscal Year and their respective certificates have been filed with the Board of Directors.

Section 3.1

STATEMENT REGARDING ARTICLES XIII A, XIII C AND XIII D OF THE CONSTITUTION OF THE STATE OF CALIFORNIA

None of the property tax levies made by the Board of Directors of MWD of SC in the next succeeding sections fall within Section 1(a) of Article XIII A approved by the electorate on June 6, 1978 for addition to the California Constitution, effective July 1, 1978. All said levies fall under the Section 1(b) exemption to said Section 1(a) and are otherwise exempt from said Section 1(a) by reason of the impairment of contract clause of Article I, Section 10 of the United States Constitution. None of said levies fall within Articles XIII C and XIII D approved by the electorate on November 5, 1996, for addition to the California Constitution, by reason of the aforementioned provisions and exemptions and the provisions of Section 3(a)(1) of Article XIII D. All said levies are made pursuant to Revenue and Taxation Code Section 93(a) and are for the purpose of and shall be used for payment of "voter-approved indebtedness."

Section 4.

ANNEXATION LEVY

For the dual purposes of raising the amounts required to be raised by means of levies on taxable properties as prescribed by resolutions of the Board of Directors of MWD of SC fixing terms and conditions for annexation to MWD of SC (or as such terms and conditions may have been modified in accordance with the Metropolitan Water District Act of the State of California, Statutes 1969, Chapter 209, as amended) and for raising funds necessary to provide for payment of a portion of the capital cost component of either the Transportation Charge or the Delta Water Charge, or both, billed to MWD of SC under the “State Water Contract” (as identified in Section 6 of this Resolution) due or to become due within the current fiscal year or within the following fiscal year before the time when money will be available from the next property tax levy, Metropolitan previously set:

a. the amount of money necessary to be raised by ad valorem property taxation for such annexed properties;

b. the rates of such taxation of MWD of SC upon secured taxable property in each of the areas subject to such levies; and

c. the amounts of money to be derived from said levies.

For FY 2023/24, there is no amount remaining to be raised under the Resolutions for annexed properties. Therefore, no annexation levies are shown in the attached schedules.

Section 5.

BOND LEVY

For the purposes of paying the annual interest on the outstanding bonded indebtedness of MWD of SC incurred as a result of approval by the voters residing within MWD of SC and such part of the principal of such bonds as shall become due before the time when money will be available from the next property tax levy, or such portion thereof as shall not be met from previous levies or other revenues of the District:

a. The amount of money necessary to be raised by ad valorem property taxation during FY 2023/24 is the sum set forth in the last line in Column #1 of Schedule A.

b. The rate of such taxation of MWD of SC for the FY 2023/24 upon secured taxable property within MWD of SC hereby is fixed and levied at .00002% of assessed valuation. The rate of such taxation for the FY 2023/24 upon unsecured taxable property is the rate fixed and levied for the preceding year applicable to secured taxable property, as required by operation of law and set forth in Column #2 of Schedule B.

c. The amounts of money necessary to be derived from said levy are set forth in Column #7 of Schedule B, including the amounts of money to be derived from the area of MWD of SC within each separate member agency.

Section 6.

STATE WATER CONTRACT LEVY

For the purpose of raising funds in excess of those funds raised under Section 5 of this Resolution, necessary and sufficient to provide for payments due or to become due within the current fiscal year or within the following fiscal year before the time when money will be available from the next property tax levy, or such portion thereof as shall not be met from previous levies or other revenues of the District, under the:

> "CONTRACT BETWEEN THE STATE OF CALIFORNIA DEPARTMENT OF WATER RESOURCES AND THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA FOR A WATER SUPPLY, dated November 4, 1960," as amended (State Water Contract),

a. The amount of money necessary to be raised by ad valorem property taxation during FY 2023/24 in excess of the sum raised under Section 5 of this Resolution is the sum set forth in the last line of Column #2 of Schedule A.

b. The rate of such taxation of MWD of SC for the FY 2023/24 upon secured taxable property within MWD of SC hereby is fixed and levied at .[TBD]% of assessed valuation. The rate of such taxation for the FY 2023/24 upon the unsecured taxable property is the rate fixed for the preceding year applicable to secured taxable property, as required by operation of law and set forth in Column #4 of Schedule B.

c. The amounts of money necessary to be derived from said levy are set forth in column #8 of Schedule B, including the amounts of money to be derived from the area of MWD of SC within each separate member agency.

Section 7.

TOTALS

The total rates of ad valorem property taxation of MWD of SC for FY 2023/24 upon secured taxable property are set forth in Column #5 of Schedule B. The total rates of ad valorem property taxation of MWD of SC for FY 2023/24 upon unsecured taxable property are set forth in Column #6 of Schedule B. The total amounts of money to be derived by virtue of such tax levies for the Fiscal Year are set forth in Column #9 of Schedule B, including the amounts of money to be derived from the area of MWD of SC within each separate member agency.

Section 8.

REDEVELOPMENT AGENCIES

Pursuant to Assembly Bill X1 26 (“ABX1 26”), chaptered and effective on June 27, 2011, and as modified in part by the California Supreme Court in the decision of *California Redevelopment Association v. Matosantos,* Case No. S194681, redevelopment agencies in California were dissolved. Such dissolution laws were modified in part by Assembly Bill 1484 (“AB 1484”), chaptered and effective on June 27, 2012, and Senate Bill 107 (“SB 107”), chaptered and effective on September 22, 2015.

The total rates of taxation of MWD of SC for the Fiscal Year set forth in Column #5 of Schedule B are the rates of taxation upon taxable property taxable by MWD of SC within the areas shown in said Schedule, including taxable property formerly within redevelopment agencies as well as all other property so taxable by MWD of SC. The total amounts of money shown in Column #9 of Schedule B to be derived from some of said areas by virtue of tax levies of MWD of SC include monies to be allocated to the successor agencies of former redevelopment agencies for the payment of enforceable obligations and allowable administrative expenses approved by the State Department of Finance and local successor agency oversight boards, as well as amounts of money to be allocated to MWD of SC. The estimated adjustment to be made to account for the difference between the total amount levied and the amount to be derived is included in the provision for estimated collection delinquencies shown in Schedule A.

Section 9.

SCHEDULES A AND B

Schedules A and B are attached after the last page of this resolution and are incorporated herein.

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 August 15, 2023.

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

THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

SCHEDULE A

Estimated Funds to be Produced by Tax Levy, Fiscal Year 2023/24
(Cents Omitted)

		Bond Levy Column #1	State Contract Levy Column #2	Totals Column #3
Secured Property				
Assessed Value	$ 3,743,913,818,639			
Tax Rate		0.00002%	TBD	
Amount of Levy		$ 748,769	$ TBD	$ TBD
Unsecured Property				
Assessed Value	$ 132,061,410,657			
Tax Rate		0.00002%	0.00348%	
Amount of Levy		$ 26,412	$ 4,595,737	$ 4,622,149
All Property				
Assessed Value	$ 3,875,975,229,296			
Amount of Levy from Schedule B		$ 775,181	$ TBD	$ TBD
Allocation of County-wide Tax on Utilities		344,812	TBD	TBD
Total Tax Levy		$ 1,119,993	$ TBD	$ TBD
Estimated Collection Adjustments *		(46,232)	TBD	TBD
Estimated Funds to be Produced by Tax Levy		$ 1,073,761	$ TBD	$ TBD

* .5% allowance for delinquencies
7.2% allowance for allocations to successors of former redevelopment agencies
$2.5 million estimated supplemental tax collections
$4.5 million estimated prior years tax collections

Note: All rates expressed as percent of A.V.

Schedule B - Tax Rates and Amounts to be Derived from Respective Areas
for State Controller and MWD Board of Directors

Agency	Area (a)		Secured Bond Rate Col. 1	Unsecured Bond Rate Col. 2	Secured SWC Rate Col. 3	Unsecured SWC Rate Col. 4	Total Secured Rate Col. 5	Total Unsecured Rate Col. 6	Bond Levy Col. 7	SWC Levy Col. 8	Total Levy Col. 9
Included in MWD											
Los Angeles County											
City of Beverly Hills											
City of Beverly Hills Area		1-1-01-000-0	0.00002%	0.00002%		0.00348%	0.00002%	0.00350%	8,990.09	TBD	8,990.09
	Agency Totals:								8,990.09	TBD	8,990.09
City of Burbank											
City of Burbank Area		1-1-02-000-0	0.00002%	0.00002%		0.00348%	0.00002%	0.00350%	6,366.72	TBD	6,366.72
	Agency Totals:								6,366.72	TBD	6,366.72
City of Glendale											
City of Glendale Area		1-1-03-000-0	0.00002%	0.00002%		0.00348%	0.00002%	0.00350%	7,994.05	TBD	7,994.05
	Agency Totals:								7,994.05	TBD	7,994.05
City of Los Angeles											
City of Los Angeles Area		1-1-04-000-0	0.00002%	0.00002%		0.00348%	0.00002%	0.00350%	160,764.72	TBD	160,764.72
	Agency Totals:								160,764.72	TBD	160,764.72
City of Pasadena											
City of Pasadena Area		1-1-05-000-0	0.00002%	0.00002%		0.00348%	0.00002%	0.00350%	7,750.93	TBD	7,750.93
	Agency Totals:								7,750.93	TBD	7,750.93
City of San Marino											
City of San Marino Area		1-1-06-000-0	0.00002%	0.00002%		0.00348%	0.00002%	0.00350%	1,604.65	TBD	1,604.65
	Agency Totals:								1,604.65	TBD	1,604.65
City of Santa Monica											
City of Santa Monica Area		1-1-07-000-0	0.00002%	0.00002%		0.00348%	0.00002%	0.00350%	9,733.60	TBD	9,733.60
	Agency Totals:								9,733.60	TBD	9,733.60

Schedule B - Tax Rates and Amounts to be Derived from Respective Areas
for State Controller and MWD Board of Directors

Agency	Area (a)	Secured Bond Rate Col. 1	Unsecured Bond Rate Col. 2	Secured SWC Rate Col. 3	Unsecured SWC Rate Col. 4	Total Secured Rate Col. 5	Total Unsecured Rate Col. 6	Bond Levy Col. 7	SWC Levy Col. 8	Total Levy Col. 9
Included in MWD										
Los Angeles County										
City of Long Beach										
City of Long Beach Area	1-1-08-000-0	0.00002%	0.00002%		0.00348%	0.00002%	0.00350%	13,162.85	TBD	13,162.85
Agency Totals:								13,162.85	TBD	13,162.85
City of Torrance										
City of Torrance Area	1-1-09-000-0	0.00002%	0.00002%		0.00348%	0.00002%	0.00350%	7,210.07	TBD	7,210.07
Agency Totals:								7,210.07	TBD	7,210.07
City of Compton										
City of Compton Area	1-1-10-000-0	0.00002%	0.00002%		0.00348%	0.00002%	0.00350%	1,292.18	TBD	1,292.18
Agency Totals:								1,292.18	TBD	1,292.18
West Basin Municipal Water District										
West Basin Municipal Water District Area	1-1-11-000-0	0.00002%	0.00002%		0.00348%	0.00002%	0.00350%	54,270.27	TBD	54,270.27
Agency Totals:								54,270.27	TBD	54,270.27
Three Valleys Municipal Water District										
Three Valleys Municipal Water District Area	1-1-12-000-0	0.00002%	0.00002%		0.00348%	0.00002%	0.00350%	17,360.47	TBD	17,360.47
Agency Totals:								17,360.47	TBD	17,360.47
Foothill Municipal Water District Foothill Municipal Water District Area	1-1-13-000-0	0.00002%	0.00002%		0.00348%	0.00002%	0.00350%	4,839.81	TBD	4,839.81
Agency Totals:								4,839.81	TBD	4,839.81
Central Basin Municipal Water District Central Basin Municipal Water District Area	1-1-14-000-0	0.00002%	0.00002%		0.00348%	0.00002%	0.00350%	38,838.55	TBD	38,838.55
Agency Totals:								38,838.55	TBD	38,838.55

Schedule B - Tax Rates and Amounts to be Derived from Respective Areas
for State Controller and MWD Board of Directors

Agency	Area (a)	Secured Bond Rate Col. 1	Unsecured Bond Rate Col. 2	Secured SWC Rate Col. 3	Unsecured SWC Rate Col. 4	Total Secured Rate Col. 5	Total Unsecured Rate Col. 6	Bond Levy Col. 7	SWC Levy Col. 8	Total Levy Col. 9
Included in MWD										
Los Angeles County										
Las Virgenes Municipal Water District										
Las Virgenes Municipal Water District Area	1-1-15-000-0	0.00002%	0.00002%		0.00348%	0.00002%	0.00350%	6,197.68	TBD	6,197.68
Agency Totals:								6,197.68	TBD	6,197.68
Upper San Gabriel Valley MWD										
Upper San Gabriel Valley MWD Area	1-1-16-000-0	0.00002%	0.00002%		0.00348%	0.00002%	0.00350%	26,969.14	TBD	26,969.14
Agency Totals:								26,969.14	TBD	26,969.14
City of San Fernando										
City of San Fernando Area Area	1-1-17-000-0	0.00002%	0.00002%		0.00348%	0.00002%	0.00350%	521.71	TBD	521.71
Agency Totals:								521.71	TBD	521.71
County Totals:								373,867.49	TBD	373,867.49
Orange County										
City of Anaheim										
City of Anaheim Area Area	1-2-01-000-0	0.00002%	0.00002%		0.00348%	0.00002%	0.00350%	12,116.94	TBD	12,116.94
Agency Totals:								12,116.94	TBd	12,116.94
City of Santa Ana										
City of Santa Ana Area Area	1-2-02-000-0	0.00002%	0.00002%		0.00348%	0.00002%	0.00350%	6,889.95	TBD	6,889.95
Agency Totals:								6,889.95	TBD	6,889.95
City of Fullerton										
City of Fullerton Area Area	1-2-03-000-0	0.00002%	0.00002%		0.00348%	0.00002%	0.00350%	5,144.48	TBD	5,144.48
Agency Totals:								5,144.48	TBD	5,144.48
Municipal Water District of Orange County										
Remainder of MWD of Orange County	1-2-05-999-0	0.00002%	0.00002%		0.00348%	0.00002%	0.00350%	129,720.14	TBD	129,720.14
Agency Totals:								129,720.14	TBD	129,720.14
County Totals:								153,871.51	TBD	153,871.51

Schedule B - Tax Rates and Amounts to be Derived from Respective Areas
for State Controller and MWD Board of Directors

Agency	Area (a)	Secured Bond Rate Col. 1	Unsecured Bond Rate Col. 2	Secured SWC Rate Col. 3	Unsecured SWC Rate Col. 4	Total Secured Rate Col. 5	Total Unsecured Rate Col. 6	Bond Levy Col. 7	SWC Levy Col. 8	Total Levy Col. 9
Riverside County										
Eastern Municipal Water District										
Remainder of Eastern MWD	1-3-01-999-0	0.00002%	0.00002%		0.00348%	0.00002%	0.00350%	23,248.88	TBD	23,248.88
Agency Totals:								23,248.88	TBD	23,248.88
Western Municipal Water District										
Eleventh Fringe Area of Western MWD	1-3-02-011-0	0.00000%	0.00000%		0.00000%	0.00000%	0.00000%	0.00	TBD	0.00
Fifteenth Fringe Area of Western Mwd	1-3-02-012-0	0.00002%	0.00002%		0.00348%	0.00002%	0.00350%	0.08	TBD	0.08
Remainder of Western MWD	1-3-02-999-0	0.00002%	0.00002%		0.00348%	0.00002%	0.00350%	29,693.96	TBD	29,693.96
Agency Totals:								29,694.04	TBD	29,694.04
County Totals:								52,942.92	TBD	52,942.92
San Bernardino County										
Inland Empire Utilities Agency										
Original Area of Chino Basin MWD	1-4-01-001-0	0.00002%	0.00002%		0.00348%	0.00002%	0.00350%	13,114.86	TBD	13,114.86
Mid-valley Area of Chino Basin MWD	1-4-01-002-0	0.00002%	0.00002%		0.00348%	0.00002%	0.00350%	19,045.04	TBD	19,045.04
Bryant Annexation Area of Chino Basin MWD	1-4-01-003-0	0.00002%	0.00002%		0.00348%	0.00002%	0.00350%	15.77	TBD	15.77
North Perimeter No. 1 Annexation Area of Chino Basin MWD	1-4-01-004-0	0.00002%	0.00002%		0.00348%	0.00002%	0.00350%	9.94	TBD	9.94
Agency Totals:								32,185.61	TBD	32,185.61
County Totals:								32,185.61	TBD	32,185.61

Schedule B - Tax Rates and Amounts to be Derived from Respective Areas
for State Controller and MWD Board of Directors

Agency	Area (a)	Secured Bond Rate Col. 1	Unsecured Bond Rate Col. 2	Secured SWC Rate Col. 3	Unsecured SWC Rate Col. 4	Total Secured Rate Col. 5	Total Unsecured Rate Col. 6	Bond Levy Col. 7	SWC Levy Col. 8	Total Levy Col. 9
Included in MWD										
San Diego County										
San Diego County Water Authority Remainder of SDCWA +	1-5-01-999-9	0.00002%	0.00002%		0.00348%	0.00002%	0.00350%	136,026.03	TBD	136,026.03
Agency Totals:								136,026.03	TBD	136,026.03
County Totals:								136,026.03	TBD	136,026.03
Ventura County										
Calleguas Municipal Water District Remainder of Calleguas MWD	1-6-01-999-0	0.00002%	0.00002%		0.00348%	0.00002%	0.00350%	26,283.91	TBD	26,283.91
Agency Totals:								26,283.91	TBD	26,283.91
County Totals:								26,283.91	TBD	26,283.91
Included Totals:								775,177.48	TBD	775,177.48

Schedule B - Tax Rates and Amounts to be Derived from Respective Areas
for State Controller and MWD Board of Directors

Agency	Area (a)	Secured Bond Rate Col. 1	Unsecured Bond Rate Col. 2	Secured SWC Rate Col. 3	Unsecured SWC Rate Col. 4	Total Secured Rate Col. 5	Total Unsecured Rate Col. 6	Bond Levy Col. 7	SWC Levy Col. 8	Total Levy Col. 9
Excluded from MWD										
Los Angeles County										
City of Los Angeles										
Alhambra Hills	2-1-04-001-0	0.00000%	0.00000%		0.00348%	0.00000%	0.00348%	0.00	TBD	0.00
Portion of Reorganization No. 85-2	2-1-04-002-0	0.00002%	0.00002%		0.00348%	0.00002%	0.00350%	2.24	TBD	2.24
Agency Totals:								2.24	TBD	2.24
Las Virgenes Municipal Water District										
Portion of Reog No. 85-2 Exclusion from Las Virgines MWD	2-1-15-001-0	0.00002%	0.00002%		0.00348%	0.00002%	0.00350%	0.18	TBD	0.18
Agency Totals:								0.18	TBD	0.18
County Totals:								2.41	TBD	2.41

Schedule B - Tax Rates and Amounts to be Derived from Respective Areas
for State Controller and MWD Board of Directors

Agency	Area (a)	Secured Bond Rate Col. 1	Unsecured Bond Rate Col. 2	Secured SWC Rate Col. 3	Unsecured SWC Rate Col. 4	Total Secured Rate Col. 5	Total Unsecured Rate Col. 6	Bond Levy Col. 7	SWC Levy Col. 8	Total Levy Col. 9
Excluded from MWD										
San Diego County										
San Diego County Water Authority										
Exclusion from Original Area of Ramona MWD	2-5-01-017-0	0.00002%	0.00002%		0.00348%	0.00002%	0.00350%	0.03	TBD	0.03
Exclusions From Ramona No.2 Annexation Area	2-5-01-030-0	0.00002%	0.00002%		0.00348%	0.00002%	0.00350%	0.44	TBD	0.44
Rainbow No.3 Annexation Area	2-5-01-041-0	0.00002%	0.00002%		0.00348%	0.00002%	0.00350%	1.03	TBD	1.03
Agency Totals:								1.50	TBD	1.50
County Totals:								1.50	TBD	1.50
Excluded Totals:								3.91	TBD	3.91
Report Totals:								775,181.40	TBD	775,181.40

Finance, Audit, Insurance, and Real Property Committee

Adopt Resolution Establishing the Tax Rate for FY 2023/2024

Item 8-1
August 15, 2023

Tax Rate Adoption Process

February 24, 2022	Notice of public hearing provided to Legislature
February 22, 2022	Published notice of hearing
March 7, 2022	Presentation to F&I Committee
March 8, 2022	Public Hearing
April 12, 2022	Board action to adopt resolution on the applicability of the tax rate limit (Section 124.5)
August 2023	**Board action to adopt resolution establishing the tax rate for FY 2023/24**

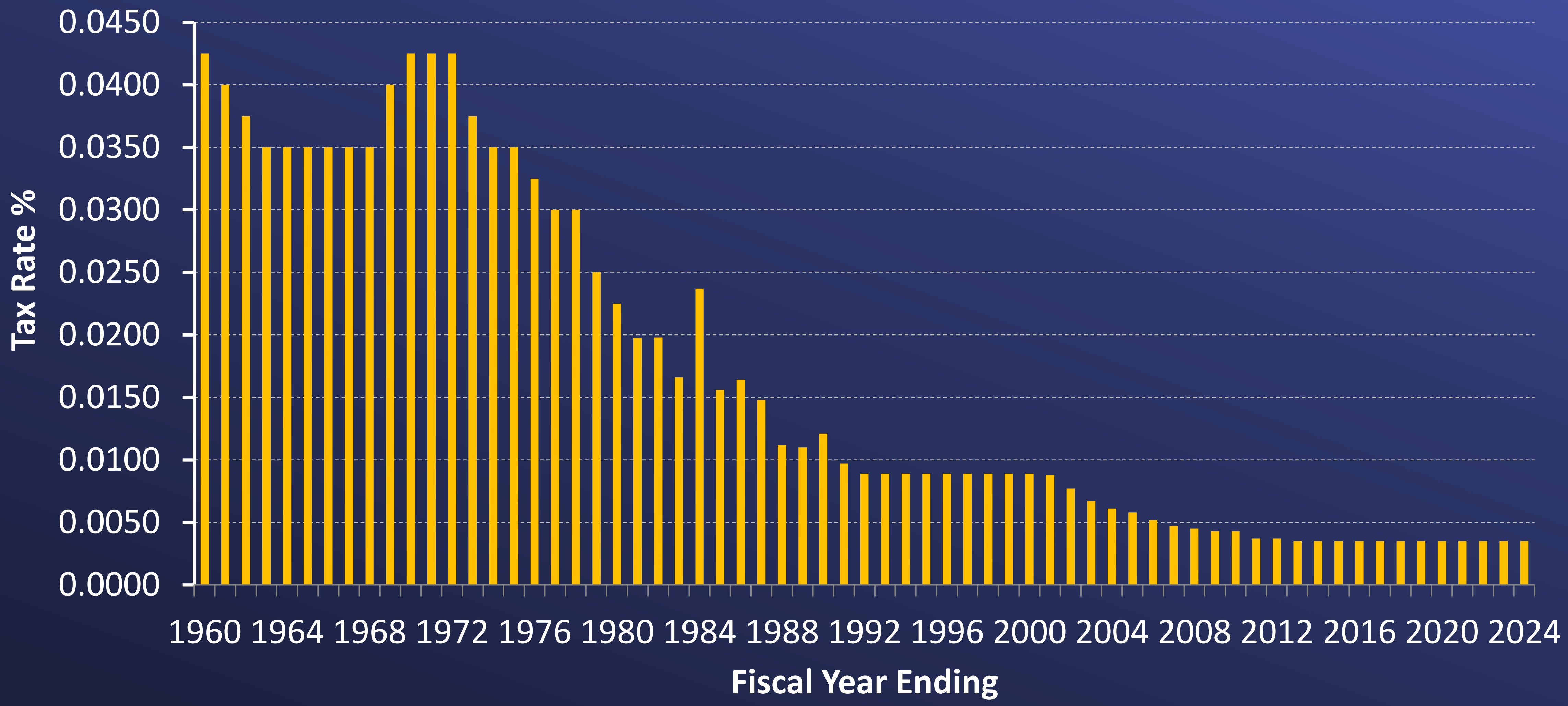
Proposed Tax Rate Adoption

- Maintain the rate approved in Metropolitan's Current Budget
  - Biennial budget for FYs 2023/24 and 2024/25, water rates for CYs 2023 and 2024, and charges for CYs 2023 and 2024, adopted in April 2023 are based on a continuation of the existing tax rate

Ad Valorem Tax Background

- Metropolitan Water District (MWD) Act authorizes property taxes to pay obligations of the district
- Proposition 13 allows agencies to repay existing voter-approved indebtedness
- Metropolitan's share of State Water Contract (SWC) costs are within the Prop 13 exception for indebtedness
- Metropolitan's general obligation bonds are within the Prop 13 exception for indebtedness

Historical Property Tax Rate



Current Ad Valorem Tax Rate

- 0.0035% of assessed valuations
- A single-family residence in Metropolitan's service area assessed at $700,000 currently pays about $25 per year in ad valorem taxes towards Metropolitan's costs

County	June 2023 Typical Single Family Home Value: Zillow Home Value Index [ZHVI]	Estimated Taxes per Year
Los Angeles	$ 870,080	$30
Orange	1,113,062	$38
Riverside	587,166	$20
San Bernardino	523,470	$18
San Diego	930,346	$32
Ventura	845,818	$29

Board Options

- Option #1
  - Adopt the Resolution Levying Ad Valorem Property Taxes for the Fiscal Year Commencing July 1, 2023 and ending June 30, 2024 for the Purposes of The Metropolitan Water District of Southern California (**Attachment 1**) maintaining the tax rate at 0.0035 percent of assessed valuation, the same rate levied in FY 2022/23; and
  - Direct staff to transmit that resolution to the county auditor-controllers, or equivalent
  - **Fiscal Impact**: No impact to the adopted biennial budget for fiscal years 2022/23 and 2024/25 and water rates and charges for calendar years 2023 and 2024 as they were based on a tax rate of 0.0035 percent.

Board Options

- Option #2
  - Adopt the Resolution Levying Ad Valorem Property Taxes for the Fiscal Year Commencing July 1, 2023 and ending June 30, 2024 for the Purposes of the Metropolitan Water District of Southern California (**Attachment 2**) at a tax rate different than the existing tax rate, applied to assessed valuation; and
  - Direct staff to transmit that resolution to the county auditor-controllers, or equivalent
  - **Fiscal Impact:** A loss of fixed revenue, dependent upon Board action, would require revisiting the adopted biennial budget for fiscal years 2023/24 and water rates and charges for calendar years 2024 and potentially 2025.

Staff Recommendation

- Option #1

THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

1928

THE METROPOLITAN WATER
DISTRICT OF SOUTHERN CALIFORNIA

RESOLUTION 9347

A RESOLUTION LEVYING AD VALOREM PROPERTY TAXES FOR THE FISCAL YEAR COMMENCING JULY 1, 2023 AND ENDING JUNE 30, 2024 FOR THE PURPOSES OF THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

The Board of Directors of The Metropolitan Water District of Southern California, after receiving, considering, and evaluating evidence and all material factors pertaining thereto, including budget requirements and estimated revenues from water rates, charges, and ad valorem property tax rates, finds, determines, and resolves:

Section 1.

RECITALS

Effective Water Rates and Charges during Fiscal Year 2023/24

The Board of Directors fixes water rates and charges on a calendar year basis and adopts its biennial budget and ad valorem property taxes on a fiscal year basis. During fiscal year (FY) 2023/24, the applicable rates and charges are those set by the Board for calendar year (CY) 2023 and CY 2024. The Board of Directors, with full review of (1) evidence presented, and (2) all material factors and considerations, has adopted water rates and charges for CYs 2023 and 2024, which, in the debated, informed and considered discretion of the Board, are in compliance with Section 134 of the Metropolitan Water District Act (the MWD Act), in that the Board, so far as practicable, has fixed such rates and charges as will result in revenue which will pay the District's operating expenses, provide for maintenance and repairs, provide for payment of the purchase price or other charges for property or services or other rights acquired by the District, and provide for the payment of the interest and principal of District bonds, notes and other evidences of indebtedness under the applicable provisions of the Act authorizing debt issuance and retirement, assuming the ad valorem property tax rate for FYs 2022/23 and 2023/24 continues at the existing rate of .0035 percent. This Resolution establishes the tax rate for FY 2023/24.

Applicability of Ad Valorem Property Tax Limitations Pursuant to the MWD Act

Section 124.5 of the MWD Act limits property tax collections to the amount necessary to pay the total annual debt service on Metropolitan's general obligation bonds and only a portion of its State Water Contract (SWC) payment obligation, limited to the preexisting debt service on state general obligation bonds (Burns-Porter bonds) used to finance construction of State Water Project (SWP) facilities for the benefit of Metropolitan. However, the limitation of Section 124.5 does not apply if, following a public hearing, the Board of Directors finds that collection of tax revenue in excess of that limitation is essential to the fiscal integrity of the District. The Board held the public hearing pursuant to Section 124.5 of the Act on March 8, 2022 to determine the applicability of the limitation for FYs 2022/23 through 2025/26. On April 12, 2022, the Board adopted Resolution No. 9301, through which the Board:

1. Found and determined 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 FYs 2022/23 through 2025/26;

2. Resolved and determined that pursuant to its finding, the tax rate restriction in Section 124.5 of the MWD Act is inapplicable when setting the ad valorem property tax rate for FYs 2022/23 through 2025/26, allowing the Board to maintain the current ad valorem property tax rate for those fiscal years (.0035 percent of assessed valuation, excluding annexation levies); and

3. Waived compliance with Section 4301(b) of Metropolitan's Administrative Code for any tax levy that utilizes the April 2022 finding regarding Section 124.5 of the MWD Act.

FY 2023/24 Ad Valorem Property Tax Levy

In its informed discretion, based upon full review of evidence presented and all material factors and considerations, the Board of Directors determines that the District's revenues for FY 2023/24 from water transactions and sources other than ad valorem property taxes, after payment of the District's operation and maintenance expenses, the payment of the purchase price or other charges for property or services or other rights acquired by the District, the operation, maintenance, power, and replacement charges due under the District's state contract, revenue bond service, deposits to the revenue bond reserve fund, short term revenue certificate (commercial paper note) service, net costs of operating equipment, and net inventory costs during the fiscal year, as well as the maintenance of prudent reserves for unforeseen District expenditures or unforeseen reduction in District revenue, will be insufficient to provide for general obligation bond service and to pay the District's contract obligations to the state for sale and delivery of water. Therefore, the Board levies ad valorem property taxes for FY 2023/24 as provided in this Resolution at sections 4 through 7 and the exhibits attached, sufficient, when taken with other revenues available for the purpose, to meet all the foregoing obligations and financial requirements, in the amounts and rates set forth in this Resolution and the schedules attached and incorporated therein.

Section 2.

DEFINITIONS

The following terms as used herein shall have the following meanings:

(1) "MWD OF SC" shall mean The Metropolitan Water District of Southern California

"MWD" shall mean Municipal Water District

"SDCWA" shall mean the San Diego County Water Authority

"ID" shall mean Irrigation District

"PUD" shall mean Public Utility District.

(2) "Fiscal Year" or "FY 2023/24" shall mean the fiscal year commencing July 1, 2023 and ending June 30, 2024.

(3) "Schedule A and B" as shown in Section 9 shall mean:

Schedule A - a tabulation setting forth for the Fiscal Year the estimated funds to be produced by MWD of SC ad valorem property tax levies made by this Resolution.

Schedule B - a tabulation setting forth for the Fiscal Year ad valorem property tax rates as set forth in Sections 4, 5, and 6 hereof, the total tax rates, and the amounts of money to be derived from respective areas from the tax levies made by this Resolution.

(4) The following city areas represent the corporate areas of cities within the County of Los Angeles at their respective times of annexation to MWD of SC, and may include areas subsequently annexed to said city areas at times when such areas were not within MWD of SC, and may include those areas which, at the time of their respective annexation to said city areas, were within non-city member public agencies and subsequently excluded from such non-city member public agencies:

"City of Beverly Hills Area" December 6, 1928

"City of Burbank Area"	December 6, 1928
"City of Glendale Area"	December 6, 1928
"City of Los Angeles Area" (Including portion of Original Area of Las Virgenes MWD excluded from Las Virgenes MWD on November 9, 1962)	December 6, 1928
"City of Pasadena Area"	December 6, 1928
"City of San Marino Area"	December 6, 1928
"City of Santa Monica Area"	December 6, 1928
"City of Long Beach Area"	February 27, 1931
"City of Torrance Area"	February 27, 1931
"City of Compton Area"	June 23, 1931
"City of San Fernando Area"	November 12, 1971

(5) "West Basin MWD" shall include the following areas; annexed to West Basin MWD and to MWD of SC on the dates cited:

Original Area	July 23, 1948
City of Gardena Area	December 9, 1948
Inglewood Area	June 9, 1952
Dominguez Area	October 16, 1952
Hawthorne Area	October 23, 1953
La Casa Territory Area	November 23, 1953
A B C Territory Area	January 11, 1955
Culver City-County Territory Area	January 11, 1955
Frawley Territory Area	January 13, 1958
Imperial Strip Territory Area	November 22, 1960
Marina Area	January 10, 1962
Belle View Area	November 12, 1963
Municipal Parking Area	November 12, 1963
La Tijera Area	December 21, 1965
Jefferson Blvd. Area	October 30, 1969
Marina Second Fringe Area	May 3, 1978
West Hollywood Area	June 23, 1981
Reorganization No. 2014-10, Parcel A, and concurrently detached from the city of Torrance	December 22, 2014
Reorganization No. 2009-16, and concurrently detached from Las Virgenes MWD	February 19, 2015
Reorganization No. 2014-06, and concurrently detached from Las Virgenes MWD	July 19, 2016

(6) "Three Valleys MWD" shall include the following areas, annexed to Three Valleys MWD (formerly Pomona Valley MWD) and to MWD of SC on the dates cited:

Original Area	November 15, 1950
Glendora Area	October 2, 1952
Rowland Area	June 15, 1953
Stephens Area	November 27, 1957

(7) "Foothill MWD" shall include the following areas, annexed to Foothill MWD and to MWD of SC on the dates cited:

Original Area of Foothill MWD	January 15, 1953
Foothill First Fringe Area	March 21, 1968
Foothill Second Fringe Area	November 21, 1968
La Vina Annexation	July 13, 1993

(8) "Central Basin MWD" shall include the following areas, annexed to Central Basin MWD and to MWD of SC

on the dates cited:

Original Area	November 12, 1954
Compton Territory Area	January 4, 1957
Bellflower Territory Area	December 30, 1958
Shoestring Strip Territory Area	January 23, 1961
Signal Hill Territory Area	November 14, 1963
Lakewood Area	November 14, 1963
Vernon Area	June 24, 1965
Dairy Valley Area	June 21, 1967
Boyle Heights Area	July 24, 1967
Cerritos Area	December 22, 1969
Hawaiian Gardens Area	November 22, 1977

(9) "Las Virgenes MWD" shall include the following areas annexed to Las Virgenes MWD and to MWD of SC on the dates cited, excluding that portion annexed to the City of Los Angeles on November 9, 1962:

Original Area	December 1, 1960
Twin Lakes Area	March 12, 1965
Bell Canyon Area	March 16, 1966
Hidden Hills Annexation 87-1	April 22, 1988
Reorganization No. 2017-10, and concurrently detached from West Basin MWD	February 16, 2021

(10) "Upper San Gabriel Valley MWD" shall include the following areas annexed to Upper San Gabriel Valley MWD and to MWD of SC on the dates cited:

Original Area	March 27, 1963
West Covina Area	November 1, 1965
Garvey Reservoir Area	December 1, 1976
Mountain Cove Annexation	July 17, 2002

(11) The following city areas represent the corporate areas of cities within the County of Orange at their respective times of annexation to MWD of SC, and may include areas subsequently annexed to said city areas at times when such areas were not within MWD of SC, and may include those areas which, at the time of their respective annexation to said city areas, were within non-city member public agencies and subsequently excluded from such non-city member public agencies:

City of Anaheim Area — December 6, 1928

Including:

Serrano/Nohl Ranch Rd. Reorganization (RO 01-05), Parcel 2, detached from MWD of Orange County on April 19, 2001;

Reorganization Area 1 (RO 03-17) detached from MWD of Orange County on August 26, 2003;

Reorganization Area 2 (RO 03-17) detached from MWD of Orange County on August 26, 2003;

Reorganization Brookhurst ARCO (RO 02-02) detached from MWD of Orange County on July 8, 2003;

North-Central Islands Annexation (IA 04-08) detached from MWD of Orange County on August 20, 2004;

Serrano Heights Reorganization (RO 04-01) detached from MWD of Orange County on May 28, 2004;

Ball Road/Santa Ana River Reorganization (RO 04-02) detached from MWD of Orange County on

December 13, 2004
Meyer Reorganization (RO 15-01) and concurrently detached from MWD of Orange County on May 16, 2016

City of Santa Ana Area Including:	December 6, 1928
Reorganization Area 4 (RO 03-17) detached from MWD of Orange County on August 26, 2003	
City of Fullerton Area Including:	February 27, 1931
Hawks Point Reorganization (RO 00-11) detached from MWD of Orange County on April 19, 2001; Reorganization Area 3 (RO 03-17) detached from MWD of Orange County on August 26, 2003; Page Avenue Island Annex. (IA 04-14) detached from MWD of Orange County on November 3, 2004; Somerset Island Annex. (IA 04-15) detached from MWD of Orange County on November 3, 2004	

(12) "Remainder of MWD of Orange County" shall include the following areas, annexed to MWD of Orange County and to MWD of SC on the dates cited excluding that portion thereof of Reorganization No. 62 annexed to Coastal MWD on March 7, 1984:

Original Area	November 26, 1951
Annexation No. 1 Territory Area	November 25, 1957
Annexation No. 4 Territory Area	December 11, 1958
Annexation No. 5 Territory Area	December 7, 1959
Annexation No. 7 Territory Area	December 8, 1960
Annexation No. 10 Territory Area	December 11, 1961
Annexation No. 11 Territory Area	January 6, 1964
Annexation No. 8A Territory Area	March 29, 1965
Annexation No. 8B Territory Area	March 29, 1965
Annexation No. 8D Territory Area	March 29, 1965
Annexation No. 8E Territory Area	March 29, 1965
Annexation No. 8F Territory Area	March 29, 1965
Annexation No. 8G Territory Area	March 29, 1965
Annexation No. 8H Territory Area	March 29, 1965
Annexation No. 13 Territory Area (Excluded from Coastal MWD for purpose of such annexation)	June 30, 1969
Annexation No. 16 Territory Area	November 7, 1972
Annexation No. 15 Territory Area	November 15, 1972
Annexation No. 18 Territory Area	December 16, 1982
Annexation No. 19 Territory Area	December 27, 1983
Annexation No. 17 Territory Area	December 29, 1983
City of Brea Area	March 7, 1984
Brea Fringe Annexation Area	March 7, 1984
Serrano/Nohl Ranch Road Reorganization Parcel 1 (RO 01-05) detached from City of Anaheim	April 19, 2001

Coastal MWD	January 17, 2001

Coastal MWD and MWD of Orange County have been consolidated into a single district (RO 97-06) effective January 17, 2001. It shall include the following areas, annexed to Coastal MWD and to MWD of SC on the dates cited:

Original Area	June 15, 1942
Fairview Farms Area	September 21, 1946
Irvine Subdivision Areas	November 26, 1948
1948 Portion of City of Newport Beach Area	November 29, 1948
Parts of Dana Point Area	August 3, 1949
Capistrano Beach-San Clemente Area	October 28, 1954
Tri-Cities Annexation No. 2 Area	December 12, 1962
Laguna Canyon Annexation Area	December 20, 1962
Lido Sands Annexation Area	January 6, 1964
Laguna Niguel Area (Including Reorganization 32 Parcel A Area excluded from Annexation No. 4 on January 4, 1977)	June 30, 1969
Tri-Cities Annexation No. 79-1 Area	December 22, 1982
Reorganization No. 62 Parcel C and that portion of Parcel B Area excluded from Annexation No. 5 of MWD of Orange County	March 7, 1984
Reorganization No. 64 Area excluded from Annexation No. 7 of MWD of Orange County	March 18, 1983
Reorganization No. 123 excluded from Annexation No. 7 of MWD of Orange County	August 6, 1990

(13) "Remainder of Eastern MWD" shall include the following areas, annexed to Eastern MWD and to MWD of SC on the dates cited:

Original Area (Portion of area excluded from Eastern MWD and annexed to Western MWD)	July 20, 1951
Adjacent Area	May 22, 1953
First Fringe Area (Portion of area excluded from Eastern MWD and annexed to Western MWD)	April 20, 1956
Third Fringe Area (Area excluded from Original Area of Western MWD)	November 20, 1958
Fourth Fringe Area	December 6, 1960
Fifth Fringe Area (Portion of area excluded from Eastern MWD and annexed to Western MWD)	May 31, 1962
Sixth Fringe Area	December 10, 1962
Seventh Fringe Area	March 11, 1963
Eight Fringe Area	April 23, 1963
Ninth Fringe Area	April 23, 1963
Tenth Fringe Area	September 22, 1964
Eleventh Fringe Area	September 22, 1964
Twelfth Fringe Area	October 22, 1965
Thirteenth Fringe Area (Portion of area excluded from Eastern MWD and annexed to Western MWD)	October 13, 1967
Fourteenth Fringe Area	October 23, 1967
Sixteenth Fringe Area (Area excluded from First Fringe Area of Western MWD)	July 1, 1969
Fifteenth Fringe Area	August 12, 1969
Seventeenth Fringe Area	March 5, 1970
Eighteenth Fringe Area	March 5, 1970
Nineteenth Fringe Area	May 8, 1970
Twentieth Fringe Area	September 29, 1971
Twenty-First Fringe Area	September 30, 1971
Twenty-Second Fringe Area	April 27, 1972

Twenty-Third Fringe Area	May 23, 1975
Twenty-Fourth Fringe Area	December 30, 1975
Twenty-Fifth Fringe Area	April 26, 1983
Twenty-Sixth Fringe Area	November 27, 1985
Twenty-Seventh Fringe Area	December 19, 1985
Twenty-Eighth Fringe Area	November 18, 1986
Twenty-Ninth Fringe Area	May 4, 1987
Thirty-First Fringe Area	July 9, 1987
Thirty-Second Fringe Area	July 9, 1987
Thirty-Third Fringe Area	August 27, 1987
Thirtieth Fringe Area	December 15, 1987
Thirty-Fourth Fringe Area	March 16, 1988
Thirty-Fifth Fringe Area	May 2, 1988
Thirty-Eighth Fringe Area	October 14, 1988
Thirty-Sixth Fringe Area	December 5, 1988
Fortieth Fringe Area	August 1, 1989
Forty-Second Fringe Area	May 25, 1990
Forty-Third Fringe Area	June 19, 1990
Thirty-Ninth Fringe Area	July 13, 1990
Forty-First Fringe Area	July 27, 1990
Forty-Fifth Fringe Area	March 13, 1991
Forty-Seventh Fringe Area	June 3, 1991
Forty-Eighth Fringe Area	November 21, 1991
Forty-Ninth Fringe Area	November 21, 1991
Fiftieth Fringe Area	November 21, 1991
Fifty-First Fringe Area	December 19, 1991
Forty-Fourth Fringe Area	June 3, 1992
Fifty-Second Fringe Area	June 29, 1992
Forty-Sixth Fringe Area	July 7, 1992
Fifty-Third Fringe Area	August 27, 1992
Fifty-Fifth Fringe Area	April 29, 1993
Fifty-Sixth Fringe Area	June 22, 1993
Fifty-Eighth Fringe Area	June 22, 1993
Fifty-Ninth Fringe Area	June 22, 1993
Sixtieth Fringe Area	November 29, 1993
Fifty-Seventh Fringe Area	December 9, 1994
Sixty-Second Fringe Area	July 3, 1996
Sixty-Third Fringe Area	October 28, 1996
Sixty-Fourth Fringe Area	August 28, 1997
Sixty-Fifth Fringe Area	December 28, 2000
Seventieth Fringe Area	August 29, 2001
Sixty-Seventh Fringe Area Reorganization (Area detached from portion of Original Area of Western MWD)	August 29, 2001
Sixty-Eighth Fringe Area	January 15, 2002
Seventy-First Fringe Area	June 20, 2002
Sixty-Ninth Fringe Area	November 27, 2002
Seventy-Second Fringe Area	October 21, 2003
Sixty-Sixth Fringe Area	November 17, 2003
Seventy-Third Fringe Area	November 17, 2003
Seventy-Fourth Fringe Area	November 17, 2003
Seventy-Fifth Fringe Area	June 2, 2004
Seventy-Sixth Fringe Area	April 6, 2004
Seventy-Eighth Fringe Area	April 19, 2005
Eighty-Third Fringe Area	December 15, 2005
Seventy-Ninth Fringe Area	December 20, 2005
Eighty-First Fringe Area	December 20, 2005
Eighty-Fourth Fringe Area	December 20, 2005

Eighty-Seventh Fringe Area	February 14, 2006
Eighty-Sixth Fringe Area	March 24, 2006
Eighty-Fifth Fringe Area	May 22, 2006
Eighty-Eighth Fringe Area	May 22, 2006
Eighty-Ninth Fringe Area	June 28, 2006
Ninety-Second Fringe Area	August 2, 2006
Ninety-First Fringe Area	November 28, 2006
Ninety-Fifth Fringe Area	December 14, 2006
Ninetieth Fringe Area	December 19, 2006
Ninety-Seventh Fringe Area	April 16, 2007
Ninety-Third Fringe Area	July 26, 2007
101st Fringe Area	January 24, 2008
Ninety-Ninth Fringe Area Reorganization (Area detached from Western Municipal Water District)	September 10, 2008
100th Fringe Area	November 17, 2008
Ninety-Sixth Fringe Area	December 11, 2008
102nd Fringe Area	December 22, 2009
103rd Fringe Area	October 1, 2013
104th Fringe Area	September 22, 2015
105th Fringe Area (2015-11-3 Reorganization)	September 19, 2017
107th Fringe Area (2017-04-5 Reorganization)	September 12, 2017
106th Fringe Area (2017-12-3 Reorganization)	December 14, 2017
108th Fringe Area (2017-24-3 Reorganization)	November 8, 2018
110th Fringe Area (2019-03-3 Reorganization	July 17, 2019
109th Fringe Area (2019-06-3 Reorganization)	November 22, 2019
111th Fringe Area (2020-25-3 Reorganization)	February 11, 2021

(14) "Remainder of Western MWD" shall include the following areas, annexed to Western MWD and to MWD of SC on the dates cited:

Original Area (Portion of area excluded from Western MWD and annexed to Eastern MWD)	November 12, 1954
First Fringe Area (Portion of area excluded from Western MWD and annexed to Eastern MWD)	December 20, 1957
Second Fringe Area	December 18, 1961
Third Fringe Area	June 27, 1962
Fifth Fringe Area	July 2, 1964
Fourth Fringe Area	December 19, 1966
Seventh Fringe Area	December 19, 1966
Eighth Fringe Area (Area excluded from Fifth Fringe Area of Eastern MWD on July 26, 1967)	September 18, 1967
Sixth Fringe Area	September 27, 1967
Ninth Fringe Area	November 17, 1967
Tenth Fringe Area	June 12, 1968
Thirteenth Fringe Area (Area excluded from Fifth Fringe Area of Eastern MWD)	June 23, 1969
Twelfth Fringe Area (Area excluded from First Fringe Area of Eastern MWD)	July 1, 1969
Eleventh Fringe Area	July 17, 1969
Fifteenth Fringe Area (Area lying entirely within the County of Orange)	July 13, 1972
Fourteenth Fringe Area	October 11, 1973

Sixteenth Fringe Area (Area excluded from Thirteenth Fringe Area of Eastern MWD)	August 30, 1977
Seventeenth Fringe Area	December 23, 1980
Eighteenth Fringe Area	December 15, 1981
Twentieth Fringe Area	December 4, 1987
Twenty-Second Fringe Area	October 14, 1988
Twenty-First Fringe Area	December 5, 1988
Twenty-Third Fringe Area	November 3, 1989
Twenty-Fourth Fringe Area	May 18, 1990
Twenty-Seventh Fringe Area	May 18, 1990
Twenty-Sixth Fringe Area	June 6, 1990
Twenty-Fifth Fringe Area	July 13, 1990
Twenty-Eighth Fringe Area	January 28, 1991
Thirtieth Fringe Area	March 13, 1991
Twenty-Ninth Fringe Area	November 4, 1991
Thirty-First Fringe Area	February 19, 1992
Thirty-Third Fringe Area	May 26, 1993
Thirty-Fourth Fringe Area (Area excluded from Fifth Fringe Area of Eastern MWD)	October 31, 1994
Thirty-Sixth Fringe Area (Area excluded from Original Area of Eastern MWD)	September 29, 1997
Thirty-Seventh Fringe Area	December 30, 1997
Thirty-Eighth Fringe Area	June 29, 1999
Fortieth Fringe Area	November 22, 1999
Thirty-Ninth Fringe Area	October 24, 2000
Forty-First Fringe Area	December 28, 2000
Forty-Fifth Fringe Area	June 20, 2002
Forty-Second Fringe Area (Area excluded from Fifth Fringe Area of Eastern MWD)	February 7, 2002
Forty-Sixth Fringe Area	November 24, 2003
Forty-Eighth Fringe Area	December 15, 2003
Forty-Ninth Fringe Area	April 28, 2004
Fiftieth Fringe Area	May 27, 2005
Forty-Seventh Fringe Area	June 21, 2005
Forty-Fourth Fringe Area	June 22, 2006
Forty-Third Fringe Area	October 21, 2014
Fifty-First Fringe Area Annexation	October 16, 2018
Fifty-Second Fringe Area Annexation	June 16, 2020

(15) "Original Area of Chino Basin MWD" shall mean the area of Chino Basin MWD annexed to MWD of SC on November 26, 1951.

(16) "Mid-Valley Area of Chino Basin MWD" shall mean the Mid-Valley area annexed to Chino Basin MWD and to MWD of SC on April 20, 1954.

(17) "Bryant Annexation Area of Chino Basin MWD" shall mean the "Bryant Annexation area annexed to Chino Basin MWD and to MWD of SC on November 25, 1957.

(18) "North Perimeter No. 1 Annexation Area of Chino Basin MWD" shall mean the North Perimeter No. 1 Annexation area annexed to Chino Basin MWD and to MWD of SC on November 28, 1969.

(19) "Remainder of SDCWA" shall include the following areas annexed to SDCWA and to MWD of SC on the dates cited:

Original Area of SDCWA Annexation (Including areas subsequently annexed to city public agencies which were included within Original Area of SDCWA at times when such areas were not within MWD of SC, and areas excluded from non-city public agencies of SDCWA at times when such areas were within said city public agencies)	December 17, 1946
Crest PUD Territory Area	December 13, 1948
San Dieguito ID Area	December 13, 1948
Santa Fe ID Area	December 13, 1948
1950 Fallbrook PUD Annexation Area (Including De Luz Heights MWD Reorganization, originally De Luz Heights MWD annexed to MWD of SC on June 28, 1967 and dissolved on July 1, 1990)	August 1, 1950
City of Escondido Area	October 9, 1950
San Diego Gas and Electric Company Area	May 14, 1952
San Diego Eucalyptus Company's Lands Area	July 18, 1952
South Bay ID Area	November 3, 1952
Rainbow MWD Area	April 10, 1954
City of Poway Area	April 21, 1954
Bueno Colorado MWD Area (Area dissolved and annexed to Rainbow MWD, Vista Irrigation District, Carlsbad MWD and Vallecitos Water District on November 24, 1993)	June 11, 1954
Rincon Del Diablo MWD	June 14, 1954
Costa Real MWD Area	June 16, 1954
El Cajon Valley-Dry Island Area (Including Lakeside-Boukai Joint Venture Reorganization detached from Padre Dam MWD on September 11, 1996)	December 20, 1954
Valley Center MWD Area	May 9, 1955
Sweetwater Reservoir Area	October 10, 1955
Padre Dam MWD Area	June 7, 1956
Bueno Colorado Annexation No. 1 Area	June 11, 1956
Otay MWD Area	October 26, 1956
Original Area of Ramona MWD within MWD of SC	August 27, 1957
Fallbrook No. 2 Annexation Area	November 24, 1958
Helix Watson Ranch-Island Area	February 20, 1959
Rainbow No. 1 Annexation Area	May 12, 1959
Ramona No. 1 Annexation Area	May 29, 1959
Helix-Fletcher Annexation Area	June 26, 1959
San Dieguito Concurrent Annexation No. 1 Area	September 15, 1959
Helix-Sunnyslope Heights Annexation Area	September 17, 1959
Poway No. 1 Annexation Area	September 21, 1959
Padre Dam MWD No. 2 Annexation Area	November 6, 1959
Padre Dam MWD No. 1 Annexation Area	November 10, 1959
San Dieguito Local Inclusion Annexation Area	November 18, 1959
Santa Fe No. 1 Annexation Area	November 30, 1959
Olivenhain MWD Area (Including Encinitas Municipal Services Reorganization Parcels 1, 2, & 3 detached from San Dieguito No. 2 Annexation Area of SDCWA on June 16, 1995)	July 25, 1960
Helix-Willis-Houston Annexation Area	August 10, 1960
Padre Dam MWD No. 3 Annexation Area	October 16, 1960
Otay No. 3 Annexation Area	October 20, 1960
Valley Center No. 1 Annexation Area	December 12, 1960
Rincon del Diablo No. 1 Annexation Area	December 12, 1960
Ramona No. 2 Annexation Area within MWD of SC	September 22, 1961

Rincon del Diablo No. 2 Annexation Area	September 29, 1961
City of Del Mar Area	November 23, 1962
Ramona No. 3 Annexation Area	September 20, 1963
Yuima MWD Area (Excluding Adams/Fitzsimmons Reorganization Parcel 1 annexed to Valley Center MWD, including Adams/Fitzsimmons Reorganization Parcel 2 excluded from Valley Center MWD on March 26, 1991)	December 16, 1963
Rincon del Diablo No. 3 Annexation Area	August 27, 1964
Olivenhain No. 1 Annexation Area	February 11, 1965
South Bay Tidelands Area	May 11, 1965
De Luz Heights Annexation Area (Reorganization)	June 28, 1967
Olivenhain No. 4 Annexation Area	November 13, 1967
Yuima No. 1 Annexation Area	November 21, 1967
Ramona Dos Picos Area	November 27, 1967
Ramona No. 4 Annexation Area	November 27, 1967
Valley Center No. 2 Annexation Area	November 29, 1967
Valley Center No. 3 Annexation Area	November 30, 1967
Rainbow No. 3 Annexation Area of SDCWA within MWD of SC" shall mean the Rainbow No. 3 Annexation area annexed to SDCWA and to MWD of SC; omitting therefrom the Werner Detachment excluded on August 4, 1980, the Brown Detachment excluded on January 1, 1981, and the Mann- Gosser Detachment excluded on March 4, 1981 from SDCWA and MWD of SC.	December 6, 1967
De Luz Heights No. 1 Annexation Area	October 15, 1969
Yuima No.2 Annexation Area	November 24, 1969
Fallbrook Community Air Park Annexation Area of SDCWA shall mean the Fallbrook Community Air Park Annexation area annexed to SDCWA and to MWD of SC	December 22, 1969
Padre Dam MWD No. 4	August 3, 1970
Ramona No. 5 Annexation Area	May 17, 1972
Rincon del Diablo No. 4 Annexation Area	November 2, 1972
San Dieguito No. 2 Annexation Area (Including Encinitas Municipal Services Reorganization on June 16, 1995)	December 8, 1972
Santa Fe No. 2 Annexation Area	April 11, 1973
Valley Center No. 4 Annexation Area	November 5, 1973
Rainbow No. 5 Annexation Area	November 22, 1973
San Onofre State Beach and Park Area	December 16, 1977
Pendleton Military Reservation Area -Nuclear Generating Plant Portion	December 16, 1977
Remainder of Pendleton Military Reservation Area	December 16, 1977
Rancho Jamul Estates Annexation Area	March 13, 1979
Lake Hodges Estates Annexation Area	June 26, 1980
Burdick Annexation No. 5 Area to Padre Dam MWD	July 26, 1982
Palo Verde Annexation No. 6 Area to Padre Dam MWD	November 15, 1983
Lake Ranch Viejo Annexation to Rainbow MWD	December 13, 1983
Honey Springs Ranch Annexation Area to Otay MWD	December 14, 1983
Thweatt Annexation Area to Rincon del Diablo MWD	December 30, 1983
Hewlett-Packard Annexation Area to Rainbow MWD	December 31, 1985
4S Ranch Annexation Area to Olivenhain MWD	November 5, 1986
Quail Park Reorganization Area Annexed to San Dieguito Water District and excluded from Olivenhain MWD	July 11, 1989
Paradise Mountain Area Annexed to Valley Center MWD	January 11, 1993
Boathouse Area Annexed to Otay Water District	September 6, 1994

Guajome Regional Park Annexation to Vista Irrigation District	October 23, 1998
Podrasky Ohlson Annexation to Valley Center MWD	March 11, 2004
San Elijo Ridge Reorganization (Altman) to Vallecitos Water District	August 9, 2004
Baxter Annexation (RO 03-19) to Padre Dam MWD	July 9, 2005
Citrus Heights Annexation	March 4, 2008
Erreca Annexation	November 4, 2009
Meadowood Reorganization (RO12-11) to SDCWA	December 4, 2014
Lake Wohlford Reorganization (R014-16) to SDCWA	April 21, 2015
Greenwood Memorial Park Island Reorganization (City of San Diego, RO 17-01)	May 26, 2017
Campus Park West (RO 14-08)	December 13, 2017
SVBF Temple Reorganization (LAFCO RO20-16 et al.)	December 16, 2021
Rancho Corrido RV Park Reorganization (LAFCO RO20-21 et al.)	February 14, 2022

(20) "Remainder of Calleguas MWD" shall include the following areas annexed to Calleguas MWD and to MWD of SC on the dates cited:

Original Area of Calleguas MWD	December 14, 1960
Calleguas Annexation No. 1 Area	March 16, 1961
Lake Sherwood Area	March 14, 1963
Annexation No. 3 Territory	March 15, 1963
Oxnard Mandalay Area	December 8, 1964
Oxnard First Fringe Area	December 8, 1964
Annexation No. 6 Territory	October 17, 1968
Oxnard Second Fringe Area	November 7, 1969
Camarillo First Fringe Area	December 19, 1969
Oxnard Third Fringe Area	December 14, 1970
Oxnard Fourth Fringe Area	December 19, 1972
Point Mugu State Park Area	June 22, 1973
Oxnard Fifth Fringe Area	December 16, 1974
Oxnard Sixth Fringe Area	December 30, 1975
Oxnard Seventh Fringe Area	December 17, 1976
Ventura School for Girls Area	December 17, 1976
Oxnard Eighth Fringe Area	December 12, 1977
Calleguas Annexation No. 17 Area	December 28, 1979
Calleguas Annexation No. 19 Area	December 9, 1981
Calleguas Annexation No. 20 Area	December 21, 1981
Calleguas Annexation No. 18 Area	December 29, 1981
Calleguas Annexation No. 21 Area	March 24, 1982
Calleguas Annexation No. 22 Area	December 2, 1983
Calleguas Annexation No. 23 Area	November 30, 1984
Calleguas Annexation No. 24 Area	June 19, 1985
Calleguas Annexation No. 25 Area	November 27, 1985
Calleguas Annexation No. 26 Area	July 25, 1986
Calleguas Annexation No. 27 Area	December 31, 1987
Calleguas Annexation No. 28 Area	October 4, 1988
Calleguas Annexation No. 29 Area	October 10, 1989
Calleguas Annexation No. 30 Area	July 6, 1990
Calleguas Annexation No. 31 Area	September 25, 1990
Calleguas Annexation No. 33 Area	November 27, 1991
Calleguas Annexation No. 34 Area	June 24, 1992
Calleguas Annexation No. 35 Area	February 26, 1993
Calleguas Annexation No. 36 Area	February 26, 1993

Calleguas Annexation No. 39 Area	February 2, 1994
Calleguas Annexation No. 40 Area	May 16, 1994
Calleguas Annexation No. 41 Area	August 16, 1994
Calleguas Annexation No. 43 Area	August 16, 1994
Calleguas Annexation No. 45 Area	August 16, 1994
Calleguas Annexation No. 46 Area	September 27, 1994
Calleguas Annexation No. 38 Area	December 19, 1994
Calleguas Annexation No. 44 Area	December 19, 1994
Calleguas Annexation No. 47 Area	September 19, 1995
Calleguas Annexation No. 48 Area	December 21, 1995
Calleguas Annexation No. 32 Area	March 5, 1996
Calleguas Annexation No. 49 Area	December 18, 1996
Calleguas Annexation No. 52A Area	November 4, 1997
Calleguas Annexation No. 53 Area	December 19, 1997
Calleguas Annexation No. 52B Area	December 23, 1997
Calleguas Annexation No. 51 Area	June 9, 1998
Calleguas Annexation No. 54 Area	January 26, 1999
Calleguas Annexation No. 55 Area	January 27, 1999
Calleguas Annexation No. 61 Area	October 27, 1999
Calleguas Annexation No. 57 Area	December 29, 1999
Calleguas Annexation No. 58 Area	December 29, 1999
Calleguas Annexation No. 60 Area	December 29, 1999
Calleguas Annexation No. 65 Area	August 2, 2000
Calleguas Annexation No. 66 Area	August 4, 2000
Calleguas Annexation No. 63 Area	December 27, 2000
Calleguas Annexation No. 68 Area	April 17, 2001
Calleguas Annexation No. 69 Area	July 20, 2001
Calleguas Annexation No. 70 Area	July 27, 2001
Calleguas Annexation No. 74 Area	November 26, 2001
Calleguas Annexation No. 72 Area	December 17, 2001
Calleguas Annexation No. 75 Area	April 24, 2002
Calleguas Annexation No. 76-A Area	July 2, 2002
Calleguas Annexation No. 76-B Area	July 26, 2002
Calleguas Annexation No. 79	May 27, 2003
Calleguas Annexation No. 81	August 11, 2003
Calleguas Annexation No. 82	September 22, 2003
Calleguas Annexation No. 80	December 9, 2002
Calleguas Annexation No. 67	December 22, 2003
Calleguas Annexation No. 73	December 22, 2003
Calleguas Annexation No. 77	June 4, 2004
Calleguas Annexation No. 78	March 3, 2004
Calleguas Annexation No. 84	October 22, 2004
Calleguas Annexation No. 83	November 23, 2005
Calleguas Annexation No. 85	January 3, 2006
Calleguas Annexation No. 92	November 28, 2007
Calleguas Annexation No. 91	April 7, 2008
Calleguas Annexation No. 90	May 21, 2008
Calleguas Annexation No. 89	September 25, 2008
Calleguas Annexation No. 87	December 28, 2009
Calleguas Annexation No. 93	December 28, 2009
Calleguas Annexation No. 94	September 21, 2010
Calleguas Annexation No. 96	April 23, 2012
Calleguas Annexation No. 95	December 20, 2012
Calleguas Annexation No. 97	December 12, 2013
Calleguas Annexation No. 98	April 8, 2014
Calleguas Annexation No. 100	January 26, 2017
Calleguas Annexation No. 102	July 30, 2018

Calleguas Annexation No. 103	December 17, 2019
Calleguas Annexation No. 104	July 25, 2022
Calleguas Annexation No. 106	October 26, 2022

(21) "Exclusions from City of Los Angeles Area" shall mean the following areas excluded from the City of Los Angeles and from MWD of SC on the dates cited:

Alhambra Hills Annexation to City of Alhambra	January 27, 1964
Portion of Reorganization No. 85-2 of City of Los Angeles	December 30, 1985
Creekside Condominiums (Reorganization 98-01)	September 11, 2002

(22) "Exclusion from Las Virgenes MWD" shall mean the following area excluded from Las Virgenes MWD and from MWD of SC on the date cited:

Portion of Reorganization No. 85-2 of Original Area of Las Virgenes MWD	December 30, 1985

(23) "Exclusion from Three Valleys MWD" shall mean the following area excluded from Three Valleys MWD and from MWD of SC on the date cited:

Azusa Reorganization (Parcels 1, 2, 3 & 20)	May 21, 1996

(24) "Exclusions from Ramona No. 2 Annexation Area" shall mean the following areas excluded from Ramona No. 2 Annexation area of SDCWA and from MWD of SC on the dates cited:

Schlueter Detachment	December 19, 1977
Bonfils Detachment	December 29, 1978

(25) "Exclusions from Rainbow No. 3 Annexation Area" shall mean the following areas excluded from Rainbow No. 3 Annexation area of SDCWA and from MWD of SC on the dates cited:

Werner Detachment	August 4, 1980
Brown Detachment	January 1, 1981
Mann-Gosser Detachment	March 4, 1981

(26) "Exclusion from Original Area of Ramona MWD" shall mean the following area excluded from Ramona MWD Area of SDCWA and from MWD of SC on the date cited:

Meyer Detachment	March 10, 1983

(27) "Exclusion from Original Area of Western MWD" shall mean the following area excluded from Original Area of Western MWD and from MWD of SC on the date cited:

LAFCO 94-28-2 Detachment	January 21, 1997

(28) "Exclusion from Central Basin MWD" shall mean the following area excluded from Central Basin MWD and from MWD of SC on the date cited:

Reorganization No. 1-1998, Parcel 1 & 2 to San Gabriel Valley Water District	December 29, 1999

Section 3.

ASSESSED VALUATIONS

The county auditors of the counties of Los Angeles, Orange, Riverside, San Bernardino, San Diego and Ventura have certified the assessed valuations of all property taxable by MWD of SC, consistent with the areas described in definitions (4) through (28) of Section 2, for the Fiscal Year and their respective certificates have been filed with the Board of Directors.

Section 3.1

STATEMENT REGARDING ARTICLES XIII A, XIII C AND XIII D OF THE CONSTITUTION OF THE STATE OF CALIFORNIA

None of the property tax levies made by the Board of Directors of MWD of SC in the next succeeding sections fall within Section 1(a) of Article XIII A approved by the electorate on June 6, 1978 for addition to the California Constitution, effective July 1, 1978. All said levies fall under the Section 1(b) exemption to said Section 1(a) and are otherwise exempt from said Section 1(a) by reason of the impairment of contract clause of Article I, Section 10 of the United States Constitution. None of said levies fall within Articles XIII C and XIII D approved by the electorate on November 5, 1996, for addition to the California Constitution, by reason of the aforementioned provisions and exemptions and the provisions of Section 3(a)(1) of Article XIII D. All said levies are made pursuant to Revenue and Taxation Code Section 93(a) and are for the purpose of and shall be used for payment of "voter-approved indebtedness."

Section 4.

ANNEXATION LEVY

For the dual purposes of raising the amounts required to be raised by means of levies on taxable properties as prescribed by resolutions of the Board of Directors of MWD of SC fixing terms and conditions for annexation to MWD of SC (or as such terms and conditions may have been modified in accordance with the Metropolitan Water District Act of the State of California, Statutes 1969, Chapter 209, as amended) and for raising funds necessary to provide for payment of a portion of the capital cost component of either the Transportation Charge or the Delta Water Charge, or both, billed to MWD of SC under the "State Water Contract" (as identified in Section 6 of this Resolution) due or to become due within the current fiscal year or within the following fiscal year before the time when money will be available from the next property tax levy, Metropolitan previously set:

a. the amount of money necessary to be raised by ad valorem property taxation for such annexed properties;

b. the rates of such taxation of MWD of SC upon secured taxable property in each of the areas subject to such levies; and

c. the amounts of money to be derived from said levies.

For FY 2023/24, there is no amount remaining to be raised under the Resolutions for annexed properties. Therefore, no annexation levies are shown in the attached schedules.

Section 5.

BOND LEVY

For the purposes of paying the annual interest on the outstanding bonded indebtedness of MWD of SC incurred as a result of approval by the voters residing within MWD of SC and such part of the principal of such bonds as shall become due before the time when money will be available from the next property tax levy, or such portion thereof as shall not be met from previous levies or other revenues of the District:

a. The amount of money necessary to be raised by ad valorem property taxation during FY 2023/24 is the sum set forth in the last line in Column #1 of Schedule A.

b. The rate of such taxation of MWD of SC for the FY 2023/24 upon secured taxable property within MWD of SC hereby is fixed and levied at .00002% of assessed valuation. The rate of such taxation for the FY 2023/24 upon unsecured taxable property is the rate fixed and levied for the preceding year applicable to secured taxable property, as required by operation of law and set forth in Column #2 of Schedule B.

c. The amounts of money necessary to be derived from said levy are set forth in Column #7 of Schedule B, including the amounts of money to be derived from the area of MWD of SC within each separate member agency.

Section 6.

STATE WATER CONTRACT LEVY

For the purpose of raising funds in excess of those funds raised under Section 5 of this Resolution, necessary and sufficient to provide for payments due or to become due within the current fiscal year or within the following fiscal year before the time when money will be available from the next property tax levy, or such portion thereof as shall not be met from previous levies or other revenues of the District, under the:

> "CONTRACT BETWEEN THE STATE OF CALIFORNIA DEPARTMENT OF WATER RESOURCES AND THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA FOR A WATER SUPPLY, dated November 4, 1960," as amended (State Water Contract),

a. The amount of money necessary to be raised by ad valorem property taxation during FY 2023/24 in excess of the sum raised under Section 5 of this Resolution is the sum set forth in the last line of Column #2 of Schedule A.

b. The rate of such taxation of MWD of SC for the FY 2023/24 upon secured taxable property within MWD of SC hereby is fixed and levied at .00348% of assessed valuation. The rate of such taxation for the FY 2023/24 upon the unsecured taxable property is the rate fixed for the preceding year applicable to secured taxable property, as required by operation of law and set forth in Column #4 of Schedule B.

c. The amounts of money necessary to be derived from said levy are set forth in column #8 of Schedule B, including the amounts of money to be derived from the area of MWD of SC within each separate member agency.

Section 7.

TOTALS

The total rates of ad valorem property taxation of MWD of SC for FY 2023/24 upon secured taxable property are set forth in Column #5 of Schedule B. The total rates of ad valorem property taxation of MWD of SC for FY 2023/24 upon unsecured taxable property are set forth in Column #6 of Schedule B. The total amounts of money to be derived by virtue of such tax levies for the Fiscal Year are set forth in Column #9 of Schedule B, including the amounts of money to be derived from the area of MWD of SC within each separate member agency.

Section 8.

REDEVELOPMENT AGENCIES

Pursuant to Assembly Bill X1 26 ("ABX1 26"), chaptered and effective on June 27, 2011, and as modified in part by the California Supreme Court in the decision of *California Redevelopment Association v. Matosantos,* Case No. S194681, redevelopment agencies in California were dissolved. Such dissolution laws were modified in part by Assembly Bill 1484 ("AB 1484"), chaptered and effective on June 27, 2012, and Senate Bill 107 ("SB 107"), chaptered and effective on September 22, 2015.

The total rates of taxation of MWD of SC for the Fiscal Year set forth in Column #5 of Schedule B are the rates of taxation upon taxable property taxable by MWD of SC within the areas shown in said Schedule, including taxable property formerly within redevelopment agencies as well as all other property so taxable by MWD of SC. The total amounts of money shown in Column #9 of Schedule B to be derived from some of said areas by virtue of tax levies of MWD of SC include monies to be allocated to the successor agencies of former redevelopment agencies for the payment of enforceable obligations and allowable administrative expenses approved by the State Department of Finance and local successor agency oversight boards, as well as amounts of money to be allocated to MWD of SC. The estimated adjustment to be made to account for the difference between the total amount levied and the amount to be derived is included in the provision for estimated collection delinquencies shown in Schedule A.

Section 9.

SCHEDULES A AND B

Schedules A and B are attached after the last page of this resolution and are incorporated herein.

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 August 15, 2023.

Lois Fong-Sakai

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

THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

SCHEDULE A

Estimated Funds to be Produced by Tax Levy, Fiscal Year 2023/24
(Cents Omitted)

		Bond Levy Column #1	State Contract Levy Column #2	Totals Column #3
Secured Property				
Assessed Value	$ 3,743,913,818,639			
Tax Rate		0.00002%	0.00348%	
Amount of Levy		$ 748,769	$ 130,288,201	$ 131,036,970
Unsecured Property				
Assessed Value	$ 132,061,410,657			
Tax Rate		0.00002%	0.00348%	
Amount of Levy		$ 26,412	$ 4,595,737	$ 4,622,149
All Property				
Assessed Value	$ 3,875,975,229,296			
Amount of Levy from Schedule B		$ 775,181	$ 134,883,938	$ 135,659,119
Allocation of County-wide Tax on Utilities		344,812	59,997,210	60,342,022
Total Tax Levy		$ 1,119,993	$ 194,881,148	$ 196,001,141
Estimated Collection Adjustments *		(46,232)	(8,044,310)	(8,090,542)
Estimated Funds to be Produced by Tax Levy		$ 1,073,761	$ 186,836,838	$ 187,910,599

* .5% allowance for delinquencies
7.2% allowance for allocations to successors of former redevelopment agencies
$2.5 million estimated supplemental tax collections
$4.5 million estimated prior years tax collections

Note: All rates expressed as percent of A.V.

Agency	Area (a)		Secured Bond Rate Col. 1	Unsecured Bond Rate Col. 2	Secured SWC Rate Col. 3	Unsecured SWC Rate Col. 4	Total Secured Rate Col. 5	Total Unsecured Rate Col. 6	Bond Levy Col. 7	SWC Levy Col. 8	Total Levy Col. 9
Included in MWD											
Los Angeles County											
City of Beverly Hills											
City of Beverly Hills Area		1-1-01-000-0	0.00002%	0.00002%	0.00348%	0.00348%	0.00350%	0.00350%	8,990.09	1,564,276.20	1,573,266.30
	Agency Totals:								8,990.09	1,564,276.20	1,573,266.30
City of Burbank											
City of Burbank Area		1-1-02-000-0	0.00002%	0.00002%	0.00348%	0.00348%	0.00350%	0.00350%	6,366.72	1,107,808.88	1,114,175.60
	Agency Totals:								6,366.72	1,107,808.88	1,114,175.60
City of Glendale											
City of Glendale Area		1-1-03-000-0	0.00002%	0.00002%	0.00348%	0.00348%	0.00350%	0.00350%	7,994.05	1,390,964.39	1,398,958.43
	Agency Totals:								7,994.05	1,390,964.39	1,398,958.43
City of Los Angeles											
City of Los Angeles Area		1-1-04-000-0	0.00002%	0.00002%	0.00348%	0.00348%	0.00350%	0.00350%	160,764.72	27,973,061.52	28,133,826.25
	Agency Totals:								160,764.72	27,973,061.52	28,133,826.25
City of Pasadena											
City of Pasadena Area		1-1-05-000-0	0.00002%	0.00002%	0.00348%	0.00348%	0.00350%	0.00350%	7,750.93	1,348,662.11	1,356,413.04
	Agency Totals:								7,750.93	1,348,662.11	1,356,413.04
City of San Marino											
City of San Marino Area		1-1-06-000-0	0.00002%	0.00002%	0.00348%	0.00348%	0.00350%	0.00350%	1,604.65	279,209.16	280,813.81
	Agency Totals:								1,604.65	279,209.16	280,813.81
City of Santa Monica											
City of Santa Monica Area		1-1-07-000-0	0.00002%	0.00002%	0.00348%	0.00348%	0.00350%	0.00350%	9,733.60	1,693,645.87	1,703,379.47
	Agency Totals:								9,733.60	1,693,645.87	1,703,379.47

Agency	Area (a)	Secured Bond Rate Col. 1	Unsecured Bond Rate Col. 2	Secured SWC Rate Col. 3	Unsecured SWC Rate Col. 4	Total Secured Rate Col. 5	Total Unsecured Rate Col. 6	Bond Levy Col. 7	SWC Levy Col. 8	Total Levy Col. 9
Included in MWD										
Los Angeles County										
City of Long Beach										
City of Long Beach Area	1-1-08-000-0	0.00002%	0.00002%	0.00348%	0.00348%	0.00350%	0.00350%	13,162.85	2,290,335.31	2,303,498.16
Agency Totals:								13,162.85	2,290,335.31	2,303,498.16
City of Torrance										
City of Torrance Area	1-1-09-000-0	0.00002%	0.00002%	0.00348%	0.00348%	0.00350%	0.00350%	7,210.07	1,254,552.73	1,261,762.80
Agency Totals:								7,210.07	1,254,552.73	1,261,762.80
City of Compton										
City of Compton Area	1-1-10-000-0	0.00002%	0.00002%	0.00348%	0.00348%	0.00350%	0.00350%	1,292.18	224,839.87	226,132.05
Agency Totals:								1,292.18	224,839.87	226,132.05
West Basin Municipal Water District										
West Basin Municipal Water District Area	1-1-11-000-0	0.00002%	0.00002%	0.00348%	0.00348%	0.00350%	0.00350%	54,270.27	9,443,027.29	9,497,297.57
Agency Totals:								54,270.27	9,443,027.29	9,497,297.57
Three Valleys Municipal Water District										
Three Valleys Municipal Water District Area	1-1-12-000-0	0.00002%	0.00002%	0.00348%	0.00348%	0.00350%	0.00350%	17,360.47	3,020,721.54	3,038,082.01
Agency Totals:								17,360.47	3,020,721.54	3,038,082.01
Foothill Municipal Water District Foothill Municipal Water District Area	1-1-13-000-0	0.00002%	0.00002%	0.00348%	0.00348%	0.00350%	0.00350%	4,839.81	842,127.49	846,967.30
Agency Totals:								4,839.81	842,127.49	846,967.30
Central Basin Municipal Water District Central Basin Municipal Water District Area	1-1-14-000-0	0.00002%	0.00002%	0.00348%	0.00348%	0.00350%	0.00350%	38,838.55	6,757,907.08	6,796,745.62
Agency Totals:								38,838.55	6,757,907.08	6,796,745.62

Agency	Area (a)	Secured Bond Rate Col. 1	Unsecured Bond Rate Col. 2	Secured SWC Rate Col. 3	Unsecured SWC Rate Col. 4	Total Secured Rate Col. 5	Total Unsecured Rate Col. 6	Bond Levy Col. 7	SWC Levy Col. 8	Total Levy Col. 9
Included in MWD										
Los Angeles County										
Las Virgenes Municipal Water District										
Las Virgenes Municipal Water District Area	1-1-15-000-0	0.00002%	0.00002%	0.00348%	0.00348%	0.00350%	0.00350%	6,197.68	1,078,395.72	1,084,593.40
Agency Totals:								6,197.68	1,078,395.72	1,084,593.40
Upper San Gabriel Valley MWD										
Upper San Gabriel Valley MWD Area	1-1-16-000-0	0.00002%	0.00002%	0.00348%	0.00348%	0.00350%	0.00350%	26,969.14	4,692,631.12	4,719,600.27
Agency Totals:								26,969.14	4,692,631.12	4,719,600.27
City of San Fernando										
City of San Fernando Area Area	1-1-17-000-0	0.00002%	0.00002%	0.00348%	0.00348%	0.00350%	0.00350%	521.71	90,777.68	91,299.40
Agency Totals:								521.71	90,777.68	91,299.40
County Totals:								373,867.49	65,052,943.97	65,426,811.47
Orange County										
City of Anaheim										
City of Anaheim Area Area	1-2-01-000-0	0.00002%	0.00002%	0.00348%	0.00348%	0.00350%	0.00350%	12,116.94	2,108,348.08	2,120,465.02
Agency Totals:								12,116.94	2,108,348.08	2,120,465.02
City of Santa Ana										
City of Santa Ana Area Area	1-2-02-000-0	0.00002%	0.00002%	0.00348%	0.00348%	0.00350%	0.00350%	6,889.95	1,198,851.86	1,205,741.81
Agency Totals:								6,889.95	1,198,851.86	1,205,741.81
City of Fullerton										
City of Fullerton Area Area	1-2-03-000-0	0.00002%	0.00002%	0.00348%	0.00348%	0.00350%	0.00350%	5,144.48	895,138.95	900,283.43
Agency Totals:								5,144.48	895,138.95	900,283.43
Municipal Water District of Orange County										
Remainder of MWD of Orange County	1-2-05-999-0	0.00002%	0.00002%	0.00348%	0.00348%	0.00350%	0.00350%	129,720.14	22,571,303.64	22,701,023.78
Agency Totals:								129,720.14	22,571,303.64	22,701,023.78
County Totals:								153,871.51	26,773,642.52	26,927,514.03

Agency	Area (a)	Secured Bond Rate Col. 1	Unsecured Bond Rate Col. 2	Secured SWC Rate Col. 3	Unsecured SWC Rate Col. 4	Total Secured Rate Col. 5	Total Unsecured Rate Col. 6	Bond Levy Col. 7	SWC Levy Col. 8	Total Levy Col. 9
Riverside County										
Eastern Municipal Water District										
Remainder of Eastern MWD	1-3-01-999-0	0.00002%	0.00002%	0.00348%	0.00348%	0.00350%	0.00350%	23,248.88	4,045,305.36	4,068,554.24
Agency Totals:								23,248.88	4,045,305.36	4,068,554.24
Western Municipal Water District										
Eleventh Fringe Area of Western MWD	1-3-02-011-0	0.00000%	0.00000%	0.00000%	0.00000%	0.00000%	0.00000%	0.00	0.00	0.00
Fifteenth Fringe Area of Western Mwd	1-3-02-012-0	0.00002%	0.00002%	0.00348%	0.00348%	0.00350%	0.00350%	0.08	14.29	14.37
Remainder of Western MWD	1-3-02-999-0	0.00002%	0.00002%	0.00348%	0.00348%	0.00350%	0.00350%	29,693.96	5,166,749.00	5,196,442.96
Agency Totals:								29,694.04	5,166,763.29	5,196,457.33
County Totals:								52,942.92	9,212,068.65	9,265,011.57
San Bernardino County										
Inland Empire Utilities Agency										
Original Area of Chino Basin MWD	1-4-01-001-0	0.00002%	0.00002%	0.00348%	0.00348%	0.00350%	0.00350%	13,114.86	2,281,985.31	2,295,100.17
Mid-valley Area of Chino Basin MWD	1-4-01-002-0	0.00002%	0.00002%	0.00348%	0.00348%	0.00350%	0.00350%	19,045.04	3,313,837.82	3,332,882.86
Bryant Annexation Area of Chino Basin MWD	1-4-01-003-0	0.00002%	0.00002%	0.00348%	0.00348%	0.00350%	0.00350%	15.77	2,744.29	2,760.07
North Perimeter No. 1 Annexation Area of Chino Basin MWD	1-4-01-004-0	0.00002%	0.00002%	0.00348%	0.00348%	0.00350%	0.00350%	9.94	1,728.85	1,738.78
Agency Totals:								32,185.61	5,600,296.26	5,632,481.87
County Totals:								32,185.61	5,600,296.26	5,632,481.87

Schedule B - Tax Rates and Amounts to be Derived from Respective Areas
for State Controller and MWD Board of Directors

Agency	Area (a)	Secured Bond Rate Col. 1	Unsecured Bond Rate Col. 2	Secured SWC Rate Col. 3	Unsecured SWC Rate Col. 4	Total Secured Rate Col. 5	Total Unsecured Rate Col. 6	Bond Levy Col. 7	SWC Levy Col. 8	Total Levy Col. 9
Included in MWD										
San Diego County										
San Diego County Water Authority Remainder of SDCWA +	1-5-01-999-9	0.00002%	0.00002%	0.00348%	0.00348%	0.00350%	0.00350%	136,026.03	23,668,529.58	23,804,555.61
Agency Totals:								136,026.03	23,668,529.58	23,804,555.61
County Totals:								136,026.03	23,668,529.58	23,804,555.61
Ventura County										
Calleguas Municipal Water District Remainder of Calleguas MWD	1-6-01-999-0	0.00002%	0.00002%	0.00348%	0.00348%	0.00350%	0.00350%	26,283.91	4,573,401.15	4,599,685.07
Agency Totals:								26,283.91	4,573,401.15	4,599,685.07
County Totals:								26,283.91	4,573,401.15	4,599,685.07
Included Totals:								775,177.48	134,880,882.13	135,656,059.62

Agency	Area (a)	Secured Bond Rate Col. 1	Unsecured Bond Rate Col. 2	Secured SWC Rate Col. 3	Unsecured SWC Rate Col. 4	Total Secured Rate Col. 5	Total Unsecured Rate Col. 6	Bond Levy Col. 7	SWC Levy Col. 8	Total Levy Col. 9
Excluded from MWD										
Los Angeles County										
City of Los Angeles										
Alhambra Hills	2-1-04-001-0	0.00000%	0.00000%	0.00348%	0.00348%	0.00348%	0.00348%	0.00	2,375.18	2,375.18
Portion of Reorganization No. 85-2	2-1-04-002-0	0.00002%	0.00002%	0.00348%	0.00348%	0.00350%	0.00350%	2.24	389.64	391.88
Agency Totals:								2.24	2,764.82	2,767.06
Las Virgenes Municipal Water District										
Portion of Reog No. 85-2 Exclusion from Las Virgines MWD	2-1-15-001-0	0.00002%	0.00002%	0.00348%	0.00348%	0.00350%	0.00350%	0.18	30.54	30.72
Agency Totals:								0.18	30.54	30.72
County Totals:								2.41	2,795.37	2,797.78

Agency	Area (a)	Secured Bond Rate Col. 1	Unsecured Bond Rate Col. 2	Secured SWC Rate Col. 3	Unsecured SWC Rate Col. 4	Total Secured Rate Col. 5	Total Unsecured Rate Col. 6	Bond Levy Col. 7	SWC Levy Col. 8	Total Levy Col. 9
Excluded from MWD										
San Diego County										
San Diego County Water Authority										
Exclusion from Original Area of Ramona MWD	2-5-01-017-0	0.00002%	0.00002%	0.00348%	0.00348%	0.00350%	0.00350%	0.03	4.77	4.80
Exclusions From Ramona No.2 Annexation Area	2-5-01-030-0	0.00002%	0.00002%	0.00348%	0.00348%	0.00350%	0.00350%	0.44	75.87	76.31
Rainbow No.3 Annexation Area	2-5-01-041-0	0.00002%	0.00002%	0.00348%	0.00348%	0.00350%	0.00350%	1.03	179.84	180.87
Agency Totals:								1.50	260.48	261.98
County Totals:								1.50	260.48	261.98
Excluded Totals:								3.91	3,055.84	3,059.76
Report Totals:								775,181.40	134,883,937.98	135,659,119.37

THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

BOARD ACTION

- **Board of Directors**
  Engineering, Operations, and Technology Committee

8/15/2023 Board Meeting

8-2

Subject

Authorize an agreement with Computer Aid Incorporated in an amount not to exceed $1,750,000 to provide staff augmentation support services for the operation and maintenance of the Metropolitan Cybersecurity Operations Center for a period of up to one year; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA **[Consultation with Metropolitan Director of Info Tech Services, Information Technology, Jacob Margolis, or designated agents on threats to public services or facilities; may be heard in closed session pursuant to Gov. Code Section 54957(a)]**

Executive Summary

This action awards an agreement for operation and maintenance of Metropolitan's enterprise-wide Cybersecurity Operations Center (CSOC) for up to a one-year period. The purpose of this contract is to provide basic cybersecurity threat monitoring capability while Metropolitan republishes an RFP for a long-term cybersecurity operations center managed services contract. Metropolitan safeguards its information and operational technology infrastructure through a combination of cybersecurity services, monitoring, anti-malware technologies, next-generation firewalls, enhanced zero trust access control, and employee awareness education. The electronic security system integrates data from access control, intrusion detection, and video monitoring. The CSOC will function 24 hours per day, seven days per week, 365 days per year to detect, identify, contain, and remediate cybersecurity threats to Metropolitan's computers, data, and industrial control systems used to store, treat and deliver water.

Timing and Urgency

This action will authorize the General Manager to proceed with an agreement with Computer Aid Incorporated (CAI) to provide minimal staffing to achieve basic continuous monitoring for cyber threats while the RFP process for a more comprehensive service can be released and awarded to a vendor for a long-term managed services contract.

Details

Background

In 2018, Metropolitan started a project to design, construct and implement the operation of a CSOC. The construction of the CSOC facility was finished in March of 2023. Work was completed on the installation and configuration of the underlying technologies needed for the CSOC to perform its functions in November 2022. Prior to the CSOC, there was no ability for Metropolitan to continuously monitor for and respond to cybersecurity threats. However, Metropolitan is not staffed to operate the CSOC, nor is it feasible to hire and retain the skill sets needed under the existing job classifications and pay scales. For the CSOC to operate at the level it was intended, a contracted managed service will be required to conduct the continuous operation.

The CSOC will centrally monitor, detect, analyze, mitigate, and respond to cyber threats on the Metropolitan Enterprise Information Technology and Supervisory Control and Data Acquisition (SCADA) systems. Currently, multiple groups at Metropolitan and external parties independently gather and analyze information from data centers, the disaster recovery facility, workstation networks, physical security, supervisory control, and data acquisition (SCADA) systems, water operations systems, and field equipment. Data is also collected and analyzed from private and government agencies such as Computer Emergency Readiness Teams (CERTs) and Information

Sharing and Analysis Centers (ISACs). Correlating this data to find suspicious activity can be extremely challenging and often only occurs long after a cyber event or incident happens.

To meet this requirement, Metropolitan released a request for proposals (RFP) in October of 2022 for CSOC Co-Managed Services. The main purpose of the CSOC co-managed support services is to improve real-time situational awareness resulting in Metropolitan's improved capabilities to detect, identify and respond to cyber threats. A secondary function of the CSOC is to provide critical intelligence information to Metropolitan's member agencies to enhance the overall cybersecurity posture for Metropolitan's service area.

After going through the selection process, no contract was awarded. One vendor was selected, but the final scope of work deviated too far from the original scope of work that was detailed in the RFP, resulting in a cancellation of the RFP with a re-release of the RFP planned pending a more stringent re-write of the scope requirements. The result of this action is the current contract for staff augmentation support to provide Metropolitan with the minimum ability to continuously monitor for cyber threats while the RFP process is conducted.

The CSOC project was executed under the Capital Investment Plan (CIP). The CIP covered the procurement and implementation of the required technologies and the actual construction of the CSOC facility. CIP funding is not available for the co-managed services agreement. Funds for this action are available within Metropolitan’s IT Group, Operations, and Maintenance budget for fiscal biennial 2022-2024.

Objective

CAI would be required to provide staff support for around-the-clock monitoring of CSOC systems to afford Metropolitan employees assigned to the CSOC to be free to conduct the CSOC defensive posture support such as approving cybersecurity exception requests, conduct information systems and operational technology design and upgrade support, and to conduct vulnerability scanning management activities. CAI will assist with CSOC core functions. These core functions include network monitoring and security event analysis, email security monitoring and analysis, cyber incident response and management, vulnerability assessment, security engineering, cyber intelligence support, and intrusion analysis.

The CSOC shall provide Information Technology and Operational Technology defensive posture support and is responsible for the overall security of the Metropolitan Enterprise-wide information systems and networks. The CSOC shall be established in accordance with the guiding principles of security established by the National Institute of Standards and Technology (NIST), the Metropolitan Cyber Security Program Framework, and the Metropolitan Cyber Security Policy. The CSOC is chartered to prevent, detect, contain, and eradicate cyber threats through monitoring, intrusion detection, and protective security services to Metropolitan information systems, including the Metropolitan wide area networks (WAN), local area networks (LAN), security devices, servers, and workstations. The Metropolitan CSOC also conducts vulnerability assessments, analyzes cyber threats, monitors the Metropolitan email gateway, and collects information on, investigates, and reports on all confirmed or suspected cybersecurity incidents.

Professional Services Required

Metropolitan used RFQ 1303 for Information Technology On-Call services. CAI was one of the vendors selected under the cybersecurity category under RFQ 1303.

CAI shall assist Metropolitan in staffing and monitoring its CSOC by supporting operations 24 hours per day, seven days per week, 365 days per year, with provision for on-call support during holiday periods. CAI staff will work under the direction of a CAI Service Delivery Manager, who will be providing services at the direction of the Metropolitan CSOC Team Manager and Office of Enterprise Cybersecurity.

Work shall be performed at the primary Metropolitan CSOC facility. CAI personnel shall operate from the Metropolitan CSOC facilities. Metropolitan will coordinate clearance for and grant physical access by qualified and cleared personnel into the CSOC premises and facilities and into other Metropolitan sites.

This action authorizes $1,750,000 for CAI to provide staff augmentation services for the operation and maintenance of the CSOC. The total project budget includes funds for awarding a new contract with CAI for a nine-month period for $1,312,500 with an option to extend month to month at $145,833.33 per month up to a total one-year period. See **Attachment 1** for the Financial Statement.

Project Milestones

September 1, 2023 – Onboarding

October 1, 2023 – Conducting CSOC Monitoring

Policy

Metropolitan Water District Administrative Code Section 5108: Appropriations

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 Minute Item 52778, dated April 12, 2022, the Board appropriated a total of $600 million for projects identified in the Capital Investment Plan for Fiscal Years 2022/23 and 2023/24.

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 it involves continuing administrative activities, such as general policy and procedure making, which will not cause either a direct physical change in the environment or a reasonably foreseeable indirect physical change in the environment (Section 15378(b)(2) of the State CEQA Guidelines).

CEQA determination for Option #2:

None required

Board Options

Option #1

Authorize an agreement with Computer Aid Incorporated in an amount not to exceed $1,750,000 to provide staff augmentation support services for the operation and maintenance of the Metropolitan Cybersecurity Operations Center for a period of up to one year.

Fiscal Impact: Expenditure of $1,750,000 in O&M funds
Business Analysis: This option will initiate implementation of security recommendations made by internal staff and DHS and will provide minimal ability to monitor for cyber threats affecting business computer systems and SCADA systems. This approach will comprehensively strengthen Metropolitan’s cybersecurity to a minimal staffing level while the RFP process is reinitiated for a permanent CSOC co-managed service.

Option #2

Do not proceed with the service at this time.
Fiscal Impact: No additional expenditure of O&M funds
Business Analysis: This option would forgo an opportunity to reduce cyber threats and increase information security risks.

Staff Recommendation

Option #1

7/25/2023
Charlie Eckstrom *Date*
Group Manager, Information Technology

7/30/2023
Adel Hagekhalil *Date*
General Manager

Attachment 1 – Financial Statement

Ref#it12686126

Allocated Funds for Cybersecurity Operations Center

	Current Board Action (Aug. 2023)
Labor	
Studies & Investigations	$ -
Final Design	-
Owner Costs (Program mgmt.)	-
Submittals Review & Record Drwgs	-
Construction Inspection & Support	-
Metropolitan Force Construction	-
Materials & Supplies	-
Incidental Expenses	-
Professional/Technical Services	1,750,000
Equipment Use	-
Contracts	-
Remaining Budget	-
Total	**$ 1,750,000**

Engineering, Operations, and Technology Committee

Cybersecurity Operations Center Temporary Staffing

Item 8-2

August 14, 2023

Current Action

Authorize an agreement with Computer Aid Incorporated in an amount not to exceed $1,750,000 for staff augmentation support services for the operation and maintenance of the Metropolitan Cybersecurity Operations Center for a period of up to one year; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA.

Background

- In 2018, Metropolitan started a project to design, construct and implement the operation of a CSOC. The construction of CSOC facility was finished in March of 2023
- Work was completed on the installation and configuration of the underlying technologies needed for the CSOC to perform its functions in November 2022
- Prior to the CSOC, there was no ability for Metropolitan to continuously monitor for and respond to cybersecurity threats

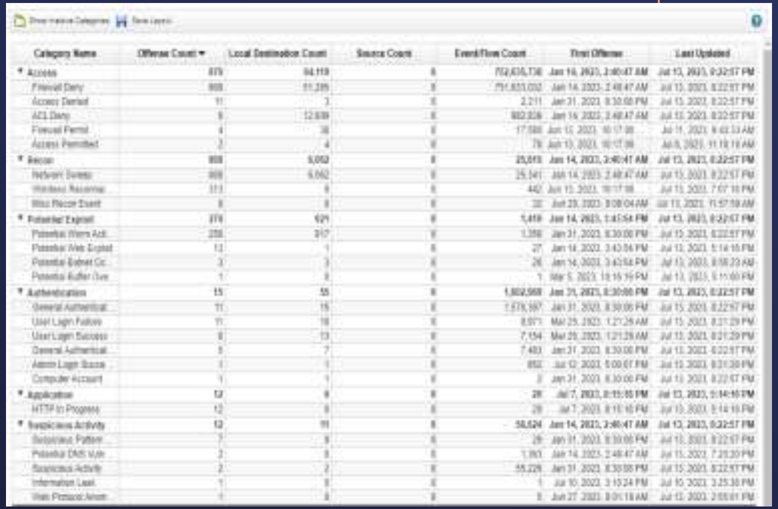
Background

- The CSOC will centrally monitor, detect, analyze, mitigate, and respond to cyber threats on the Metropolitan Enterprise Information Technology and Supervisory Control and Data Acquisition (SCADA) systems
- Metropolitan was not staffed to operate the CSOC, nor was it feasible to hire staff under the current job classifications and pay scales
- A contracted managed service would be required to conduct the continuous operation of the CSOC
- To meet this requirement, Metropolitan released a request for proposals (RFP) in October of 2022 for CSOC Co-Managed Services

Reasons for this action

- After completing the RFP the selection process, no contract was awarded. One vendor was selected, but the final scope of work deviated too far from the original scope of work that was detailed in the RFP, resulting in a cancellation of the RFP pending re-publishing with more stringent requirements
- To cover cybersecurity staffing shortages in relation to CSOC essential operational functions while a new RFP process is initiated and completed.

Reasons for this action



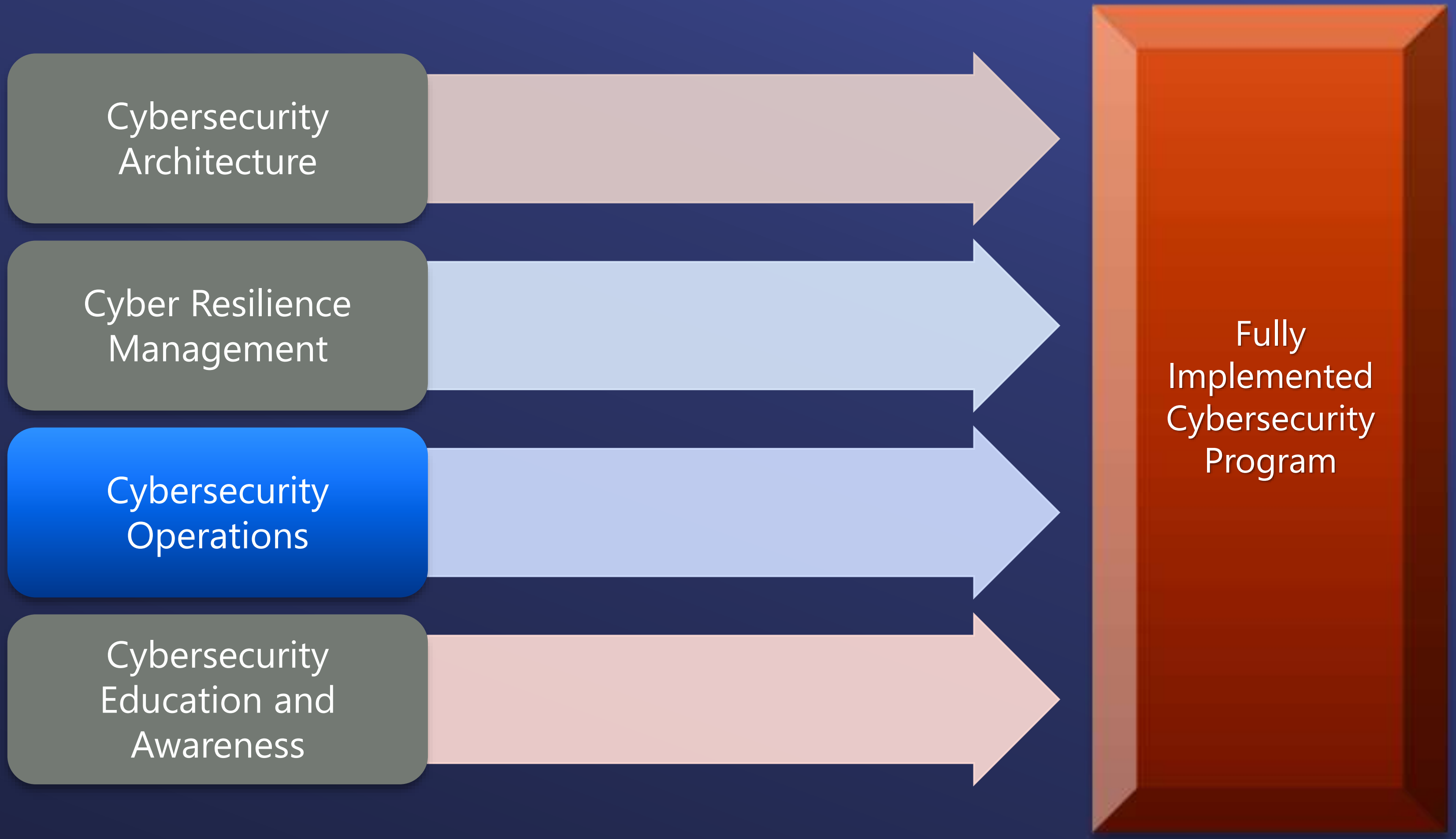
- Metropolitan CSOC currently tracks between 5000 and 6500 events per second
  - Generated from systems critical to Metropolitan's operations
  - Events require analysis for determination of threats or system misconfigurations.
- Due to staffing shortages, since January 2023, the following concerning events went uninvestigated:
  - 870 Access attempts
  - 868 reconnaissance indicators
  - 274 potential vulnerability exploits
- In all, the CSOC systems recorded 756 million events since January 2023, the vast majority of which are benign, but repeated series of events such as those listed above require further investigation.

Reasons for this action

- Staff is stretched thin between legal eDiscovery requests and monitoring for cyber threats.
    - Currently 479 user objects and data on legal hold
- Currently, staff are only able to effectively engage in monitoring for attacks against employee computers (laptop and desktops), and to conduct limited investigations into phishing events.

Reasons for this action

This action is one of four pillars for the implementation of Metropolitan's Cybersecurity Program



Reasons for this action

- Computer Aid Incorporated will provide staff augmentation services for the CSOC core functions. These core functions include:
  - Network monitoring and security event analysis
  - Email security monitoring and analysis
  - Cyber incident response and management vulnerability assessment
  - Security engineering
  - Cyber intelligence support
  - Intrusion analysis

Vendor Selection

Computer Aid Incorporated was selected from a list of vendors pre-qualified from RFQ 1303 On-Call Information Technology Services

Vendor Selection

RFQ 1303

- 48 vendors responded to the RFQ
- Of the 48, 46 were qualified for on-call support services
- Cybersecurity is listed as Category 23
- Of the 46 vendors 15 vendors were qualified under category 23.

Vendor Selection

RFQ 1303

- CAI was chosen due to their past experience and exceptional performance on a previous cybersecurity project and their past experiences with other Metropolitan IT Projects
  - Due the short ramp up time for this effort, intimate knowledge of Metropolitan's systems was a primary consideration

Agreement Scope

- CAI will provide six (6) dedicated on-site analyst resources to directly support the Metropolitan CSOC Team and CSOC Team efforts, including monitoring for cyber threats, conducting cyber-threat hunting, and support cyber incident response activities.
- On-site analysts may be assigned to the cyber incident response team as the situation may dictate.
- Provided analyst shall staff the CSOC 24 hours per day during Metropolitan's regular operating hours and for a period after regular hours where there will be limited availability of Metropolitan counterparts. These hours are as follows:

Agreement Scope

- These hours are as follows:

CSOC Staffing Shifts	Coverage Days	Coverage Hours
CSOC Day Shift	Monday - Friday	6:00am – 2:00pm
CSOC Swing Shift	Monday – Friday	2:00pm – 10:00pm
CSOC Evening / Morning	Monday - Friday	10:00pm – 6:00am
Holidays (weekdays)	Monday - Friday	On Call
Holidays (weekends)	Sat - Sun	On Call

Agreement Scope

- Analyst will provide subject matter expertise, advice, and action on the following items:
  - Vulnerability Assessment
  - Intrusion Prevention and Detection System (IPS/IDS)
  - Host Intrusion Prevention and Host Detection System (HIPS/HIDS)
  - Access Control and Authorization
  - Policy Enforcement
  - Application Security
  - Protocol Analysis
  - Penetration Testing
  - Web Application Firewalls
  - Firewall Management
  - Incident Response
  - Secure Web Gateways
  - Endpoint Detection and Response (EDR), Network Detection and Response
  - (NDR), Extended Detection and Response (XDR)

Project Cost

Nine Months of Staff Augmentation Services	$1,312,500
Month-to-Month Rate (Months 10, 11, and 12)	$145,833
Contract Not to Exceed Total	$1,750,000

Project Timeline

Aug 2023:
Board Approval of CAI Agreement

October 1, 2023:
Onboarding of Support Services

November 1, 2023:
CSOC Operations Begin

June 2024:
Transition Begins with Co-Managed Services

September 2024:
Co-Managed Service Provider Takes over Comprehensive 24x7x365 CSOC Management.

Board Options

- Option #1
  - Authorize an agreement with Computer Aid Incorporated in an amount not to exceed $1,750,000 to provide staff augmentation support services for the operation and maintenance of the Metropolitan Cybersecurity Operations Center for a period of up to one year.

- Option #2
  - Do not proceed with the service at this time.

Staff Recommendation

- Option #1

THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

Report

Water Resource Management Group

- **Conservation Board Report August 2023**

Summary

This report provides a summary of conservation activity and expenditures for June 2023.

Purpose

Informational

Detailed Report

Conservation Expenditures – FY2022/23 & FY2023/24 (1)

	Paid (2)	Committed (3)
Regional Devices	\$6.5 M	\$6.4 M
Member Agency Administered	\$7.9 M	\$4.8 M
Turf Replacement	\$22.4 M	\$38.4 M
Advertising	\$6.9 M	\$0.1 M
Other	\$2.0 M	\$1.1 M
TOTAL	**\$45.7 M**	**\$50.8 M**

(1) The Conservation Program biennial expenditure authorization is \$86 million.

(2) Paid as of 7/1/2022 - 6/30/2023. Financial reporting on cash basis.

(3) Committed dollars as of July 10, 2023

Summary of Expenditures in June 2023: \$5,116,065 (1)

Lifetime Water Savings to be achieved by all rebates in June 2023: 5,425 AF
FY2022/23-FY2023/24: 62,396 AF lifetime water savings

Turf Replacement Rebates:
June: 1,080,324 ft2 removed
FY2022/23-FY2023/24: 10,471,445 ft^2 removed

Clothes Washers:
June: 717 units rebated
FY2022/23-FY2023/24: 12,973 units rebated

Smart Controllers:
June: 681 units rebated
FY2022/23-FY2023/24: 9,619 units rebated

Toilets:
June: 733 units rebated
FY2022/23-FY2023/24: 23,926 units rebated

Rain Barrels and Cisterns:
June: 128 units rebated
FY2022/23-FY2023/24: 3,416 units rebated

Sprinkler Nozzles:
June: 1,123 units rebated
FY2022/23-FY2023/24: 23,323 units rebated

(1) Expenditures may include advertising and Water Savings Incentive Program activity in addition to the incentives highlighted above.

Date of Report: 8/15/2023

THE METROPOLITAN WATER DISTRICT
OF SOUTHERN CALIFORNIA

INFORMATION

- **Board of Directors**
  Finance, Audit, Insurance, and Real Property Committee

8/15/2023 Board Meeting

9-2

Subject

Review Draft 2023 Long-Range Finance Plan Needs Assessment

Executive Summary

The enclosed draft 2023 Long-Range Finance Plan Needs Assessment ("LRFP-NA") document is a draft of the first phase of a two-phase process to provide the Board with a finance plan for funding new capital investments over the next decade. The first phase of the development process – the LRFP-NA – will outline the capital investment requirements and water rate increases associated with four demand and supply scenarios. The second phase will result in the production of a final LRFP document that will provide a tailored financial analysis based on board feedback on the LRFP-NA and the Board's approval of specific capital projects through the Climate Adaptation Master Plan for Water (CAMP4W) process. The next iteration of the Long-Range Finance Plan (LRFP) is expected to be completed in fiscal year 2024/25. Thereafter, it is expected that the LRFP will be updated every five years. Meanwhile, staff will receive input on the attached draft and come back to the Board later this year with a final LRFP-NA for approval.

Details

Background

In late 2022, Metropolitan staff initiated a process to develop an LRFP-NA that would provide a financial management tool to evaluate options for capital investments to meet Metropolitan's water supply and demand requirements over the next ten years. The LRFP process has long been used by Metropolitan to help guide board decisions on financial management. The current LRFP process is the sixth update to the first LRFP that was completed in December 1986, with subsequent updates completed in 1987, 1988, 1995, 1999, and 2004. It was through the LRFP process that many key financial policies on reserves, water rates, and debt policies, that are in use today, were first developed.

The current LRFP will be a two-phased process. The LRFP-NA, a draft of which is included in this board information letter, will develop guidelines to assist the Board in determining capital financing options and their related impact on water rates over the next ten years. The framework for these options will be built around four scenarios used to characterize different outcomes for water supply stability and demand requirements. These four scenarios were developed in the 2020 Integrated Resources Plan Needs Assessment (the "2020 IRP-NA"), approved by the Board in April 2022. However, the LRFP-NA will now outline capital requirements, and their related water rate impacts, to meet the water supply and demand parameters of the four scenarios. The LRFP-NA also provides detailed descriptions of a range of debt, grants, and other options for funding capital investment projects. A key factor underlying the LRFP-NA framework is the impact of climate change. A key guideline for this critical issue is the CAMP4W process, developed as the result of the February 2023 board retreat to address critical policy issues driven by climate change.

The second phase of the LRFP process will commence with the final completion of LRFP-NA and the CAMP4W process. This is expected sometime in fiscal year 2024/25. The ultimate LRFP document will incorporate input from the Board and member agencies reflecting a more refined financial analysis for the funding and timing of specific capital projects.

Metropolitan Board Direction

Based on the results of the draft LRFP-NA, Metropolitan staff seeks board feedback on three important questions critical to the undertaking of phase two:

- What is an acceptable average annual rate increase on full-service water sales through 2032 to fund water portfolio projects and/or conservation to address the expected impacts of climate change as analyzed within the 2020 IRP Needs Assessment?
- What is the desired estimated allocation between core supplies (which includes conservation), flex supplies, and storage in the optimal portfolio mix developed within the acceptable average annual rate increases identified by the Board?
- What alternative financing approaches interest the Board either singularly or in combination to address funding of future capital investments?

Staff will review and incorporate the feedback on these questions before finalizing the LRFP-NA for Board approval later this year.

The findings of the LRFP-NA financial analysis are dependent on the assumed unit costs for each resource. Although Metropolitan exercised care in selecting appropriate references on which to base the unit costs, it is anticipated that when phase two of the LRFP concludes, there will be differences between actual project-specific unit costs and those modeled here in LRFP-NA.

Policy

Metropolitan Water District Act Section 123: Borrowing, Limitation

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 125.5: Guidelines for Intended Use of Unreserved Fund Balances

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 Administrative Code Section 4201: Mission Statement

Metropolitan Water District Administrative Code Section 5109: Capital Financing

Fiscal Impact

Not applicable

8/11/2023

Katano Kasaine *Date*
Assistant General Manager/
Chief Financial Officer

8/11/2023

Adel Hagekhalil *Date*
General Manager

Attachment 1 – Draft 2023 Long-Range Finance Plan Needs Assessment

Ref# cfo12693604

2023 Long-Range Finance Plan

DRAFT REV.080112023

THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

Photo: Inside Etiwanda Pipeline

Contents

Executive Summary.

Objectives

Metropolitan's Long-Range Finance Plan (LRFP) will be a multi-year, multi-phased development process to address Metropolitan's new capital investments over the next decade. The initial phase of the LRFP process – the 2023 LRFP Needs Assessment (LRFP-NA) -- started in late 2022 and is designed to (1) provide high-level financial analysis of rate impacts under various resource development scenarios, (2) discuss the primary capital financing and funding methods Metropolitan has at its disposal, (3) introduce potential financial tools that could become components of a tailored financial strategy, and (4) catalogue Metropolitan's key policies related to the capital markets. Addressing these elements, the LRFP-NA seeks to encourage policy discussion among the Metropolitan Board of Directors, resulting in the co-development of the final LRFP document to be produced at the conclusion of phase two. The LRFP-NA builds on the 2020 IRP Needs Assessment and is consistent with the goals and objectives of the Climate Adaptation Master Plan for Water (CAMP4W) planning process. A key purpose of the LRFP-NA is to inform the CAMP4W process and assist the board in its strategic decision making for critical issues of resiliency, reliability, financial sustainability, affordability and equity. The next iteration of the LRFP document – which will come at a later date – will integrate specific capital projects and outline the funding and financing strategies based on board input, including its policy goals and objectives.

As discussed in detail in this report, the 2020 IRP Needs Assessment outlined four plausible scenarios[1], each with varying levels of required resource development. LRFP-NA forecasts the average annual rate increases needed to meet the resource development requirements of each scenario. Scenario D – a climate-stressed alternative – is characterized by high demand for water amid reduced imported water supply. Specifically, Scenario D reflects severe climate change impacts, high regulatory impacts, and strong regional economic and population growth. This scenario requires the most significant resource development for Metropolitan to reach 100 percent reliability to meet projected member agency demands. This scenario shows that core supply would need to increase by as much as 300,000 acre-feet (AF), or 300 thousand acre-feet (TAF) beyond Metropolitan's existing resource portfolio of supplies.

Key Considerations

Staff initiated the LRFP-NA with a measured approach by asking some foundational questions. These questions not only helped guide the analysis, but also framed the outline of the LRFP-NA document:

- What are the rate impacts and how much does it cost to provide 100 percent reliability (i.e., meet member agency water resource demands fully) under a heavily stressed climate and demand scenario?
- Can Metropolitan address the core supply needs in Scenario D solely through conservation?
- What bond financing options are available and what is Metropolitan's debt capacity to finance the projected capital investments?
- How much outside funding from federal and/or state grants should Metropolitan target?
- What other financing tools or structures can Metropolitan explore to address Scenario D capital investments while balancing the varying needs of its member agencies?

[1] Note throughout this document, the conventions for referencing the four scenarios are used interchangeably: IRP A, B, C, D and Scenario A, B, C, D.

Rate Impacts for Various Scenarios

In addressing these questions, staff analyzed the cost impacts of the resource development necessary to close the reliability gap as outlined in the 2020 IRP. As a comparative metric of cost, LRFP-NA uses the average annual rate[2] increase needed to meet the resource development requirements under the scenarios presented in the 2020 IRP Needs Assessment. Several key takeaways resulted from this analysis and are summarized below. A more detailed analysis is included in the "Financial Forecast" section of this report.

To facilitate comparisons of the four scenarios, staff first evaluated the annual rate impacts over the financial forecast period assuming that reliability targets would be achieved through core supply development only, without any additional storage. This initial approach shows the range of average annual rate impacts across the scenarios evaluated in the 2020 IRP on a commensurate basis. The average annual rate increases range from a low of 5.6 percent to a high of 8.4 percent per year, depending on the IRP scenario through 2032 (the forecast period) as shown in Figure 1.

Figure 1: Estimated Rate Increases Under IRP Scenarios for Core Supply Only

IRP Scenario	IRP A	IRP B	IRP C	IRP D
Core Supply Development	0 TAF	50 TAF	15 TAF	300 TAF
Average Annual Rate Increase through 2032	6.2%	5.6%	5.6%	8.4%

Taking the IRP D scenario as an example, 8.4 percent can be interpreted as the average annual rate increase needed through 2032 to fund the maximum needed resource development to avoid net shortages given the scenario of low imports and high demands on Metropolitan.

Next, staff evaluated the effect of including additional storage in the resource mix with a focus on Scenario D. Again, Scenario D has the most significant resource development requirements and corresponding financial impact. The average annual rate increases for Scenario D with different levels of storage development are shown in Figure 2. Adding 250 TAF of storage reduces the need for additional core supplies from 300 TAF to 200 TAF. This combination reduces the overall annual rate impact from 8.4 percent to 7.1 percent. However, adding storage above this level does not further reduce the need for core supplies and does result in a higher overall rate increase. Based on the three levels of storage development identified in the IRP, the most cost-effective supply and storage mix to meet the needs identified in Scenario D over the 10-year forecast period is developing 250 TAF of additional storage.[3]

Figure 2: IRP Scenario D Annual Rate Increase Sensitivity of Storage

IRP D	300 TAF Core Supply	200 TAF Core Supply	200 TAF Core Supply
	0 TAF Storage	250 TAF by 2035	500 TAF by 2035
Average Annual Rate Increase through 2032	8.4%	7.1%	7.4%

[2] Increases in different rate elements may vary as a result of the cost-of-service allocation and cost recovery approach for each project. Impacts on a member agency will depend on how and when they take water.
[3] The modeled supply and storage over the LRFP-NA forecast period are shown in Figure 10.

A Look at Risk:
Rate Impacts & Shortages

Resource development decisions – regardless of the portfolio chosen – come with inherent risks and tradeoffs. One of the key risks facing Metropolitan is that demand conditions could deviate substantially from the capacity created by the selected development portfolio over the near- and long-term. If demand is lower than forecast, it could result in higher rates. If demand is higher than forecast, it could result in water shortages. Any resource development portfolio needs to balance the risk of financially untenable rate increases against the overarching goals of reliability. To quantify the impacts of these risks, staff analyzed the rate impacts and net shortages caused by different demand levels on the IRP scenarios.

For example, assume that Metropolitan plans and develops resources to meet the demands in IRP D, but that projected demand does not materialize. Instead, assume what occurs is demands as projected in IRP A. In this sensitivity analysis, the overdevelopment of core supply and storage to meet the unrealized projected demand in IRP D would result in substantially higher rates. The overall annual rate increase under this framework increases from 7.1 percent to 10.9 percent over the forecast period, assuming development of 200 TAF of core supply and 250 TAF of storage.

Conversely, if Metropolitan plans to meet the conditions outlined in IRP A (no new resource development), but experiences the demands of IRP D, Metropolitan could experience shortages of up to 300 TAF from 10 percent to 23 percent of the time through 2032.

One of the most important environmental challenges is the need to increase the efficiency of water use in the agricultural, urban and industrial sectors. As shown in the LRFP-NA, new core supply is increasingly expensive to develop and comes with financial risks. Increasing the efficient use of water through conservation can reduce the need to develop new supplies. However, meeting future water needs through conservation alone may be cost-prohibitive when compared to the hybrid strategy of using conservation, core supply, and storage.

Currently, there is insufficient data on the availability and price of the marginal effectiveness of expanding conservation programs. Further study is needed to identify the available capacity and price elasticity of conservation. Conservation programs require front-loaded expenditures for future water savings realized over the lifetime of the investment (e.g., turf replacement has an estimated 30-year water savings horizon). Consequently, this results in very high upfront expenditures to realize the projected savings target of IRP D. Based on the cost of current conservation programs, escalated to adjust for price elasticity, staff estimates that 300 TAF of conservation by 2032 would require annual conservation expenditures more than $1.1 billion per year. While conservation is an effective tool to manage demand, it should be evaluated as a part of a multi-pronged approach to solving projected gaps between available supplies and member agency demands.

Metropolitan is currently in the planning phase of several projects that will be considered by the board for approval in the next several years. Despite the timing of these decisions, Figure 3 below shows the estimated scale of capital investments needed to achieve 100 percent reliability by 2032. This estimate uses the IRP D scenario with the lowest overall annual rate increase – 200 TAF of core supply and 250 TAF of storage capacity. Using a set of assumptions based on recent projects, Metropolitan converted the unit rates from the analysis above into estimated capital and O&M costs. Taking the derived capital financing unit rate and multiplying by a resource development target results in an annual financing cost, which can then be worked into an estimated total project cost.

Figure 3: Estimated Capital Investment for IRP D Scenario

Resource Development		Estimated Capital Investment (billions in 2023$)
Core Supply (TAF)	Storage Capacity (TAF)	
200	250[4]	$5.5 - $6.0

To be 100 percent reliable by 2032 under the IRP D scenario with the lowest average annual overall rate increases (7.1 percent), Metropolitan's preliminary estimate is that $5.5 billion to $6.0 billion of capital investment (in 2023 dollars) could be needed to achieve that objective. However, this should be considered a high-level estimate, as numerous factors can affect the overall cost of a project. Additional distribution infrastructure, economies of scale, inflation, environmental and regulatory compliance, and treatment technology will impact the ultimate cost of a project.

Metropolitan will face some significant challenges to complete multiple capital projects at such a large scale. In terms of construction timeline, IRP D scenario would require core supply development in excess of the Pure Water of Southern California (PWSC) project by 2032. In fact, IRP D scenario requires 1.3x more new supply in 2032 than the estimated PWSC supply output – a substantial increase. Tentatively, phase 1 of the PWSC would produce 115 million gallons per day. Moreover, Metropolitan must consider the constraints on its ability to bond finance its capital infrastructure through its revenue bond authority, which is discussed in more detail later in this report and is summarized below.

Metropolitan's Bond Program Debt Capacity

Metropolitan has maintained a highly rated and successful bond program over its history to meet its capital financing needs. To achieve this distinction, Metropolitan has:

- Adopted prudent debt policies and comprehensive financial best practices
- Issued a variety of debt instruments to lower its cost of capital
- Balanced the prioritization of key financial metrics consistently in each biennial budget
- Managed its relationship proactively with the rating agencies and bond investors

[4] Refer to Figure 10 for supply and storage development requirements by year.

Staff currently estimates that Metropolitan has a range of revenue bond debt capacity between $3.6 billion and $4.9 billion. This range assumes that Metropolitan's debt service coverage target would not fall below 1.75x and complies with relevant statutory, administrative and contractual covenant requirements. With an estimate of $5.5 billion to $6.0 billion in capital needs under IRP scenario D and an assumption of 40 percent PAYGO, this results in a debt financing need of $3.3 to $3.6 billion. Based on staff's preliminary analysis of debt capacity, there is barely sufficient revenue bond debt capacity to accommodate this new projected capital financing need (in accordance with the delineated assumptions). Still, the funding of costs associated with refurbishment and replacement of Metropolitan's existing facilities and conveyance system need to be considered. In addition, there is the potential for projected capital cost estimates to push the upper limits of Metropolitan's debt capacity, not to mention the exposure risk to member agency demands (i.e., water sales) not occurring as projected. This would negatively impact net operating revenues and potentially debt service coverage. Although Metropolitan may be able to finance these capital needs by maximizing its revenue bond capacity, this may not be the only or most advisable approach.

Metropolitan has broad authority to issue debt for the purposes authorized for special purpose districts under state statute. While there are some constraints in the Metropolitan Act regarding the issuance of revenue bonds, and tax-exempt financing of capital, Metropolitan can otherwise employ a broad array of financing tools and structures. Metropolitan's Administrative Code contains some constraints regarding revenue bonds issuance, which the board may revisit so long as all legal and contractual restrictions are met. As an alternative funding method to revenue bond financing, a general obligation or special tax bond to fund certain new capital or program investments could be considered; however, Metropolitan would need to obtain voter authorization. This bond debt service expense would be paid from a new ad valorem property tax levied on all secured and unsecured taxable property in the service area. Approval by a two-third majority of voters in the district is required to issue general obligation bonds, which is a challenging threshold to achieve.

Another financing tool available to Metropolitan is the use of Joint Powers Authority (JPA) structures to effectuate the capital financing and operations of new projects for new services. The JPA could include partnerships between Metropolitan and its own member agencies or third parties. Each JPA member would be able to determine their level of participation in each project financed. Moreover, each would have the flexibility to determine the source of funding that supports its obligations, including operations and maintenance costs and debt service expenses.

Exploring Federal & State Funding Opportunities

Historically, Metropolitan has developed its capital infrastructure predominantly through its own revenues and financing tools. Given the significant investment required to address the impacts of climate change on top of the existing requirements to maintain Metropolitan's core system infrastructure, it is critical for Metropolitan to explore opportunities for funding from federal and state grant and loan programs. Several opportunities are available under existing federal legislation, as well as state priorities to address climate change impacts on various capital infrastructure including water-related projects. Metropolitan's new grants team in the Sustainability, Resilience and Innovation (SRI) office will provide a coordinated approach to analyzing, helping secure and complying with grant funding requirements. Another promising opportunity for Metropolitan's capital financing program is a Water Infrastructure Finance and Innovation Act (WIFIA) loan managed by the U.S. Environmental Protection Agency (EPA). WIFIA can provide loan funding up to 49 percent of Eligible Project Costs at competitively low rates, currently around 4 percent. While WIFIA loans have mostly been used for specific projects, there are opportunities for funding qualifying expenditures for a combination of eligible projects through a Master Loan Agreement with EPA. Based on the maximum estimate of capital infrastructure needs in IRP D scenario ($6.0 billion), a WIFIA loan, if awarded, could provide approximately $3 billion in loan authorization, depending upon the project(s) submitted and qualifying eligibility under the WIFIA program. Finally, staff is exploring new approaches and/or opportunities to advocate for new tools that could enable Metropolitan to save on the cost of its infrastructure investments.

[5] See Appendix G for Eligible Project Costs and other key program considerations for the use of WIFIA funds.

Metropolitan Board Direction

Based on the results of the LRFP-NA, Metropolitan staff seeks board feedback on three important questions critical to the undertaking of Phase 2:

- What is an acceptable average annual rate increase on full-service water sales through 2032 to fund water portfolio projects and/or conservation to address expected impacts of climate change as analyzed within the 2020 IRP Needs Assessment?
- What is the desired estimated allocation between core supplies (which includes conservation), flex supplies, and storage in the optimal portfolio mix developed within the acceptable average annual rate increases identified by the board?
- What alternative financing approaches interest the board either singularly or in combination to address funding of future capital investments?

The findings of the LRFP-NA financial analysis are dependent on the assumed unit costs for each resource. Although Metropolitan exercised care in selecting appropriate references on which to base the unit costs, it is anticipated that when Phase 2 of the LRFP concludes, there will be differences between project-specific unit costs and those modeled here in LRFP-NA. During the second phase of the LRFP, staff will provide a refined financial forecast that considers the board's approved resource development portfolio that emerges from the CAMP4W process.

Photo: Storing surplus SWP supplies in Diamond Valley Lake

Introduction: The Long-Range Finance Process.

In late 2022 Metropolitan staff initiated a process to develop a long-range Finance Plan (LRFP) that provides a comprehensive roadmap for Metropolitan's financial management and decision-making over a 10-year horizon. The LRFP serves as a strategic tool that guides Metropolitan's financial activities and ensures its long-term financial sustainability under changing hydrologic conditions throughout the Southern California region. Specifically, the LRFP will assist in evaluating the financial impact of future Capital Improvement Plan (CIP) funding needs over a horizon that is longer than the two-year budget cycle, but that is consistent with the term of the 10-Year Financial Forecast that Metropolitan currently provides and updates biennially as part of its budget document. To meet regional water demands amid uncertain supply conditions, Metropolitan must continue investing in the development of local supply, greater conservation and increased storage. Population growth, coupled with new development and aging infrastructure, also drives Metropolitan's need for additional resource development.

This process represents the sixth iteration of Metropolitan's LRFP, which was originally completed in December 1986 and updated in 1987, 1988, 1995, 1999 and 2004. Since the first LRFP was adopted, numerous financial policies and recommendations have been implemented, which include:

- Creation of the Water Rate Stabilization Fund
- Establishment of water standby and availability of service charges
- Broader authority to invest funds in Metropolitan's investment portfolio, including the recent establishment of an endowment portfolio that facilitates a tailored investment strategy for trust funds managed by the District
- Creation of the Pay-As-You-Go (PAYGO) Fund and development of the PAYGO policy including a CIP funding strategy for bond-funded and cash-funded projects
- Established a variable rate debt management program
- Created the Water Transfer Fund
- Implemented a working capital reserve policy
- Refined the Water Rate Stabilization Fund reserve target balances

The LRFP is a key component of Metropolitan's planning efforts as it develops the framework for addressing future CIP funding strategies and assessing the impact of various capital investments on Metropolitan's finances. This LRFP includes financial projections based on key assumptions that assess the funding feasibility of resource development alternatives under varying hydrologic conditions. Importantly, the LRFP will also identify challenges, opportunities, and strategies to help align Metropolitan's resource and financial planning objectives.

Metropolitan will consider several major investment decisions in the coming years including Pure Water Southern California, the Delta Conveyance Project, Sites Reservoir, and the Drought Action/Project portfolio. Acute cost pressures also have emerged for the CIP including inflation, supply-chain delays, facility upgrades from Metropolitan employee desert housing to energy systems, refurbishments of aging infrastructure, pipeline replacement, and cybersecurity. These investment decisions will be made in phases across different timelines. Metropolitan's investment needs, particularly for water resources and financing, underscore how water supply reliability and financial sustainability must be considered holistically and simultaneously.

The current LRFP process requires the coordination of departments within Metropolitan involved in the scoping and planning of CIP projects, water storage and supply needs assessment, financial rate setting, and debt management. As such, the LRFP is an ongoing process, requiring periodic updates as Metropolitan evaluates key investments.

Metropolitan's Master Planning Process

Since 1996, Metropolitan's principal water resources planning document has been the Integrated Water Resources Plan (IRP). Metropolitan's first IRP was developed as a long-term blueprint for water resources and capital investments for the Southern California region over a 25-year planning cycle. The purpose of the IRP then, and now, is to develop a portfolio of investments that help to meet the water supply reliability and water quality needs for the region in a cost-effective and environmentally sound manner. The latest iteration of the IRP was developed in two phases. The first phase – the 2020 IRP Needs Assessment (the "2020 IRP-NA) – was completed in April 2022.

At its February 2023 retreat, the Metropolitan Board of Directors commenced a master planning process to set a long-term vision for Metropolitan that would address critical policy issues driven by climate change. This planning process – known as the Climate Adaptation Master Plan for Water (CAMP4W) – seeks to evaluate Metropolitan's resource development objectives through a climate adaptation lens. The policy issues addressed through the CAMP4W process concern the future role of Metropolitan, its water resources portfolio, projected supply and demand gaps under alternative scenarios, new investments for supply reliability and resilience, a business model that promotes financial sustainability and a workforce required to realize this vision. As the board engages on climate adaptation policy issues, all potential solutions deserve consideration.

Input from Metropolitan's 26 member agencies is a critical element of the long-term planning process. Metropolitan's investments to strengthen regional water supplies and storage affect the decisions made by member agencies to invest in their own local supplies. Conversely, capital investments for water supply by member agencies impact Metropolitan's resource planning decisions. Along with coordination within Metropolitan in our planning process, it is important to garner input from Metropolitan's member agencies given their unique economic and demographic makeup. Each has different levels of financial capacity, as expressed by different levels of rate capacity to support new resource investments.

Relatedly, although all of Metropolitan's member agencies rely on the constant availability of Metropolitan's service, they each have varying levels of projected water demands provided by Metropolitan. While this distinction might be driven by policy choice for some, other member agencies might face inherent constraints in maximizing local supplies, such as groundwater accessibility. These diverse needs challenge Metropolitan to find a range of solutions.

As Metropolitan engages in this complex policy discussion with its member agencies, having a common understanding of key terms is paramount. The key themes in this process include Reliability, Resiliency, Financial Sustainability, Affordability and Equity, and are defined as:

- **Reliability** – How Metropolitan can meet the water demands of member agencies to ensure availability of water in the service area.
- **Resiliency** – How Metropolitan can withstand and recover from a variety of potential service disruptions.
- **Financial Sustainability** – How the enterprise level of Metropolitan can generate sufficient revenues to cover projected expenditures in both the short and long-term. In addition, financial sustainability addresses the maintenance of sufficient reserves and debt service coverage to support Metropolitan's creditworthiness and access to the capital markets through bond financing at low borrowing costs.
- **Affordability** – How the relative cost burden of Metropolitan's current and projected investments impact member agencies' ability to pay for service. For context, additional consideration of affordability impacts on member agencies' end user customers will be explored.
- **Equity** – How does Metropolitan pursue a fair, just and inclusive approach to its cost and revenue structure as well as access to water, funding and programs by its customers?

Sound planning is the foundation of the board's ability to assess where it has been and where it is going. Metropolitan's biennial budgets, capital improvement plans, and 10-year financial forecasts have addressed the costs and funding associated with needed investments and ongoing operations and maintenance. The uncertainty and volatility of climate change impacts have made both water resources and financial planning more challenging — favoring investments that increase operational flexibility, emergency preparedness, and a climate-resilient water supply. Establishing evaluation criteria to compare these investments is a clear and present challenge to be addressed in the CAMP4W process. Planning amid uncertain circumstances, with eyes on both current and future needs, requires that Metropolitan's vision of its water and financial futures be synchronized. Now is an important time to ensure that the District's vital planning processes are in alignment so that collectively, Metropolitan has a sound master plan going forward.

With this goal in mind, one of Metropolitan's key planning processes will be the Long-Range Finance Plan. At the conclusion of a multi-year process, the re-establishment of Metropolitan's Long-Range Finance Plan ultimately will provide a broader scope and analytical framework than provided in the 10-year Financial Forecast. All the components of the 10-Year Financial Forecast will be captured in the contemplated two phases of the LRFP further discussed below. A key distinction between the current 10-Year Financial Forecast and the current LRFP update is the incorporation of multiple scenarios impacting demand/sales and the required mix of resource needs, which will be of critical importance in addressing the shift in analytical approach in the 2020 IRP-NA driven in large part by the increasing impacts of climate change.

A Multi-Phased Approach

This update to the LRFP will be delivered in two phases. Metropolitan has utilized multi-phased approaches to planning efforts in the past, including the most recent 2020 IRP-NA update. In fact, a three-phased approach was contemplated in 2007 for the last proposed LRFP update process but ultimately not pursued.

Phase 1: 2023 LRFP Needs Assessment

- **Identify Financial Policy Considerations**
- **High level estimation of the projected financial impact of costs for each scenario**
  - Frame the cost of new resource needs by utilizing a range of unit cost assumptions
  - Utilize existing CIP and IRP scenarios to calculate the average rate increases necessary for core supplies at different assumed levels of developed storage
  - Explore opportunities to fund and/or finance new supplies or resource needs
- **Elicit Board feedback to inform capacity constraints for CIP projects within the next biennial budget and future LRFP phases**
- **Frame the issues of Metropolitan's impact on underserved communities**

Long-Range Finance Plan Needs Assessment

LRFP-NA establishes a top-down, high-level framing of financial considerations for Metropolitan, using the alternative scenarios developed in the 2020 IRP-NA. In this phase, Metropolitan will analyze rate increases required under various scenarios developed in the 2020 IRP-NA. Since the 2020 IRP-NA considers the maintenance of existing supply and storage programs, the unmet needs under alternative scenarios reflect the required investment beyond Metropolitan's current resource portfolio.

LRFP-NA reflects the shift to scenario-based planning in our financial analysis. LRFP-NA will also provide the board with information on the range of rate increases resulting from the alternative scenarios developed in the 2020 IRP-NA. The LRFP-NA will help to frame the issues of financial sustainability and affordability as discussed in the CAMP4W process, looking at topics related to Metropolitan's enterprise-level credit assessment, such as cashflow sufficiency, operational liquidity, net position and unrestricted reserves. Moreover, it also discusses debt management factors, including debt issuance authority, debt policies, credit ratings, debt coverage and debt capacity.

Given the complementary planning activities that have taken place concurrently with the development of LRFP-NA, coordination across numerous departments was critical. The working group began preparing the strategy for LRFP-NA in late 2022 and has actively participated in and provided input into the concurrent and ongoing CAMP4W process.

Feedback from the board, member agencies and key stakeholders is a key part of the LRFP-NA process in order to reach a successful outcome. To ensure an interactive process, Metropolitan staff developed an engagement strategy utilizing board workshops, surveys and working group meetings with member agency managers.

Phase 2: 2025 LRFP

- **Refined financial feasibility analysis of additional water supply projects based on feedback from Phase 1 and available detailed project cost information**
- **Tailored financing strategy for required capital infrastructure**
- **Financial feasibility includes projected metric outputs:**
  - Rate increases
  - Debt service coverage
  - Liquidity and Reserves
  - Debt to equity components
  - Impact on credit ratings
  - Comprehensive debt policies

Long-Range Finance Plan Document

The final LRFP document development will commence upon completion of LRFP-NA and the CAMP4W process. Staff anticipates concluding the current LRFP update sometime in FY 2024/25. Thereafter, it is expected that the LRFP will be next updated every 4 years. The 2025 LRFP will integrate specific capital projects and recommended funding strategies through a feedback loop with internal Metropolitan planning teams.

Currently, Metropolitan's CIP and water supply portfolio needs are influenced by a variety of key factors including drought and climate change, asset age and useful life, as well as technology enhancements and functional improvements. As a result, Metropolitan's future CIP and water supply needs could include a range of potential investments, such as Pure Water Southern California, Sites Reservoir, and the Bay Delta Conveyance Project, among others. These potential investments are in addition to the refurbishment and replacement of Metropolitan's existing facilities. The CAMP4W process might also consider revamping Metropolitan's Local Resource Program (LRP) so that Metropolitan may be a co-developer, rather than a limited "funding partner" in local supply projects as dictated by current program parameters.

Phase 2 of the LRFP will analyze the availability and use of other local, State and Federal funds to identify an optimal mix of funding options and strategies for Metropolitan's future CIP. These plans will then be stress-tested across a variety of "what-if" scenarios to measure their resiliency to economic and hydrologic shocks.

The 2025 LRFP will provide the 10-year financial impact and cost of delivering Metropolitan's key CIP projects and initiatives identified in the CAMP4W. The 2025 LRFP will provide more refined analysis related to specific project funding and phasing as well as incorporating board feedback provided through the LRFP-NA and the CAMP4W planning process. Upon completion of the 2025 LRFP, Metropolitan will have developed a tailored financial roadmap to address Metropolitan's future CIP needs and will address the full breadth of elements typically found in a long-range finance plan, focused on strategic implementation. The 2025 LRFP document will incorporate a framework for decision-making and resource allocation within Metropolitan that will be developed within CAMP4W. It will reflect Metropolitan's prioritized investments, allocate financial resources to various projects and programs, and assess the financial implications of different courses of action. The 2025 LRFP document will support and reflect informed decision-making by considering the financial impact and trade-offs associated with different options.

Supporting Documents & Planning Processes

Biennial Budget and Ten–Year Financial Forecast

Metropolitan adopts two-year budgets. Our budget, rates, and charges reflect a careful balance between generating revenues to invest in the region's water future and managing rates through steady, modest increases that reflect the cost of service after offsetting revenues from property taxes, interest income and other miscellaneous revenues.

The Adopted Budget for FY 2022/23 and FY 2023/24 occurred at a challenging time for Metropolitan and its member agencies as it faced a drought emergency due to a historically low State Water Project (SWP) allocation, had just emerged from a global pandemic, and was confronted by high inflation. Considering these circumstances, the adopted budget struck a balance between investing in reliable water resources for Southern California while managing rates to address rising operational costs and reduced revenues due to lower water sales and severe drought. Nevertheless, the Adopted Biennial Budget invested in various projects and programs so that Metropolitan could be more resilient to climate change and drought and sets the stage for a transitional shift in Metropolitan's planning processes. The goal is to shape Metropolitan's capital investments in core supplies, our business model, and long-term system resiliency.

The appropriations in the Adopted Budget are summarized below:

Figure 4: FY 2022/23 and FY 2023/24

Operating and Capital Appropriations, $ Millions

Adopted Budget	FY 2022/23	FY 2023/24	Total Biennium
Operating Budget	$1,495.7	$1,589.4	$3,085.1
Debt Service	288.0	301.0	589.0
Capital Investments*	356.4	364.0	720.4
Grand Total	$2,140.1	$2,254.4	$4,394.5

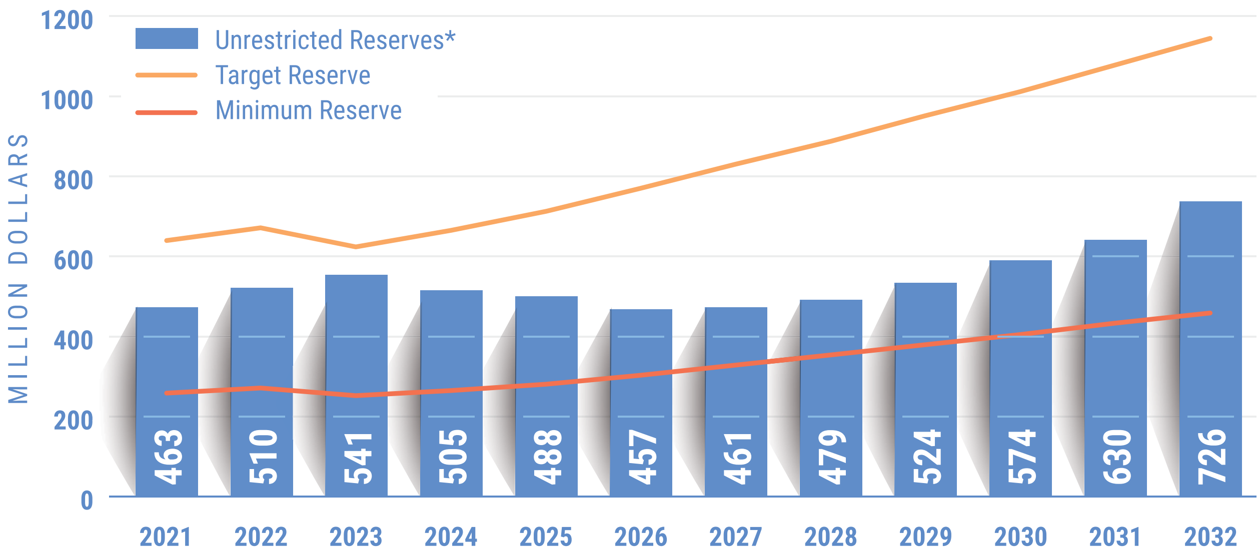
*Capital Investments include debt financed Supply and Conservation Programs.

The Adopted Biennial Budget also establishes the foundation for a ten–year financial forecast of water transactions, expenditures, revenues, projected rate increases and financial indicators. Incorporating a ten–year forecast within the biennial budget process helps ensure the long-range Finance Plan is continuously updated every two years to reflect any changes in underlying assumptions and/or financial policies.

The near-term budget measures taken to reduce overall rate increases in the biennium have pushed forecasted rates higher in CYs 2025 through 2029, increasing 7 percent for one year before lowering to 6 percent for an additional four years. Among other factors, the increase in rates in the outer years is attributed to the addition of preliminary costs for PWSC. These increases also reflect the assumption that Metropolitan will begin increasing the level of PAYGO funding in FY 2024/25, as initially planned for FY 2022/23, to improve debt coverage ratios in the long term. The use of operating revenue funding for the CIP will result in lower revenue requirements than would otherwise be needed in later years of the forecast, as the use of operating revenues to fund the CIP will reduce the need for new money bond issues. Starting in CY 2030 annual rate increases are expected to be 5 percent for the remainder of the 10-year forecast period. Increasing PAYGO funding and maintaining the ad valorem tax rate at its current level throughout the ten–year period will mitigate increases in future water rates and charges.

Key financial indicators of the Ten–Year Financial Forecast are summarized in Figure 5.

Figure 5: Projected Rate Increases, Reserves, and Financial Indicators



Key Metrics in the 10-Year Financial Forecast												
Fiscal Year	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
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

* includes Revenue Remainder and Water Rate Stabilization Fund

** includes water sales, exchanges, and wheeling

Integrated Water Resources Plan

The IRP is Metropolitan's principal water resources planning document. Metropolitan, its member agencies and their customers, as well as groundwater basin managers developed Metropolitan's first IRP as a long-term planning blueprint for resources and capital investments over a 25-year planning cycle. Historically, the end product of the IRP was the development of a portfolio of preferred resources to meet the water supply reliability and water quality needs for the region in a cost-effective and environmentally sound manner. The first IRP was adopted by the board in January 1996 and has been subsequently updated approximately every five years (i.e., in 2004, 2010 and 2015). Work on Metropolitan's 2020 IRP-NA commenced in February 2020 and is ongoing.

Metropolitan's last IRP update (2015 IRP Update) was adopted by the board on January 12, 2016 as a strategy to set goals and a framework for water resources development. The strategy reflected in the 2015 IRP Update was aimed at providing regional reliability through 2040 by stabilizing Metropolitan's traditional imported water supplies and continuing to develop additional conservation programs and local resources, with an increased emphasis on regional collaboration. It also advanced long-term planning for potential future contingency resources, such as potable reuse, storm water capture and seawater desalination.

The 2015 IRP Update specifically identified goals, approaches and regional targets for water resource development needed to ensure reliability under planned conditions through the year 2040, focusing on the following primary resource areas: (1) State Water Project, (2) Colorado River Aqueduct, (3) water transfers and exchanges; (4) water conservation, and (5) local water supplies. It provides an adaptive management approach to address future uncertainty, including climate change. Adaptive water management, as opposed to a rigid set of planned actions over future decades, is designed to be a systematic process for improving management policies and practices by learning from the outcomes of implemented management strategies. An adaptive management approach began to evolve with Metropolitan's first IRP in 1996, after drought-related shortages in 1991 prompted a rethinking of Southern California's long-term water strategy. Reliance on imported supplies to meet future water needs has decreased steadily over time, replaced by plans for local actions to meet new demands. The 2015 IRP Update continues a diversified portfolio approach to water management. The 2015 IRP Update remains in effect until the adoption of the next update based on the 2020 IRP Regional Needs Assessment.

In February 2020, Metropolitan initiated a new process for the development of the 2020 IRP-NA. The year 2020 marked the conclusion of the 25-year planning cycle envisioned by the original 1996 IRP. The development of the 2020 IRP-NA utilizing this new process is ongoing and has been expanded into a more comprehensive Climate Adaptation Master Plan for Water. This approach builds upon Metropolitan's adaptive management strategy by using a scenario planning approach. Under this approach, Metropolitan anticipates ranges for how much water Southern California can expect from its imported and local supplies, as well as regional water demands, across four plausible scenarios through 2045.

The first phase of this process, the Regional Needs Assessment is complete. The Regional Needs Assessment analyzed potential gaps between the expected supplies and the forecasted demands across the four IRP scenarios. The Regional Needs Assessment presents key technical findings and examines the effectiveness of generalized portfolio categories. It also frames and guides the establishment of more specific targets to maintain reliability over the planning period and informs Metropolitan's board on resource investment decisions as well as funding mechanism. Considering the future uncertainties inherent in long-term resource planning, including uncertainties about climate change and regulatory requirements, as well as Southern California's population and economy, this scenario-based planning approach better prepares the region for a wider range of potential outcomes by identifying solutions and policies across a variety of possible future conditions. This strategy is designed to enable Metropolitan and its member agencies to manage future challenges and changes in California's water conditions and to balance investments with water reliability benefits.

The board adopted the 2020 IRP Regional Needs Assessment Report in April 2022. The findings fall within five key focus areas: SWP Dependent Areas, Storage, Retail Demand/Demand Management, Metropolitan Imported Supplies, and Local Supply. Adopting the Regional Needs Assessment allows the analysis and findings to serve as both a foundation and guardrail for the implementation phase.

Climate Adaptation Master Plan for Water

The next phase of water resource planning will expand the intended IRP implementation into a more comprehensive process under CAMP4W, as introduced above. CAMP4W will integrate water resource, climate resilience and financial planning into a cohesive strategy and approach. Metropolitan will take the results and findings of the Regional Needs Assessment into a collaborative process to identify integrated regional solutions. Using a One Water[6] approach, the implementation phase will translate the high-level portfolio analysis from the first phase into specific policies, programs, and projects to address the findings and mitigate the potential shortages. A comprehensive adaptive management strategy and set of evaluation criteria will be developed to guide these specific actions. Criteria will be developed through a climate lens, ensuring that climate resilience and water supply reliability are the primary focus areas. The adaptive management strategy will also establish a process for monitoring key reliability indicators to support decision-making.

Considering the acceleration of climate impacts and the cascading effects of simultaneous and serial climate events, Metropolitan initiated the CAMP4W to more explicitly assess and incorporate climate vulnerabilities and risks into its resource planning.

Specific projects identified by Metropolitan in connection with the implementation of the CAMP4W are subject to board consideration and approval, as well as environmental and regulatory documentation and compliance. Until adoption of the CAMP4W outcomes, the 2015 IRP Update remains in place to guide the staff and board in furthering the reliability goals for the region.

2007 Integrated Area Study: Metropolitan's Resource Portfolio Approach

In the 2007 Integrated Area Study (IAS), Metropolitan introduced the concept of a preferred mix of portfolio projects at the regional and local level for optimized resource planning. Metropolitan and its member agencies developed a process for evaluating project portfolios capable of meeting facility needs identified for several planning regions.[7] These portfolios were evaluated relative to five planning objectives: (1) minimize costs; (2) improve water quality; (3) improve reliability; (4) increase adaptability; and (5) minimize implementation risk.

The 2020 IRP-NA uses a similar portfolio approach to resource planning, however, unlike the 2007 IAS, specific projects are not evaluated for inclusion in the portfolio. Instead, assumptions were made in the Needs Assessment about the yield of specific categories from a resource perspective. The three categories include: core supply, flex supply, and storage. The portfolio analyses tested how the supply-demand gap in each IRP scenario might be met using a single supply type (i.e., core, storage, or flex). As discussed above, Metropolitan analyzed diversified portfolios that use a mix of resources to meet the projected supply-demand gaps under different socio-demographic and hydrologic conditions.

Despite the omission of specific projects in the resource planning and hence financial planning phase 1 analysis, there are still valuable insights that can help the Metropolitan and member agencies' boards in their decision-making processes:

1. Metropolitan's resource planning approach starts with the identification of key goals and objectives of reliability to meet member agency demands.

2. With respect to risk tolerance, Metropolitan's resource planning considers the resiliency of Metropolitan's supplies and system performance under stressed conditions of climate change.

3. A diversified mix of supply resources has been developed and continues to serve as a defensive strategy of risk to Metropolitan's ability to meet its goals and objectives.

4. The 2020 IRP-NA Assessment analyzes the appropriate asset allocation by identifying the resource needs in three primary categories (core, flex and storage).

[6] One Water is a coordinated approach to holistically and sustainably manage all finite water resources – drinking water, wastewater, stormwater, greywater and more – for long-term reliability and resilience.
[7] The region's primary areas in the 2007 IAS were: (1) the Central Pool; (2) Riverside and San Diego area; (3) West Valley area; and (4) San Bernardino area.

Financial Forecast.

Scope & Objective

A key consideration in development of an informed and broadly-supported resource portfolio strategy is an analysis of the costs related to alternative investment options. Financial forecasts help policymakers understand the longer-term effects of near-term financial decisions and broad strategic direction. A high-level, financial forecast can assist in the planning, decision-making process and development of a framework for evaluating the effectiveness and financial viability of various capital investment scenarios.

The purpose of the LRFP-NA is to evaluate the rate impacts and/or alternative funding requirements of different resource development scenarios as identified in the 2020 IRP-NA. The LRFP-NA provides a range of potential rate outcomes that could result from implementing various resource development portfolios. The LRFP-NA is a high-level forecasting approach that provides insights into the balance between water supply reliability and average annual overall rate increases to assist the board in selecting a resource development portfolio.

As discussed earlier in this report, the ultimate LRFP document development will follow the completion of the CAMP4W process once specific resource development projects are selected. The 2025 LRFP will provide a more detailed assessment for specific projects and portfolios of projects that have been identified to meet board-approved reliability objectives. After specific projects have been chosen for analysis, a more refined rate analysis can be performed that considers project financing, cost recovery methodology, and reserve requirements. Moreover, the full scope of the LRFP will be developed to address the breadth of considerations typically found in a long-range planning document.

Summary of the LRFP-NA Analysis

- Under the four scenarios presented within the IRP that are utilized within the LRFP-NA analysis, Core supply needs increase by as much as 300,000 AF through 2032.

- As identified in the IRP Needs Assessment, new storage capacity needs above 250,000 AF did not provide any material resource benefit within the LRFP-NA modeling period, hence scenarios with 250,000 AF of new storage capacity resulted in the lowest average rate increases.

- The cost of meeting these core supply and new storage needs is estimated to range between $5.5 billion and $6.0 billion.

- Meeting future demand with conservation alone may be cost-prohibitive when compared to a hybrid strategy using conservation, new supply, and storage.

Key Assumptions in the LRFP-NA

Modeling Period

The LRFP-NA modeling period starts with calendar year 2023/24 and 2024/25 adopted rates and projects from 2025 to 2032. Because of the inherent uncertainty in projecting financial conditions, public agencies and water utilities commonly use 5- or 10-year financial forecasts. Beyond a 10-year horizon, financial forecasts, at best, give broad indications of future trends, but, at worst, mislead or give a false sense of certainty of what the future holds. The intent of the LRFP-NA modeling is to estimate average annual overall rate increases over the 10-year forecast period and provide an indication of the long-term trajectory of rates. The existing 10-Year Financial Forecast, which is part of the Adopted Budget, extends to 2032 and provides a reference point for analyzing the rate impacts of the modeled scenarios.

Average-Cost Increase Approach

For this report, Metropolitan's forecasting methodology equates resource development costs to changes in overall rates (i.e., the rates on a unit basis). As a matter of policy, rates are developed to recover Metropolitan's projected budgeted costs after offsetting property taxes, interest income, and miscellaneous income. Over time it is anticipated that, on a percentage basis, average cost increases are equal to average overall rate increases. However, in any given year, fluctuations in costs and water transactions (sales, exchanges, and wheeling) require the use of or result in the addition to Metropolitan's unrestricted reserves. For the purposes of this modeling analysis, staff assumed that costs are recovered exactly as anticipated, allowing the model to focus on the impacts of resource development costs without introducing additional variation from reserves, debt coverage considerations, and other items that would be incorporated into a full cost-of-service and rate design analysis. Like all financial models, this approach is a simplification, but nonetheless provides insights into the potential overall rate impacts from various resource development scenarios in the IRP.

The modeling in the LRFP-NA follows a five-step process to estimate average annual overall rate increases from implementing different resource development portfolios:

1. Created baseline forecast: A baseline forecast, including all of Metropolitan's costs, was created by starting with the adopted FY 2022/23 and 2023/24 Budget and 10-Year Financial Forecast and removing the assumed Pure Water Southern California (PWSC) costs to obtain a baseline without any additional resource development costs. The 10-Year Financial Forecast included approximately $3.7 billion of debt-funded capital investment for PWSC through 2031/32.

2. Identified resource development targets: The IRP included resource development targets for each of the four core scenarios that are described in detail later in this report.

3. Estimated resource unit costs: Drawing on a survey of recent projects and studies, resource unit costs on a dollar per acre foot basis were estimated, including both operations and maintenance (O&M) and capital financing costs (debt).

4. Calculated annual development costs: For each year of the LRFP-NA modeling period (2025-2032), the resource development targets (Step 2) were multiplied by the estimated resource unit costs (Step 3) to arrive at the sum cost to be added to the baseline forecast each year. Additionally, variable costs, such as power, supply programs, and chemical treatment, were estimated based on the supply and demands of each IRP scenario.

5. Calculated average rate increases: Adding the incremental resource development costs to each year, average annual overall rate increases from 2025 through 2032 were calculated for each modeled scenario.

In practice, capital projects, including resource development projects, are constructed over a multi-year period and typically are financed primarily through debt. As a project is constructed, Metropolitan periodically issues debt to pay for project costs, steadily increasing Metropolitan's annual debt financing costs and overall revenue requirement over the life of the project. In response, Metropolitan raises rates annually to pay for the new financing costs and ensure debt coverage targets are being met or exceeded. The result is a gradual increase in rates over the project construction period, holding all else equal. Because specific resource projects are not yet identified for board consideration, specific project timelines and financing structures cannot be forecast. The financial model assumes that resources can be developed incrementally to meet the 2032 targets identified in Step 2 above and paid for annually on a unit basis, replicating the cost and rate progression seen under actual capital projects.

In addition to resource development costs, the financial model projects variable costs, such as power and variable treatment, based on the supply and demands of each IRP scenario. This includes forecasts for treated demand and State Water Project (SWP) and Colorado River Aqueduct (CRA) supplies for each year in the modeling period. The variable treatment costs were calculated for each IRP scenario using the cost ($/AF) from the FY 2022/23 and 2023/24 budget forecast and the quantity of treated demand forecasted in the IRP. Similarly, using assumptions from the adopted budget and SWP and CRA flow data from the IRP, Metropolitan's variable cost model (VCM) calculates the variable power costs, such as SWP contract power and CRA power expenses, for each IRP scenario. The VCM also forecasts the corresponding power sales revenues for each IRP scenario. The LRFP-NA model combines the variable costs and other fixed costs in the baseline forecast, in addition to the projected resource development costs to calculate the total revenue requirements for the modeling period.

Base Cost Assumptions Common to All Scenarios

As noted above, the baseline forecast was created by taking the Adopted Budget and 10-Year Financial Forecast and removing the assumed PWSC project costs. The baseline, therefore, does not include any additional resource development but does include ongoing funding for conservation, local resource projects, capital refurbishment and replacement, and various operating assumptions about cost inflation rates, interest rates, and power and treatment unit costs. Highlighted in Figure 6 below are key assumptions in the baseline forecast that are common to all scenarios later presented in this analysis. More details can be found in the Adopted Budget and 10-Year Financial Forecast found on Metropolitan's website (Biennial Budget), including detailed information on all costs and assumptions.

Figure 6: Base Cost Assumptions

Input Assumption	Values
Interest on Investments	1.00% - 1.50%
Interest Rate – Fixed Bonds	3.00% - 3.50%
Annual Conservation Funding	$30.5 million
Average Annual LRP Funding	$66.0 million
Annual Salaries and Benefits Escalation Rate	5.0%
Annual General O&M Inflationary Increases	3.0%
Annual CIP Funding Escalation Rate	3.0%
Average Annual Increase in Marginal CRA Variable Power Cost	4.0%
Annual Variable Treatment Cost Escalation	3.0%

2020 IRP Needs Assessment

Resource Development Targets

The IRP serves as Metropolitan's long-term, comprehensive water resources strategy to provide the region with a reliable water supply. The 2020 IRP-NA incorporated scenario planning to address wide-ranging uncertainties rather than focusing on a single scenario as in past updates. In collaboration with the member agencies, the board, and other interested parties, Metropolitan broadened its perspective by constructing and modeling four plausible scenarios.

Figure 7 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, and the input of other interested parties. The impacts of these drivers within each scenario were quantified using in-house models.

Figure 7: IRP Framework

- Scenario A – Low Demand/Stable Imports: Gradual climate change impacts, low regulatory impacts, and slow economic growth.
- Scenario B – High Demand/Stable Imports: Gradual climate change impacts, low regulatory impacts, high economic growth.
- Scenario C – Low Demand/Reduced Imports: Severe climate change impacts, high regulatory impacts, slow economic growth.
- Scenario D – High Demand/Reduced Imports: Severe climate change impacts, high regulatory impacts, and high economic growth.

Metropolitan found the possibility of shortage in three of the four scenarios (B, C, and D), after exhausting available and accessible supplies. Only in a future with low demands and stable imported supplies – as reflected in IRP A – would Southern California avoid shortage without additional water supply and system reliability investments. The technical results of the IRP analysis were based on two analytical processes: (1) Reliability assessment to define and quantify potential "gaps" for each scenario; and, (2) Portfolio analyses to quantify high-level actions that would be needed to achieve reliability in each scenario. The portfolio analysis explored the effectiveness of three supply categories -- core, storage, and flexible -- to reduce or eliminate gaps.

- Core supplies are resource management actions that augment supply or reduce Metropolitan demand and remain available each year.
- Storage supplies reflect the capacity to save water supply to meet future demands.
- Flexible (Flex) supplies are implemented as needed and include savings from deliberate efforts to change water use behavior.

The portfolio analyses tested how the supply-demand gap in each IRP scenario might be met using a single supply type (i.e., core, storage, or flex). In addition, Metropolitan analyzed diversified portfolios that use a mix of resources to meet the supply-demand gaps. The outcome of this analysis is a matrix of portfolios that identify annual development targets for each IRP scenario for three different levels of storage development. These portfolios were input into the forecasting model as resource development targets. It is important to note that flex supply, although a useful tool in practice, accounts for a minimal amount of supply in the resource portfolios. Figures 8, 9 and 10 below outline the resource portfolios for IRP scenarios B, C, and D, respectively. As a note, under IRP A scenario all supply-demand gaps can be managed through existing resources, and therefore additional resource development is not considered for Scenario A. It is important to note that in quantifying the gaps identified in the 2020 IRP-NA scenarios, local resource development of Metropolitan's member agencies was taken into account.

Figure 8: IRP B Resource Development Targets (AF)

	New Storage: None		New Storage: 250,000 AF*		New Storage: 500,000 AF*	
Year	Core	Storage	Core	Storage	Core	Storage
2025	50,000	-	30,000	22,727	30,000	45,455
2026	50,000	-	30,000	45,455	30,000	90,909
2027	50,000	-	30,000	68,182	30,000	136,364
2028	50,000	-	30,000	90,909	30,000	181,818
2029	50,000	-	30,000	113,636	30,000	227,273
2030	50,000	-	30,000	136,364	30,000	272,727
2031	50,000	-	30,000	159,091	30,000	318,182
2032	50,000	-	30,000	181,818	30,000	363,636
2033	50,000	-	30,000	204,545	30,000	409,091
2034	50,000	-	30,000	227,273	30,000	454,545
2035	50,000	-	30,000	250,000	30,000	500,000
2036	80,000	-	30,000	250,000	30,000	500,000
2037	80,000	-	30,000	250,000	30,000	500,000
2038	80,000	-	30,000	250,000	30,000	500,000
2039	80,000	-	30,000	250,000	30,000	500,000
2040	80,000	-	30,000	250,000	30,000	500,000
2041	100,000	-	30,000	250,000	30,000	500,000
2042	100,000	-	30,000	250,000	30,000	500,000
2043	100,000	-	30,000	250,000	30,000	500,000
2044	100,000	-	30,000	250,000	30,000	500,000
2045	100,000	-	30,000	250,000	30,000	500,000

Figure 9: IRP C Resource Development Targets (AF)

Year	New Storage: None		New Storage: 250,000 AF		New Storage: 500,000 AF	
	Core	Storage	Core	Storage	Core	Storage
2025	15,000	-	15,000	22,727	15,000	45,455
2026	15,000	-	15,000	45,455	15,000	90,909
2027	15,000	-	15,000	68,182	15,000	136,364
2028	15,000	-	15,000	90,909	15,000	181,818
2029	15,000	-	15,000	113,636	15,000	227,273
2030	15,000	-	15,000	136,364	15,000	272,727
2031	15,000	-	15,000	159,091	15,000	318,182
2032	15,000	-	15,000	181,818	15,000	363,636
2033	15,000	-	15,000	204,545	15,000	409,091
2034	15,000	-	15,000	227,273	15,000	454,545
2035	15,000	-	15,000	250,000	15,000	500,000
2036	40,000	-	15,000	250,000	15,000	500,000
2037	40,000	-	15,000	250,000	15,000	500,000
2038	40,000	-	15,000	250,000	15,000	500,000
2039	40,000	-	15,000	250,000	15,000	500,000
2040	40,000	-	15,000	250,000	15,000	500,000
2041	50,000	-	15,000	250,000	15,000	500,000
2042	50,000	-	15,000	250,000	15,000	500,000
2043	50,000	-	15,000	250,000	15,000	500,000
2044	50,000	-	15,000	250,000	15,000	500,000
2045	50,000	-	15,000	250,000	15,000	500,000

Figure 10: IRP D Resource Development Targets (AF)

Year	New Storage: None		New Storage: 250,000 AF		New Storage: 500,000 AF	
	Core	Storage	Core	Storage	Core	Storage
2025	100,000	-	100,000	22,727	100,000	45,455
2026	150,000	-	150,000	45,455	150,000	90,909
2027	150,000	-	150,000	68,182	150,000	136,364
2028	150,000	-	150,000	90,909	150,000	181,818
2029	150,000	-	150,000	113,636	150,000	227,273
2030	150,000	-	150,000	136,364	150,000	272,727
2031	300,000	-	200,000	159,091	200,000	318,182
2032	300,000	-	200,000	181,818	200,000	363,636
2033	300,000	-	200,000	204,545	200,000	409,091
2034	300,000	-	200,000	227,273	200,000	454,545
2035	300,000	-	200,000	250,000	200,000	500,000
2036	450,000	-	400,000	250,000	400,000	500,000
2037	450,000	-	400,000	250,000	400,000	500,000
2038	450,000	-	400,000	250,000	400,000	500,000
2039	450,000	-	400,000	250,000	400,000	500,000
2040	450,000	-	400,000	250,000	400,000	500,000
2041	650,000	-	550,000	250,000	500,000	500,000
2042	650,000	-	550,000	250,000	500,000	500,000
2043	650,000	-	550,000	250,000	500,000	500,000
2044	650,000	-	550,000	250,000	500,000	500,000
2045	650,000	-	550,000	250,000	500,000	500,000

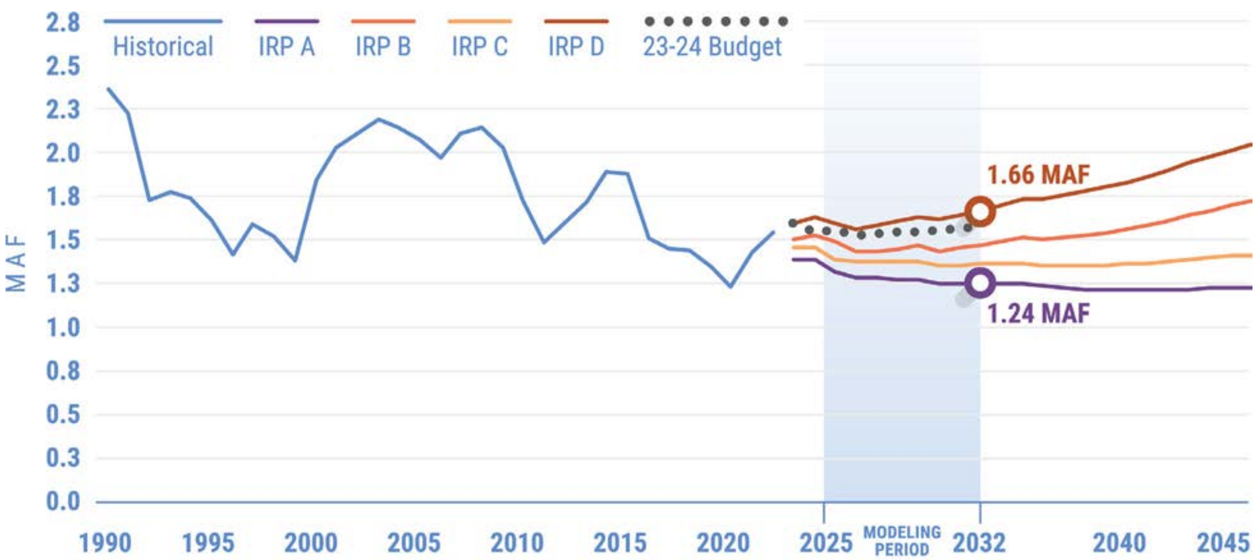
New storage is assumed to come online in 2035. In all financial scenarios, a 2032 resource development target for storage was prorated on a linear scale starting in 2025. Therefore, the 2032 storage targets of 181,818 AF and 363,636 AF reflect 8 years of linear progress towards the 2035 targets of 250,000 AF and 500,000 AF, respectively. Similarly, the LRFP model assumes linear development of new core supply to meet the 2032 resource development targets. Taking IRP D as an example, under the option that contemplates adding 250,000 AF of new storage capacity, the LRFP model assumes linear development of new core supply to meet the resource development target of 200,000 AF by 2032, new storage capacity to meet the resource development target of 181,818 AF by 2032, and 255 AF of flex supply in 2025. As noted above, flex supply has negligible impact on the financial analysis; nevertheless, the information is included for transparency.

Net Demand Projections

Imported water from Metropolitan provides a resource supply source for its 26 member agencies. For some, their primary sources of water are local. Water purchased from Metropolitan is used to meet the gap between local supplies and their retail demands. Alternatively, some member agencies rely on Metropolitan for their primary source of water supply, and purchase water from Metropolitan to meet all or most of their demands. In aggregate, these purchases constitute the total demands on Metropolitan.

Demands on Metropolitan are calculated using Metropolitan's water Sales Model (Sales Model), which accounts for weather-related variations to retail demands and local supplies. This model produces a range of forecasted demands as shown in Figure 11. For comparison, the net water demands on Metropolitan from the Adopted Biennial Budget are also plotted in Figure 11.

Figure 11: Projected Net Demands on Metropolitan



The 2020 IRP-NA 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. Additionally, Metropolitan engaged with climate experts 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 LRFP model makes certain assumptions about average costs to effectuate the technical modeling and determine the rate impacts of resource development. Figure 11 above illustrates the historical demands on Metropolitan that have a wide range of variability. These fluctuations are managed primarily through the prudent build-up and use of Metropolitan's unrestricted reserves. However, in the LRFP model, demands are anticipated to occur exactly as projected, allowing the LRFP to focus on the rate impacts from resource development and not changes in reserves.

Resource Development Costs

In step 3 of the forecasting process, Metropolitan estimated annual unit costs for each of the supply resources – core, storage, and flex – as well as structural conservation. Because specific IRP resource portfolios have not yet been approved by the board, staff is unable to use project-specific information to calculate unit costs. Instead, staff relied on data from recently completed or studied projects to a develop a range of potential unit costs for each resource need, including both O&M and capital financing costs. The model was developed assuming the unit costs shown in Figure 12.

Figure 12: Modeled Unit Costs

Resource	Unit Cost Range from Sources	Modeled Unit Cost
Core Supply	$2,815/AF - $3,266/AF	$3,000/AF
Storage	$269/AF - $325/AF	$300/AF
Flex Supply	$400/AF - $605/AF	$600/AF

The modeled unit costs are priced in 2023 dollars and were escalated at a rate of 3 percent for future years. The modeled unit costs encompass O&M and capital financing costs.

Core Supply

The unit cost sources for core supply are based on three Southern California projects:

- Carlsbad Desalination Plant (50 million gallons daily (MGD)): $2,975/AF[8]
- Santa Barbara Desalination Plant (3 MGD): $3,126/AF[9]
- Ventura Water Pure (4.8 MGD): $3,266/AF[10]

Desalination and recycling projects are representative of a new core supply that is developed in-region, operates continuously, and reflects the higher marginal price of investing in new conveyance and advanced treatment facilities.

Flex Supply

The unit cost sources for flex supply are based on Metropolitan's current supply programs and recent transfer transactions. Minimal quantities of flex supplies are required on average for each of the IRP scenarios. As such flex supplies do not significantly impact the modeling results.

Storage Supply

The unit cost sources for storage are based on Metropolitan's cost for construction of Diamond Valley Lake and preliminary results of an in-region storage study. The storage unit cost is based on built capacity, not a calculation of anticipated yield. As such, $300/AF can be interpreted as the annual financing and O&M cost per acre foot of built capacity of new storage.

[8] https://www.sdcwa.org/wp-content/uploads/2020/11/desal-carlsbad-fs.pdf
[9] City of Santa Barbara. (2022, October 20). Recycled Water Market Assessment. City of Santa Barbara. City of Santa Barbara (santabarbaraca.gov)
[10] Unit cost of Ventura Water Pure was estimated by Metropolitan staff assuming $206 million in total capital costs, $6.7 million in annual O&M costs, and $18.2 million in grants, with the remaining capital costs funded from the EPA's WIFIA loan program at a rate of 2.5% for a 30-year term. Sources: 2019-Ventura-Water-Supply-Projects-Final-EIR (civicplus.com); 3069 (ca.gov). Prices were escalated to 2023 dollars from 2019 with 3% escalator.

Modeled Scenarios & Results

After selecting unit costs for each of the resources, step 4 of the modeling process calculates the annual additional resource development costs to be added to the baseline forecast by multiplying the annual development target by the modeled unit cost. The result is a forecast that gradually increases both reliability and costs over time as Metropolitan makes progress towards its development targets.

Step 5, the final step of the modeling process, is an analysis of various resource portfolios and the resulting average rate impacts. Metropolitan analyzed four portfolios based on the core IRP scenarios and iterated those scenarios across three storage options – no new storage, 250 TAF, and 500 TAF of new storage capacity. As noted earlier in the report, new storage resources are assumed to come online in 2035 and are modeled as though storage can be developed in equal annual increments to meet the targets of 250 TAF or 500 TAF in 2035. For naming convenience, this report refers to different scenarios by the total new storage capacity but with the understanding that the rate increases are based on the prorated 2032 storage targets of 182 TAF or 364 TAF. Six core scenarios were forecasted and analyzed for rate impacts. A sensitivity analysis also was performed to understand the rate impacts from over development of resources. The seven scenarios analyzed by staff are summarized in Figure 13.

Figure 13: Comparison of Modeled Scenarios

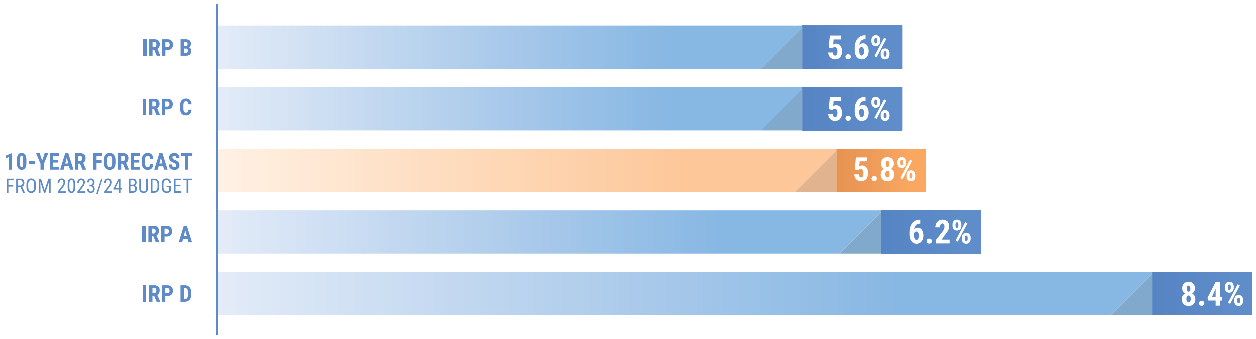
#	Scenario Short Descriptions	IRP Scenario	Import Reliability	Demands	2035 Core Supply Target (AF)	2045 Storage Target (AF)	2032 Storage Target (AF)
1	IRP A, No Storage	A	High	Low (1.24 MAF[11])	N/A	N/A	N/A
2	IRP B, No Storage	B	High	High (1.46 MAF)	50,000	-	-
3	IRP C, No Storage	C	Low	Low (1.35 MAF)	15,000	-	-
4	IRP D, No Storage	D	Low	High (1.66 MAF)	300,000	-	-
5	IRP D, 250 TAF Storage	D	Low	High (1.66 MAF)	200,000	250,000	181,818
6	IRP D, 500 TAF Storage	D	Low	High (1.66 MAF)	200,000	500,000	363,636
7	IRP D w/ IRP A Demand	D	Low	Low (1.24 MAF)	200,000	250,000	181,818

[11] MAF = Million acre feet

Average Annual Overall Rate Impacts of Core IRP Scenarios – No Storage Option

The first set of scenarios modeled were the base IRP scenarios (A, B, C, and D) with no additional storage development. These are identified as Scenarios 1, 2, 3, and 4 in Figure 14. Under these scenarios, the financial forecast assumes that any anticipated shortages are completely met with only core supply development. As a point of reference, Figure 14 includes the average annual increase on Metropolitan's overall rate from the Fiscal Year 2022/23 and 2023/24 10-Year Financial Forecast.

Figure 14: Average Annual Overall Rate Increases of Core IRP Scenarios – No Storage Option (2025-2032)*



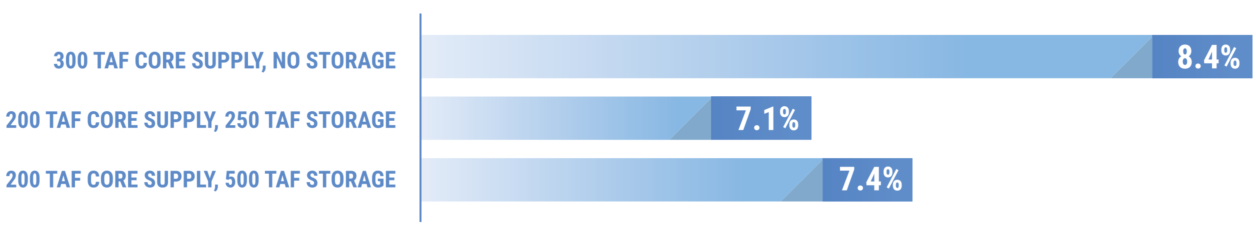
*Member Agency rate impacts might be substantially higher than the overall rate increase as a result of the Cost of Service allocation and cost recovery approach taken for each project. For example, if a project only impacts the supply function, then the rate increase for full-service water would increase more and the rate increase on the SDCWA exchange deliveries would be less.

The average overall rate increases range from 5.6 percent to 8.4 percent per year, depending on the IRP scenario. Taking the IRP D scenario as an example, 8.4 percent can be interpreted as the average annual increase on the overall rate needed through 2032 to be on track to achieve 100 percent supply reliability given low import reliability and high demands on Metropolitan. An outcome of note is that IRP A, which requires no additional investment in resources to meet projected demands, has a higher rate increase than the adopted budget forecast and IRP scenarios B and C. Even though IRP A has lower total costs, demands are also lower, causing the average unit rate to increase overall. IRP D has the highest likelihood and magnitude of shortage in future years, and the most significant resource development targets to meet projected shortages.

Average Annual Rate Impacts of IRP D Scenario – Multiple Storage Options

To drill down further into how Metropolitan may meet the projected shortages under IRP D scenario, average rate impacts were calculated for the three storage options – no storage, 250 TAF, and 500 TAF of new storage capacity. Scenarios 4, 5, and 6 from Figure 13 reflect these options.

Figure 15: Average Annual Overall Rate Impacts of IRP D Scenarios – Multiple Storage Options*



*Member agency rate impacts might be substantially higher than the overall rate increase as a result of the Cost of Service allocation and cost recovery approach taken for each project. For example, if a project only impacts the supply function, then the rate increase for full-service water would increase more and the rate increase on the SDCWA exchange deliveries would be less.

Based on the resource development portfolios, adding storage capacity decreases the amount of core supply development that is needed and lowers the average increase on overall rates from 8.4 percent to 7.1 percent per year for the modeling period 2025-2032. This outcome is consistent with the difference in modeled unit costs for storage ($300/AF of capacity) and core supply ($3,000/AF). As demonstrated by the 500 TAF-storage option, excess storage only reduces the need for core supply to a point. In fact, above 250 TAF of modeled storage no significant reduction in core supply was detected.

Sensitivity Analysis – Low Demands in IRP D

The scenarios described assume that demands would occur as projected, and that the resource development for each scenario would be appropriate to meet those demands. But this assumption may not always be true. Metropolitan could develop resources to meet projected demands under IRP D scenario (Scenario 5 from Figure 13) but experience demand as projected under IRP A scenario, where there is low demand.

Figure 16: Sensitivity Analysis – Low Demands for IRP D Scenario | Average Annual Overall Rate Increases (2025 to 2032)*

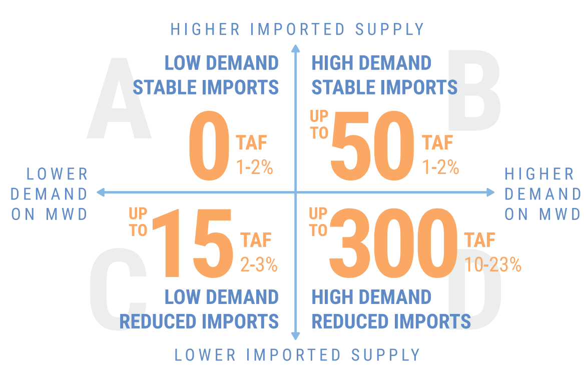
*Member agency rate impacts might be substantially higher than the overall rate increase as a result of the Cost of Service allocation and cost recovery approach taken for each project. For example, if a project only impacts the supply function, then the rate increase for full-service water would increase more and the rate increase on the SDCWA exchange deliveries would be less.

Figure 16 shows the impacts from having lower demands than anticipated. In the case of resource development under IRP scenario D, where Metropolitan invests in core supply and storage to meet anticipated shortages, cumulative rate increases would be substantially higher if Metropolitan experienced demands as projected under IRP A. Metropolitan would continue to pay capital financing costs on constructed projects regardless of whether those assets were in use or not, recognizing, however, that if Metropolitan were to shut down an asset, there would be some O&M cost savings.

Net Shortage Assessment

The previous scenarios analyze the rate impacts of developing the resources necessary to meet the demands in the IRP D scenario. However, Metropolitan could choose to plan for the IRP A scenario, which does not require any additional resource development in the future. The risk in this decision is that actual demands come in higher than anticipated, such as in scenarios B, C, and D. If this were to occur, there would be an increase in the frequency of Metropolitan experiencing net shortage and having to implement the Water Supply Allocation Plan. Figure 17 displays the frequency and magnitude of net shortages if Metropolitan were to plan for IRP A scenario and experience the demand and imported supply conditions under different IRP scenarios.

Figure 17: Projected Net Shortage Under Different Supply and Demand Conditions Identified in IRP A, B, C and D Scenarios

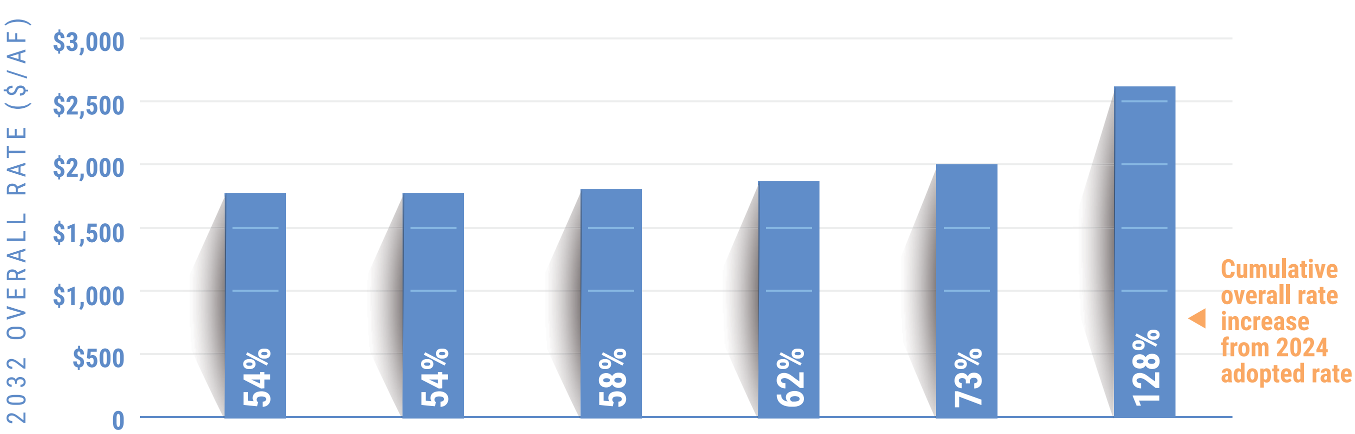


Resource development decisions – regardless of the portfolio chosen – come with inherent risks and tradeoffs. One of the key risks facing Metropolitan is that demand conditions could deviate substantially from the capacity created by the selected development portfolio over the near- and long-term. If demand is lower than forecast, it could result in higher rates. If demand is higher than forecast, it could result in reliability concerns. Figure 17 illustrates the tradeoff between lower rates (less resource development) and the frequency and magnitude of net shortages. While it is possible to reduce overall rate increases by foregoing investment in new resources, the downsides are potentially substantial. If Metropolitan plans for IRP A scenario but experiences IRP D demand and supply conditions, Metropolitan will experience a shortage of up to 300 TAF, 10 percent to 23 percent of the time. In addition to the significant impacts that this would cause for member agencies that depend on Metropolitan for reliable supplies, there would be ripple effects throughout the economy of Southern California. The CAMP4W will delve deeper into the issue of resource development given the board's reliability, resilience, and affordability objectives. Any resource development portfolio needs to balance the risk of financially untenable rate increases against the overarching goals of reliability.

Projected 2032 Overall Rates

To provide additional perspective on the rate impacts from the modeled scenarios, Figure 18 compares the projected overall unit rates[12], e.g. full-service rates, for 2032 based on the analysis of the average annual rate increases. Additionally, above each bar in the chart there is a percentage that indicates the increase from the 2024 adopted rate to the projected 2032 rate. The 10-Year Financial Forecast from the Adopted Budget, for example, projected a 2032 rate that would be 58 percent higher than the 2024 adopted rate. Under IRP scenario D with 182 TAF of new storage development, the projected 2032 rate would need to be 73 percent higher than the 2024 adopted rate.

Figure 18: Projected 2032 Overall Rates of Modeled Scenarios



	IRP B, No Storage	IRP C, No Storage	10-year forecast from 2023/24 Budget	IRP A, No Storage	IRP D, 250 TAF Storage	Plan for IRP D, Observed IRP A Demand
Core Supply	30 TAF	15 TAF	N/A	0	200 TAF	200 TAF
Storage	0	0	N/A	0	182 TAF	182 TAF
Water Demand	IRP B 1.46 MAF	IRP C 1.35 MAF	Budget 1.58 MAF	IRP A 1.24 MAF	IRP D 1.66 MAF	IRP A 1.24 MAF

[12] Rate increases are based on overall rates for full-service water, which is the total of unbundled rate elements used in Metropolitan's cost-of-service process for purposes of transparency. This report does not review changes in any particular rate element separately.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Conservation

Metropolitan administers regional conservation programs and co-funds member agency conservation programs designed to increase water use efficiency and bolster water conservation behavior. Conservation comes from two areas of change:

1. **Structural conservation,** which involves increases in water use efficiency
2. **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, analogous to a core supply. Water-efficient device retrofits, landscape conversions, plumbing codes, and leak prevention contribute to ongoing structural water savings. In contrast, behavioral conservation is less permanent and can wax and wane due to various influences outside of Metropolitan's direct control, similar to flexible supply – a resource that can be called upon but has less reliability than core supply. In contrast to the way core, flex, and storage resources were modeled, namely as annual payments for annual supply benefits, conservation requires upfront payments for benefits over the long-term. Because the analysis is limited to the period from 2023 to 2032, an appropriate comparison between the rate impacts from conservation versus the other supplies is difficult to accomplish in this analysis. However, the existing conservation programs, which gradually increase water-use efficiency over time, were assumed to continue under each IRP scenario and were included in the LRFP model.

Photo: Bewaterwise.com occupies world's largest digital billboard

Structural Conservation Cost Analysis

Structural conservation is implemented through rebates and incentives on a per "device" basis, where device is used as a catchall term for individual conservation initiatives. Rebate costs and associated savings are converted to a unit cost that equates dollars spent today to water savings over the lifetime of a device. Turf replacement, for example, has a 30-year assumed useful life and rebates $2 per square foot of turf replacement, which is equivalent to $494 per AF of lifetime water savings. Spending $494 today will result in 1 AF of water savings over the following 30 years. Using this example, $494 would buy on average 0.03 AF of water savings each year. Figure 19 summarizes Metropolitan's most utilized conservation programs in 2022.

Figure 19: Metropolitan's Most Utilized Conservation Devices - 2022

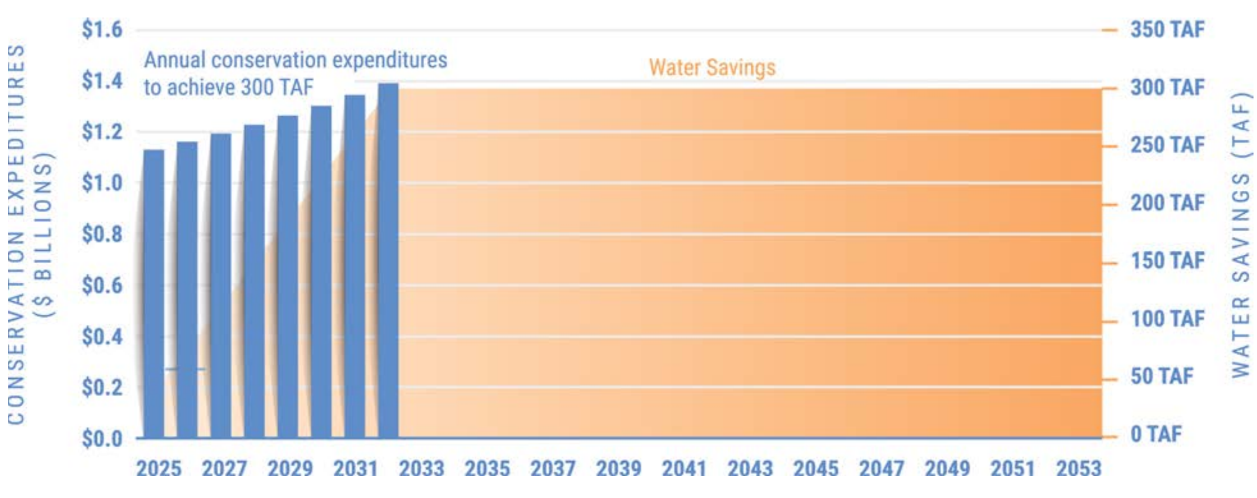
Device	Life (Yrs)	Lifetime AF Savings	Rebate ($)	Rate ($/AF)	2022 Quantity (Units)	Total Lifetime AF Savings	Total Cost ($)
	A	B	C	D=C/D	E	F=E x B	G=C x E
High-Efficiency Nozzles	5	0.0132	$2	152	22,312	295	$44,624
High-Efficiency Washer	14	0.4598	$85	185	11,762	5,408	$999,770
High-Efficiency Toilets	20	0.2100	$40	190	22,625	4,752	$905,000
Showerheads	5	0.0211	$12	570	5,029	106	$60,348
Flow Control	10	0.0840	$5	60	5,223	439	$26,115
Weather-Based Irrigation Controller	10	0.4143	$80	193	9,337	3,869	$746,960
Weather-Based Controller by Station	10	0.1790	$35	196	19,264	3,448	$674,240
Turf Removal	30	0.0041	$2	494	2,933,030	11,883	$5,866,060
Turf Replacement	30	0.0032	$2	631	3,814,405	12,081	$7,628,810
Rain Barrel	5	0.0095	$35	3,676	2,452	23	$85,820
Total/ Weighted Average				**$403/AF**		**42,301 AF**	**$17,037,747**

As Figure 19 illustrates, Metropolitan is achieving 42,301 AF of demand reduction over the lifetime of the devices at an average rate of $403/AF. The total cost for this level of long-term demand reduction is approximately $17 million. However, a challenge to modeling conservation is understanding how much additional conservation is available and at what prices. **The assumption being that for a given level of community outreach and offered rebates, all achievable conservation is being realized.** In other words, the only way to get a higher level of conservation is to increase incentives. Currently, the turf replacement rebate is set at $2 per square foot (~$630/AF of lifetime savings) and realizes approximately 12,000 AF of savings over 30 years. To understand, for example, how much additional conservation would be realized if the turf replacement rebate were increased to $4 per square foot (~$1,000/AF of savings over 30 years), a price elasticity study would be needed. Moreover, how much maximum conservation capacity is available for the Metropolitan service area is unknown. This would provide staff with the requisite information to suitably project costs and rate impacts from different levels of conservation.

To understand the magnitude of potential impacts on rates from meeting the demands under the IRP D scenario (300 TAF by 2032) with conservation, an estimate of conservation costs was prepared for 2025 to 2032. Starting in 2025, Metropolitan would need to annually increase its supply by 37,500 AF to meet the 300,000 AF target by 2032. At $4 per square foot of turf replacement (~$1,000 per AF of lifetime water savings), which is an increase relative to current rebate levels, conservation would cost approximately $1.1 billion in 2025 for 37,500 AF of demand reduction.[13] The 37,500 AF of demand reduction would continue each year thereafter for 30 years. In 2026, an additional $1.1 billion would need to be spent to achieve 37,500 AF of additional savings, and so on through 2032 until 300,000 AF of demand reduction has been achieved. The 300 TAF of water savings would, however, continue in the future without the need for additional spending. Underpinning this scenario is the assumption that 300 TAF of conservation is available at $1,000 per AF of lifetime water savings. As mentioned previously, a price elasticity study would assist in determining the maximum amount of conservation that can be achieved and the corresponding prices for the desired conservation level.

Figure 20 illustrates the schedule of payments, which increase due to inflation, and water savings from investing in conservation.

Figure 20: Annual Expenditures and Water Savings for Turf Removal



[13] To arrive at this estimate, first take from Figure 19 the total expenditures and lifetime (30 years) water savings for turf replacement - $5,866,060 and 11,833 AF, respectively. The assumption is that new conservation will cost twice as much to achieve the same amount of lifetime water savings, thus multiply $5,866,060 by two, which equals $11,732,120. Therefore, $11,732,120 buys 11,833 AF of water savings over 30 years or divide by 30 to get the annual amount savings, which is 394 AF. IRP D requires 37,500 AF of annual supply development, which when divided by the annual water savings of 394 AF, equates to approximately 95 units of turf replacement. 95 units of turf replacement multiplied by the cost of each unit, $11,732,120, equals $1.1 billion in conservation expenditure to achieve 37,500 AF of water savings in a specific year.

Figure 20 illustrates how Metropolitan would need to invest approximately $10 billion in conservation over eight years to meet the 2032 demands (300 TAF) under IRP Scenario D. Funding conservation at this level would be financially challenging. Because conservation does not construct physical assets and it reduces water sales, bond financing conservation expenditures at this scale is not feasible. Conservation, therefore, would have to be cash funded. However, incurring these costs as Pay-As-You-Go (PAYGO) expenditures would increase Metropolitan's revenue requirement by approximately 65 percent in 2025, causing rates to increase in similar fashion. After the initial increase in rates, adjustments would be needed annually to account for inflationary impacts and decreasing water sales due to investments in conservation. Alternatively, Metropolitan could phase-in the rate impacts by ramping up conservation to meet the 2032 target of 300 TAF. Figure 20 presents a schedule that increases conservation by an equal amount each year, 37,500 AF. In a scenario that ramps up conservation spending, Metropolitan could fund approximately 6,400 AF of conservation in the first year and build up to 75,700 AF in the final year. The effect is to reduce the upfront rate shock and stabilize the portion of rate increases stemming from conservation funding, while still meeting the 2032 target of 300 TAF.

Although conservation would be costly and paid for upfront, the benefits continue for many years in the future. Therefore, it would be expected that in comparison to core supply development, which has ongoing annual O&M and financing costs, the rate increases beyond the 10-year modeling period would likely be lower under a scenario where demands are met with conservation only. Figure 20 makes this clear as the expenditure bars drop off after 2032 but the water savings continue.

A benefit of conservation is that it lends itself to adaptive management more so than core supply and storage resources. For instance, conservation spending can be curtailed if Metropolitan observes a natural reduction in demand. On the other hand, capital projects are typically completed once construction has begun, so the likelihood of over developing resources is more of a concern with core supply and storage projects than with conservation. Figure 21 illustrates a scenario where conservation spending is curtailed in 2027 as opposed to continuing through 2032, as shown in Figure 20. In this scenario, Metropolitan would save approximately $6.5 billion in resource expenditures by being able to adapt to the evolving water demand environment. Under a scenario where Metropolitan ramps up conservation spending, the savings from adaptive management could be more pronounced, as the majority of costs would fall to later years.

Figure 21: **Adjusted Conservation Example –** Annual Expenditures (left) and Water Savings (right)

Mandatory Conservation Alternative Cost Analysis

As discussed in more detail below, choosing not to develop additional resources increases the risk of a long-term, structural imbalance between demands on Metropolitan and available supplies, potentially leading to persistent water supply allocations and mandatory conservation. Alternatively, there may be regulatory action taken by the State or Federal governments mandating water efficiency and water-use reductions due to supply conditions exacerbated by climate change.

In this rate impact scenario, the model assumes that there is no new resource development for Metropolitan, that mandated conservation does not incur additional costs for Metropolitan, and that mandated conservation would gradually increase over the forecast period to the meet the IRP D 2032 resource development target of 300 TAF.

Figure 22: IRP D – Average Rate Impacts from Mandated Conservation*

*Member Agency rate impacts might be substantially higher than the overall rate increase as a result of the Cost of Service allocation and cost recovery approach taken for each project. For example, if a project only impacts the supply function, then the rate increase for full-service water would increase more and the rate increase on the SDCWA exchange deliveries would be less.

For Metropolitan, mandated conservation has less of a rate impact than the least cost alternative of 200 TAF of core supply and 250 TAF of new storage development for IRP D scenario. However, while Metropolitan may not incur additional costs from mandated conservation, its member agencies and downstream retail agencies would bear the cost of compliance and enforcement, requiring potentially significant resources to ensure cutback targets are met. A particular challenge is with end users that have a high willingness to pay for water service. Enforcement fees alone may not be sufficient to get these end users to comply with conservation mandates. Similar to the analysis above with conservation incentives, further study would be needed to understand the quantity of conservation available from different combinations of mandated actions, such as restricting or prohibiting residential outdoor turf watering, and non-compliance penalties. Additionally, consideration would need to be given to the potential impacts on economic growth and quality of life for the region. As mandatory cutbacks escalate, mandatory conservation goes beyond aesthetic and non-functional preferences and begins to limit commercial and industrial water use, potentially negatively impacting economic activity or growth. Therefore, Metropolitan would still expect an upper bound on the amount of conservation that can be achieved, even if the method of conservation is mandatorily imposed. While this scenario represents the lowest average rate increase for Metropolitan, it also poses challenges and costs that are not embedded in Metropolitan's rates. In fact, the potential challenges and costs would potentially be shouldered by the member agencies and subagencies, as well as the overall regional economy.

Estimated Capital Investment

Although individual projects or portfolios of projects have not been approved by the board to meet its desired reliability objectives, Metropolitan estimated the scale of the capital investments needed to achieve 100 percent reliability by 2032 under the IRP D scenario with the lowest average rate increase – 200 TAF of core supply and 182 TAF of storage capacity (250 TAF target by 2035). Using a set of assumptions based on recent projects, Metropolitan converted the unit rates from the analysis above into estimated capital and O&M costs. The following assumptions were used:

- **Core supply unit cost:** $3,000/AF (2023 $). Matches the unit cost in the rate impact analysis.
- **Storage unit cost:** $300/AF of storage capacity (2023 $). Matches the unit cost in the rate impact analysis.
- **O&M costs as a percentage of the unit rate for core supply projects:** 50 percent. Percentage based on cost estimates from large-scale water supply projects in Southern California: San Diego Pure Water[14] and Doheny Desalination Plant[15]. For these projects, O&M costs are estimated to make up 39 percent to 55 percent of annual project costs, respectively.
- **O&M costs as a percentage of the unit rate for storage projects:** 0 percent to 50 percent. Percentage based on whether the project is for groundwater storage or surface water storage. In this analysis, it is assumed that surface water storage requires minimal ongoing annual operating costs and water can be gravity-fed from the storage facility without additional pumping. On the other hand, groundwater is assumed to incur more O&M costs, mainly power costs for pumping.
- **Capital financing costs as a percentage of the unit rate:** Capital financing costs are equal to the remaining percentage of project costs after O&M costs have been removed from the unit rate. The terms of financing are assumed to be: 4 percent interest, 30-year repayment, and 2 percent issuance costs. As an example, for a core supply project at $3,000/AF, it is assumed that O&M costs account for 50 percent of the unit rate, or $1,500/AF. Therefore, the capital financing costs are assumed to be $1,500/AF.

Taking the derived capital financing unit rate and multiplying by a resource development target results in an annual financing cost, which can then be worked into an estimated total project cost using the assumed financing terms. To be 100 percent reliable by 2032 under the IRP D scenario with the lowest average annual overall rate increases (7.1 percent), Metropolitan's preliminary estimate is that $5.5 billion to $6.0 billion of capital investment (in 2023 dollars) will be needed. However, this estimate should be viewed with reservation, as many variables can affect the overall cost of a project. Additional distribution infrastructure, economies of scale, inflation, environmental and regulatory compliance, and treatment technology will impact the cost of a project.

Figure 23: Estimated Capital Investment for IRP D Scenario

Resource Development		Estimated Capital Investment ($ billion)
Core Supply (AF)	Storage Capacity (AF)	
200,000	250,000[16]	$5.5 - $6.0

[14] Based on Application for Funding for the Pure Water Program Phase 1 – North City Project from Metropolitan Water District's Local Resources Program submitted by the City of San Diego on December 1, 2017
[15] Based on Doheny Ocean Desalination Project – Preliminary Design Report prepared by GHD on May 2018
[16] 182 TAF of storage capacity development by 2032.

For example, Ventura Water Pure has an estimated capital investment before grants and contributions of $206 million and will produce approximately 5,400 AF of water per year.[17] San Diego Pure Water has an estimated capital investment before grants and contributions of $1.5 billion and will produce approximately 34,000 AF per year.[18] It would be incorrect to compare these projects based on dollars of investment per acre-foot of production without knowing the specifics of each project. As a note, there is a range for capital investment due to differences in groundwater and surface water capital financing assumptions. Groundwater storage is assumed to require less capital investment but has higher operating costs, and vice versa for surface water storage.

Metropolitan will face some significant challenges to complete multiple projects at such a large scale. In terms of the construction timeline, IRP D scenario would require core supply development by 2032 beyond the PWSC project. In fact, IRP D scenario represents a substantial increase in new supply in 2032 by approximately 1.3x more than the projected PWSC supply output. If approved, PWSC will begin producing 115 million gallons per day in 2032. Metropolitan has constraints on its ability to bond finance its capital infrastructure through its revenue bond authority, which is addressed further in the "Capital Financing Considerations" section of this report.

Risk Factors

Inherent in the decision to pursue a resource project or portfolio of projects is a risk that projected supply and demand conditions will not occur as anticipated and, as a result, Metropolitan will have developed too much or too little resources for actual conditions. In the sensitivity analysis section of this report, the financial model projected two different outcomes for IRP D scenario – one based on low demand (IRP A demand) and one based on high demand (IRP D scenario demand). Under the high demand assumption, overall annual rate increases are projected to be 7.1 percent annually, appropriately matching resource development with forecasted member agency demands and imported supply availability. However, under the low demand assumption, overall annual rate increases are projected to be 10.9 percent annually, creating a significant rate burden from the overdevelopment of resources. Conversely, Figure 17 presents the risk of planning for IRP A scenario, which requires no additional resource development, but experiencing the demands and water supply conditions of scenarios B, C, or D. Scenarios C and D, which assume rapid and severe climate change impacts, would see average shortages of up to 15 TAF and 300 TAF, respectively, by 2032.

The data in the preceding paragraph illustrates the compromise between reliability and affordability. Higher levels of resource development assure greater reliability against all IRP scenarios, but with that comes the risk of too much resource development and rates that are higher than otherwise necessary. Additionally, most resource projects, except for conservation, are typically debt financed and take many years to complete. Even if Metropolitan were able to realize that overdevelopment had occurred and choose to cease operating a supply resource and paying applicable operating costs, it would still be required to pay capital financing costs on the debt, which could last for twenty or more years. On the other hand, too little resource development risks greater magnitude and higher frequency of net water shortages for Metropolitan.

In addition to uncertainty about future demands, hydrologic conditions, and resource development, Metropolitan faces other risks that could affect its operations or financial condition. However, prudent financial planning can assist Metropolitan in preparing to respond to and mitigating such risks. The following list of risks is not meant to be exhaustive, and the order is not indicative of relative importance:

- **Climate Change:** Climate change is expected to reduce the reliability of Metropolitan's imported water supply for Southern California. Metropolitan has long recognized the threat to its water supply posed by these long-term impacts and has been addressing climate change for more than two decades through its IRP, which recently has been expanded into the CAMP4W process. Considering the acceleration of climate impacts and the cascading effects of simultaneous and serial climate events, Metropolitan initiated the CAMP4W to assess and incorporate climate vulnerabilities and risks into its resource planning more explicitly. CAMP4W will integrate water resource, climate resilience and financial planning into a cohesive strategy and approach.

[17] 2019-Ventura-Water-Supply-Projects-Final-EIR (civicplus.com)
[18] Pure_water_main_fact_sheet_1.12.22.pdf (sandiego.gov)

- **Water Transactions:** Consumer demand and locally supplied water vary from year to year, resulting in variability in the volume of Metropolitan's water transactions and variability in water revenue, of which approximately 80 percent is collected through volumetric rates. Future reliance on Metropolitan supplies will depend in part on the level of local supply projects development by Metropolitan's member agencies. Over the last several years supplies and demands have been affected by weather conditions (including, periods of drought or wet weather), water use restrictions, economic conditions, and environmental laws, regulations, and judicial decisions. Future water transactions will be subject to variability due to these and other factors. Metropolitan uses its financial reserves and budgetary tools to manage reductions in revenues.

- **Economic Conditions:** Water use by customers of retail service providers (which includes some Metropolitan member agencies and agencies that purchase water from them) is affected by economic conditions. Economic recession and its associated impacts, such as job losses, income losses, and housing foreclosures or vacancies, or inflation may reduce aggregate levels of water use and Metropolitan water transactions.

- **Environmental Considerations:** Current and proposed environmental laws, regulations and judicial decisions have and may in the future affect water deliveries to Metropolitan. Any of these laws, regulations and judicial decisions, and other official determinations relating to Metropolitan's water supply could have an adverse impact on the operation of the State Water Project and Colorado River operations and Metropolitan's water reserves and financial position.

- **Disaster Events:** Earthquakes, wildfires, floods, high winds and other natural or man-made disasters or accidents, could cause interruption or failure of water system infrastructure and impair the ability of Metropolitan to generate sufficient revenues. This may require Metropolitan to increase its rates and charges. To mitigate these risks, Metropolitan routinely assesses the seismic hazards and potential risks to its facilities. It makes strategic investments to limit overall system damage, improve post-earthquake and disaster recovery time, and reduce impacts on service area residents and businesses.

Affordability Considerations

In response to interest by the board, the LRFP and CAMP4W processes will analyze how Metropolitan's CIP portfolio of projects will impact water rate affordability in the region. Staff research and discussion on the concept of affordability will not make a determination of affordability on behalf of the member agencies. The role of Metropolitan to address certain aspects of affordability must first be evaluated through the lens of its statutory and legal authority.

Much of the guidance related to water affordability is directed toward retail water agencies that sell water direct to consumers. While the financial rate impact on the retail customer is an important consideration in regional CIP planning, Metropolitan's role as a water wholesaler limits the scope of possible interventions. In other words, while member agencies make the ultimate determination of affordability for their own customers, Metropolitan is sensitive to how costs it recovers from its member agencies through its rate structure may have an impact on member agencies' own determination of affordability.

As Metropolitan considers various project alternatives for its CIP, the team will highlight when and where various projects can contribute to affordability in the long-term even if there are increased costs in the short-term. Metropolitan's overarching goal is to provide the board and other stakeholders with information about various affordability considerations or models to develop a framework for integration into CAMP4W and Phase 2 LRFP. At a minimum, Metropolitan will have defined what it means by affordability – particularly in the wholesale context – and provide the tools necessary to help the board make informed decisions going forward.

Photo: Orange County Groundwater Replenishment System

Capital Financing Considerations.

Metropolitan was created in 1928 under the authority of the Metropolitan Water District Act (California Statutes 1927, Chapter 429, as reenacted in 1969 as Chapter 209, as amended (MWD Act)). The MWD Act authorizes Metropolitan to: levy property taxes within its service area; establish water rates for service; impose 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 of Directors (board) is authorized to establish terms and conditions under which additional areas may be annexed to Metropolitan's service area. The levels and availability of Metropolitan's rates and charges for water transactions are set by its board and are not subject to regulation or approval by the California Public Utilities Commission or any other State or federal agency.

Metropolitan is focused on developing a holistic approach with its current LRFP and CAMP4W process that incorporates numerous factors in capital planning, including but not limited to affordability, flexibility, feasibility, compliance with financial policies and the effect on Metropolitan's overall financial sustainability. Metropolitan generally has three core methods to fund its capital needs: (1) pay-as-you-go (PAYGO) from net operating revenues, (2) borrowing through debt or loans, and (3) grant funding from federal or state programs.

An optimal finance plan will seek to maximize its lowest cost-of-funds before layering on higher-costing sources in its capital stack. With grant funding as the lowest cost funding option, many finance plans are structured around available and/or executed grants. However, there are several key factors that must also be considered: (1) grants are typically paid on a reimbursement basis, requiring strong liquidity by the grantee, (2) many grants require local agency matching funds, and (3) many federal grants will often "federalize"[19] the project being funded. As a federally-funded project, there may be added costs attributed to compliance requirements with laws such as, the National Environmental Policy Act (NEPA) or Build America, Buy America Act (BABA)). Depending on the complexity of the project and/or grant program, there may also be notable administrative costs for ongoing grant compliance. As such, inclusion of grants within the overall CIP must be carefully considered and structured. Specifically, Metropolitan would need to be assured that the financial benefit of securing the grant monies results in a positive net benefit to the project.

[19] Federalizing a project means that by virtue of accepting federal dollars either directly from a federal agency or state program capitalized by federal dollars, such as state SRF programs, this could trigger a compliance requirement of various federal laws.

For the other sources of funds in the capital stack, Metropolitan will typically use PAYGO funding, debt, or a combination of the two. PAYGO funding and debt funding can provide complementary benefits as summarized in Figure 24. The decision to use PAYGO funding or debt generally is based on the unique circumstances of the project and/or agency. These characteristics include useful life, cost, use (private vs. public), among others. Many small projects with short useful lives, such as equipment replacement, are funded on a PAYGO basis while costly projects are debt funded.

Figure 24: Considerations of Project Funding

	Benefits	Considerations
PAYGO Funding	• Flexible • Avoids bond interest expense; but has an opportunity cost of investment earnings • No contractual obligations with lenders • Lowers rates over time	• Project costs borne entirely by existing or past customers • Project delivery delays may occur if insufficient PAYGO funding exists
Debt Funding	• Allows acceleration of future funds for project capital funding • Intergenerational equity	• Cost of borrowing is interest • Contractual obligations to lenders • Reduced future flexibility

Within phase two, Metropolitan will develop a tailored finance plan for the board's preferred CIP portfolio of projects. When analyzing the most advantageous finance plan, feasibility will be determined by meeting several factors:

- Minimum credit rating target levels
- Liquidity/reserve targets
- Debt service coverage ratios
- Debt to equity/debt capacity constraints

For now, the CIP program projections and funding strategy in the 10-Year Financial Forecast serve as a baseline for the LRFP-NA financial analysis.

Capital Financing with Debt

As described above, Metropolitan uses a combination of debt, PAYGO and grants to fund the CIP. The decision on the appropriate mix of funding sources has historically been set during the biennial budget process. Debt financing has allowed Metropolitan to reduce the near-term impact of project costs to its member agencies, while also allocating debt service costs more equitably across current and future ratepayers who will also benefit from the infrastructure investments.

Metropolitan remains vigilant in monitoring its finances and identifying ways to enhance its overall financial position for the benefit of its member agencies. This is accomplished by analyzing and employing several funding and financing strategies including:

- Strategic use of long-term and short-term debt
- Allocating a reasonable mix of long-term fixed rate and variable rate debt
- Identifying third-party grant funding opportunities
- Prudently investing our cash to protect our principal, meet our cashflow liquidity requirements and maximize yield (see Appendix E)
- Incorporating "alternative" borrowing strategies to address debt capacity or debt coverage constraints and/or provide opportunities to reduce borrowing costs

Authorization for the Issuance of Debt

Metropolitan may issue a broad array of debt pursuant to state statutes, which include the Metropolitan Water District Act, California Statutes 1969, Chapter 209, as amended and supplemented (MWD Act), and general bond law provisions available to governmental agencies, including Article 11 of Chapter 3 (commencing with Section 53580) and Chapter 6 (commencing with Section 54300) of Part 1 of Division 2 of Title 5, as well as a number of state statutes that provide flexibility in bond terms when financing and refinancing capital infrastructure. The MWD Act provides for a limit on general obligation bonds, water revenue bonds and other evidences of indebtedness of 15 percent of the assessed value of all taxable property within Metropolitan's service area.

General Obligation Bonds

General Obligation bonds (GO bonds) are backed by the full faith and credit of the issuing body and are paid for through additional ad valorem property taxes above the limit imposed by Proposition 13 (Prop 13). Because GO Bonds involve an increase in property taxes, they require voter approval.

Voters authorized Metropolitan to issue general obligation bonds since the early years of its formation. In September 1931, voters in Metropolitan's district authorized $220,000,000 of general obligation bonds to construct the Colorado River Aqueduct. In 2023 dollars, this equates to approximately $4.4 billion.[20] Similarly, voters in Metropolitan's district authorized $850,000,000 of Waterworks General Obligation Bonds, Election 1966, in multiple series, in a special election held on June 7, 1966. Both voter authorizations have been fully utilized. As shown in the table found in Appendix A, there is approximately $19.2 million of general obligation bonds outstanding that refunded the Waterworks General Obligation Bonds, Election 1966 issued.

GO bonds are commonly used to finance capital projects, including schools, libraries, housing, governmental buildings as well as large infrastructure assets ranging from transportation to water programs, among others.

[20] Based on a 3.3 percent CPI annual growth rate according to the Bureau of Labor Statistics since 1931.

At present, GO bond proceeds cannot be used for certain purposes, such as equipment purchases or operations and maintenance costs. Certain local governmental entities, like Metropolitan, are authorized to issue GO bonds upon voter approval, under specific legislation. The agency issuing a GO bond is authorized by California Article 4.5 Chapter 3 of Part 1 of Division 2 of Title 5 of the Government Code and Article XIII A of the State Constitution to levy an ad valorem property tax at the rate necessary to repay the principal and interest of the bonds. The property taxes being used to repay a GO bond issue are not subject to the usual ad valorem limitations based on property tax rates (Prop 13), however special overall limitations exist to avoid excessive GO debt issuance.[21]

Metropolitan also has the statutory authority to levy property taxes "for the purposes of carrying on its operations and paying the obligations of the district" pursuant to the MWD Act, § 124. Except for certain exclusions such as (i) bonded indebtedness of the district, (ii) bonded indebtedness to the federal government or any board, department, or agency thereof, or (iii) contractual obligations to the State pursuant to Section 11652 of the Water Code, the tax levy shall not exceed five cents ($0.05) per $100 of assessed valuation in the district. Metropolitan is also limited in its ability to levy ad valorem taxes by Section 124.5 of the MWD Act. Section 124.5 limits Metropolitan's property tax levy to the amount needed to pay: (1) Metropolitan's general obligation bonded indebtedness, and (2) Metropolitan's portion of bonds used to finance the construction of SWP facilities for the benefit of Metropolitan (Burns-Porter bonds) issued as of the effective date of the Section 124.5 amendment. 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.

Revenue Bonds

Metropolitan issues revenue bonds also pursuant to the MWD Act[22], and Resolution 8329 adopted by the board on July 9, 1991, as amended and supplemented (Master Resolution), including as amended and supplemented by Resolution 8387 adopted by the board on January 12, 1993 (Fourth Supplemental Resolution and, together with the Master Resolution, the Resolutions). The voters in Metropolitan's service area approved Metropolitan's use of revenue bonds at a special election held on June 4, 1974, as required by the MWD Act.

Resolution 8329 provides for the issuance of Metropolitan's senior lien water revenue bonds. Resolution 9199, adopted by Metropolitan's board on March 8, 2016, as amended and supplemented, provides for the issuance of Metropolitan's subordinate lien water revenue bonds and other obligations secured by a pledge of Net Operating Revenues that is subordinate to the pledge securing Senior Revenue Bonds and Senior Parity Obligations. Metropolitan's ability to issue water revenue bonds falls under the same limitation on indebtedness of 15 percent of the assessed value of all taxable property within Metropolitan's service area described above with respect to general obligation bonds. The second limitation under the MWD Act on the issuance of revenue bonds 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 such bonds, equals at least 100 percent of the aggregate amount of revenue bonds outstanding following the issuance of such bonds. In other words, Metropolitan's Net Position from its balance sheet serves as a cap on outstanding District revenue bonds.

Metropolitan's Current Debt Portfolio & Projected Debt Portfolio Costs

As of June 30, 2023, Metropolitan's total outstanding long-term debt is $3.90 billion. As summarized by the charts in Figure 25, water revenue bonds account for most of this total. Metropolitan's outstanding revenue bonds, fixed rate bonds make up 79.0 percent or $3.07 billion, while the remaining Variable Rate Demand Obligations (VRDOs), Term Rate Mode bonds and SIFMA Index Mode bonds total $825.3 million or 21.2 percent. Because variable interest rates have historically, on average, been lower than fixed rates, a mix of fixed and

[21] http://www.californiataxdata.com/pdf/GOBond.pdf.
[22] Get CA Code reference for other authority to issue revenue bonds.

variable rate debt will continue to be issued to help manage debt service costs. Metropolitan also has short-term obligations outstanding, $38.4 million of tax-exempt Flexible Rate Revolving Notes and $18 million of taxable Flexible Rate Revolving Notes. Metropolitan has no voter-approved GO bond authority remaining. Without new voter approval, Metropolitan can only issue refunding bonds for its outstanding GO Bonds. Metropolitan's $19.2 million of currently outstanding GO bonds mature in 2037.

In addition to its outstanding bonds, Metropolitan maintains approximately $373 million of synthetic fixed rate swaps that hedge a portion of Metropolitan's outstanding variable rate debt portfolio. Metropolitan's outstanding swaps mature in 2030. More details regarding Metropolitan's current debt portfolio can be found in Appendices A & B.

Figure 25: Overview of Debt Portfolio as of June 30, 2023

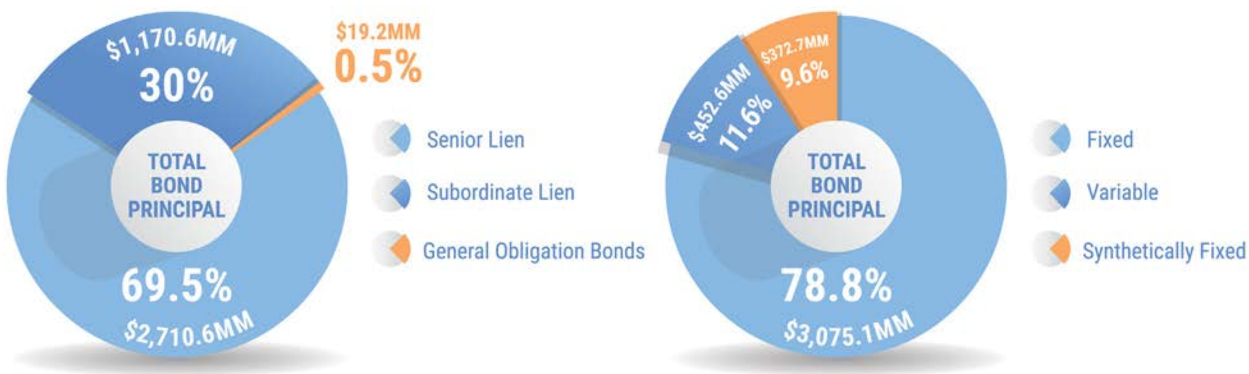
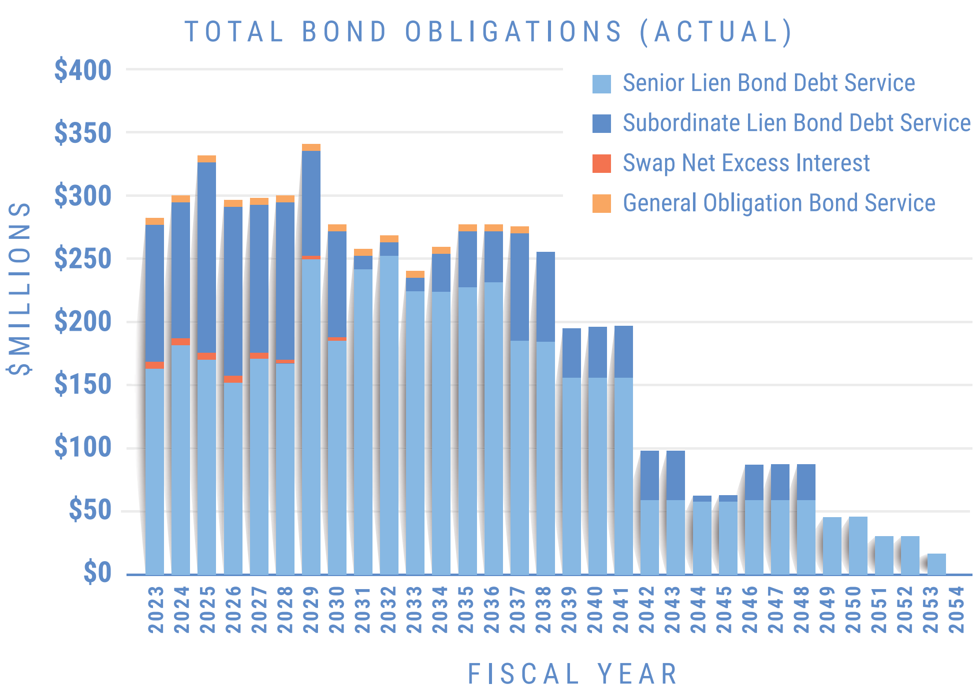


Figure 26: Metropolitan Debt Service Profile as of June 30, 2023



Key Considerations Related to Debt

Access to the capital markets has allowed Metropolitan to construct important infrastructure to support the continued delivery of water to its member agencies. Going forward, debt will remain an important element of Metropolitan's LRFP. Given the important role of debt financing, there are several factors for Metropolitan to consider when contemplating the use of debt: credit ratings, debt capacity and debt service coverage.

Importance of Credit Ratings. Maintaining strong credit ratings is critically important to Metropolitan's ability to access the capital markets at cost effective borrowing costs. To access the municipal bond market, Metropolitan must continue to demonstrate that it remains financially sound with a strong willingness to increase rates as necessary to pay its debt in full and on time. A recognized indicator of such financial integrity is the bond ratings assigned by the three major bond rating services. The ratings are letter-grade indicators, of an agency's financial health. These ratings have been used by investors for decades as a key indicator of credit quality.

Metropolitan maintains among the highest ratings from three nationally recognized credit rating agencies, Standard and Poor's (S&P), Moody's Investors Service (Moody's) and Fitch Ratings (Fitch) as indicated in Figure 27.

Figure 27: Metropolitan Credit Ratings as of June 30, 2023

Metropolitan Senior (Parity) Lien
Long-term Bond Credit Ratings

S&P	Moody's	Fitch
Stable Outlook	Stable Outlook	Stable Outlook
AAA	Aaa	AAA
AA+	**Aa1**	**AA+**
AA	Aa2	AA
AA-	Aa3	AA-
A+	A1	A+
A	A2	A
A-	A3	A-
BBB+	Baa1	BBB+
BBB	Baa2	BBB
BBB-	Baa3	BBB-

Metropolitan Subordinate Lien
Long-term Bond Credit Ratings

S&P	Moody's	Fitch
AA+	-	AA+

Metropolitan GO Bonds
Long-term Bond Credit Ratings

S&P	Moody's	Fitch
AAA	Aaa	-

How Ratings are Analyzed and Determined. In assigning an issuer's credit rating, the rating agencies perform a thorough analysis of the borrower's credit fundamentals. Some of the key credit fundamentals include financial, operational, and management characteristics of the borrower and transaction structure, as relevant. As an example, S&P utilizes credit scoring criteria summarized below. Notably, financial characteristics represent 50 percent of the overall rating.

Figure 28: S&P Water Utility Scorecard

S&P's Water Utility Scorecard			
Enterprise Risk Profile (50% of Final Rating)		Financial Risk Profile (50% of Final Rating)	
Factor	Weight	Factor	Weight
Economic Fundamentals	45%	All-in Coverage	40%
Industry Risk	20%	Liquidity & Reserves	40%
Market Position	25%	Debt & Liabilities	10%
Operational Management	10%	Financial Management	10%

It is important to note that the rating criteria are analyzed in the aggregate. In other words, in most situations, no single component will determine a rating. In addition to utilizing the score from these criteria, the rating agencies will also compare Metropolitan to other water utilities in some key areas such as debt service coverage and liquidity, among others.

In its May 23, 2023, credit rating report, S&P noted numerous credit strengths supporting the AAA rating on Metropolitan's Senior Lien, including:

- Comprehensive resource planning and financial policies
- Strong financial profile including the ability to maintain strong and steady financial metrics despite variability in water sales
- Long-term approach to water supply diversification and management
- Robust service area economy

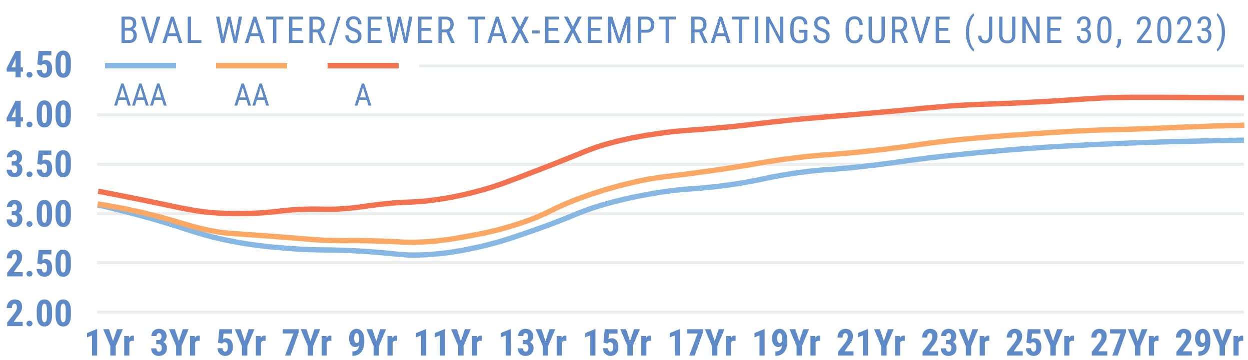
Despite these positive attributes, S&P cited certain events which could place downward pressure on Metropolitan's rating in the future, specifically noting:

- Underperformance of Metropolitan's financial forecast
- Material declining liquidity and coverage levels

CIP and associated funding plans play an important role in Metropolitan's financial health. For this reason, it is essential that the LRFP measure the impact of each plan of finance on credit ratings. While credit ratings should not, on their own, drive operations of Metropolitan, they are important to consider. Accordingly, future LRFP phases will contain specific analysis related to the impacts on credit ratings.

What are the benefits to Metropolitan from such strong credit ratings? First, they assure continued market access to issue revenue bonds. Secondly, the interest rates on Metropolitan's debt generally are lower as a result of its strong credit quality. The spread in interest rates, between stronger and weaker credits, varies depending on prevailing economic conditions, among other factors. However, in times of heightened economic uncertainty, the interest rate difference between highly-rated issuers and lower-rated issuers can be substantial. Figure 29 shows indicative interest rates on June 30, 2023 for different terms at various rating levels. As of June 30, 2023, the tax-exempt yield on a 20-year bond for a AAA rated Water/Sewer Utility was 3.47 percent, while an A (five-rating category decline) rated entity was 4.02 percent. If Metropolitan's ratings declined to the A-category, this 55 basis point (bp) difference would approximate an additional $11 million in interest costs, per $100 million of issuance, over twenty years.

Figure 29: Indicative Yield Curves for Water/Sewer Utilities by Rating Category

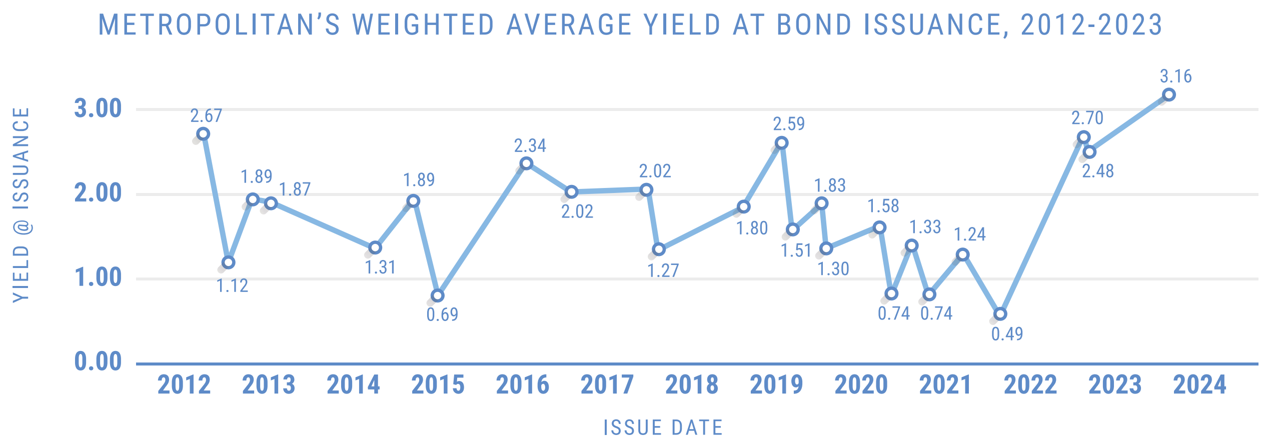


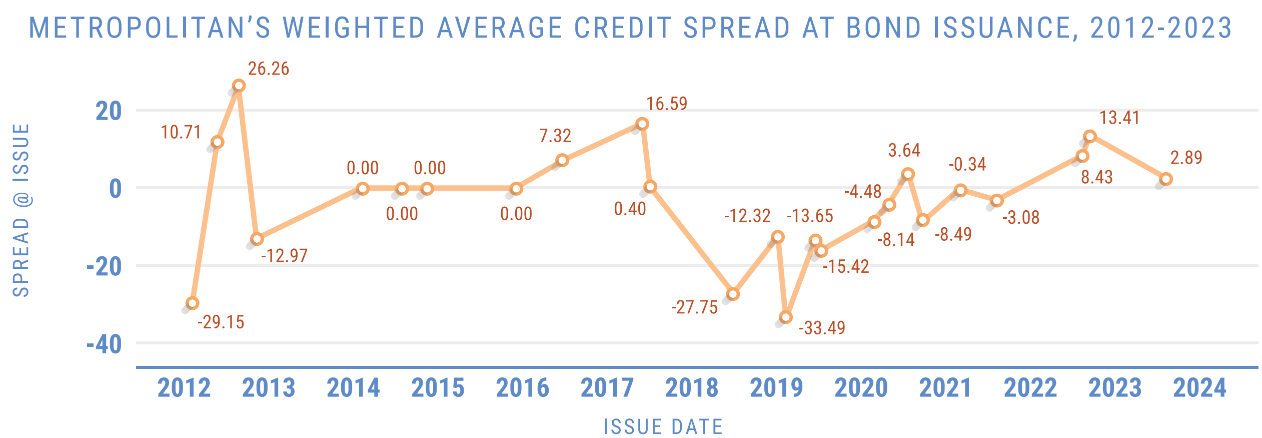
Interest rates on municipal bonds can be either tax-exempt or taxable to the bondholder. Qualification for tax-exemption is based on specifications in Section 103 of the Internal Revenue Code of 1986 as amended (Tax Code), including certain procedural requirements like filing the IRS Form 8038 for each transaction. Bondholders of tax-exempt debt are permitted to deduct the interest earned on the investment on their tax returns, which encourages them to accept a lower interest rate than another investment that is subject to taxes. There can be multiple layers of tax benefit depending on the issuer and residence of the bondholder. Some issuers like New York City, have triple tax-exemption for interest on their bonds from federal, state and local income taxes. In California, Metropolitan's bondholders have the potential to benefit from a dual tax-exemption for interest on their bonds from only federal and state income taxes. Because California is a high-tax state, this benefit has historically been quite valuable, and explains why California tax-exempt bonds generally price lower than comparably rated bonds in other parts of the country.

Revenue bond pricing performance. Maintaining strong credit ratings has been beneficial to Metropolitan and its member agencies. While credit spreads are dependent on numerous factors, including absolute levels of yields and general market conditions, over time Metropolitan's credit strength market has resulted in very aggressive pricing. Metropolitan's strong credit ratings have enabled it to access the capital markets at lower price levels relative to the prevailing market conditions at the time, as reflected in Figure 30. While Metropolitan cannot control what market conditions will be during the planning horizon of its capital plan, it can proactively protect its ratings and consider an array of financing tools that will enable it to obtain an overall cost of capital at levels assumed in its long-range planning models and budgets.

Refunding bonds. It is important for public agencies to routinely monitor their outstanding debt obligations for opportunities to lower their debt expense through the use of refunding bonds. A refunding bond is a new issuance of debt used to pay off one or more existing issuances of debt or obligation. A current refunding pays off existing bonds within 90 days of their call date. An advance refunding, which is no longer permitted on a tax-exempt basis, would pay off existing bonds greater than 90 days of their call date. The payoff through either a current refunding or advance refunding in most cases involves an escrow. An escrow is a fund structured with investment securities that could be comprised of state and local government securities (SLGs) issued by the U.S. Treasury or permitted defeasance securities, e.g. US Treasuries, T-Bills, or Agencies. Refundings could also be used for the purpose of restructuring debt service payments or modifying certain covenants governing the transaction or debt program. Metropolitan has routinely accessed the capital markets to refinance or restructure some of its outstanding debt obligations, typically for savings. This has allowed Metropolitan to keep its cost of funds comparatively low. It is important for Metropolitan to maintain and utilize its debt management policy as a tool for effective debt administration. Metropolitan has compiled various bond related policies and developed a comprehensive debt management policy found in Appendix C for the Board's consideration and adoption.

Figure 30: Metropolitan's Fixed-Rate Revenue Bond Pricing by Weighted Average Yield and Credit Spread, 2012 to 2023





Revenue bond debt service coverage. Revenue bond debt service coverage (DSC) is a primary indicator in determining an issuer's ability to fund its annual debt service costs. It is one of the key statistics used by rating agencies in their credit evaluations. DSC measures the degree to which revenues, after paying recurring operating expenditures, are available to pay revenue bond debt service. For AAA/AA rated municipal utilities such as Metropolitan, a DSC of 2x or better is expected. This provides a favorable margin to absorb unanticipated reductions in revenues or increases in operating expenses. For Metropolitan, the components of the DSC calculation are defined in the Master Resolution, (as defined above) and include Operating Revenues, defined as all of Metropolitan's revenues that are legally available for the payment of revenue bond debt service. This includes water sales, exchange agreement, wheeling, readiness to serve (RTS) charges, capacity charges, power sales, certain components of interest income and miscellaneous revenues. Operating revenues do not include property taxes, which are used to fund Metropolitan's General Obligation bond debt service and certain components of the SWP capital costs. Also excluded is interest income from the Construction Fund and other restricted funds. Subtracted from Operating Revenues are Operation and Maintenance Expenditures, defined as "the necessary Expenditures for operating and maintaining the properties, works, and facilities of Metropolitan…". Net Operating Revenues, (NOR), may be adjusted by Additional Revenues, which may include transfers from unrestricted reserves such as balances in the Revenue Remainder and Rate Stabilization Fund. The Adjusted Net Operating Revenues (ANOR) is then divided by annual revenue bond debt service, plus debt service on any parity obligations, for the DSC calculation.

The coverage, or the amount by which ANOR exceeds annual revenue bond debt service, reflects a financial margin by which available revenues exceed annual debt service. The larger the difference, the greater protection afforded to bondholders. In addition, this difference also reflects funds which, unless they are committed for some other purpose, are then available for PAYGO funding of capital projects or to add to financial reserves. Metropolitan has additional recurring expenditures that are funded after revenue bond debt service is paid. These expenditures are certain capital payments to the SWP, funded both as an Operation and Maintenance Expense, paid prior to debt service and also as a capital charge that may be funded from any Metropolitan revenue source, including reserves. Metropolitan reflects these capital charges as paid after revenue bond debt service. Therefore, Metropolitan calculates a Fixed Charge Coverage (FCC) which provides a more comprehensive measure of the degree to which ANOR covers all recurring fixed costs. The FCC is calculated as NOR divided by the sum of revenue bond debt service, other parity bond obligations, SWP capital payments and other debt service costs for loans or other obligations. To the extent that the FCC is positive, the margin represents funds available for PAYGO funded capital, additions to financial reserves or any other lawful purpose.

Metropolitan has policy guidelines for DSC and FCC of 2.0x and 1.2x, respectively. These levels are viewed as reasonable targets by the rating agencies and the financial community as being consistent with a strong AA credit. In most years, Metropolitan has met or exceeded these targets. Rating agency analysts have stated the importance of continually meeting targeted coverage levels for Metropolitan to maintain its current high bond ratings.

Revenue Bonds Additional Bonds Test Requirement. Another way in which Metropolitan is limited in its ability to issue revenue bonds is by its Additional Bonds Test (ABT), a legal covenant within its existing bond documents. The ABT is a test that Metropolitan must satisfy to issue new revenue bonds. Metropolitan currently has two primary ABTs in connection with its Revenue Bonds:

1. Senior Lien Additional Bonds Test
   1.20x maximum annual debt service (MADS) on senior lien obligations

2. Subordinate Lien Additional Bonds Test
   1.00x average annual debt service (AADS) on all senior and subordinate lien obligations

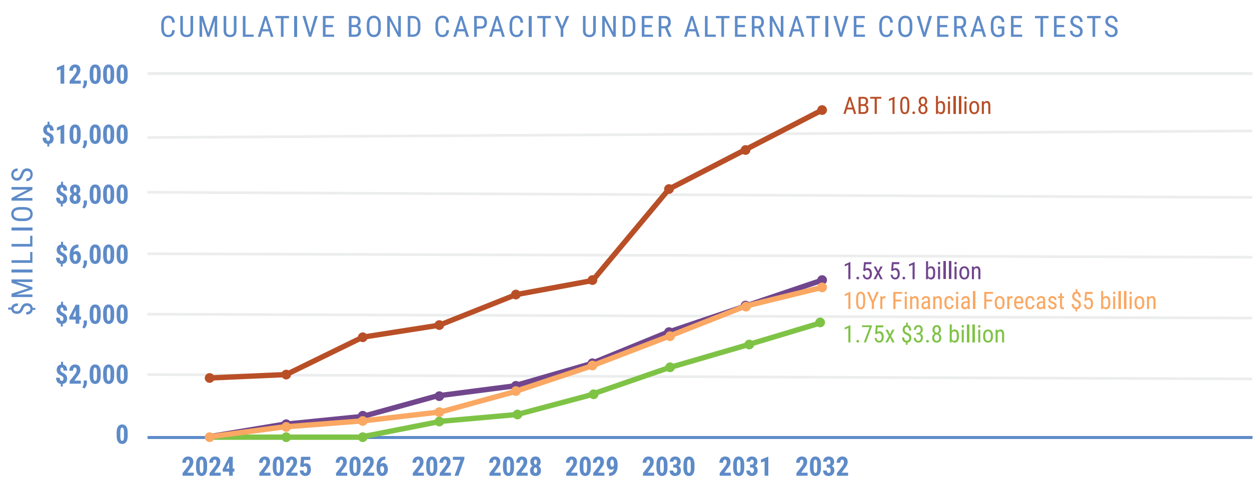
Using ANOR projections from the current 10-Year Financial Forecast, Metropolitan's aggregate ABT debt capacity across these two liens is estimated to be approximately $10.8 billion. To be clear, the ABT debt capacity calculation reflects the legal authorization under the covenant terms in Metropolitan's master bond resolutions, which prescribes a specific methodology with certain mandated assumptions for the calculation of projected debt service. It is important to note that this methodology may produce results that materially differ from Metropolitan's actual projected debt service. To meet anticipated capital funding needs, balance debt service coverage targets and PAYGO annual spend goals, among other priorities, the 10-Year Financial Forecast projected approximately $5.2 billion of debt to be issued over the 10-year period between fiscal year 2022/23 and fiscal year 2031/32. As of June 30, 2023, an estimated $4.9 billion of unissued projected debt remains of the 10-Year Financial Forecast's anticipated capital financing needs for the next eight years.

This debt capacity analysis, which utilizes a higher interest rate sensitivity[23] than the 10-Year Financial Forecast, assumes that Metropolitan issues additional debt "up to" the level legally allowed under its ABT and two alternative coverage scenarios. It is important to note the distinction between the two approaches. The 10-

[23] Interest rates assumed at 5% across the entire 10-year forecast period.

Year Financial Forecast's debt projections are based on need -- specifically, the timing when capital financing is required. Alternatively, the debt capacity analysis calculates the maximum amount of debt that could be issued under certain constraining limitations, not dependent on need. If Metropolitan were to issue debt "up to" the levels allowed by the ABT, for example, it is likely that this maximum amount of borrowing would have negative impact on Metropolitan's credit ratings (given the significantly lower debt service coverage levels). As such, it is unlikely that Metropolitan would pursue this approach. Alternatively, Metropolitan analyzed debt capacity assuming a more restrictive coverage constraint than that allowed under its ABT, the results of which are presented in Figure 31 and supportive data can be found in Appendix F.

Figure 31: Metropolitan's Projected Cumalitive Debt Capacity, Fiscal Year 2024 through 2032



	Current ABT (1.20x)	1.50x Debt Service Coverage*	1.75x Debt Service Coverage**
Additional Debt Capacity	$10.8 billion	$5.1 billion	$3.8 billion

* Debt capacity calculated using 5% interest rates and as of June 30, 2023
** Debt Service coverage calculated for each respective scenario to estimate the debt capacity available while targeting minimum target coverage ratio based on current year revenues.

As described above, there are two legal limitations to Metropolitan's ability to issue debt beyond the covenant restriction of the ABT. The first legal limitation is a statutory constraint that is estimated to be $543.7 billion based on 15 percent of total taxable assessed value in the Metropolitan service area of $3,624.8 billion for FY 2023. The second legal limitation relates to Metropolitan's equity (or net position) which constrains Metropolitan's issuance capacity of revenue bonds specifically, and is the more restrictive legal limitation of the two. According to FY 2022 unaudited financials, Metropolitan's net position is approximately $7.456 billion. As of June 30, 2023, Metropolitan had approximately $3.9 billion of revenue bonds outstanding. This results in a current revenue bond debt capacity of approximately $3.6 billion. Metropolitan's net position, however, is not a static number. In fact, Metropolitan's FY 2018 net position was approximately $6.686 billion. While Metropolitan's net position has grown over 11.5 percent over the past five years, future growth is not guaranteed.

In short, Metropolitan could issue $3.6 billion of additional revenue bonds, however this is projected to result in Metropolitan's average debt service coverage coming in closer to 1.69x than the 2.0x debt service coverage policy target of the board. Moreover, Metropolitan may need to carefully consider alternative methods of capital financing besides revenue bonds to the extent Metropolitan's net position doesn't grow sufficiently and/or the capital funding demands over the next eight years exceed projected estimates. Balancing these key issues is central to accommodating the amount and timing of new revenue bond issuance over this period.

Additional Borrowing Options. It is important to note that Metropolitan's limitations to issue debt under the 1974 voter authorization relate specifically to Revenue Bonds. This restriction, however, does not apply to other borrowing options such as WIFIA loans or State loans such as California State Water Resources Control board SRF loans (which both may be secured by Net Revenues). Future borrowings using these loan options (which may be more advantageous in certain circumstances) would not count against Metropolitan's effective revenue bond limitation.

In addition, Metropolitan could issue Certificates of Participation or, in connection with certain projects, borrow through a Joint Powers Authority (JPA) which also would not be restricted by Metropolitan's net position revenue bond limitation. For these alternative borrowing options, which are discussed in greater detail later in the report, Metropolitan's overall creditworthiness as well as the relevant bond terms for each transaction structure will be key factors impacting the cost-effectiveness of the financing(s).

Going forward, Metropolitan's revenue bond debt capacity and debt service coverage will be important considerations in the development of pro forma financial analyses. Debt is a key component in Metropolitan's long-range financial planning process as it is an important element affecting future rate increases, affordability concerns and project delivery timing.

Photo: Casa Loma Siphon Seismic Retrofit Project

Summary of Capital Funding & Financing Tools

There are many potential capital funding and financing tools to consider as Metropolitan endeavors to develop its long range finance plan. This section discusses at a high-level the key categories Metropolitan's LRFP will most likely comprise, as well as some of the potential funding and financing opportunities within these categories to be considered.

Primary Forms of Debt Available to Metropolitan

With Metropolitan's strong ratings, there are many options for accessing the capital markets and structuring its debt. The most common form of debt are obligations issued directly by Metropolitan to investors and/or lenders. Metropolitan initially utilized ad valorem property taxes and GO Bonds to fund its capital and operations expenditures after formation. Metropolitan has approximately $19.2 million of GO bonds outstanding as of June 30, 2023. Currently, Metropolitan issues Revenue Bonds as the primary financing method for its capital improvement program, and has approximately $3.9 billion outstanding as of June 30, 2023. When debt or loans are utilized, Metropolitan pledges or identifies a source of funds to secure repayment of the obligations.

Bond Type	Description	Authorizing and Relevant Statute or Administrative Code
General Obligation Bonds	Debt service is repaid through ad valorem property taxes	Sections 124,124.5 of MWD Act; MWD Ordinance 105; Section 3.03 of Resolution 8386 (as amended)
Revenue Bonds	Debt service is repaid through revenues from rates and fixed charges remaining after the payment of O&M expenses	Section 237 of MWD Act; Section 5201 of Admin. Act; Section 5.01 Resolution 8329 (as amended)
Certificates of Participation	Debt service repaid through payments appropriated annually by the board	Section 140 of MWD Act; Division V and Division VIII, Chapter 2 of Admin. Act

Fixed Rate Debt

Type	Description	Key Considerations/Benefits
Long-Term Tax-Exempt Bonds	• Long-term debt (typically issued with a repayment of up to 30 years) with an interest rate fixed for the life of the bonds	• Predictable and cost-effective means of funding projects
Short-Term Notes and Certificates	• Fixed rate debt issued with a short-term maturity (typically 5 years or less) • ST Certificates have an initial one-year maturity, but then can be refunded for multiple years.	• Predictable and cost-effective means of funding projects • Notes are typically rolled or refunded with long-term debt at maturity subjecting Metropolitan to interest rate risk
Taxable/Tax-Credit Bonds	• Taxable fixed rate debt issued with no federal tax deduction of bond interest for the bondholder, although state and potentially local tax-exemption is possible, where applicable. • Tax-Credit Bonds are taxable investments, however, the federal government can either provide a direct subsidy to the municipal issuer as a percentage of the taxable interest, or provide a tax-credit to the bondholder in lieu of interest paid by the governmental issuer.	• Higher borrowing cost, but provides flexibility with potential private use or private benefit issues related to a financed asset (e.g. Delta Islands) • Tax-Credit bonds if reinstated could provide a significant advantage to Metropolitan, particularly if the investor tax-credit option were made available, as discussed further below.

Borrowing Options

Metropolitan can choose from a variety of debt instruments to fund its capital needs. The two main types of debt are fixed rate and variable rate. With fixed rate debt, the interest rate stays the same over the life of the obligation. With variable rate debt, the interest rate is reset periodically over the life of the obligation. All debt instruments have associated risks and requirements that should be considered before issuance.

Subsidized loans are another type of funding option available to Metropolitan. These loans are administered by federal or state agencies. The agencies establish eligibility criteria for issuers and/or projects in order to qualify for funding. A major advantage of subsidized loans is the competitive interest rate offered. However, drawbacks include limitations on size, structure and borrowing terms and covenants which may be more restrictive. Certain loans may also federalize the project which could be an important consideration, as satisfying the requirements (e.g., the National Environmental Policy Act (NEPA), Davis-Bacon, American Iron and Steel, and Build America, Buy America Act (BABA)) could significantly increase the cost of a project. Borrowers also typically need to complete an extensive application process.

Outside of debt instruments, Metropolitan may also utilize federal/state grants or budget appropriations. These are typically one-time awards for specific projects.

Security

Revenue sources available to Metropolitan include rates, fixed charges, property taxes, and lease or other contractual payments and appropriations. Net operating revenues from water rates and fixed charges, including the Readiness-To-Serve Charge and the Capacity Charge, may be used to repay debt service on Metropolitan's water revenue bonds. Revenues from property taxes may be used to pay voter-approved debt service on general obligation or other voter-approved bonds. Lease payments may be used to secure Certificates of Participation.

Covenants to Lenders and/or Investors

Metropolitan will be subject to certain common contractual covenants that are made with the lenders/investors to ensure the future repayment of debt service. These include a rate covenant that dictates a minimum ratio between Net Revenues and debt service in any given year that debt is outstanding. Currently, Metropolitan's rate covenant is 1.0x debt service on its Parity Lien and Subordinate Lien. While this rate covenant is fairly flexible, it does represent a restriction placed on Metropolitan by its lender to ensure future repayment of debt service by imposing rate increases and/or using available cash to meet current obligations. Another covenant discussed above in detail is the ABT which is a required coverage calculation that must be satisfied before the issuance of additional revenue bonds.

Variable Rate Debt

Type	Description	Key Considerations/Benefits
Floating Rate Notes	• Debt instrument with a variable rate of interest that resets at specified intervals at a predetermined spread to an index or formula	• Avoids needs for bank support • Smaller investor universe than VRDBs
Variable Rate Demand Bonds (VRDBs)	• Floating rate obligations that have a nominal long-term maturity but have a coupon rate reset periodically by remarketing agent	• Large and mature investor base • Requires bank facility
Commercial Paper	• Interim financing borrowing in maturities of up to 270 days on an as-needed basis	• Large and mature investor base • Requires bank facility
Bank Line of Credit	• Interim financing allowing for draws on a line of credit from a bank on an as-needed basis up to a certain amount	• Avoids needs for bank facility • May be subject to more onerous bank terms

Metropolitan also has used derivative instruments historically to manage risk exposures and produce a lower cost of financing relative to fixed-rate debt. As of June 30, 2023, Metropolitan has approximately $372.7 million in outstanding interest rate swaps. These transactions and their associated bonds have resulted in $129.5 million in savings through June 30, 2023, including $3.8 million, net present debt service savings, on three swap termination transactions. The mark-to-market ("MTM") value plus the accrued interest of the swap portfolio is a negative $6.2 million as of June 30, 2023. In the rapid and significant rise in short-term interest rates attributed to Federal Reserve Bank's monetary policy to combat rampant inflation, Metropolitan's hedges worked effectively at protecting us against variable rate exposure. That said, Metropolitan also has been exploring opportunities to de-risk (or terminate) some or all of the remaining swaps. In the meanwhile, Metropolitan operates under its existing Swap Policy provided in Appendix D.

Federal & State Funding

Metropolitan could also continue to actively pursue federal- and state-level grants and appropriations. Grant funds and budget appropriations can potentially be used to offset costs that otherwise would be recovered through rates and charges. While some grants can be upfront, most are dispensed on a reimbursement basis. This means that the local entity would need to spend the eligible project costs first, and then submit a request for reimbursement. Hence, cashflow liquidity is a potential concern for many smaller governmental entities. Also, some federal and state programs require a local match, which may vary by program but generally range between 10 percent to 50 percent of the eligible project costs for reimbursement. Lastly, some federal and state programs provide a matching subsidy to the ultimate customer, such as with conservation programs. While Metropolitan may create and manage this type of program, utilizing its own rate-based revenues, most of the federal and state matching subsidy grants for this purpose would only lower the product purchase costs for specified water efficiency equipment to the program customer. Metropolitan's costs related to such programs would not be reduced.

For federal, and certain state, funding programs, it is also important to note that use of these funds may "federalize" the capital project utilizing these sources. Federalizing a project may place more restrictive provisions on Metropolitan that could increase the direct cost and/or delivery timing of the project, which in turn could also increase project costs due to inflation. As such, care should be taken when analyzing funding alternatives, whether they be federal, state or local.

Budget Appropriations & Grants

Direct Budget Appropriations	Federal/ State	Description	Awarded to Metropolitan?
State Legislative Appropriations	State	• Non-recurring, one-time appropriations that support Metropolitan projects and state objectives • Metropolitan advocates for these through External Affairs Group • Emergency Drought Relief: Awarded $50M • Pure Water Southern California Project: Awarded $80M	Yes
Federal Legislative Appropriations	Federal	• Metropolitan continues to advocate for these through External Affairs Group • Federal budget appropriations include: Inflation Reduction Act (IRA), Bipartisan Infrastructure Law (BIL), and American Rescue Plan Act (ARPA)	Yes; through various Acts

Metropolitan vigorously pursues external funding to fulfill its mission of providing an adequate and reliable supply of high-quality water to meet present and future needs in an environmentally and economically responsible way. In many cases, external funding such as grants and low interest loans are used to accomplish strategic goals and objectives through a variety of projects and programs, including new construction, capital improvements, water use efficiency, and research that otherwise would not have been implemented without external funding. Grant funds also help manage project costs and defer water rate increases to the extent practicable.

Due to the uncertainty of grant awards, the LRFP assumes that no grants will be received and expenditures would be funded by Metropolitan's annual budget. New initiatives that require investment to address current and pertinent issues affecting water supply reliability including climate change and other challenges.

Metropolitan has a long and successful record of implementing a variety of projects with federal and state agencies as well as non-profit organizations and foundations. The following table describes the current grant funding opportunities available and/or awarded to Metropolitan.

Grants	Level	Description	Awarded to Metropolitan?
Bureau of Reclamation WaterSMART Program	Federal	• Multiple federal grant programs that support drought resiliency, water efficiency, and water infrastructure projects • Large Scale Recycled Water Program opportunity has not yet been released but Metropolitan is engaging on eligibility criteria	Yes
FEMA Preparedness, Hazard Mitigation Assistance, Resilience, and Emergency Food and Shelter Grants	Federal	• FEMA BRIC may be opportunity for Metropolitan	Yes
State Department of Water Resources	State	• Urban Drought Relief Program – Metropolitan Awarded $4.5M for 2021 • Considering application for 2022 cycle	Yes

Other Federal Funding Opportunities

In November 2022, Metropolitan and the Palo Verde Irrigation District (PVID) submitted a joint proposal for consideration under Program I.a. (Bucket 1) of the Lower Colorado Conservation and Efficiency Program (LC Conservation Program). Metropolitan and PVID jointly proposed a three-year agreement to voluntarily fallow up to 19,460 acres in the PVID service area from 2023 to 2026 for a total conserved volume of up to 373,000 acre-feet. The Bucket 1 funding from the Inflation Reduction Act is eligible for a price of $400 per acre-foot. Contract negotiations are ongoing with Metropolitan, PVID, and USBR. Metropolitan and the Bard Water District (Bard) likewise submitted a proposal to voluntarily fallow up to 3,000 acres for a total conserved volume of up to 6.030 acre-feet. This proposal included a set price for the conserved water at $330 per acre-foot. Contract negotiations with Metropolitan, Bard, and USBR are ongoing. In August 2023, Metropolitan will submit a proposal under a different element of the LC Conservation Program (Bucket 2 proposal). Details of the proposal elements, the water's price, and the water's volume contributed remain confidential at this time. Through the signing of an executive order on January 21, 2021 (Executive Order 14008), the Biden Administration charged a group of executive branch officials with developing a strategy for allocating 40% of the overall benefits of federal investments in climate-related programs to disadvantaged communities – otherwise known as the Justice40 Initiative (J40I). While J40I does not have earmarked funds, it promotes a "whole-of-government approach" to


Photo: U.S. Capitol

addressing environmental justice and economic inclusion. Metropolitan is currently exploring community-based organization (CBO) partnerships in southern and northern California that can help access these funds to assist in addressing underserved community needs in Metropolitan's footprint.

Moreover, the Department of Energy (DOE) created the Office of State and Community Energy Programs (SCEP) to implement $16 billion in programs funded by the BIL and IRA. In support of J40I, SCEP works to:

- accelerate high-impact, self-sustaining clean energy projects that improve people's lives;
- aid state and local governments, tribes, CBOs & others in deployment; and
- center the needs of low-income households and Disadvantaged Communities (DACs)

Not only could Metropolitan seek funds broadly through BIL and IRA to fund direct project or program costs, such as solar generation, battery storage and vehicle replacement, but could also partner with CBOs and state programs on projects that may have a direct connection to consumers who could benefit from combined energy and water efficiency rebates. This collaborative overlay of programs could help reach common constituents more efficiently while also potentially creating income capacity through energy savings to offset higher rates associated with climate adaptation investments for water reliability and resilience.

Federal/State Loans

In addition to the publicly issued debt that is most prevalent in the market, highly rated entities such as Metropolitan also have access to competitive loan programs. These programs offer certain benefits over publicly issued bonds, but also may have some potentially negative considerations. At the federal and state level, a number of loan programs are available for funding water infrastructure projects. These programs include WIFIA loans (administered by U.S. EPA), State Revolving Fund (SRF) loans (administered through California's State Water Resources Control Board) and IEDB loans (administered through California's Infrastructure and Economic Development Bank or IBank).

Type	Description	Key Considerations/Benefits
WIFIA Loan	• Loan program through the U.S. Environmental Protection Agency with an interest rate based on the treasury rate for eligible projects • Interest rate comparable to Metropolitan's cost of borrowing (6/30/23 estimate of 4 percent) • Up to 49 percent of project costs are eligible for funding	• Historically, lower cost than public bond issuance • Flexibility in certain repayment provisions • Long initial application and approval process • Ongoing administrative requirements • Federalization of project
SRF Loan	• State Water Resources Control Board manages California's revolving loan program for both drinking water and clean water projects • Program provides loans and grants (in the form of principal forgiveness loans) to help water and wastewater agencies finance qualifying projects	• Low cost of borrowing • Competitive process, no guarantee of approval • Long loan approval process • May federalize projects • More onerous terms and provisions than public market borrowing • Will not accept subordinate lien
CA IEDB Loan	• CA Infrastructure and Economic Development Bank provides infrastructure loans to state/local govt. entities • Qualifying infrastructure projects include water treatment and distribution	• Avoids certain public market borrowing issuance expenses • Competitive process • Terms and provisions may be more onerous than public market borrowing

Other Borrowing Mechanisms & Alternative Bond Credit Structures

Other forms of borrowing for Metropolitan's consideration include Certificates of Participation (COPs) and JPA Bonds. Certificates of Participation can be issued by Metropolitan directly and are secured by lease revenues.

Although similar to COPs, JPA Bonds and Rate Reduction Bonds must be issued by a Joint Exercise of Powers Agency. Legislation within the State provides for the issuance of Rate Reduction Bonds by certain utilities, Metropolitan will analyze and explore related opportunities for the District and/or its member agencies as part of a holistic financing strategy.

Metropolitan could utilize a JPA structure to fund new projects for new services, through partnerships with its own member agencies or third parties. While Metropolitan could still own and operate a capital project with this approach, each JPA member (including Metropolitan) would be able to determine their level of participation in the project. Moreover, each JPA member would have the flexibility to determine the source of funding that supports its respective obligations, including operations, maintenance and debt service expenses. Funding sources from a JPA member could include revenues from a variety of sources including rates and charges, or taxes approved by the voters in its service area. A key consideration for the JPA will be crafting its credit structure for bond financing. The ratings for the JPA bonds will depend on the composition of the JPA membership and the consolidated revenue pledge of all members. It is conceivable that smaller participation of Metropolitan could result in a JPA rating lower than Metropolitan's current ratings. Even if at a minimum target rating structure in the A category, there could be ways to mitigate this impact on JPA transactions, including but not limited to contractual covenants (such as higher minimum rate covenants or a higher DSCR policy target), bond issue reserves and/or financing tools such as Tax Credit Bonds as described further below.

Additional Financing Vehicles

Debt Issued Through Other Entities	Description	Considerations
MWD Asset Financing Corporation (MWDAFC)	• In 1996 the board authorized the formation of MWDAFC with the power to issue bonds or notes and to incur liabilities. The debt issuance powers of MWDAFC can be used to provide financing for capital projects	• MWDAFC lease revenue bonds, commercial paper or some other form of debt would not be obligations of Metropolitan and would not have any effect on revenue bond debt to equity limitation. This will preserve revenue bond capacity and provide additional flexibility for Metropolitan to finance the ongoing CIP.
JPA Issued Debt	• Long-term debt issued through a JPA • Metropolitan may or may not be the sole obligor for such debt • Participants could include Metropolitan and a contingent of Metropolitan member agencies • Metropolitan would hold Participation Rights in the JPA	• Consideration should be paid to repayment of JPA debt (i.e., is it repaid as O&M or on the same lien as direct debt?) • Rating agencies tie Metropolitan's share of JPA debt as a "fixed obligation" for purposes of coverage calculation and leverage
Rate Reduction Bonds	• Issued by a JPA to local agencies to finance or refinance a water or wastewater utility project • Secured by utility project property and repaid through a separate utility project charge imposed on ratepayers' bills	• Rate reduction bonds have been utilized by certain utilities, but challenges exist regarding their use by wholesale agencies such as Metropolitan

Other Funding & Financing Opportunities

Metropolitan has several financing tools at its disposal to complement the current options available to meet its capital needs. Metropolitan has existing authorization for some of these tools, while others may require new authorization or approvals. The full complement of financial tools will be used as part of a customized long-term financial strategy based upon board feedback and preferences.

Tax Credit Bond (TCB) Financings. Even though the authority to issue tax credit bonds was eliminated in tax year 2018 by the Tax Cuts and Jobs Act (TCJA), Metropolitan, through its congressional representatives and various stakeholders, could advocate for a federal bill restoring tax credit bond issuance authority, with some specific modifications. One potential modification is to specifically allow for an unlimited issuance authority for water infrastructure projects necessary to address climate risks and vulnerabilities. Another potential modification is to seek a full subsidy of interest costs as a tax credit direct to bondholders in lieu of interest payments, or alternatively, a 35 percent direct payment subsidy to municipal issuers on taxable interest as authorized under the former Build America Bond program. Congress has approved TCBs utilizing a tax credit to bondholders at a higher (and in some instances full) subsidy level in the past, such as education (QZABs) or clean or renewable energy projects (CREBs). The fiscal value of this approach is that the federal government through tax policy could leverage private money to subsidize the cost of debt financing. This subsidy in the form of a direct payment (cash by the US Treasury to municipal issuers) at a specified credit rate at a minimum could result in a lower cost of funding than traditional tax-exempt bonds in certain segments of the yield curve (i.e. maturity terms); however, this Direct Payment approach would require addressing the threat of future federal sequestration on those payments. Alternatively, this subsidy in the form of a tax credit to the investor could be at best fully offsetting of interest to the municipal issuer. As a result, more local agency dollars could go into the direct cost of the project versus into the hands of bond investors supporting municipal debt.

New Property Tax Secured Bonds. Looking forward, Metropolitan has the opportunity to explore other revenues to secure new financing. As an alternative funding method to current revenue bond financing or pay-as-you-go funding from rates and charges, a voter-approved bond (e.g., general obligation or special tax bond) may be used to fund certain new capital or program investments. This proposed bond debt service expense would be paid from a new special property tax levied on all secured and unsecured taxable property in Metropolitan's service area. Approval by a two-third majority of voters in the district is required for a new special property tax, which is a challenging threshold to achieve. There are a few notable factors to consider with this strategy. First, there is a multi-year lead time to craft and put a tax initiative on the ballot. Also, there would be significant election-related costs for the new property tax initiative since Metropolitan's service area encompasses several counties. To the extent the state pursues a climate initiative that could align with potential projects funded through approach, there could be opportunities to collaborate on marketing efforts for voter education. While a Metropolitan property tax must be approved district-wide, any member agency could seek voter approval for a special property tax to be collected only within its service area to pay its obligations to Metropolitan for an existing service or participation in a new project.

Set Metropolitan's Property Tax Rate to Fund a Higher Targeted Amount of State Water Project Costs. Metropolitan has set a 0.0035 percent property tax rate ($0.0035 per $100 of assessed value) since FY 2013/14, which is its lowest property tax rate ever levied. Voters approved Metropolitan's collection of property taxes to pay for its State Water Contract (SWC) obligations in 1966. However, the Legislature added Section 124.5 to the MWD Act requiring the MWD Board since FY 1990/91 to make a finding that it is essential to the district's fiscal integrity to collect more than Metropolitan's debt service for GO bonds and Metropolitan's portion of debt service related to outstanding Burns-Porter bonds, before it could levy property taxes that would result in revenues in excess of

[24] A legal question must be answered concerning Section 124.5's applicability to $167 million of remaining voter authorization of Burns-Porter bonds but unissued post FY 1990-91.

[25] Of the original $1,582,400,000 of total Burns-Porter GO bonds issued, $155,000 remains, with a final maturity of 11/1/2024. Source: DWR Official Statement, Series BF, dated September 13, 2022. Metropolitan has $19.2 million of GO Bonds outstanding with a final maturity of March 1, 2037.

these two obligations.[26] Since FY2013/14, the board has made that determination. The amount of SWC obligation paid by the 0.0035 percent tax rate, however, provides for only approximately 30 percent of Metropolitan's SWC expenditures per the FY 2023/24 adopted budget. Importantly, the Legislature did not provide guidance on the definition of fiscal integrity nor the frequency with which Metropolitan's Board should make any determination.

Prior to FY2013/14, under the Section 124.5 restriction, the property tax rate decreased in line with debt service for Metropolitan's GO bonds and Burns-Porter bonds. The property tax rate would continue to decrease as Metropolitan's GO bonds and Burns-Porter bonds are ultimately paid off[27]; provided the board did not determine that property taxes were necessary for the district's fiscal integrity.

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 refurbishment 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 31 shows the portion of SWC costs paid with property tax revenues, assuming Metropolitan maintains the 0.0035 percent tax rate.

Metropolitan could explore the option of funding more of its SWC costs with property taxes as intended and approved by the voters. It would also be beneficial to Metropolitan's long-range financial planning if the applicability of the Section 124.5 limits were known for the ten-year planning term. Metropolitan's Board has made the necessary findings required to collect more property tax revenue than the limit under Section 124.5 every two years, and more recently authorized collection of property taxes in excess of the limitation for up to four years recently. With a long-range finance plan covering ten years, Metropolitan's Board should explore the option of making a Section 124.5 determination consistent with that planning term as well.

Figure 32: State Water Contract Costs

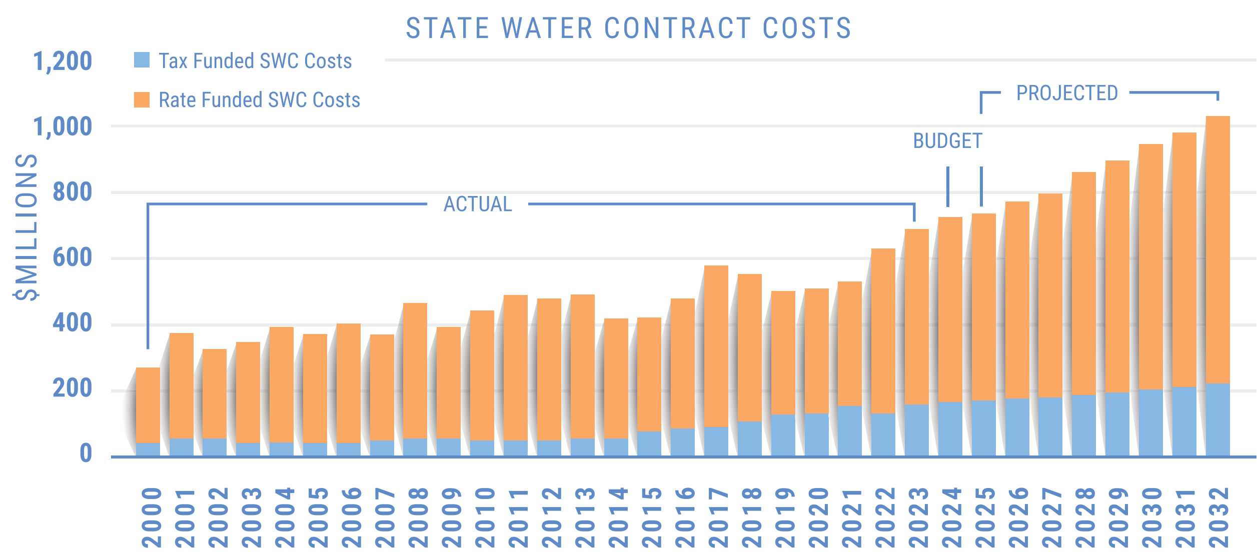


Photo: Metropolitan-owned Bouldin Island

Putting It All Together: Other Considerations & Next Steps.

The LRFP-NA has provided the board with key observations to help advance the important conversations occurring in its other concurrent planning processes. Several key observations come from the modeling analysis, which helps answer some important questions about the rate impact of various scenarios. Other key observations come from the capital financing discussion which focuses on funding and financing considerations to implement the required capital investments.

Topline Observations About Rate Impacts & Reliability from the Financial Analysis

Although financial modeling cannot predict the future, the analysis performed herein provides valuable insight into the relationship between rate impacts and water supply reliability. The key observations are summarized below.

- Rate increases and water supply reliability are positively correlated, rising and falling together, except in the case of IRP scenario A as it does not require additional resource development to achieve 100 percent reliability.

- In two of the four IRP scenarios, A and D, we anticipate average annual overall rate increases to exceed the forecasted rate increases in the 10-Year Financial Forecast reflected in the Adopted Budget. IRP A scenario, however, would not increase Metropolitan's revenue requirement, but because of lower projected demands, it would increase volumetric water rates. As reasonably expected, IRP D scenario, the scenario with the highest likelihood and largest magnitude of shortage, presents the most significant impact on rates.

- Meeting IRP D scenario demands with a mix of core supply and new storage capacity is estimated to require average annual rate increases of approximately 7.1 percent. However, there are risks with this approach. If demands were to come in lower than projected, average annual overall rate increases would increase to approximately 10.9 percent. On the other hand, underdevelopment of water resources will risk water supply shortages, up to 300 TAF in 2032 approximately 10 percent to 23 percent of the time.

- In place of new resource development, Metropolitan may look to conservation as a means of achieving 100 percent reliability. Although further study is recommended to understand the availability of conservation, price elasticity, and average annual overall rate impacts, a preliminary estimate places annual conservation costs at greater than $1 billion per year through 2032 in IRP D scenario. Metropolitan's ability to fund this level of conservation through the rate base alone is questionable, given financing limitations and/or potential rate burdens. Exploration of external funding support through federal and/or state grants may provide a potential mitigating offset to those anticipated constraints associated with funding conservation directly from operating revenues. Moreover, investing in conservation also locks in lower water demands that will increase water rates, all other things considered equal.

- In contrast to capital projects, which are typically completed once initial construction has begun, conservation spending can be curtailed at any time. If Metropolitan observes a natural reduction in demands, it could slow or stop spending on conservation spending, allowing for adaptive management of resources to meet actual demands. The benefits of conservation are paid for upfront but take effect immediately and continue for many years in the future. In comparison to core supply development, which has ongoing annual O&M and financing costs, the rate increases beyond the 10-year modeling period would likely be lower under a scenario where demands are met with conservation only.

- It is estimated that Metropolitan will need to invest $5.5 billion to $6.0 billion under IRP scenario D by 2032 to be 100 percent reliable. However, Metropolitan would be challenged to accomplish this level of investment in such a short time frame. The realities of construction timelines coupled with financing constraints will be impediments to swift, large-scale development of new supply resources.

As a final note, the findings of the financial analysis are dependent on the assumed unit costs for each resource. Although Metropolitan exercised care in selecting appropriate references on which to base the unit costs, it is anticipated that when phase two of the LRFP proceeds, there will be differences between actual project-specific unit costs and those modeled here in phase one.

Key Observations from Capital Financing Overview

Metropolitan has maintained a highly-rated and notably successful bond program over its history. To achieve this, Metropolitan has:

- Adopted prudent debt policies and comprehensive financial best practices
- Issued a variety of debt instruments to lower its cost of capital
- Balanced key financial metrics consistently in each biennial budget
- Managed its relationship with the rating agencies and investors proactively

Debt Capacity Analysis. Based on our 10-Year Financial Forecast, and as confirmed by our debt capacity analysis, Metropolitan has a range of revenue bond debt capacity between $3.6 billion and $5.1 billion.. This range is based on the assumption that Metropolitan's debt service coverage target would not fall below 1.50x. With an estimate of $5.5 billion to $6.0 billion in capital need under IRP scenario D, financing alone is insufficient to fund the needed capital. However, with an assumption of 40 percent PAYGO, this results in a debt financing need of $3.3 to $3.6 billion. Based on staff's preliminary analysis of debt capacity, there is barely sufficient revenue bond debt capacity to accommodate this new projected capital financing need (in accordance with the delineated assumptions). Still, the funding of costs associated with refurbishment and replacement of Metropolitan's existing facilities need to be considered. In addition, there is the potential for projected capital cost estimates to push the upper limits of Metropolitan's debt capacity, not to mention the exposure risk to member agency demands (i.e., water sales) not occurring as projected. This would negatively impact net operating revenues and potentially debt service coverage. Although Metropolitan may be able to finance these capital needs by maximizing its revenue bond capacity, this may not be the only or most advisable approach.

Bond Financing Considerations. Metropolitan has broad authority to issue debt for the purposes of funding the governmental purposes authorized for special purpose districts under state statute. While there are some statutory constraints on the issuance of revenue bonds, Metropolitan can otherwise employ a broad array of financing tools and structures. The key considerations for using debt for future CIP projects include:

- Projected revenue stream (either existing or new) to support future debt
- On-balance sheet or off-balance sheet capital placement
- Use of existing or new credit liens for specific project(s)

External Funding and/or Other Financing Options. Historically, Metropolitan has developed its capital infrastructure predominantly through its own revenues and financing tools. Given the significant investment required to address the impacts of climate change on top of the existing requirements to maintain Metropolitan's core system infrastructure, it is critical for Metropolitan to explore opportunities for funding from federal and state grant and loan programs:

- Metropolitan has identified up to $6 billion in grant funding opportunities through the federal Bipartisan Infrastructure Law (BIL) and Infrastructure and Investment Jobs Act (IIJA). The opportunities can support a wide array of projects and programs that include water storage, aging infrastructure, water recycling, Colorado River drought contingency planning and WaterSMART grants.

- At the state level, Metropolitan already has received $130 million in discretionary budget funding for planning related to PWSC ($80 million) and various drought mitigation projects in the CIP ($50 million). Given the large swings the CA state budget experiences, it is difficult for Metropolitan to depend on significant multi-year commitments. That said, Governor Newsom has prioritized programs related to climate change, as well as initiatives that could provide cost-offsetting benefits to water supply and resource projects, including $5.2 billion for emergency drought projects, long-term water resilience, sustainable groundwater management, and other climate associated projects.

- Our new grants team in Metropolitan's Sustainability, Resiliency and Innovation Office will provide a coordinated approach to analyzing, helping secure and complying with grant funding requirements.

- Federal WIFIA loans through the U.S. EPA provide another external funding source that utilizes the opportunity to finance capital infrastructure up to 49% of the Eligible Project Costs. While WIFIA loans have mostly been used for specific projects, there are opportunities for funding qualifying expenditures for a combination of eligible projects through a Master Loan Agreement with EPA.

- Based on the maximum estimate of capital infrastructure needs in Scenario D ($6.0 billion), a WIFIA loan, if awarded, could provide up to $3 billion in loan authorization, depending upon the project(s) submitted.

- Lastly, there is an opportunity to pursue new federal legislation to restore Tax Credit Bonds. This financing tool, if tailored for water infrastructure with a climate adaptation focus and provide a full subsidy in the form of a tax-credit to private investors, could save Metropolitan billions in financing costs for some of the large infrastructure projects it is considering.

Metropolitan Board Direction

Based on the results of the Phase 1 analysis, Metropolitan staff seeks board feedback on three important questions critical to the undertaking of Phase 2 LRFP:

1. **What is an acceptable average rate increases on full-service water sales through 2032 to fund water portfolio projects and/or conservation to address expected impacts of climate change analyzed within the 2020 IRP-NA?**

2. **What is the desired estimated allocation between core supplies (including conservation), flex supplies, and storage in the optimal portfolio developed within the acceptable average rate increases identified by the board?**

3. **What alternative financing approaches interest the board either singularly or in combination to address funding of future capital investments?**

Photo: F.E. Weymouth Water Treatment Plant, La Verne, California

Appendix.

Contents

Appendix A.

Current Debt Portfolio Overview

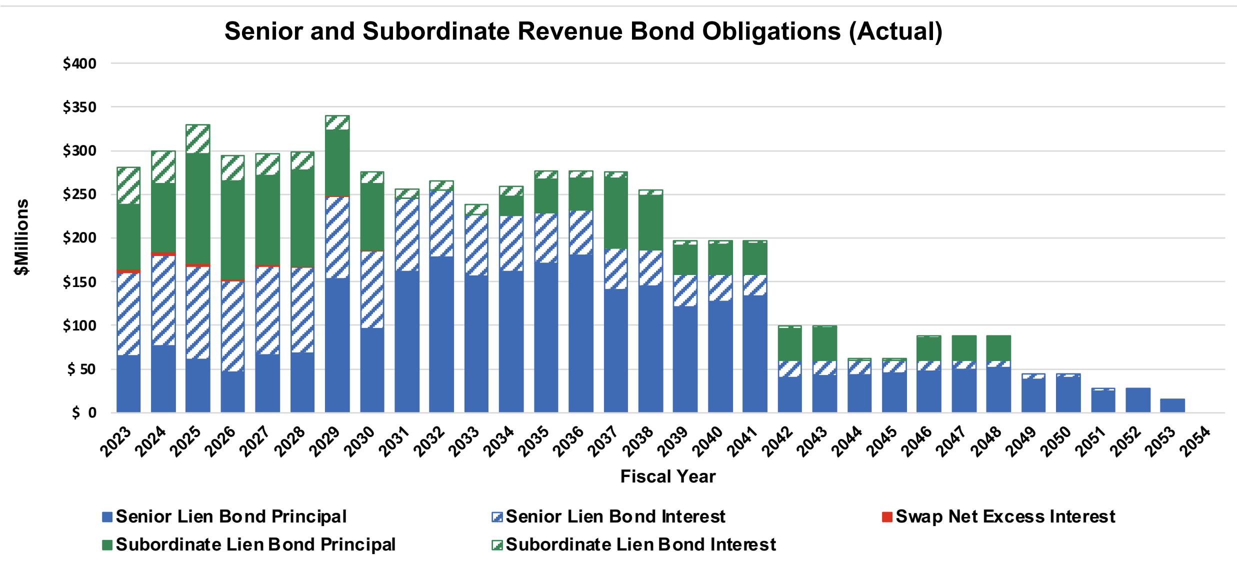
Appendix A. Current Debt Portfolio & Projected Debt Portfolio Costs

Outstanding Long-Term Debt as of 6/30/2023			
Series	Amount Issued	Amount Outstanding	Maturity
Senior Lien Revenue Bonds:			
Water Revenue Refunding Bonds, 2011 Series C	$157,100,000	$29,315,000	10/1/2036
Water Revenue Refunding Bonds, 2014 Series E	$86,060,000	$33,910,000	7/1/2024
Water Revenue Bonds, 2015 Authorization, Series A	$208,255,000	$54,880,000	7/1/2045
Water Revenue Refunding Bonds, 2016 Series A	$239,455,000	$112,415,000	7/1/2037
Variable Rate Water Revenue Refunding Bonds, 2016 Series B–2	$51,835,000	$25,325,000	7/1/2037
Water Revenue Bonds, 2017 Authorization, Series A	$80,000,000	$24,275,000	7/1/2047
Water Revenue Refunding Bonds, 2018 Series B	$137,485,000	$119,690,000	1/1/2039
Water Revenue Refunding Bonds, 2019 Series A	$218,090,000	$218,090,000	7/1/2039
Water Revenue Bonds, 2020 Series A	$207,355,000	$207,355,000	10/1/2049
Variable Rate Water Revenue Refunding Bonds, 2020 Series B	$271,815,000	$271,815,000	7/1/2035
Water Revenue Refunding Bonds, 2020 Series C	$267,995,000	$263,230,000	7/1/2040
Water Revenue Bonds, 2021 Series A	$188,890,000	$188,890,000	10/1/2051
Water Revenue Refunding Bonds, 2021 Series B	$98,410,000	$87,810,000	10/1/2036
Water Revenue Refunding Bonds, 2022 Series A	$279,570,000	$279,570,000	10/1/2036
Water Revenue Refunding Bonds, 2022 Series B	$253,365,000	$253,365,000	7/1/2040
Variable Rate Water Revenue Refunding Bonds, 2022 Series C–1	$147,650,000	$147,650,000	7/1/2037
Variable Rate Water Revenue Refunding Bonds, 2022 Series C–2	$134,625,000	$134,625,000	7/1/2046
Water Revenue & Refunding Bonds, 2023 Series A	$258,410,000	$258,410,000	4/1/2053
Subordinate Lien Revenue Bonds:			
Water Revenue Refunding Bonds, 2017 Series A	$238,015,000	$204,760,000	7/1/2027
Water Revenue Refunding Bonds, 2017 Series B	$178,220,000	$35,640,000	8/1/2024
Water Revenue Bonds, 2017 Series C	$80,000,000	$80,000,000	7/1/2047
Water Revenue Refunding Bonds, 2017 Series D	$95,630,000	$95,630,000	7/1/2037
Water Revenue Refunding Bonds, 2017 Series E	$95,625,000	$95,625,000	7/1/2037
Water Revenue Refunding Bonds, 2018 Series A	$99,075,000	$10,865,000	7/1/2023
Water Revenue Bonds, 2018 Series B	$64,345,000	$64,345,000	9/1/2028
Water Revenue Bonds, 2019 Series A	$241,530,000	$209,060,000	7/1/2029
Water Revenue Bonds, 2020 Series A	$152,455,000	$152,455,000	7/1/2029
Water Revenue Refunding Bonds, 2021 Series A	$222,160,000	$222,160,000	7/1/2042
Total Revenue Bonds	**$4,753,420,000**	**$3,881,160,000**	
General Obligation Bonds:			
Waterworks Refunding Bonds, 2019 Series A	$16,755,000	$5,550,000	3/1/2028
Waterworks Refunding Bonds, 2020 Series A	$13,665,000	$13,665,000	3/1/2037
Total Long-Term Debt Obligations	**$4,783,840,000**	**$3,900,375,000**	

Outstanding Swap Obligations as of 6/30/2023			
Fixed Payor Swaps:	Original Notional	Notional Outstanding	Termination Date
2002A / Morgan Stanley	$96,235,500	$34,553,750	7/1/2025
2002B / JPMorgan Chase Bank	$32,880,600	$12,926,250	7/1/2025
2003 / Wells Fargo Bank	$158,597,500	$131,912,500	7/1/2030
2003 / JPMorgan Chase Bank	$162,585,000	$131,912,500	7/1/2030
2004C–1 / Morgan Stanley Capital Services, Inc.	$74,849,500	$4,672,250	10/1/2029
2004C–2 / Citigroup Financial Products, Inc.	$61,240,500	$3,822,750	10/1/2029
2005 / JPMorgan Chase Bank	$58,547,500	$26,445,000	7/1/2030
2005 / Citigroup Financial Products, Inc.	$58,547,500	$26,445,000	7/1/2030
Total Fixed Payor Swaps	**$703,483,600**	**$372,690,000**	

Appendix B.

Projected Debt Portfolio Payments by Lien


Senior and Subordinate Revenue Bond Obligations (Actual)
$Millions
$400
$350
$300
$250
$200
$150
$100
$ 50
$ 0
2023 2024 2025 2026 2027 2028 2029 2030 2031 2032 2033 2034 2035 2036 2037 2038 2039 2040 2041 2042 2043 2044 2045 2046 2047 2048 2049 2050 2051 2052 2053 2054
Fiscal Year
Senior Lien Bond Principal
Senior Lien Bond Interest
Swap Net Excess Interest
Subordinate Lien Bond Principal
Subordinate Lien Bond Interest

Appendix C.

Metropolitan Draft Debt Management Policy

DRAFT REV.08112023

Introduction

The Metropolitan Water District of Southern California ("Metropolitan", "MWD" or "District") finances the on-going requirements of its capital program, in part, through the issuance of debt. Metropolitan's debt policies were established to provide the framework and guidance for incurring, managing, structuring, and administering Metropolitan's debt management program. The debt policies are consistent with the requirements of the Metropolitan Act ("MWD Act") and have been adopted in the form of the Metropolitan Administrative Code, Master Revenue Bond Resolution, Master Subordinate Revenue Bond Resolution, Supplemental Revenue Bond Resolutions, the Short-Term Certificate and Commercial Paper Resolutions, and related Board adopted policies. The Board (or the Ad Hoc Committee or Chief Financial Officer ("CFO") on behalf of the Board, if so authorized) may waive elements of these policies in connection with individual financings as they deem necessary or advisable.

Purpose of Policy

The purpose of this debt management policy is to:

- To establish parameters for issuing debt;
- Provide guidance to decision makers with respect to options available to finance infrastructure, projects, and other needs;
- Promote objectivity in the decision-making process; and
- Comply with State laws governing the issuance of bonds.

Metropolitan will adhere to the following legal requirements for the issuance of public debt:

- The state law which authorizes the issuance of the debt
- The federal and State laws which govern the eligibility of the debt for tax-exempt status
- The federal and State laws which govern the issuance of taxable debt
- The federal disclosure laws of the debt both before and after issuance
- Generally Accepted Accounting Principles ("GAAP")

Purpose for Which Debt May Be Issued

Metropolitan's Capital Investment Plan (the "Capital Investment Plan" or "CIP") involves expansion and rehabilitation of existing facilities and construction of new facilities to meet future water demands, ensure system reliability as well as enhance operational efficiency and flexibility, and comply with water quality regulations. Metropolitan's CIP is regularly reviewed and updated.

Metropolitan's Capital Investment Plan requires funding from debt financing as well as from pay-as-you-go funding. The Board has adopted an internal target to fund 40 percent of capital program expenditures required for replacements and refurbishments of Metropolitan facilities from current revenues; however, the actual percentage is subject to change based on Board direction and approval during each budget cycle. The remainder of capital program expenditures will be funded through the issuance from time to time of water revenue bonds or notes, general obligation bonds and/or certificates of participation. However, pay-as-you-go funding may be reduced or increased by the Board during the fiscal year. Moreover, Metropolitan currently does not have authorization to issue additional general obligation bonds to fund the capital program. Without additional authorization, requiring an election with approval by at least 2/3 of the qualified electors, general obligation bonds can only be issued to refund existing general obligation bonds.

The proceeds of any debt obligation shall be expended only for the purpose for which it was authorized by the Board and in compliance with allowable legal uses. Debt may only be issued under Board authorization and when Metropolitan has identified sufficient funds to pay the obligation of principal and interest. No debt shall be issued with a maturity date greater than the expected useful life of the facilities or improvements being financed. Generally, the final maturity of a bond or State Revolving Fund (SRF) loan debt shall be limited to 30 years after the date of issuance, while the final term of a Water Infrastructure Finance and Innovation Act ("WIFIA") loan may be up to 35 years. For certain long-life assets, specific longer duration obligations such as Century Bonds may be analyzed for their applicability and fit within Metropolitan's long-term capital financing strategy and objectives.

For more information regarding debt issuance and capital funding, see Metropolitan's most recently adopted biennial budget.

Within the funding of the CIP, there are several types of and purposes for which debt can be issued.

A. Long-term Borrowing. Long-term borrowing may be used to finance the acquisition or improvement of land, facilities, or equipment for which it is appropriate to spread these costs over more than one budget year. Long-term borrowing may also be used to fund capitalized interest, costs of issuance, required reserves, and any other financing-related costs which may be legally capitalized.

For more information on the purposes for which Metropolitan's long-term debt may be issued, please refer to Resolution 8329 adopted on July 9, 1991, as amended and supplemented (the "Master Resolution") and Resolution 9199 adopted on March 8, 2016, as amended and supplemented (the "Master Subordinate Resolution" and, together with the Master Resolution, the "Master Resolutions").

B. Short-term Borrowing. Short-term borrowing, such as notes, commercial paper and lines of credit, may be issued as an interim source of funding in anticipation of long-term borrowing, or for any purpose for which long-term debt may be issued, including refunding outstanding debt, capitalized interest and other financing-related costs. Additionally, short-term borrowing may be considered if available cash is insufficient to meet short-term operating needs. For more information on the purposes for which Metropolitan's short-term debt may be issued, please refer to Resolution 8322 adopted on April 8, 1991, as amended and supplemented (the "Master Commercial Paper Resolution") and Resolution 9201 adopted on March 8, 2016 (the "Short-Term Certificate Resolution").

C. Refunding. A refunding is a transaction in which Metropolitan issues new obligations to refinance or restructure outstanding obligations. Periodic reviews of outstanding debt will be undertaken to identify refunding opportunities. Refundings will be considered if and when there is a benefit of the refunding. Refundings which are non-economic may be undertaken to achieve District objectives relating to changes in covenants, call provisions, operational flexibility, tax status, issuer, the debt service profile or for other benefits to Metropolitan. For more information on the purposes for which Metropolitan's debt may be refunded, please refer to Resolution 8387 adopted on January 12, 1993, (the "Fourth Supplement to the Master Resolution") and Resolution 9104 adopted on December 8, 2009 (the "Nineteenth Supplement to the Master Resolution"), and Resolution 9200 adopted March 8, 2016 (the "First Supplement to the Master Subordinate Resolution").

Debt Management

Metropolitan will provide for a periodic review of its financial performance and review its performance relative to the financial policies outlined herein. These financial policies will be taken into account during the capital planning, budgeting, and rate setting process. Necessary appropriations for annual debt service requirements will be routinely included in Metropolitan's budget. Metropolitan will maintain proactive communication with the investment community, including rating agencies, credit enhancers and investors, to ensure future capital market access at the lowest possible interest rates.

Metropolitan's Debt Management Policy, Reserve Policy, Swap Policy and Investment Policy are integrated into the decision-making framework utilized in the budgeting and capital improvement planning process. As such, the following principles outline Metropolitan's approach to debt management:

- Metropolitan will issue debt only in the case where there is an identified source of repayment. Debt will be issued to the extent that (i) projected existing revenues are sufficient to pay for the proposed debt service together with existing debt service covered by such existing revenues, or (ii) additional revenues have been identified as a source of repayment in an amount sufficient to pay for the proposed debt.

- Metropolitan will not issue debt to cover operating needs, unless specifically approved by the Board.

- Borrowings by Metropolitan will be of a duration that does not exceed the useful life of the improvement that it finances. The standard term of long-term borrowing is typically 20-35 years.

- Metropolitan currently issues debt instruments on a fixed and variable interest rate basis. Fixed rate debt ensures budget certainty through the life of the obligation. When appropriate, Metropolitan may choose to incur debt that pays a rate of interest that varies according to a predetermined index or results from a periodic remarketing of the securities.

The proceeds of the bond sales will be invested until used for the intended project(s) in order to maximize utilization of the public funds. The investments will be made to obtain the highest level of safety. Metropolitan's Investment Policy and the Master Resolution and supplements thereto govern objectives and criteria for investment of bond proceeds. The CFO will oversee the investment of bond proceeds in a manner to avoid, if possible, and minimize any potential negative arbitrage, while complying with arbitrage and tax provisions.

Bond proceeds will be deposited and recorded in separate accounts. Metropolitan's Treasurer will act as Fiscal Agent and administer the disbursement of bond proceeds pursuant to the Master Resolution and supplements thereto. Disbursement of bonds funds will be approved by Metropolitan's CFO.

The CFO, MWD staff and MWD's municipal advisor will monitor opportunities for the prepayment or refunding of related debt. The financial advantages of a refunding must outweigh the cost of issuing new debt, except in situations where the obligations need to be refinanced to remove specific legal provisions, terms or covenants or to meet other objectives of the District. A potential refunding can be assessed in combination with any new capital projects requiring financing, and the benefits of the refunding will be evaluated in relation to its costs and risks.

Debt will primarily be refunded to achieve one or more of the following objectives:

- Reduce future debt service costs;

- Restructure the legal requirements, terms, and/or covenants of the original issue; and/or

- Achieve other debt-related objectives of benefit to Metropolitan.

Debt Management Policy Goals

In general, Metropolitan's debt management policy is to:

- Maintain an annual revenue bond debt service coverage ratio of at least 2.0 times coverage;
- Maintain an annual fixed charge coverage ratio of at least 1.2 times coverage;
- Fund replacements and refurbishments, capital projects costing less than $1 million, or capital projects with useful lives less than the typical bond terms, and reimbursable capital projects from annual revenues;
- Limit debt-funded capital to no more than 60 percent of the total capital program over the ten-year planning period; and
- Limit variable rate debt to 40 percent of outstanding revenue bond debt (excluding variable rate bonds associated with interest rate swap agreements).

The 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. The second limitation under the Act specifies that no revenue bonds may be issued, except for the purpose of refunding, unless the amount of equity 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.

For more information regarding Metropolitan's debt management policy goals, see Administrative Code section 5109 and Metropolitan's most recently adopted biennial budget.

Types of Debt

Part 5 of the Metropolitan Water District Act, California Statutes 1969, Chapter 209, as amended and sPart 5 of the Metropolitan Water District Act, California Statutes 1969, Chapter 209, as amended and supplemented, including by the Revenue Bond Law of 1941 (Chapter 6 (commencing with Section 54300) of Part 1, Division 2, Title 5 of the Government Code) (the "Act"), authorizes Metropolitan's Board to issue general obligation bonds, revenue bonds, substitute bonds, electric revenue bonds, bonds for repair or replacement of damaged or demolished works of the District, bonds supported by annexation charges, bond anticipation notes, refunding bonds and short-term revenue certificates. Bonds or other forms of indebtedness issued pursuant to Part 5 of the MWD Act may bear interest at a fixed or variable rate and be issued in the form of notes, bonds, or other evidences of indebtedness.

In accordance with the terms and conditions of the Metropolitan's Master Resolution and supplements thereto, Metropolitan is authorized to issue from time to time a variety of tax-exempt and taxable debt instruments, including but not limited to the following:

- Water Revenue Bonds
- General Obligation Bonds
- Certificates of Participation
- Refunding Bonds
- Commercial Paper

- Short-Term Credit Facilities
- Medium-Term Fixed and Floating Rate Notes
- Notes and Anticipation Notes
- Tax-Credit Bonds
- Federal Loans (e.g., Water Infrastructure Finance and Innovation Act ("WIFIA"))
- State Loans
- Other types of bonded indebtedness as authorized by the Metropolitan Act and the Metropolitan Board of Directors

In addition to the aforementioned long- and short-term financing instruments, Metropolitan may also consider joint arrangements with other governmental agencies. Communication and coordination will be made with local governments regarding cost sharing in potential joint projects, including leveraging grants and funding sources.

Metropolitan is authorized to join with other special districts and/or municipal agencies to create a separate entity, such as a Joint Powers Authority (JPA), to issue debt on behalf of Metropolitan, the special district or municipality. Metropolitan will only be liable for its share of debt service, as specified in a contract executed in connection with the joint venture debt.

Credit Enhancement

Credit enhancement may be used to improve or establish a credit rating on a Metropolitan debt obligation. Types of credit enhancement include, but are not limited to, Letters of Credit, bond insurance or surety policies. The CFO will recommend to the Board the use of credit enhancement if it reduces the overall cost of the proposed financing or if, in the opinion of the CFO, the use of such credit enhancement furthers Metropolitan's overall financial objectives.

Debt Service Reserve Fund/Surety Policy

The CFO, with counsel from Metropolitan's municipal advisor, bond counsel, and underwriter, will determine whether it is prudent and cost-effective to fund a debt service reserve fund. Metropolitan may issue debt without a funded debt service reserve fund if market pricing will not be negatively impacted.

Capitalized Interest

Generally, interest may be capitalized for the construction period of a revenue-producing project, such that debt service expense does not begin until the project is expected to be operational and producing revenues. Only under extraordinary circumstances, interest may be capitalized for a period longer than the construction period, if compliant with tax law.

Credit Ratings

Metropolitan will seek to maintain the highest possible credit ratings that can be achieved for debt instruments without compromising Metropolitan's policy objectives. Ratings are one reflection of the general fiscal soundness of Metropolitan and the capabilities of its management. By maintaining the highest possible credit ratings, Metropolitan can issue its debt at a lower interest cost. To enhance creditworthiness, Metropolitan is committed to prudent financial management, systematic capital planning, and long-term financial planning.

The CFO in consultation with Metropolitan's municipal advisor, shall be responsible for determining whether a rating shall be requested on a particular financing, and which of the major rating agencies shall be asked to provide such a rating.

Metropolitan recognizes that external economic, natural, or other events may from time to time affect the creditworthiness of its debt. Each proposal for additional debt will be analyzed for its impact upon Metropolitan's credit ratings.

Rating Agency Relationships

The CFO shall be responsible for maintaining relationships with the rating agencies; S&P Global Ratings, Moody's Investors Service, Fitch Ratings and other nationally recognized statistical rating organizations (NRSROs), as appropriate. This effort shall include providing periodic updates, both formal and informal, on Metropolitan's general financial condition and coordinating meetings and presentations in conjunction with a new debt issuance, as appropriate.

The retention of a rating agency relationship will be based on a determination of the potential for more favorable interest costs as compared to the direct and indirect cost of maintaining that relationship.

Method of Sale

Metropolitan will select the method of sale that best fits the type of bonds being sold, market conditions, and the desire to structure bond maturities to enhance the overall performance of the entire debt portfolio. Three general methods exist for the sale of municipal bonds:

1. Competitive sale. Bonds will be marketed to a wide audience of investment banking (underwriting) firms. Metropolitan will award the sale of the competitively sold bonds to the underwriter who places the compliant bid with the lowest true interest cost (TIC). Pursuant to this policy, the CFO is hereby authorized to sign the bid form on behalf of Metropolitan fixing the interest rates on bonds sold on a competitive basis.

2. Negotiated sale. The CFO selects the underwriter, or team of underwriters, of its securities in advance of the bond sale. The primary role of the underwriter is leading the investor marketing process ahead of sale and taking orders from investors at pricing. Metropolitan and its municipal advisor will work with the underwriter to bring the issue to market and negotiate all rates and terms of the sale. In advance of the sale, the CFO will determine compensation for and liability of each underwriter employed and the designation rules and priority of orders under which the sale will be conducted. Pursuant to this policy, the CFO is hereby authorized to sign the bond purchase agreement on behalf of Metropolitan.

3. Private placement/ direct purchase. Metropolitan may elect to issue debt on a private placement / direct purchase basis. Such method shall be considered if it is demonstrated to result in cost savings or provide other advantages relative to other methods of debt issuance, or of it is determined that access to the public market is unavailable and timing considerations require that a financing be completed.

In addition to accessing capital through the public markets and private placements, Metropolitan can also fund its capital needs through State and federal loan programs, mainly the State SRF loan program and the federal WIFIA loan program.

Swap Policy

It is the policy of Metropolitan to utilize swap instruments to better manage its assets and liabilities. Metropolitan may execute a Swap transaction if Metropolitan expects the Swap Transaction to result in any of the following:

- Reduce exposure to changes in interest rates on a particular financial transaction or in the context of the management of interest rate risk derived from Metropolitan's overall assets and liabilities;
- Result in a lower net cost of borrowing with respect to Metropolitan's debt or achieve a higher net rate of return on investments made in connection with, or incidental to the issuance, incurring, or carrying of Metropolitan's obligations or other Metropolitan investments; or
- Manage variable interest rate exposure consistent with prudent debt practices and guidelines approved by the Board.

Metropolitan shall not enter into any Swap Transaction for speculative purposes.

For more information regarding Metropolitan's Swap Policy, please refer to Resolution 8773 adopted September 11, 2001, as amended (the "Master Swap Resolution") and to Metropolitan's Master Swap Policy, as amended and restated.

Roles & Responsibilities

The primary responsibility for developing debt financing recommendations rests with the CFO. In developing such recommendations, the CFO shall consider the need for debt financing and assess progress on the current capital improvement program or plan (CIP) and any other program/improvement deemed necessary by Metropolitan. The Board authorizes and approves debt financing and/or debt service related recommendations and proposals.

All proposed debt financings shall be presented to and approved by the Board. Debt financings are typically issued directly by Metropolitan, but from time to time, debt may be issued through a Joint Powers Authority if applicable. Any debt issued through a Joint Powers Authority will be presented to and approved by the Board.

Debt is to be issued pursuant to the authority of and in full compliance with provisions, restrictions and limitations of the Constitution and laws of the State of California Government Code (CGC) §54300 et seq.

Bond Counsel. Metropolitan will retain external bond counsel for all debt issues. The CFO and General Counsel shall make recommendations on the retention of bond counsel.

Bond counsel will prepare the necessary authorizing resolutions, agreements and other documents necessary to execute the financing. All debt issued by Metropolitan will include a written opinion by bond counsel affirming that Metropolitan is authorized to issue the debt, stating that Metropolitan has met all state constitutional and statutory requirements necessary for issuance, and determining the debt's federal income tax status.

Disclosure Counsel. Metropolitan will retain external disclosure counsel for debt issues requiring public disclosure. The CFO and General Counsel shall make recommendations on the retention of disclosure counsel.

Disclosure Counsel will prepare the necessary disclosure documents such as the preliminary official statement and official statement and assist Metropolitan in applicable disclosure related matters.

Municipal Advisor. Metropolitan will select a municipal advisor who is an independent municipal advisor. While serving as Metropolitan's municipal advisor, a firm may not also engage in the underwriting of Metropolitan bond issues. A firm may also not switch roles (i.e., from municipal advisor to underwriter) after a financial transaction has begun. Municipal advisors shall be selected through a competitive process after a review of proposals by the CFO and/or other staff.

The municipal advisor will advise Metropolitan on refunding opportunities for current outstanding debt, as well as assist in evaluating the merits of competitive, negotiated or private placement of new debt, and determining the most appropriate structure to ensure effective pricing that meets Metropolitan's near-term and long-term cash flow needs. The municipal advisor will work with all parties, as required, in a financing transaction, including Metropolitan's bond counsel, trustee, underwriters, and credit liquidity providers, to develop and monitor the financing schedule and preparation of the Official Statement.

Underwriters. For negotiated sales, Metropolitan will generally select or pre-qualify underwriters through a competitive process. This process may include a request for proposal or qualifications to all firms considered appropriate for the underwriting of a particular issue or type of bonds. The CFO will determine the appropriate method to evaluate the underwriter submittals and then select or qualify firms on that basis. Metropolitan will not be bound by the terms and conditions of any underwriting agreement; oral or written, to which it was not a party.

Other Third-Party Service Providers. Depending on the nature of the transaction, Metropolitan may wish or need to engage other third-party service providers such as trustee and/or paying agent, verification agent, printing, remarketing and credit liquidity service provider, among others. Metropolitan and its municipal advisor will determine when and if these third parties are necessary and manage the engagement process accordingly.

Federal Arbitrage & Rebate Compliance

Metropolitan will fully comply with federal arbitrage and rebate regulations. Concurrent with this policy, the CFO will take all permitted steps to minimize any rebate liability through proactive management in the structuring and oversight of its individual debt issues. All of Metropolitan's tax-exempt issues, including lease purchase agreements, are subject to arbitrage compliance regulations.

Division 5, Chapter 2 of the Administrative Code establishes funds and parameters to provide for accountability of public moneys in accordance with applicable federal and state law and regulations and Board policies. Additionally, the Controller's Section of the Office of the CFO implements Metropolitan's Internal Control Process 3.2, "Acquisition, Tracking and Disposition of Plant Assets." A copy of this process is on file with the Controller.

The Office of the CFO shall be responsible for the following:

1. Monitoring the expenditure of bond proceeds to ensure they are used only for the purpose and authority for which the bonds were issued.

2. Administering Metropolitan's Procedures and Guidelines Regarding Compliance With Federal Tax Requirements Applicable to Tax-Exempt Bonds and Other Tax-Favored Obligations (the "Procedures and Guidelines") including (a) the interest on which is excluded from gross income for federal income tax purposes or (b) that are eligible for a federal subsidy in the form of a tax credit to bondholders or payments to Metropolitan.

3. Monitoring the investment of bond proceeds with awareness of rules pertaining to yield restrictions. Maintaining detailed investment records, including purchase prices, sale prices and comparable market prices for all securities.

4. Contracting the services of outside arbitrage consultants to establish and maintain a system of record

keeping and reporting to meet the arbitrage rebate compliance requirements of federal tax code.

To the extent any arbitrage rebate liability exists, Metropolitan will report such liability in its Annual Comprehensive Financial Report (ACFR).

Continuing Disclosure

Metropolitan will comply with disclosure requirements in a timely and comprehensive manner, as stipulated by the Securities Exchange Commission (SEC) Rule 15c2-12. The CFO shall be responsible for providing ongoing disclosure information to the Municipal Securities Rulemaking Board's (MSRB's) Electronic Municipal Market Access (EMMA) system, the central depository designated for ongoing disclosures by municipal issuers. Metropolitan will provide financial information and operating data no later than 180 days following the end of Metropolitan's fiscal year each year, and will provide notice of certain enumerated events with respect to the bonds, if material, as defined in Metropolitan's bond covenants.

Metropolitan will also comply with annual State reporting requirements pertaining to its outstanding debt.

Metropolitan will keep current with any changes in both the administrative aspects of its filing requirements and the national repositories responsible for ensuring issuer compliance with the continuing disclosure regulations. In the event a 'material event' occurs requiring immediate disclosure, Metropolitan will ensure information flows to the appropriate disclosure notification parties.

Policy Review

On an as needed basis, the CFO will be responsible for updating and revising this Policy which shall be reviewed and adopted by the Board.

Appendix D.

Metropolitan Swap Policy

THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA AMENDED AND RESTATED MASTER SWAP POLICY

May 11, 2010

1. Authority

A Master Swap Resolution (“Master Swap Resolution”) of the Board of Directors of the Metropolitan Water District of Southern California (“Metropolitan”) authorizing the execution and delivery of interest rate swap transactions (“Swap Transactions”) and related agreements (“Swap Agreements”) was approved on September 11, 2001 and amended on July 14, 2009 and May 11, 2010. The Master Swap Resolution authorizes Metropolitan to enter into Swap Transactions from time to time to better manage assets and liabilities and to take advantage of market conditions to lower overall costs and reduce interest rate risk.

The Master Swap Resolution authorizes the execution of Swap Transactions and Swap Agreements, provides for security and payment provisions, and sets forth certain other provisions related to Swap Agreements between Metropolitan and qualified swap counterparties. In the event of a conflict between the terms of the Master Swap Resolution and the terms of this Master Swap Policy (the “Swap Policy”), the terms and conditions of the Master Swap Resolution shall control.

2. Purpose

The incurring or carrying of obligations and management of investments by Metropolitan involves a variety of interest rate payments and other risks that a variety of financial instruments are available to offset, hedge, or reduce. It is the policy of Metropolitan to utilize such financial instruments to better manage its assets and liabilities. Metropolitan may execute a Swap Transaction if Metropolitan expects the Swap Transaction to result in any of the following:

- Reduce exposure to changes in interest rates on a particular financial transaction or in the context of the management of interest rate risk derived from Metropolitan’s overall asset / liability balance;
- Result in a lower net cost of borrowing with respect to Metropolitan’s debt or achieve a higher net rate of return on investments made in connection with, or incidental to the issuance, incurring, or carrying of Metropolitan’s obligations or other Metropolitan investments; or
- Manage variable interest rate exposure consistent with prudent debt practices and guidelines approved by the Board.

Metropolitan shall not enter into any Swap Transaction for speculative purposes.

3. Form of Swap Agreements

Each Swap Transaction and Swap Agreement executed by Metropolitan shall contain terms and conditions as set forth in an ISDA Master Agreement (as such term is defined in the Master Swap Resolution). Subject to the Approval Requirements (as defined below in Section 4), the Swap Agreements between Metropolitan and each Qualified Swap Counterparty (as defined below) shall include payment, term, security, collateral, default, remedy, termination, and other terms, conditions and provisions as the Chief Financial Officer, in consultation with the General Counsel, deems necessary or desirable.

4. Swap Transaction Approval Requirements

The Chief Financial Officer, the Ad Hoc Committee (as such term is defined in the Master Swap Resolution) or the Board of Directors of Metropolitan shall approve each Swap Transaction in accordance with the approval requirements set forth in Article II, Section 2.01(a)(iii) of the Master Swap Resolution and in this Section 4. The approval requirements of any Swap Transaction will be based upon the notional amount and average life of the Swap Transaction. The following table sets forth the approval requirements for each Swap Transaction (the "Approval Requirements"):

Approval Requirements

Average Life of Swap Transaction	Notional Amount		
	Board Approval	**Ad Hoc Committee**	**CFO Approval**
5 years or less	greater than $300M	>$50M, up to $300M	$50M or less
>5 years <10 years	greater than $250M	>$50M, up to $250M	$50M or less
10 years or greater	greater than $200M	>$50M, up to $200M	$50M or less

If Metropolitan proposes to enter into any Swap Transaction, then Metropolitan shall satisfy the Approval Requirements with respect to such Swap Transaction based on the average life and notional amount of such Swap Transaction and all other Swap Transactions Metropolitan has entered into over the immediately preceding three-month period (without regard to any Replacement Swap Transactions (as defined below), Offsetting Swap Transactions (as defined below) and any amendments, assignments or novations of existing Swap Transactions for which the requirements for approval are specified in Section 10 hereof).

For example, if Metropolitan enters into a $50 million Swap Transaction for 15 years, approval for this Swap Transaction would be required from the Chief Financial Officer only. However, if within the same three-month period Metropolitan proposes to enter into a second 15-year Swap Transaction for $50 million, then approval for the second Swap Transaction (and only the second Swap Transaction) would be required by the Ad Hoc Committee.

Notwithstanding the foregoing, the Chief Financial Officer may execute and deliver any Swap Agreement (including an ISDA Master Agreement and a Schedule and Credit Support Annex thereto) so long as the terms and conditions of each Swap Transaction entered thereunder is approved and authorized in accordance with this Section 4.

5. Qualified Swap Counterparties

Metropolitan shall be authorized to enter into Swap Transactions only with Qualified Swap Counterparties. The term "Qualified Swap Counterparty" shall mean any commercial or investment bank or any other financial institution that (a) has a demonstrated record of successfully executing swap transactions, (b) is rated, or has its payment obligations under a Swap Agreement guaranteed by an entity which is rated, in each case at least “Aa3” or “AA-”, or equivalent by any two of the nationally recognized rating agencies (i.e., Moody’s, Standard and Poor’s, or Fitch

Metropolitan may enter into Swap Transactions with existing swap counterparties whose credit ratings have dropped below the required levels if the additional Swap Transaction is an Offsetting Swap Transaction (as such term is defined in Section 8 of this Swap Policy). For example, if Metropolitan has $100 million of floating to fixed interest rate swaps with an existing swap counterparty whose rating has dropped below qualified levels, then Metropolitan may enter into up to $100 million of fixed to floating interest rate Swap Transactions to “offset” the risk to Metropolitan with the swap counterparty. The Chief Financial Officer has discretion to determine the tenor of such Offsetting Swap Transaction, but in no case may the final maturity be longer than the existing Swap Transaction which is being offset.

Metropolitan may negotiate or competitively bid any Swap Transaction based on a review of the costs and benefits to Metropolitan of such approach.

6. Termination Provisions

All Swap Transactions shall contain provisions granting Metropolitan the right to optionally terminate a Swap Transaction at any time over the term of the Swap Transaction.

Optional Termination. Metropolitan may exercise the right to optionally terminate a Swap Transaction if it determines that it will (1) produce a benefit to Metropolitan, either through receipt of a payment from a termination, or if a termination payment is made by Metropolitan, in conjunction with a conversion to a more beneficial (desirable) debt obligation of Metropolitan or as otherwise determined by Metropolitan, (2) result in a more beneficial mix of fixed and variable rate debt consistent with prudent debt practices and guidelines approved by the Board, or (3) otherwise reduce risk as determined by the Chief Financial Officer or the Ad Hoc Committee. The Chief Financial Officer or the Ad Hoc Committee is authorized to terminate any Swap Transaction on behalf of Metropolitan as provided by Section 2.04 of the Master Swap Resolution.

Mandatory Termination: A termination payment to or from Metropolitan may be required in the event of termination of a Swap Transaction due to the occurrence and continuance of an event of default or termination event (including, but not limited to, a decrease in credit rating below an established level of either Metropolitan or the swap counterparty). If the event of default or termination event is due to the swap counterparty and a termination payment would be owed by Metropolitan, before deciding to exercise its right to terminate a Swap Transaction, the Chief Financial Officer shall evaluate whether it is financially advantageous for Metropolitan to enter into a Replacement Swap Transaction (as defined and for the purposes specified below) to avoid making such termination payment or so that the swap counterparty to the Replacement Swap Transaction will make an up-front payment to Metropolitan upon entering into the Replacement Swap Transaction in an amount that will offset the termination payment that Metropolitan will be making to the original swap counterparty. As used herein, the term “Replacement Swap Transaction” shall mean any Swap Transaction that Metropolitan enters into for the purpose of replacing an existing Swap Transaction that has been or is expected to be terminated (either by Metropolitan or the counterparty thereto).

Upon the occurrence and continuance of an event of default by a swap counterparty or a termination event related to a swap counterparty whereby Metropolitan would be required to make a termination payment, Metropolitan shall proceed as follows:

- In order to mitigate the financial impact of making such payment at the time such payment is due; Metropolitan will seek to enter into a Replacement Swap Transaction such that the swap counterparty to the

Replacement Swap Transaction would make an upfront payment to Metropolitan in an amount that would offset the termination payment obligation of Metropolitan under the existing Swap Transaction or the swap counterparty to the Replacement Swap Transaction will make a payment directly to the counterparty of the existing Swap Transaction pursuant to a novation agreement and Metropolitan will no longer have a payment obligation with respect to the swap counterparty to the existing Swap Transaction.

Authorization for Replacement Swap Transactions. Notwithstanding any other provision of this Swap Policy to the contrary (including, but not limited to, this Section 6 and Section 4 and Section 8 of this Swap Policy), the Chief Financial Officer shall be authorized to execute and deliver on behalf of Metropolitan any Replacement Swap Transaction so long as the counterparty of such Replacement Swap Transaction is a Qualified Swap Counterparty.

7. Term and Notional Amount of Swap Agreement

Metropolitan shall determine the appropriate term for any Swap Transaction on a case by case basis. The slope of the swap curve, the marginal change in swap rates from year to year along the swap curve, and the impact that the term of the swap has on the overall exposure of Metropolitan shall be considered in determining the appropriate term of any swap agreement. In connection with the issuance or carrying of bonds, the term of a Swap Transaction between Metropolitan and a Qualified Swap Counterparty shall not extend beyond the latest final maturity date of existing water revenue bonds of Metropolitan. At no time shall the total notional amount of all swaps exceed the total amount of outstanding water revenue bonds.

8. Swap Counterparty Maximum Net Exposure Limits

To diversify Metropolitan's swap counterparty risk and to limit Metropolitan's credit exposure to any one swap counterparty, Metropolitan hereby establishes limits for each swap counterparty based upon both the credit rating of the swap counterparty and the relative level of Maximum Net Exposure (as defined below). Metropolitan shall not enter into any Swap Transaction if after giving effect to, and as of the date of the entering into of, such Swap Transaction both of the following would occur: (a) the Maximum Net Exposure for such swap counterparty would exceed $50 million and (b) the Maximum Net Exposure for such swap counterparty exceeds 50% of the total Maximum Net Exposure of all Swap Transactions (regardless of swap counterparty) of Metropolitan as of such date.

As an example of how to calculate the Maximum Net Exposure of Metropolitan to a swap counterparty, assume Metropolitan has executed a 30-year $150 million notional amount Swap Transaction with a swap counterparty and the Termination Exposure to that swap counterparty for Metropolitan is $40 million and Metropolitan wants to enter into another $150 million notional amount Swap Transaction with such swap counterparty. Now assume that if the yield curve moved 50 basis points Metropolitan's aggregate Termination Exposure to this swap counterparty on the existing Swap Transactions would increase by $10 million and Metropolitan's Termination Exposure on the new Swap Transaction would be $10 million. The Maximum Net Exposure of Metropolitan to such swap counterparty would equal $60 million. Therefore, since the Maximum Net Exposure of Metropolitan to such swap counterparty would exceed $50 million, Metropolitan would be authorized to enter into such new Swap Transaction only if the $60 million in Maximum Net Exposure represents 50% or less of the total Maximum Net Exposure of all Swap Transactions of Metropolitan as of such date.

In addition, additional exposure provisions are as follows:

- The sum total notional amount per swap counterparty may not exceed 25 percent of Metropolitan's total revenue bond indebtedness; provided, however, that Metropolitan shall not take into consideration into the total notional amount per swap counterparty any Offsetting Swap Transactions entered into with a swap counterparty which offset other Swap Transactions entered into with the same swap counterparty; and

- The appropriate collateral thresholds in the Swap Agreement will be determined on a case by case basis, and approved by the Chief Financial Officer in consultation with the General Counsel.

If at any time the mark-to-market exposure under all Swap Transactions with a swap counterparty exceeds the limits described above, then Metropolitan shall conduct a review of its risk to that swap counterparty. The Chief Financial Officer shall evaluate appropriate strategies in consultation with the Office of the General Counsel to mitigate this exposure. Notwithstanding the foregoing, Metropolitan shall only be required to satisfy the provisions of this Section 8 at the time that it enters into a Swap Transaction.

As used in this Section 8:

The term "Termination Exposure" shall mean the total amount of mark-to-market termination payment exposure of Metropolitan under a Swap Transaction or Swap Transactions, calculated assuming market quotation/second method on a mid-market basis.

The term "Potential Termination Exposure" shall mean the total estimated additional amount of mark-to-market termination exposure of a Swap Transaction that would be caused by a change of 50 basis points in the swap curve (in the direction that would cause the greatest increase in such Termination Exposure to Metropolitan).

The term "Maximum Net Exposure" shall mean, in connection with any proposed Swap Transaction with a swap counterparty, that amount equal to the sum of (a) the aggregate amount of Termination Exposure on the date of determination for all existing Swap Transactions with such swap counterparty, (b) the aggregate amount of Potential Termination Exposure for the proposed new Swap Transaction, plus (c) the Potential Termination Exposure for all existing Swap Transactions with the swap counterparty of the new Swap Transaction; provided, however, that in calculating such Termination Exposure and Potential Termination Exposure, Metropolitan shall take into consideration the impact of any Offsetting Swap Transactions.

The term "Offsetting Swap Transaction" shall mean any Swap Transaction that Metropolitan enters into that directly or indirectly has the effect of offsetting Metropolitan's interest rate exposure under one or more other Swap Transactions, including, but not limited to, basis risk swap transactions.

9. Collateral Requirements

As part of any Swap Agreement, unless otherwise approved by the Ad Hoc Committee, Metropolitan shall require collateralization or other credit enhancement to secure any or all swap payment obligations. As appropriate, the Chief Financial Officer, in consultation with the General Counsel may require collateral or other credit enhancement to be posted by each swap counterparty. Unless the Ad Hoc Committee otherwise authorizes or requires, each Swap Agreement that Metropolitan executes and delivers after the date hereof shall be required or may be permitted to, as applicable, contain the following terms and conditions:

- Each swap counterparty to Metropolitan may be required to post collateral subject to negotiated thresholds if the credit rating of the swap counterparty or parent falls below the "AA" category. Additional collateral for further decreases in credit ratings of each counterparty shall be posted by each swap counterparty in accordance with the provisions contained in the collateral support agreement to each Swap Agreement with Metropolitan.

- Collateral may consist of cash, U.S. Treasury securities or Agencies.
- Collateral shall be deposited with a third party custodian, or as mutually agreed upon between Metropolitan and each swap counterparty.
- A list of acceptable securities that may be posted as collateral and the valuation of such collateral will be determined and mutually agreed upon during negotiation of the swap agreement with each swap counterparty.
- The market value of the collateral shall be determined on at least a weekly basis.
- Metropolitan will determine reasonable threshold limits for the initial deposit and for increments of collateral posting thereafter.
- The Chief Financial Officer shall determine on a case by case basis whether other forms of credit enhancement are more beneficial to Metropolitan.
- Metropolitan may, as part of the negotiation, be required to post collateral to the swap counterparty. The terms of such collateral posting by Metropolitan will not exceed the collateral posting requirements of the swap counterparty unless the Ad Hoc Committee has approved such terms.

10. Amendment or Assignment of Swap Transaction or Swap Agreement.

a. Amendments. Notwithstanding any other provision of this Swap Policy, Metropolitan shall be authorized to enter into an amendment of any existing Swap Transaction

(1) solely with the approval and the authorization of Metropolitan's Chief Financial Officer if such amendment does not cause an increase on the effective date of the amendment in the Termination Exposure of Metropolitan of more than $2.5 million after adjusting for any up-front payments either made or received by Metropolitan (for example, if Metropolitan is paid

$3 million by the counterparty as a result of the amendment and concurrently the Termination Exposure increases by $3 million, the net impact of the amendment will be deemed to be zero) and (2) solely with the approval and the authorization of the Ad Hoc Committee if such amendment does not cause an increase on the effective date of the amendment in the Termination Exposure of Metropolitan of more than $5 million after adjusting for any up-front payments either made or received by Metropolitan.

b. Assignments. Notwithstanding any other provision of this Swap Policy, Metropolitan shall be authorized to enter into any assignment or novation of a Swap Transaction from one swap counterparty to another swap counterparty solely with the approval and the authorization of Metropolitan's Chief Financial Officer if the swap counterparty to which such Swap Transaction is assigned is a Qualified Swap Counterparty. Notwithstanding any other provision of this Swap Policy (including Section 4 and Section 8 of this Swap Policy), Metropolitan shall be authorized to enter into a Swap Agreement with the swap counterparty to which any Swap Transaction is assigned pursuant to the immediately preceding sentence (or otherwise amend the terms and conditions of the assigned Swap Transaction) on such terms and conditions (1) as the Chief Financial Officer of Metropolitan shall authorize and approve so long as such terms and conditions do not have the impact of increasing on the effective date of such assignment or novation the Termination Exposure of Metropolitan under the assigned or novated Swap Transactions of more than $2.5 million and (2) solely with the approval and the authorization of the Ad Hoc Committee if such amendment does not cause an increase on the effective date of such assignment or novation the Termination Exposure of Metropolitan under the assigned or novated Swap Transactions of more than $5 million.

11. Reporting Requirements

A written report providing the status of all Swap Transactions will be provided to the Board of Directors at least on a quarterly basis and shall include the following information:

- Highlights of all material changes to Swap Agreements and Swap Transactions or new Swap Agreements and Swap Transactions (including, but not limited to any amendments, assignments or novations to Swap Agreements or Swap Transactions) entered into by Metropolitan since the last report.
- Market value of each of Metropolitan's Swap Transactions.
- The net impact to Metropolitan of a 50 basis point movement (up or down) for each Swap Transaction with the appropriate swap index or curve.
- For each swap counterparty, Metropolitan shall provide the total notional amount position, the average life of each swap agreement, and the remaining term of each Swap Transaction.
- The credit rating of each swap counterparty and credit enhancer insuring or guaranteeing swap payments, if any.
- Actual collateral posting by swap counterparty, if any, per Swap Transaction and in total by swap counterparty.
- Actual collateral posting by Metropolitan, if any, per Swap Transaction and in total by swap counterparty.
- A summary of each Swap Transaction, including but not limited to the type of Swap Transaction, the rates paid by Metropolitan and received by Metropolitan, and other terms.
- Information concerning any default by a swap counterparty to Metropolitan, and the results of the default, including but not limited to the financial impact to Metropolitan, if any.
- A summary of any planned Swap Transactions and the expected impact of such Swap Transactions on Metropolitan.
- A summary of any Swap Transactions that were terminated.

The Chief Financial Officer together with the General Counsel shall review the Swap Policy on an annual basis and recommend appropriate changes to the Board.

12. Calculations.

In calculating the Termination Exposure, Potential Termination Exposure, Maximum Net Exposure or any other calculation under this Swap Policy, Metropolitan may conclusively rely on calculations of employees of Metropolitan or on a certificate from its swap advisor certifying as to such calculation (in each case, in accordance with industry standards and customs) and any such calculation shall be conclusive for all purposes of the Master Swap Resolution and this Swap Policy.

Appendix E.

Metropolitan Investment Policy

THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA
STATEMENT OF INVESTMENT POLICY

FISCAL YEAR 2023/24

June 13, 2023

I. POLICY

This Statement of Investment Policy (Policy) is intended to outline the guidelines and practices to be used in managing the Metropolitan Water District of Southern California's (District) investment portfolio. District funds not required for immediate cash disbursements will be invested in compliance with the Government Code of the state of California (California Government Code).

II. INVESTMENT AUTHORITY

As authorized by Section 53607 of the California Government Code, authority to invest or reinvest funds of the District is hereby delegated by the Board of Directors to the Treasurer, for a period of one-year, who shall thereafter assume full responsibility for the investment program until the delegation of authority is revoked or expires. Subject to review, the Board of Directors may renew the delegation of authority each year. The Treasurer may delegate the day-to-day investment activities to their designee(s) but not the responsibility for the overall investment program.

The Treasurer may also delegate the day-to-day execution of investments to registered investment managers through written agreements. The investment manager(s), in coordination with the Treasurer, will manage on a daily basis the District's investment portfolio pursuant to the specific and stated investment objectives of the District. The investment manager(s) shall follow this Policy, the specific investment guidelines provided to each investment manager, and such other written instructions provided by the Treasurer or their designee(s). The investment manager(s) may be given discretion to acquire and dispose of assets in their designated account, but the investment manager(s) shall not be permitted to have custodial control over the District's investment portfolio.

III. STATEMENT OF OBJECTIVES

In accordance with California Government Code Section 53600.5, and in order of importance, the Treasurer shall adhere to the following three criteria:

1. Safety of Principal. Investments shall be undertaken which first seek to ensure the preservation of principal in the portfolio. The Treasurer shall ensure that each investment transaction is evaluated or cause to have evaluated each potential investment, seeking both quality in issuer and in underlying security or collateral, and shall diversify the portfolio to reduce exposure to loss. Diversification of the portfolio will be used in order to reduce exposure to principal loss.
2. Liquidity. Investments shall be made whose maturity date is compatible with cash flow requirements of the District and which will permit easy and rapid conversion into cash without substantial loss of principal.
3. Return on Investment. Investments shall be undertaken to produce an acceptable rate of return after first considering safety of principal and liquidity and the prudent investor standard.

IV. SCOPE

This Policy applies to all funds and investment activities under the direct authority of the District and accounted for in the Annual Comprehensive Financial Report (ACFR), except for the employee's retirement and deferred compensation funds. In addition, deposits with banks under the California Government Code's "Deposit of Funds" provisions are excluded from this Policy's requirements. Funds of the District will be invested in compliance with the provisions of, but not necessarily limited to securities specified in the California Government Code Section 53601 et seq. and other applicable statutes. Investments will be in accordance with these policies and written administrative procedures. Investment of the District's bond proceeds shall be subject to the conditions and restrictions of bond documents and are not governed by this Policy.

V. PRUDENT INVESTOR STANDARD

Pursuant to California Government Code Section 53600.3, all persons authorized to make investment decisions on behalf of the District are trustees and therefore fiduciaries subject to the "prudent investor standard". The prudent investment standard obligates a trustee to ensure that "when investing, reinvesting, purchasing, acquiring, exchanging, selling, or managing public funds, a trustee shall act with care, skill, prudence, and diligence under the circumstances then prevailing, including, but not limited to, the general economic conditions and the anticipated needs of the agency that a prudent person acting in a like capacity and familiarity with those matters would use in the conduct of funds of a like character and with like aims, to safeguard the principal and maintain the liquidity needs of the agency. Within the limitations of this section and considering individual investments as part of an overall strategy, investments may be acquired as authorized by law."

VI. SAFEKEEPING AND CUSTODY

To protect against potential losses caused by the collapse of individual securities dealers, all investment transactions involving deliverable securities will be conducted on a delivery versus payment (DVP) basis. All deliverable securities owned by the District, including collateral on repurchase agreements, shall be held in safekeeping by a third party bank trust department acting as agent for the District under the terms of a custody agreement executed by the bank and the District. All financial institutions that provide safekeeping services for the District shall be required to provide reports or safekeeping receipts directly to the Controller to verify securities taken into their possession. The Controller shall also maintain evidence of the District ownership in non-deliverable securities (e.g. LAIF, CAMP, and Time CDs).

VII. INVESTMENT TRANSACTIONS

Information concerning investment opportunities and market developments will be gained by maintaining contact with the financial community. Confirmations for investment transactions will be sent directly to the Controller for audit. When practical, the Treasurer shall solicit more than one quotation on each trade.

VIII. REPORTING

If the Board delegates responsibility of the investment program to the Treasurer, then in accordance with the Metropolitan Water District Administrative Code, Section 5114, the Treasurer shall submit a monthly report to the Executive Secretary of the Board of Directors via the General Manager indicating the types of investment by fund and date of maturity, and shall provide the current market value of all securities, rates of interest, and expected yield to maturity. The Treasurer shall also submit a monthly summary report to the Board of Directors via the General Manager showing investment activity, including yield and earnings, and the status of cash by depository.

In addition, the monthly report shall also include a statement denoting the ability to meet the District's expenditure requirements for the next six (6) months. The report shall also state compliance of the portfolio to this Policy, or manner in which the portfolio is not in compliance. In the event of non-compliance, staff will prepare a report for the Board that details the compliance issue, provides analysis, and provides a recommendation to bring the portfolio back into compliance with this Policy.

IX. PERFORMANCE STANDARDS

The investment portfolio shall be managed with the objective of obtaining a rate of return throughout budgetary and economic cycles, commensurate with the investment risk constraints and the cash flow needs of the District. The District will employ an active management approach that allows for the sale of securities prior to their scheduled maturity dates. Securities may be sold for a variety of reasons, such as to increase yield, lengthen or shorten maturities, to take a profit, or to increase investment quality. In no instance shall a transaction be used for purely speculative purposes. The District recognizes that in a diversified portfolio occasional measured losses are inevitable and must be considered within the context of the overall portfolio's structure and expected investment return, with the proviso that adequate diversification and credit analysis have been implemented.

Because the composition of the portfolio fluctuates, depending on market and credit conditions, various appropriate indices selected by the Treasurer will be used to monitor performance.

X. INVESTMENT GUIDELINES AND ELIGIBLE SECURITIES

The District is governed by the California Government Code, Sections 53600 et seq. Within the context of these limitations, the investments listed below are authorized.

The District is prohibited from investing in any investment authorized by the California Government Code but not explicitly listed in this Policy without the prior approval of the Board of Directors. Some of the limitations on investments set forth below are more stringent than required by the California Government Code and have been included to better manage the credit risks specific to the District's portfolio. Under the provisions of California Government Code Sections 53601.6, the District shall not invest any funds covered by this Investment Policy in inverse floaters, range notes, mortgage-derived, interest-only strips or any investment that may result in a zero interest accrual if held to maturity, except as authorized by Code Section 53601.6.

1. US Treasury Obligations

United States Treasury notes, bonds, bills, or certificates of indebtedness, or those for which the faith and credit of the United States are pledged for the payment of principal and interest.

- Maximum allocation: 100% of the portfolio
- Maximum maturity: Five (5) years, except as otherwise permitted by this Policy
- Credit requirement: N.A.

2. Federal Agency Obligations

Federal agency or United States government-sponsored enterprise obligations, participations, or other instruments, including those issued by or fully guaranteed as to principal and interest by federal agencies or United States government-sponsored enterprises.

- Maximum allocation: 100% of the portfolio
- Maximum maturity: Five (5) years, except as otherwise permitted by this Policy
- Credit requirement: N.A.

3. Banker's Acceptances

Bills of exchange or time drafts drawn on and accepted by a commercial bank, typically created from a letter of credit issued in a foreign trade transaction.

- Maximum allocation: Forty percent (40%) of the portfolio; five percent (5%) with any one issuer
- Maximum maturity: One-hundred eighty (180) days
- Credit requirement: A-1 or its equivalent or better by a Nationally Recognized Statistical Rating Organization (NRSRO).
- Issued by banks with total deposits of over one billion dollars ($1,000,000,000)
- Issued by banks from offices in the USA.

4. Commercial Paper

Commercial paper is defined as short-term, unsecured promissory notes issued by financial and non-financial companies to raise short-term cash. Financial companies issue commercial paper to support their consumer and/or business lending; non-financial companies issue for operating funds.

- Maximum allocation: Forty percent (40%) of the portfolio; five percent (5%) with any one issuer
- Maximum maturity: Two hundred seventy (270) days
- Credit requirement: Highest ranking or highest letter and number rating as provided by an NRSRO.
- Entity issuing the commercial paper must meet the conditions of California Government Code Section 53601(h)(1) or (2).

5. Medium Term Corporate Notes

All corporate and depository institution debt securities (not to include other investment types specified in Code) issued by corporations organized and operating within the United States or by depository institutions licensed by the United States or any state and operating within the United States.

- Maximum allocation: Thirty percent (30%) of the portfolio; five percent (5%) with any one issuer
- Maximum maturity: Five (5) years
- Credit requirement: A or its equivalent or better by an NRSRO.

6. Negotiable Certificates of Deposit

Issued by a nationally or state-chartered bank, a savings association or a federal association, a state or federal credit union, or by a federally licensed or state-licensed branch of a foreign bank.

- Maximum allocation: Thirty percent (30%) of the portfolio, five percent (5%) with any one issuer
- Maximum maturity: Five (5) years
- Credit requirement: A (long-term) or A-1 (short-term) or their equivalents or better by an NRSRO
- Issued by banks with total deposits of one billion dollars ($1,000,000,000) or more

7. Bank Deposit

Insured or collateralized time certificates of deposits, saving accounts, market rate accounts, or other bank deposits.

- Maximum limit: Thirty percent (30%) of the portfolio for all deposits
- Maximum maturity: Five (5) years
- Credit requirement: All deposits must be collateralized as required by California Government Code Sections 53630 et seq. The Treasurer may waive collateral for the portion of any deposits that is insured pursuant to federal law.
- Deposits are limited to a state or national bank, savings association or federal association, a state or federal credit union, or a federally insured industrial loan company, located in California.
- Deposits must meet the conditions of California Government Code Sections 53630 et seq.

Pursuant to Government Code 53637, the District is prohibited from investing in deposits of a state or federal credit union if a member of the District's Board of Directors, or any person at the District with investment decision-making authority, serves on the board of directors or committee of the state or federal credit union.

8. Money Market Mutual Funds

Shares of beneficial interest issued by diversified management companies that are money market funds registered with the SEC.

- Maximum maturity: N/A
- Maximum allocation: Twenty percent (20%) of the portfolio
- Credit requirement: Highest ranking by not less than two NRSROs or must retain an investment advisor that meets specified requirements
- The use of money market funds is limited to Government money market funds that provide daily liquidity and seek to maintain a stable Net Asset Value (NAV)

9. State of California, Local Agency Investment Fund (LAIF)

LAIF is a pooled investment fund overseen by the State Treasurer, which operates like a money market fund, but is for the exclusive benefit of governmental entities within the state. The maximum investment amount authorized by the Local Agency Investment Fund (LAIF) is set by the California State Treasurer's Office. The LAIF is held in trust in the custody of the State of California Treasurer. The District's right to withdraw its deposited monies from LAIF is not contingent upon the State's failure to adopt a State Budget.

- Maximum limit: The current limit set by LAIF for operating accounts
- Maximum maturity: N/A
- Credit requirement: N/A

10. Municipal Bonds & Notes

Municipal obligations issued by the State of California, any other of the states in the union, or a local agency within the State of California. This may include bonds, notes, warrants, or other evidences of indebtedness including bonds payable solely out of the revenues from a revenue-producing property owned, controlled, or operated by an authorized entity.

- Maximum limit: Thirty percent (30%) of the portfolio; five percent (5%) with any one issuer
- Maximum maturity: Five (5) years
- Credit requirement: A (long-term) or A-1 (short-term) or their equivalents or better by an NRSRO
- Must be issued by State of California, any of the other 49 states, or a California local agency

11. Repurchase Agreement

A repurchase agreement is a purchase of authorized securities with terms including a written agreement by the seller to repurchase the securities on a future date and price.

- Maximum allocation: Twenty percent (20%) of the portfolio
- Maximum maturity: Two hundred seventy (270) days
- Master Repurchase Agreement must be on file
- Limited to primary dealers or financial institutions rated in a rating category of “A” or its equivalent or higher by an NRSRO.
- Fully collateralized at market value of at least one hundred two percent (102%) with US government or federal agency securities

12. California Asset Management Program (CAMP)

Shares of beneficial interest issued by a joint powers authority organized pursuant to Section 6509.7.

- Maximum allocation: Forty percent (40%) of the portfolio
- Maximum maturity: N/A
- Credit requirement: AAAm or its equivalent or better by an NRSRO
- Joint powers authority has retained an investment adviser that is registered or exempt from registration with the Securities and Exchange Commission, has five or more years of experience investing in the securities and obligations authorized under California Government Code Section 53601, and has assets under management in excess of five hundred million dollars ($500,000,000).

13. Supranationals

Securities issued or unconditionally guaranteed by the International Bank for Reconstruction and Development (IBRD), International Finance Corporation (IFC), or Inter-American Development Bank (IADB) and eligible for purchase and sale within the United States.

- Maximum allocation: Thirty percent (30%) of the portfolio
- Maximum maturity: Five (5) years
- Credit requirement: AA or its equivalent or better by an NRSRO.

14. Asset-Backed Securities

A mortgage pass-through security, collateralized mortgage obligation, mortgage-backed or other pay-through bond, equipment lease-backed certificate, consumer receivable pass-through certificate, or consumer receivable-backed bond.

- Maximum allocation: Twenty percent (20%) of the portfolio, five percent (5%) with any one issuer
- Maximum maturity: Five (5) years
- Credit requirement: AA or its equivalent or better by an NRSRO.

XI. DIVERSIFICATION

The District shall seek to diversify the investments within the investment portfolio to avoid incurring unreasonable risks inherent in concentrated holdings in specific instruments, individual financial institutions or maturities. To promote diversification, this Policy sets various percentage holding limits by investment type and issuer. Investment type and issuer percentage limitation listed in this Policy are calculated at the time the security is purchased. Per issuer limits, when listed, are calculated across investment types at the parent company level. Should an investment percentage be exceeded due to instances such as the fluctuation in overall portfolio size, or market valuation changes, the Treasurer is not required to sell the affected securities. However, no additional investments can be made in that investment type or issuer while it is above the limits established by this Policy.

XII. CREDIT RATINGS

Credit rating requirements for eligible securities in this Policy specify the minimum credit rating category required at the time of purchase without regard to +, -, or 1, 2, 3 modifiers, if any. The security, at the time of purchase, may not be rated below the minimum credit requirement by any of the NRSROs that rate the security.

If a security is downgraded below the minimum rating criteria specified in this Policy, the Treasurer shall determine a course of action to be taken on a case-by-case basis considering such factors as the reason for the downgrade, prognosis for recovery or further rating downgrades, and the market price of the security. The Treasurer shall note in the monthly report any securities which have been downgraded below Policy requirements and the recommended course of action.

XIII. MATURITY

The Treasurer shall maintain a system to monitor and forecast revenues and expenditures so that the District's funds can be invested to the fullest extent possible while providing sufficient liquidity to meet the District's reasonably anticipated cash flow requirements.

The final maturity of any investment in the portfolios shall not exceed five (5) years with certain exceptions:

- The Treasurer is authorized to invest special trust funds in investment with a term to maximum maturity in excess of five years. These funds include, but are not limited to, the Water Revenue Bond Reserve Funds, Escrow Funds, Debt Service Funds, the Iron Mountain Landfill Closure/Post-closure Maintenance Trust Fund, and the Lake Mathews Multi-Species Reserve Trust Fund.
- The core portfolio may hold United States Treasury and Federal Agency securities with maturities in excess of five years.

XIV. DURATION

Duration is a measure of a security's price sensitivity to interest rate changes. It indicates the approximate percentage change of a security's value given a 1% change in interest rates. A portfolio's duration is the weighted average of the individual security durations held in the portfolio.

The investment portfolio is divided into liquidity, core, and endowment fund portfolios. The Policy's duration limits only apply to the liquidity and core portfolios. The duration of the liquidity portfolio is limited to the duration of the benchmark index plus or minus 0.5 years. The duration of the core portfolio will be limited to the duration of the benchmark index plus or minus 1.5 years. The appropriate benchmark indices will be set by the Treasurer and reported to the Board in the Monthly Treasurer's Report.

XV. ADMINISTRATION

The Treasurer may, at any time, establish more restrictive requirements for securities approved for investment as deemed appropriate in this Policy. These restrictions may include, but are not limited to, higher credit ratings, lower percentage limits by security type or issuer, shorter maturities and additional collateral requirements for collateralized investments.

XVI. AUTHORIZED FINANCIAL DEALERS AND INSTITUTIONS

For investments not purchased directly from the issuer, the Treasurer shall select only brokers/dealers who are licensed and in good standing with the California Department of Securities, the Securities and Exchange Commission, the Financial Industry Regulatory Authority (FINRA) or other applicable self-regulatory organizations. Before engaging in investment transactions with a broker/dealer, the Treasurer shall obtain a signed verification form that attests the individual has reviewed the District's Policy, and intends to present only those investment recommendations and transactions to the District that is appropriate under the terms and conditions of the Policy.

The District's external investment manager(s) may be granted discretion to purchase and sell investment securities in accordance with this Policy. Investment managers may also use their own list of internally-approved issuers, broker-dealers and other financial firms, so long as such managers are registered under the Investment Advisers Act of 1940.

XVII. INTERNAL CONTROLS

The Treasurer or designee shall maintain a system of internal control procedures designed to ensure compliance with the Policy and to prevent losses due to fraud, employee error, and misrepresentations by third parties or unanticipated changes in financial markets. The internal control procedures shall apply to the investment activities of any person with investment decision-making authority acting on behalf of the District. Procedures should include references to individuals authorized to execute transactions or transfers, safekeeping agreements, repurchase agreements, wire transfer agreements, collateral/depository agreements and banking services contracts, as appropriate. The internal control structure shall be designed to provide reasonable assurance that these objectives are met. The concept of reasonable assurance recognizes that (1) the cost of a control should not exceed the benefits likely to be derived; and (2) the valuation of costs and benefits requires estimates and judgement by management. As part of the annual audit, the District's external auditor will perform a review of investment transactions to verify compliance with policies and procedures.

XVIII. ETHICS AND CONFLICT OF INTEREST

The Treasurer and designees shall refrain from personal business activity that could conflict with the proper execution and management of the investment program or that could impair their ability to make impartial decisions.

The Treasurer and designees shall disclose to the Ethics Officer and General Counsel any personal financial interests that could conflict with the proper execution and management of the investment program, or that could impair their ability to make impartial decisions.

XVIX. INVESTMENT POLICY

This Policy shall be reviewed periodically by the Treasurer with any and all modifications made thereto approved by the Board of Directors at a public meeting.

SUMMARY TABLE OF INVESTMENT GUIDELINES AND ELIGIBLE SECURITIES

The following table is intended to be a summary of the Policy's requirements in Section X of this Policy. If there is a discrepancy between Section X and this table, the requirements listed in Section X take precedence.

Authorized Investments	Maximum % Holdings	Purchase Restrictions	Maximum Maturity	Credit Quality
US Treasury Obligations	100%	N/A	5 Years1	N/A
Federal Agency Obligations	100%	N/A	5 Years1	N/A
Bankers' Acceptance	40%	5% per issuer2	180 days	"A-1" or its equivalent or higher by an NRSRO.
Commercial Paper	40%	5% per issuer2	270 days	Highest ranking or of the highest letter and number rating as provided for by an NRSRO.
Medium Term Corporate Notes	30%	5% per issuer2. US licensed and operating corporations	5 years	"A" or its equivalent or higher by an NRSRO.
Negotiable CD	30%	5% per issuer2, National or state charted bank, S&L, or branch of foreign bank	5 years	"A-1" (short-term) or "A" (long-term) or their equivalents or higher by an NRSRO.
Bank Deposit	30%	See California Government Code Section 53637	5 Years	Collateralized/ FDIC Insured in accordance with California Government Code
Money Market Mutual Funds	20%	Gov't MMF. Stable NAV	Daily Liquidy	Highest ranking by two NRSROs or advisor requirements
Local Agency Investment Fund ("LAIF")	LAIF limit for operating accounts	Subject to California Government Code Section 16429.1 limitations	N/A	N/A

SUMMARY TABLE OF INVESTMENT GUIDELINES AND ELIGIBLE SECURITIES

The following table is intended to be a summary of the Policy's requirements in Section X of this Policy. If there is a discrepancy between Section X and this table, the requirements listed in Section X take precedence.

Authorized Investments	Maximum % Holdings	Purchase Restrictions	Maximum Maturity	Credit Quality
Municipal Bonds and Notes	30%	5% per issuer2. State of California or California agencies or other 49 states	5 Years1	"A" or its equivalent or higher by an NRSRO.
Repurchase Agreements ("REPO")	20%	Limited to primary dealers or financial institutions rated "A" or better by a NRSROs	270 days	Collateralized (min 102% of funds invested) with US Government or federal agency securities with maximum 5 year maturities
California Asset Management Program ("CAMP")	40%	N/A	Daily Liquidity	"AAAm" or its equivalent or higher by a NRSRO
Supranationals	30%	Limited to IBRD, IFC, IADB	5 Years	"AA" or its equivalent or higher by an NRSRO.
Asset-Backed Securities	20%	5% per issuer2	5 Years	"AA" or its equivalent or higher by an NRSRO.

Notes:

1. The Treasurer is authorized to invest special trust funds in investment with a term to maximum maturity in excess of five years. These funds include, but are not limited to, the Water Revenue Bond Reserve Funds, Escrow Funds, Debt Service Funds, the Iron Mountain Landfill Closure/Post-closure Maintenance Trust Fund, and the Lake Mathews Multi-Species Reserve Trust Fund.

   The core portfolio may be invested in United States Treasury and Federal Agency securities with maturities in excess of five years.

2. Per issuer limits, when listed, are calculated across investment types at the parent company level.

GLOSSARY

The glossary is provided for general information only. It is not to be considered a part of the Policy for determining Policy requirements or terms.

AGENCIES: Federal agency securities and/or Government-sponsored enterprises (GSEs), also known as U.S. Government instrumentalities. Securities issued by Government National Mortgage Association (GNMA) are considered true agency securities, backed by the full faith and credit of the U.S. Government. GSEs are financial intermediaries established by the federal government to fund loans to certain groups of borrowers, for example homeowners, farmers and students and are privately owned corporations with a public purpose. The most common GSEs are Federal Farm Credit System Banks, Federal Home Loan Banks, Federal Home Loan Mortgage Association, and Federal National Mortgage Association.

ASSET BACKED: Securities whose income payments and hence value is derived from and collateralized (or "backed") by a specified pool of underlying assets which are receivables. Pooling the assets into financial instruments allows them to be sold to general investors, a process called securitization, and allows the risk of investing in the underlying assets to be diversified because each security will represent a fraction of the total value of the diverse pool of underlying assets. The pools of underlying assets can comprise common payments credit cards, auto loans, mortgage loans, and other types of assets. Interest and principal is paid to investors from borrowers who are paying down their debt..

BANKERS' ACCEPTANCE (BA): A draft or bill of exchange accepted by a bank or trust company. The accepting institution guarantees payment of the bill, as well as the issuer. This money market instrument is used to finance international trade.

BASIS POINT: One-hundredth of one percent (i.e., 0.01%).

BENCHMARK: A comparative base for measuring the performance or risk tolerance of the investment portfolio. A benchmark should represent a close correlation to the level of risk and the average duration of the portfolio's investment.

BOND: A financial obligation for which the issuers promises to pay the bondholder a specified stream of future cash flows, including periodic interest payments and a principal repayment.

BOOK VALUE: The value at which a debt security is shown on the holder's balance sheet. Book value is acquisition cost less amortization of premium or accretion of discount.

BROKER: A broker acts as an intermediary between a buyer and seller for a commission and does not trade for his/her own risk and account or inventory.

CALLABLE SECURITIES: A security that can be redeemed by the issuer before the scheduled maturity date.

CALIFORNIA ASSET MANAGEMENT PROGRAM (CAMP): A local government investment pool organized as joint powers authority in which funds from California local agency investors/participants are aggregated together for investment purposes.

CASH EQUIVALENTS (CE): Highly liquid and safe instruments or investments that can be converted into cash immediately. Examples include bank accounts, money market funds, and Treasury bills.

CASH FLOW: An analysis of all changes that affect the cash account during a specified period.

CERTIFICATE OF DEPOSIT (CD): A time deposit with a specific maturity evidenced by a certificate. Large-denomination CD's are typically negotiable.

COLLATERAL: Securities, evidence of deposit or other property which a borrower pledges to secure repayment of a loan. Also refers to securities pledged by a bank to secure deposits of public monies.

COLLATERALIZED MORTGAGE OBLIGATION (CMO): A type of mortgage-backed security that creates separate pools of pass-through rates for different classes of bondholders with varying maturities, called trances. The repayments from the pool of pass-through securities are used to retire the bonds in the order specified by the bonds' prospectus.

COMMERCIAL PAPER: Short-term, unsecured, negotiable promissory notes of corporations.

CORPORATE NOTE: Debt instrument issued by a private corporation.

COUPON: The annual rate at which a bond pays interest.

CREDIT RATINGS: A grade given to a debt instrument that indicates its credit quality. Private independent rating services such as Standard & Poor's, Moody's and Fitch provide these

CREDIT RISK: The risk that an obligation will not be paid and a loss will result due to a failure of the issuer of a security.

CUSIP: Stands for Committee on Uniform Securities Identification Procedures. A CUSIP number identifies most securities, including: stocks of all registered U.S. and Canadian companies, and U.S. government and municipal bonds. The CUSIP system—owned by the American Bankers Association and operated by Standard & Poor's—facilitates the clearing and settlement process of securities. The number consists of nine characters (including letters and numbers) that uniquely identify a company or issuer and the type of security.

CURRENT YIELD: The annual interest on an investment divided by the current market value. Since the calculation relies on the current market value rather than the investor's cost, current yield is unrelated to the actual return the investor will earn if the security is held to maturity.

CUSTODIAN: A bank or other financial institution that keeps custody of stock certificates and other assets.

DEALER: A dealer, as opposed to a broker, acts as a principal in all transactions, buying and selling for his/her own risk and account or inventory.

DELIVERY VERSUS PAYMENT (DVP): Delivery of securities with a simultaneous exchange of money for the securities.

DERIVATIVES: A financial instrument that is based on, or derived from, some underlying asset, reference date, or index.

DIRECT ISSUER: Issuer markets its own paper directly to the investor without use of an intermediary.

DISCOUNT: The difference between the cost of a security and its value at maturity when quoted at lower than face value.

DIVERSIFICATION: Dividing investment funds among a variety of securities offering independent returns and risk profiles.

DURATION: A measure of the timing of the cash flows, such as the interest payments and the principal repayment, to be received from a given fixed-income security. This calculation is based on three variables: term to maturity, coupon rate, and yield to maturity. Duration measures the price sensitivity of a bond to changes in interest rates.

EFFECTIVE RATE OF RETURN: The annualized rate of return on an investment considering the price paid for the investment, its coupon rate, and the compounding of interest paid. (Total Earnings / Average daily balance) x (365/ # of days in the reporting period)

FACE VALUE: The principal amount owed on a debt instrument. It is the amount on which interest is computed and represents the amount that the issuer promises to pay at maturity.

FAIR VALUE: The amount at which a security could be exchanged between willing parties, other than in a forced or liquidation sale. If a market price is available, the fair value is equal to the market value.

FANNIE MAE: Trade name for the Federal National Mortgage Association (FNMA), a U.S. Government sponsored enterprise.

FEDERAL DEPOSIT INSURANCE CORPORATION (FDIC): A federal agency that provides insurance on bank deposits, guaranteeing deposits to a set limit per account, currently $250,000.

FEDERAL FARM CREDIT BANK (FFCB): Government-sponsored enterprise that consolidates the financing activities of the Federal Land Banks, the Federal Intermediate Credit Banks and the Banks for Cooperatives. Its securities do not carry direct U.S. government guarantees.

FEDERAL FUNDS RATE: The rate of interest at which Federal funds are traded. This rate is considered to be the most sensitive indicator of the direction of interest rates, as it is currently pegged by the Federal Reserve through open-market operations.

FEDERAL GOVERNMENT AGENCY SECURITIES: Federal Agency or United States government-sponsored enterprise obligations, participations, or other instruments, including those issued by or fully guaranteed as to principal and interest by federal agencies or United States government-sponsored enterprises.

GOVERNMENT ACCOUNTING STANDARDS BOARD (GASB): A standard-setting body, associated with the Financial Accounting Foundation, which prescribes standard accounting practices for governmental units.

GUARANTEED INVESTMENT CONTRACTS (GICS): An agreement acknowledging receipt of funds, for deposit, specifying terms for withdrawal, and guaranteeing a rate of interest to be paid.

INDEX: An index is an indicator that is published on a periodic basis that shows the estimated price and/or yield levels for various groups of securities. Examples of relevant indices for Metropolitan include, but not limited to, ICE BofAML, 3-Month Treasury Bill Index, and ICE BofAML, 1 - 5 years AAA-A US Corporate and Government Index

INTEREST RATE: The annual yield earned on an investment, expressed as a percentage.

INTEREST RATE RISK: The risk of gain or loss in market values of securities due to changes in interest-rate levels. For example, rising interest rates will cause the market value of portfolio securities to decline.

INVESTMENT AGREEMENTS: A contract providing for the lending of issuer funds to a financial institution that agrees to repay the funds with interest under predetermined specifications.

INVESTMENT GRADE (LONG TERM RATINGS): The minimum, high-quality ratings for long-term debt such as corporate notes. Investment Grade ratings are as follows: A3 (Moody's), A- (S&P), and A- (Fitch).

INVESTMENT PORTFOLIO: A collection of securities held by a bank, individual, institution or government agency for investment purposes.

LIQUIDITY: A liquid asset is one that can be converted easily and rapidly into cash with minimum risk of principal.
LOCAL AGENCY INVESTMENT FUND (LAIF): An investment pool sponsored by the State of California and administered/managed by the State Treasurer. Local government units, with consent of the governing body of that Agency, may voluntarily deposit surplus funds for the purpose of investment. Interest earned is distributed by the State Controller to the participating governmental agencies on a quarterly basis.

LOCAL AGENCY INVESTMENT POOL: A pooled investment vehicle sponsored by a local agency or a group of local agencies for use by other local agencies.

MARKET RISK: The risk that the value of securities will fluctuate with changes in overall market conditions or interest rates. Systematic risk of a security that is common to all securities of the same general class (stocks, bonds, notes, money market instruments) and cannot be eliminated by diversification (which may be used to eliminate non-systematic risk).

MARKET VALUE: The price at which a security is currently being sold in the market. See FAIR VALUE.

MASTER REPURCHASE AGREEMENT: A written contract covering all future transactions between the parties to repurchase agreements and reverse repurchase agreements that establish each party's rights in the transactions. A master agreement will often specify, among other things, the right of the buyer-lender to liquidate the underlying securities in the event of default by the seller-borrower.

MATURITY: The date that the principal or stated value of a debt instrument becomes due and payable.

MEDIUM-TERM CORPORATE NOTES (MTNs): Unsecured, investment-grade senior debt securities of major corporations which are sold in relatively small amounts either on a continuous or an intermittent basis. MTNs are highly flexible debt instruments that can be structured to respond to market opportunities or to investor preferences.

MODIFIED DURATION: The percent change in price for a 100 basis point change in yields. This is a measure of a portfolio's or security's exposure to market risk.

MONEY MARKET: The market in which short-term debt instruments (Treasury Bills, Discount Notes, Commercial Paper, Banker's Acceptances and Negotiable Certificates of Deposit) are issued and traded.

MORTGAGED BACKED SECURITIES: A type of security that is secured by a mortgage or collection of mortgages. These securities typically pay principal and interest monthly.

MUNICIPAL BONDS: Debt obligations issued by states and local governments and their agencies, including cities, counties, government retirement plans, school Agencies, state universities, sewer agency, municipally owned utilities and authorities running bridges, airports and other transportation facilities

MUTUAL FUND: An entity that pools money and can invest in a variety of securities that are specifically defined in the fund's prospectus.

NEGOTIABLE CERTIFICATE OF DEPOSIT: A large denomination certificate of deposit that can be sold in the open market prior to maturity.

NET PORTFOLIO YIELD: Calculation in which the 365-day basis equals the annualized percentage of the sum of all Net Earnings during the period divided by the sum of all Average Daily Portfolio Balances.

NATIONALLY RECOGNIZED STATISTICAL RATING ORGANIZATION (NRSRO): is a credit rating agency that issues credit ratings that the U.S Securities and Exchange Commission permits other financial firms to use for certain regulatory purposes.

PAR VALUE: The amount of principal which must be paid at maturity. Also referred to as the face amount of a bond. See FACE VALUE.

PORTFOLIO: The collection of securities held by an individual or institution.

PREMIUM: The difference between the par value of a bond and the cost of the bond, when the cost is above par.

PRIMARY DEALER: A group of government securities dealers who submit daily reports of market activity and positions and monthly financial statements to the Federal Reserve Bank of New York and are subject to its informal oversight. These dealers are authorized to buy and sell government securities in direct dealing with the Federal Reserve Bank of New York in its execution of market operations to carry out U.S. monetary policy. Such dealers must be qualified in terms of reputation, capacity, and adequacy of staff and facilities.

PRIME (SHORT TERM RATING): High-quality ratings for short-term debt such as commercial paper. Prime ratings are as follows: P1 (Moody's), A1 (S&P), and F1 (Fitch).

PRINCIPAL: The face value or par value of a debt instrument, or the amount of capital invested in a given security.

PRIVATE PLACEMENTS: Securities that do not have to be registered with the Securities and Exchange Commission because they are offered to a limited number of sophisticated investors.

PROSPECTUS: A legal document that must be provided to any prospective purchaser of a new securities offering registered with the Securities and Exchange Commission that typically includes information on the issuer, the issuer's business, the proposed use of proceeds, the experience of the issuer's management, and certain certified financial statements (also known as an "official statement").

PRUDENT INVESTOR STANDARD: A standard of conduct for fiduciaries. Investments shall be made with judgment and care, under circumstances then prevailing, which persons of prudence, discretion and intelligence exercise in the management of their own affairs, not for speculation, but for investment, considering the probable safety of their capital as well as the probable income to be derived.

PUBLIC DEPOSIT: A bank that is qualified under California law to accept a deposit of public funds.

PURCHASE DATE: The date in which a security is purchased for settlement on that or a later date. Also known as the "trade date".

RATE OF RETURN: 1) The yield which can be attained on a security based on its purchase price or its current market price. 2) Income earned on an investment, expressed as a percentage of the cost of the investment.

REALIZED GAIN (OR LOSS): Gain or loss resulting from the sale or disposal of a security.

REPURCHASE AGREEMENT (RP or REPO): A transaction in which a counterparty or the holder of securities (e.g. investment dealer) sells these securities to an investor (e.g. the District) with a simultaneous agreement to repurchase them at a fixed date. The security "buyer" (e.g. the District) in effect lends the "seller" money for the period of the agreement, and the terms of the agreement are structured to compensate the "buyer" for this.

Dealers use RP extensively to finance their positions. Exception: When the Fed is said to be doing RP, it is lending money that is, increasing bank reserves.

REVERSE REPURCHASE AGREEMENT (REVERSE REPO): The opposite of a repurchase agreement. A reverse repo is a transaction in which the District sells securities to a counterparty (e.g. investment dealer) and agrees to repurchase the securities from the counterparty at a fixed date. The counterparty in effect lends the seller (e.g. the District) money for the period of the agreement with terms of the agreement structured to compensate the buyer.

RISK: Degree of uncertainty of return on an asset.

SAFEKEEPING: A service that banks offer to clients for a fee, where physical securities are held in the bank's vault for protection and book-entry securities are on record with the Federal Reserve Bank or Depository Trust Company in the bank's name for the benefit of the client. As an agent for the client, the safekeeping bank settles securities transactions, collects coupon payments, and redeems securities at maturity or on the call date, if called.

SECURITIES AND EXCHANGE COMMISSION (SEC): Agency created by Congress to protect investors in securities transactions by administering securities legislation.

SECONDARY MARKET: A market for the repurchase and resale of outstanding issues following the initial distribution.

SECURITIES: Investment instruments such as notes, bonds, stocks, money market instruments and other instruments of indebtedness or equity.

SETTLEMENT DATE: The date on which a trade is cleared by delivery of securities against funds.

SPREAD: The difference between two figures or percentages. It may be the difference between the bid (price at which a prospective buyer offers to pay) and asked (price at which an owner offers to sell) prices of a quote, or between the amount paid when bought and the amount received when sold.

STRUCTURED NOTE: A complex, fixed-income instrument, which pays interest, based on a formula tied to other interest rates, commodities or indices. Examples include "inverse floating rate" notes which have coupons that increase when other interest rates are falling, and which fall when other interest rates are rising and "dual index floaters", which pay interest based on the relationship between two other interest rates, for example, the yield on the ten-year Treasury note minus the Libor rate. Issuers of such notes lock in a reduced cost of borrowing by purchasing interest rate swap agreements.

SUPRANATIONALS: International institutions that provide development financing, advisory services and/or financial services to their member countries to achieve the overall goal of improving living standards through sustainable economic growth. The California Government Code allows local agencies to purchase the United States dollar-denominated senior unsecured unsubordinated obligations issued or unconditionally guaranteed by the International Bank for Reconstruction and Development, International Finance Corporation, or Inter-American Development Bank.

TIME DEPOSIT: A deposit with a California bank or savings and loan association for a specific amount and with a specific maturity date and interest rate. Deposits of up to $250,000 are insured by FDIC. Deposits over $250,000 are collateralized above the insurance with either government securities (at 110% of par value), first trust deeds (at 150% of par value), or letters of credit (at 105% of par value).

TOTAL RATE OF RETURN: A measure of a portfolio's performance over time. It is the internal rate of return that equates the beginning value of the portfolio with the ending value, and includes interest earnings and realized and unrealized gains and losses on the portfolio. For bonds held to maturity, total return is the yield to maturity. (Net Invested Income/Time Weighted Invested Value) X (365/ # of days in the reporting period)

TRUSTEE OR TRUST COMPANY OR TRUST DEPARTMENT OF A BANK: A financial institution with trust powers that acts in a fiduciary capacity for the benefit of the bondholders in enforcing the terms of the bond contract.

UNDERWRITER: A dealer which purchases a new issue of municipal securities for resale.

U.S. GOVERNMENT AGENCY SECURITIES: Securities issued by U.S. government agencies, most of which are secured only by the credit worthiness of the particular agency. See AGENCIES.

U.S. TREASURY OBLIGATIONS: Securities issued by the U.S. Treasury and backed by the full faith and credit of the United States. Treasuries are the benchmark for interest rates on all other securities in the U.S. The Treasury issues both discounted securities and fixed coupon notes and bonds. The income from Treasury securities is exempt from state and local, but not federal, taxes.

TREASURY BILLS: Securities issued at a discount with initial maturities of one year or less. The Treasury currently issues three-month and six-month Treasury bills at regular weekly auctions. It also issues very short-term "cash management" bills as needed to smooth out cash flows.

TREASURY NOTES: Intermediate-term coupon-bearing securities with initial maturities of one year to ten years.

TREASURY BOND: Long-term coupon-bearing securities with initial maturities of ten years or longer.

UNREALIZED GAIN (OR LOSS): Gain or loss that has not become actual. It becomes a realized gain (or loss) when the security in which there is a gain or loss is actually sold. See REALIZED GAIN (OR LOSS).

VOLATILITY: Characteristic of a security, commodity or market to rise or fall sharply in price within a short-term period.

WEIGHTED AVERAGE MATURITY: The average maturity of all the securities that comprise a portfolio that is typically expressed in days or years.

YIELD: The annual rate of return on an investment expressed as a percentage of the investment. See CURRENT YIELD; YIELD TO MATURITY.

YIELD CURVE: Graph showing the relationship at a given point in time between yields and maturity for bonds that are identical in every way except maturity.

YIELD TO MATURITY: Concept used to determine the rate of return if an investment is held to maturity. It takes into account purchase price, redemption value, time to maturity, coupon yield, and the time between interest payments. It is the rate of income return on an investment, minus any premium or plus any discount, with the adjustment spread over the period from the date of purchase to the date of maturity of the bond, expressed as a percentage.

RATING DESCRIPTION TABLE			
	Long Term Debt Ratings		
Credit Quality	**Moody's**	**S&P**	**Fitch**
Strongest Quality	Aaa	AAA	AAA
Strong Quality	Aa1/Aa2/Aa3	AA+/AA/AA-	AA
Good Quality	A1/A2/A3	A+/A/A-	A
Medium Quality	Baa1/Baa2/Baa3	BBB+/BBB/BBB-	BBB
Speculative	Ba1/Ba2/Ba3	BB+/BB/BB-	BB
Low	B1/B2/B3	B+/B/B-	B
Poor	Caa	CCC+	CCC
Highly Speculative	Ca/C	CCC/CCC-/CC	CC
Short Term Debt Ratings			
Credit Quality	**Moody's**	**S&P**	**Fitch**
Strongest Quality	P-1	A-1+	F1
Strong Quality		A-1	
Good Quality	P-2	A-2	F2
Medium Quality	P-3	A-3	F3
Note: Investment Grade ratings apply to securities with at least a medium credit quality or higher by one of the nationally recognize statistical rating organization; anything below the medium credit quality is non-investment grade.			

Appendix F.

Metropolitan Debt Capacity Supportive Analysis

Preliminary capacity analyses were performed as part of LRFP Phase 1. These analyses used the revenue projections as provided in Metropolitan's 10-year Financial Forecast and utilized different constraints by which to measure capacity under three scenarios:

1. Capacity under Metropolitan's Senior and Subordinate Additional Bonds Tests
2. Capacity solving for aggregate debt service coverage of 1.50x
3. Capacity solving for aggregate debt service coverage of 1.75x

It is important to note that these capacity analyses do not factor in other constraints limiting Metropolitan's issuance of Revenue Bonds such as: i) the limitation of the amount of debt not exceeding 15% of total taxable assessed value in Metropolitan's service area and ii) the limitation of revenue bond par not exceeding Metropolitan's equity (or net position).

It is also important to note that debt capacity in future years is subject to actual Metropolitan Net Revenues, actual Metropolitan approved rates as well as future bond interest rate levels.

Debt Capacity Analysis: Annual Debt Issuance by Coverage Test

(Dollars in Millions)

	2024	2025	2026	2027	2028	2029	2030	2031	2032
175% Additional Capacity (Par)[1]	$-	$-	$-	$470	$289	$592	$895	$849	$672
150% Additional Capacity (Par)[2]	$-	$357	$253	$701	$343	$689	$1,005	$941	$807
ABT Additional Capacity (Par)[3]	$1,950	$103	$1,289	$410	$910	$480	$3,060	1,320	$1,325
10-Year Financial Forecast Project Debt (Par)	$75	$200	$210	$300	$670	$850	$990	$1,010	$640

1 Capacity calculated targeting 175% coverage of Adjusted Net Operating Revenues to Senior + Subordinate Debt Service based on actual projected debt service.

2 Capacity calculated targeting 150% coverage of Adjusted Net Operating Revenues to Senior + Subordinate Debt Service based on actual projected debt service.

3 Capacity under Senior and Subordinate Lien Additional Bonds Tests.

Note: All scenarios utilize projected Net Operating Revenues in the 10-Year Financial Forecast

Debt Capacity Analysis: Cumulative Debt Issuance by Coverage Test									
(Dollars in Millions)									
	2024	2025	2026	2027	2028	2029	2030	2031	2032
175% Cumulative Debt Capacity (Par)1	$-	$-	$-	$470	$759	$1,351	$2,246	$3,095	$3,767
150% Cumuative Debt Capacity (Par)2	$-	$357	$610	$1,310	$1,653	$2,342	$3,347	$4,288	$5,095
ABT Cumulative Debt Capacity (Par)3	$1,950	$2,054	$3,343	$3,753	$4,662	$5,142	$8,203	$9,523	$10,848
10-Year Financial Forecast Projected Cumulative Debt Issued (Par)	$75	$275	$485	$785	$1,455	$2,305	$3,295	$4,305	$4,945

1 Capacity calculated targeting 175% coverage of Adjusted Net Operating Revenues to Senior + Subordinate Debt Service based on actual projected debt service.

2 Capacity calculated targeting 150% coverage of Adjusted Net Operating Revenues to Senior + Subordinate Debt Service based on actual projected debt service.

3 Capacity under Senior and Subordinate Lien Additional Bonds Tests.

Note: All scenarios utilize projected Net Operating Revenues in the 10-Year Financial Forecast

Appendix G.

Program Summary of Water Infrastructure Finance & Innovation Act

Program Summary of the Water Infrastructure Finance & Innovation Act

The Water Infrastructure Finance and Innovation Act (WIFIA) is a competitive federal loan program for eligible water and wastewater projects. WIFIA loans can provide a cost-effective and flexible financing tool for eligible projects. However, as with any financing tool, in addition to the benefits, there are also considerations which should be factored into the determination of whether to pursue WIFIA funding.

WIFIA Loan Structure and Terms

WIFIA loans have several parameters outlining the structure of repayment for loans:

- Minimum project size of $20 million for large communities
- WIFIA Loans may fund up to 49% of Eligible Project Costs (as long as total Federal funding does not exceed 80% for the Project(s))
- Maximum loan repayment term of 35 years after substantial completion

WIFIA is able to finance up to 49% of Eligible Project Costs which can include costs in addition to construction costs. The defined term eligible project costs may include all or a portion of certain costs as outlined by EPA and subject to negotiation, including:

- Development and planning costs;
- Construction costs;
- Contingency;
- Interest on interim financing during construction;
- Debt Service Reserve Funds; and
- Issuance costs

WIFIA Loan Benefits and Considerations

There are several potential benefits associated with the WIFIA loan program, and as mentioned before, several considerations as outlined below:

Potential Benefit	Description
Low cost of capital	• Interest rate is roughly equivalent to that of US Treasury rates (1 basis point is added to the SLGS rate of a comparable average life)
Reduced interest rate risk	• Interest rate is fixed at loan closing, potentially prior to draws on the loan
Flexible draw terms	• Ability to draw funds and accrue interest based on actual, rather than projected, spending; thereby reducing the cost of carry

Potential Benefit	Description
Flexible repayment terms	• Ability to defer repayment until five years following substantial completion of the project(s) • Ability to customize loan repayment structure • Final loan maturity may be up to 35 years from the substantial completion of the project(s)
Potential loan repayment at any time, without penalty	• Provides flexibility to reduce loan balance, at any time, without penalties typically associated with publicy sold debt • Partial optional prepayment can typically be negotiated to occur on a pro-rata basis
Loan refinancing	• Ability to refinance the loan rate one time under certain circumstances

Potential Consideration	Description
Federal project requirements	• WIFIA financing subjects project(s) to federal requirements (unless specific waivers are received), including Davis-Bacon, NEPA, and American Iron and Steel requirement
Loan terms and covenants	• Loan terms and covenants may be more onerous than Metropolitan's publicly issued obligations
Lien priority	• WIFIA credit assistance may be subordinate to the project's other debt obligations in the priority of its lien on the project's cash flow, but in the event of bankruptcy, insolvency, or liquidation, the WIFIA credit instrument will have a parity lien with respect to the project's senior creditors
Continuing disclosure and monitoring	• Ongoing continuing disclosure obligations to EPA for life of the loan • Annual submission of updated financial pro-forma
Project completion timing	• Loan agreement will contain specific dates for project substantial completion which are not as flexible as alternative borrowing methods • Care must be taken in setting Project Substantial Completion Date and Project Substantial Completion Default Date

Appendix H.

Acronyms & Glossary

ACRONYMS

AADS: Average Annual Debt Service

ABT: Additional Bonds Test

AF: Acre-Feet

ANOR: Annual Net Operating Revenues

CAMP4W: Climate Adaptation Master Plan for Water

CIP: Capital Improvement Plan

COP: Certificate of Participation

CP: Commercial Paper

EPA: U.S. Environmental Protection Agency

FEMA: Federal Emergency Management Agency

G.O. Bonds: General Obligation Bonds

IEDB: California Infrastructure and Economic Development Bank

IRP: Integrated Water Resources Plan

JPA: Joint Powers Authority

LOC: Letter of Credit

LRFP: Long-Range Finance Plan

O&M: Operating and Maintenance

PAYGO: Pay-As-You-Go

SIFMA: Securities Industry and Financial Markets Association

SRF: State Revolving Fund

TAF: Thousand Acre-Feet

VRDO: Variable Rate Demand Obligation

WIFIA: Water Infrastructure Finance and Innovation Act

GLOSSARY:

Additional Bonds Test: The financial test that must be satisfied under the bond contract securing outstanding revenue bonds or other types of bonds as a condition to issuing additional bonds.

Ad Valorem Tax: A direct tax calculated “according to value” of property.

Assessed Value: The appraised value of a property as set for purposes of assessing property taxes.

Bond Covenant: Contractual obligations set forth in a bond contract.

BVAL: Indicative interest rate curve published by Bloomberg using yields from senior unsecured bonds with the same industry sector and credit rating category. Utilized in a similar manner to MMD, but differing in the approach in which the interest rate curves are determined.

CAMP4W: A master planning process to set a long-term vision for Metropolitan that will address critical policy issues driven by climate change. Specifically through CAMP4W, Metropolitan seeks to evaluate resource development objectives through a climate adaptation lens.

Capital Improvement Plan: 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.

Certificate of Participation: Obligation whereby investors purchase a share of some form of an installment payment rather than the obligation being secured by a pledge of system Net Revenues.

Commercial Paper: Short-term obligations issued by municipal entities usually backed by a line of credit with a bank that mature within 270 days.

Credit Rating: An opinion by a rating agency of the creditworthiness of a bond or obligation.

Credit Spread: A spread to an index (typically MMD or BVAL for tax-exempt municipal bonds) which results in a yield at which municipal investors are willing to purchase bonds. The credit spread can be affected by numerous factors including: i) rating on the bonds, ii) coupon of the bond, iii) market conditions, iv) maturity of the bonds, v) other characteristics of the bonds (such as call features). Higher rated bonds will typically have lower credit spreads versus comparable lower rated credits.

Debt Capacity: The amount of debt mathematically able to be issued under a defined set of constraints. Often, a debt capacity is run based on the constraint of an Additional Bonds Test or a targeted Debt Service Coverage ratio.

Debt Policy: Policy approved by the Board which outlines key parameters and considerations for the incurrence of obligations and the issuance of debt. Typically a Debt Policy will contain information on the types of debt and obligations allowed to be issued or incurred, the structuring considerations of debt, use of debt proceeds, continuing disclosure obligations and the responsibilities of various parties (both internal and external) related to the issuance of new debt and maintenance of existing debt. Within the State of California, municipal entities are required to have a Board approved debt policy prior to the issuance of public bonds.

Debt Service: The amount of money necessary to pay the principal and interest on outstanding debt obligations. Annual debt service refers to the total principal and interest required to be paid in a calendar or fiscal year. Total debt service refers to the total principal and interest paid throughout the life of a debt obligation.

Debt Service Coverage: The ratio of available pledged revenues (typically Net Revenues) available annually to pay debt service over the annual debt service requirement.

Fixed Charge Coverage: Fixed Charge Coverage is a method of calculating debt service coverage which includes certain O&M obligations related to debt in the denominator of the calculation. For Metropolitan this is typically calculated as Net Operating Revenues / (Debt Service + SWP Capital Payments).

General Obligation Bond: A bond issued by a state or local government that is payable from general funds of the issuer, although the precise source and priority of payment may vary considerably from issuer to issuer depending on applicable state or local law.

Integrated Resources Plan: A program in which Metropolitan provides financial assistance to its member agencies for the development of local groundwater recycling and groundwater recovery projects.

Joint Powers Authority: A municipal entity created by two or more public authorities.

Liquidity: The relative ability of a security to be readily converted into cash.

Maximum Annual Debt Service: The amount of Debt Service for the year in which the greatest amount of debt service payments are required.

MMD: Representative tax-exempt interest rates utilized in the municipal market as a benchmark for pricing tax-exempt bonds. The MMD index is an interest rate curve released by Municipal Market Data for its AAA General Obligation Yields. Municipal bonds are typically sold at spreads to AAA MMD rates.

Net Operating Revenues: Operating Revenues remaining after the payment of O&M expenses.

O&M: Expenses associated with the operating and maintenance of Metropolitan's system.

PAYGO: The practice of funding capital expenditures from current operating revenues in lieu of using debt proceeds.

Rate Covenant: Covenant to set rates and charges sufficient to provide required pledged revenues to meet a minimum Debt Service Coverage ratio.

Revenue Bond: A bond that is payable from a specific source of revenue. Pledged revenues may be derived from operation of the financed project, grants or excise or other specified non-ad-valorem taxes.

State Revolving Fund: SRF loans are loans through the State Water Resources Control Board for certain eligible Clean and Drinking Water projects.

Variable Rate Demand Obligation: Obligations that do not have a fixed interest rate, but rather have an interest rate that is reset periodically by either a remarketing agent or through an industry index such as SIFMA.

Unit Costs: For purposes of this LRFP, the unit costs are calculated on a dollar per acre foot basis including both O&M and capital financing costs (Debt Service) based on a survey of recent projects and studies.

WIFIA: Federal loan program

Photo: East/West Branch, California Aqueduct. Photo courtesy of DWR.

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Finance, Audit, Insurance, and Real Property Committee

Review Draft 2023 Long-Range Finance Plan Needs Assessment

Item 9-2

August 15, 2023

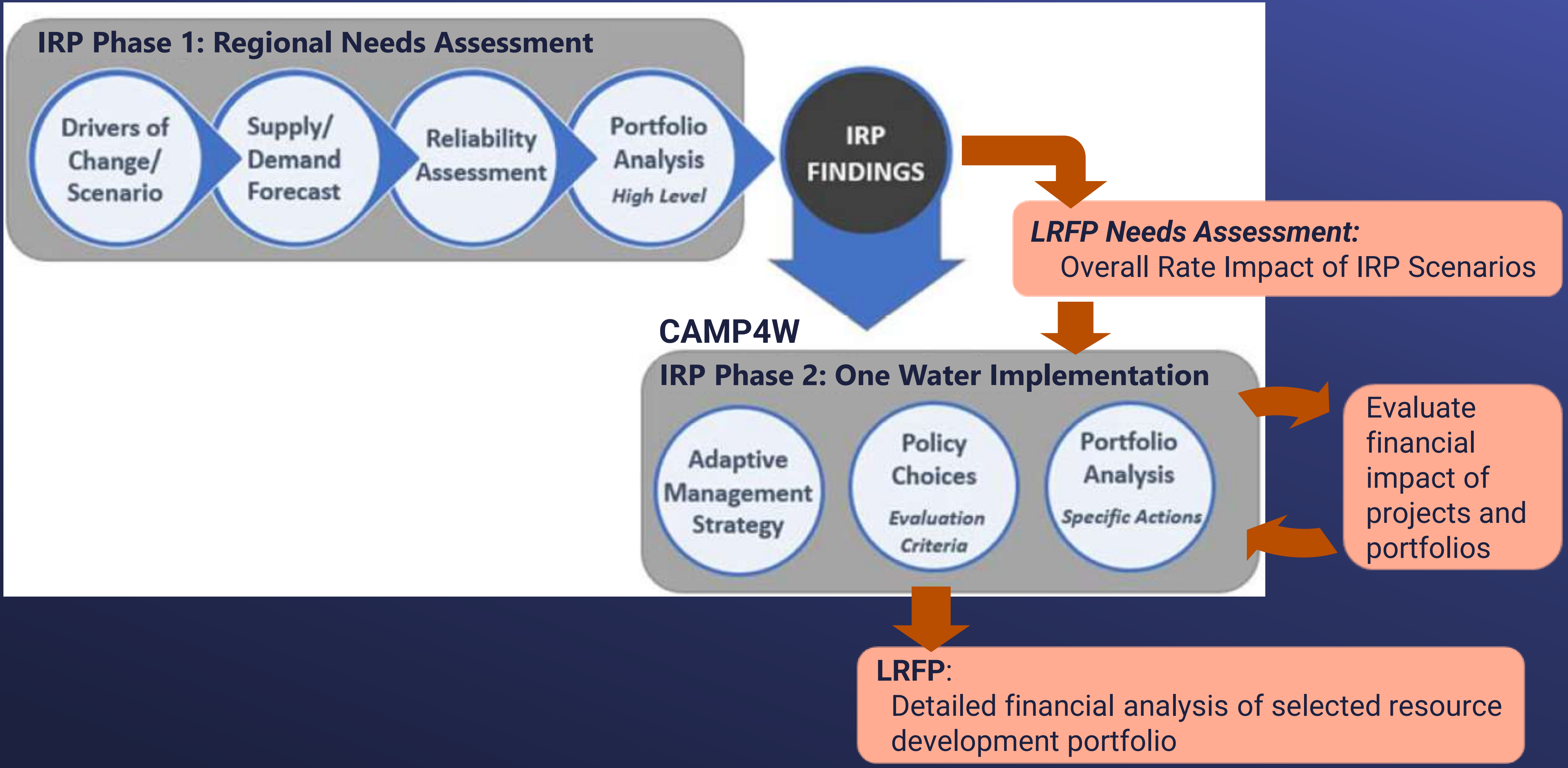
Agenda

- Overview of LRFP Process
- Rate Impact Modeling Analysis
- Capital Financing Considerations
- Conclusions & Next Steps

Long-Range Finance Plan Needs Assessment

Overview of LRFP Process

Integrated Planning Processes



Long-Range Financial Plan

LRFP Needs Assessment: Overall Rate Impact of IRP Scenarios and Capital Financing Considerations

1. Estimate the *rate impact* of various resource development scenarios identified in the IRP needs assessment
2. Discuss the primary capital financing and funding tools Metropolitan has at its disposal, describe the key finance policy considerations, and review alternative financial approaches

Results: Inform the CAMP4W process and assist the Board in selecting the resource development portfolio to pursue while weighing resiliency, reliability, financial sustainability, and affordability objectives

LRFP: Detailed Long-Range Financial Plan

As specific projects are identified that meet Board-approved objectives, a more refined rate impact can be developed, including phased project financing, cost recovery methodology, and reserve requirements

Long-Range Finance Plan Needs Assessment

Rate Impact Modeling Analysis

Modeling Overview
LRFP Needs Assessment

Modeling Period

- Starts with the adopted rates for calendar year 2023 and 2024 and project overall annual rate increases to 2032
- Public agencies and water utilities commonly use 5 or 10-year financial forecasts. Beyond a 10-year horizon, forecasts become highly uncertain
- The intent of the LRFP Needs Assessment is to estimate average annual overall rate increases over the 10-year forecast period and provide an indication of the trajectory of rates in the longer-term
- The model assumes that costs are recovered exactly as anticipated, allowing the model to focus on the impacts of resource development costs without introducing additional variation from reserves, debt coverage considerations, and other items that will be incorporated into the final LRFP

Modeling Overview

LRFP Needs Assessment

Modeling Process

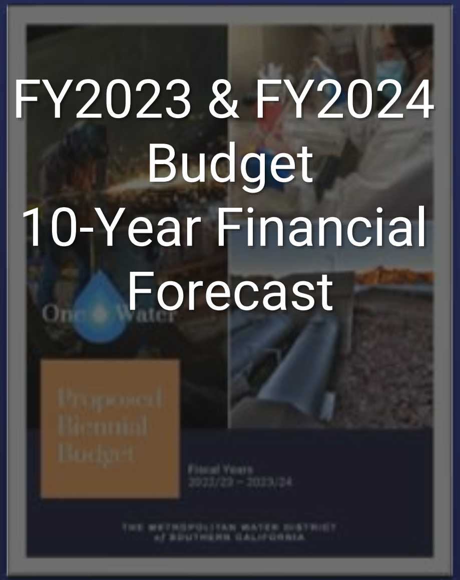
For each IRP Scenario for each year:

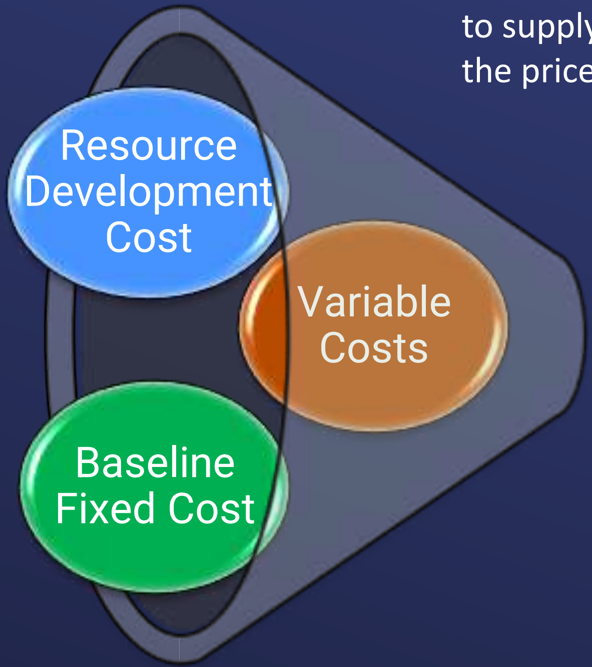
*Increases in different rate elements may vary as a result of the cost-of-service allocation and cost recovery approach for each project. Impacts on a member agency will depend on how and when they take water. For example, the more a project is allocated to supply then the full-service water rate will increase higher than the price for SDCWA exchange agreement deliveries.

Resource Development (AF)

× Resource Unit Cost ($/AF)

= Resource Development Cost





Revenue Requirement ($)

÷ Water Transactions ($/AF)

= Overall Rate ($/AF)

2020 IRP Needs Assessment Scenarios

Scenario Descriptions

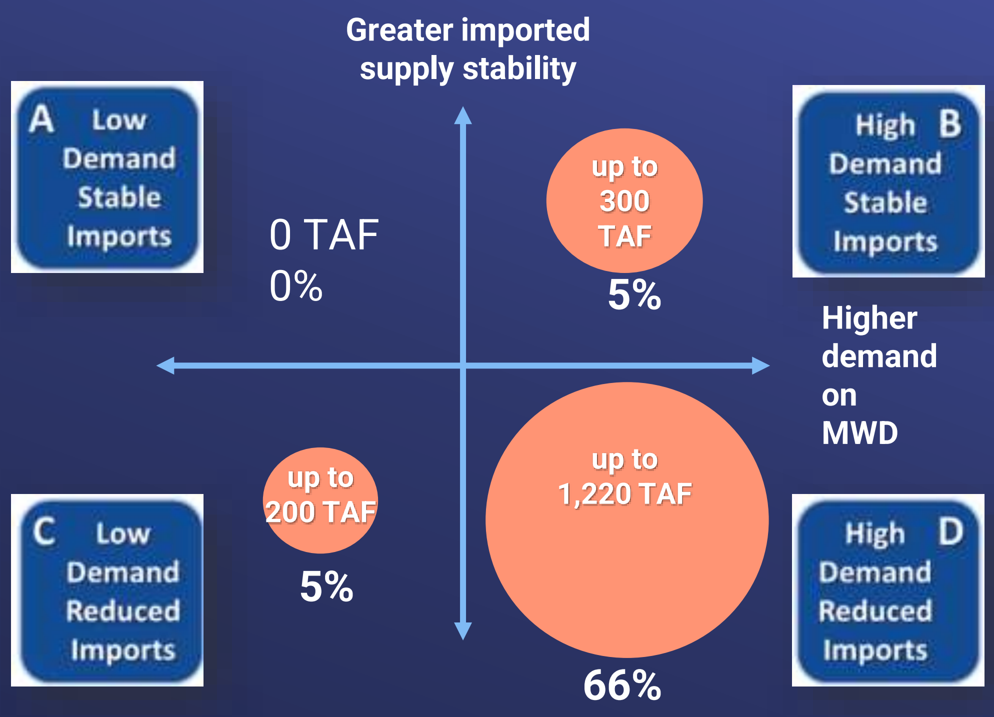
Scenario A – Low Demand/Stable Imports:
Gradual climate change impacts, low regulatory impacts, and slow economic growth.

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

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

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

Summary Matrix of IRP Scenario Results*

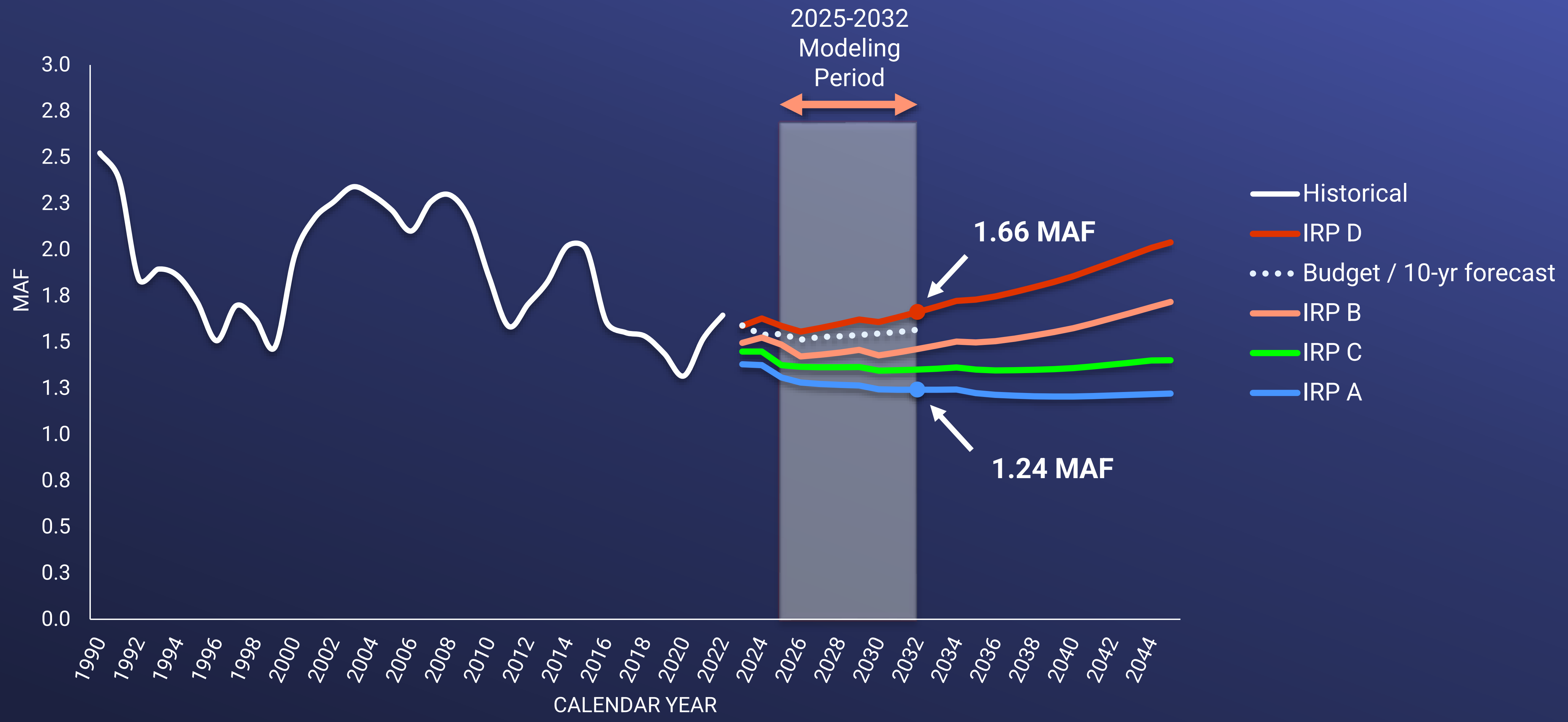


**Max Magnitude of Supply Gap (TAF) and Frequency (%) of a Net Shortage in 2045*

2020 IRP Needs Assessment Scenarios

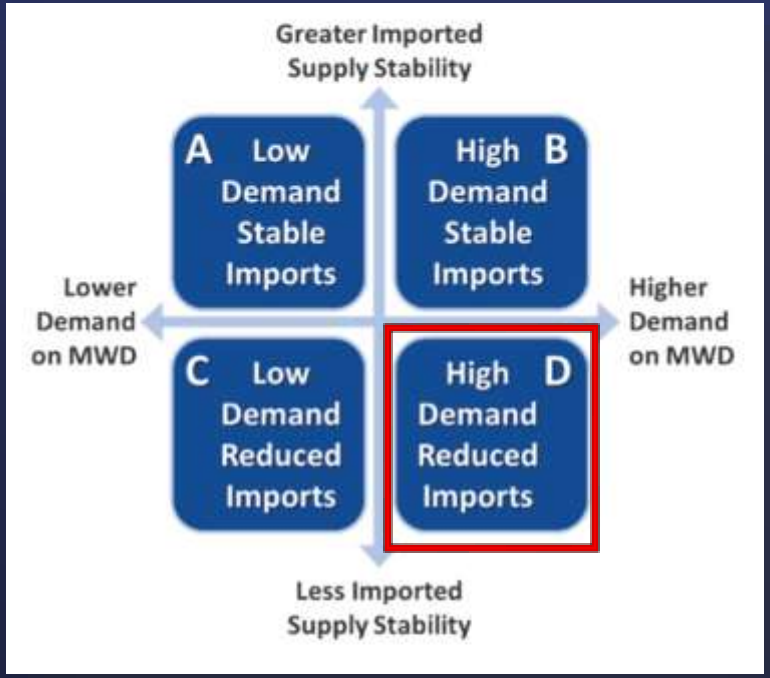
	Max Magnitude of Supply Gap (TAF) and Frequency (%) of a Net Shortage in 2045	
Scenario A	0 AF	**No additional resource development required**
Scenario C	up to 200 TAF 5%	**<u>*Minimal*</u> resource development required**
Scenario B	up to 300 TAF 5%	**<u>*Moderate*</u> resource development required**
Scenario D	up to 1,220 TAF 66%	**<u>*Significant*</u> resource development required**

Projected Water Demands



Resource Portfolios Example

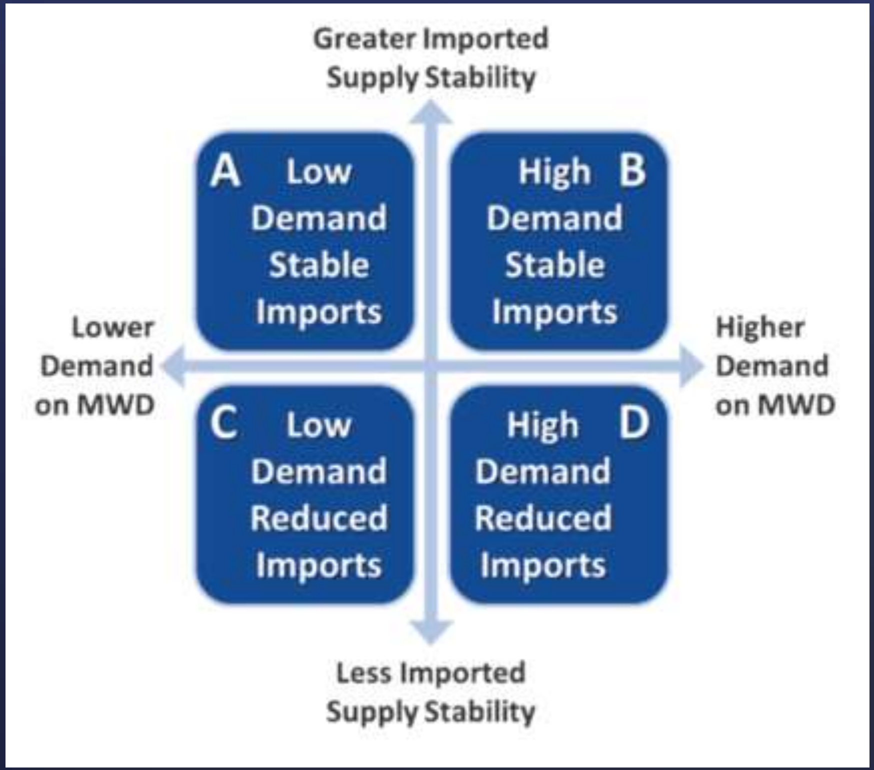
IRP Scenario D



	Additional storage: 0 AF		Additional storage: 250 TAF		Additional storage: 500 TAF	
	Storage	Core Supply	Storage	Core Supply	Storage	Core Supply
2025	0 TAF	100 TAF	23 TAF	100 TAF	45 TAF	100 TAF
2026	0 TAF	150 TAF	45 TAF	150 TAF	91 TAF	150 TAF
2027	0 TAF	150 TAF	68 TAF	150 TAF	136 TAF	150 TAF
2028	0 TAF	150 TAF	91 TAF	150 TAF	182 TAF	150 TAF
2029	0 TAF	150 TAF	114 TAF	150 TAF	227 TAF	150 TAF
2030	0 TAF	150 TAF	136 TAF	150 TAF	273 TAF	150 TAF
2031	0 TAF	300 TAF	159 TAF	200 TAF	318 TAF	200 TAF
2032	0 TAF	300 TAF	182 TAF	200 TAF	364 TAF	200 TAF
2033	0 TAF	300 TAF	205 TAF	200 TAF	409 TAF	200 TAF
2034	0 TAF	300 TAF	227 TAF	200 TAF	455 TAF	200 TAF
2035	0 TAF	300 TAF	250 TAF	200 TAF	500 TAF	200 TAF
2036	0 TAF	450 TAF	250 TAF	400 TAF	500 TAF	400 TAF
2037	0 TAF	450 TAF	250 TAF	400 TAF	500 TAF	400 TAF
2038	0 TAF	450 TAF	250 TAF	400 TAF	500 TAF	400 TAF
2039	0 TAF	450 TAF	250 TAF	400 TAF	500 TAF	400 TAF
2040	0 TAF	450 TAF	250 TAF	400 TAF	500 TAF	400 TAF
2041	0 TAF	650 TAF	250 TAF	550 TAF	500 TAF	500 TAF
2042	0 TAF	650 TAF	250 TAF	550 TAF	500 TAF	500 TAF
2043	0 TAF	650 TAF	250 TAF	550 TAF	500 TAF	500 TAF
2044	0 TAF	650 TAF	250 TAF	550 TAF	500 TAF	500 TAF
2045	0 TAF	650 TAF	250 TAF	550 TAF	500 TAF	500 TAF

Resource Portfolios Summary

IRP Scenarios



Core Supply Needs in 2032			
	No Storage	250 TAF Storage (182 TAF storage in 2032)	500 TAF Storage (364 TAF storage in 2032)
IRP A	0 TAF	0 TAF	0 TAF
IRP B	50 TAF	30 TAF	30 TAF
IRP C	15 TAF	15 TAF	15 TAF
IRP D	300 TAF	200 TAF	200 TAF

Resource Unit Costs

Resource	Range from sources	Modeled Unit Cost[1]
Core Supply[2]	Carlsbad Desal = $2,975/AF Santa Barbara Desal = $3,126/AF Venture Water Pure = $3,266/AF	$3,000/AF
Storage	DVL[3] = $269/AF ($3.8B @ 30yrs 4%, 800 TAF capacity) Chino Basin Storage Study[4] ~ $275-325/AF	Annual cost = $300/AF storage capacity
Flex Supply[5]	SWP Transfer = $605/AF Yuba Accord Transfer = $400/AF	$600/AF

[1] 2023 unit costs are escalated at 3% to future costs

[2] From SDCWA publication dated February 2023, Santa Barbara Recycled Water Assessment Oct 2022 Staff Report

Ventura PW cost was estimated by Metropolitan staff assuming $206 million in total capital costs, $6.7 million in annual O&M costs, and $18.2 million in grants, with the remaining capital costs funded from the EPA's WIFIA loan program at a rate of 2.5% for a 30-year term. Sources: 2019-Ventura-Water-Supply-Projects-Final-EIR (civicplus.com); 3069 (ca.gov). Prices were escalated to 2023 dollars from 2019 with 3% escalator.

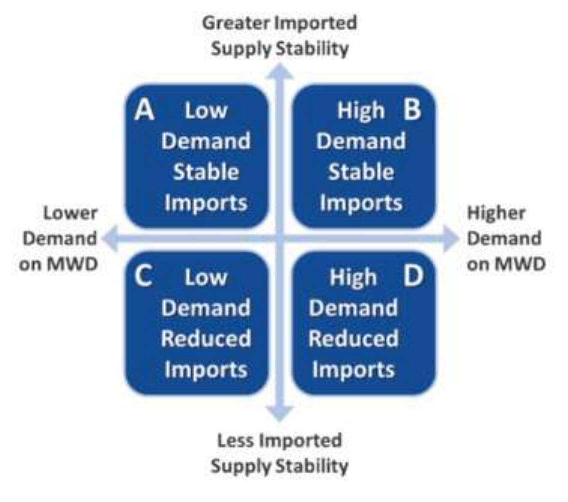
[3] Annual financing cost per AF of capacity constructed based on project cost in today's dollars of $3.8 billion. Assumes 30-year financing at 4%.

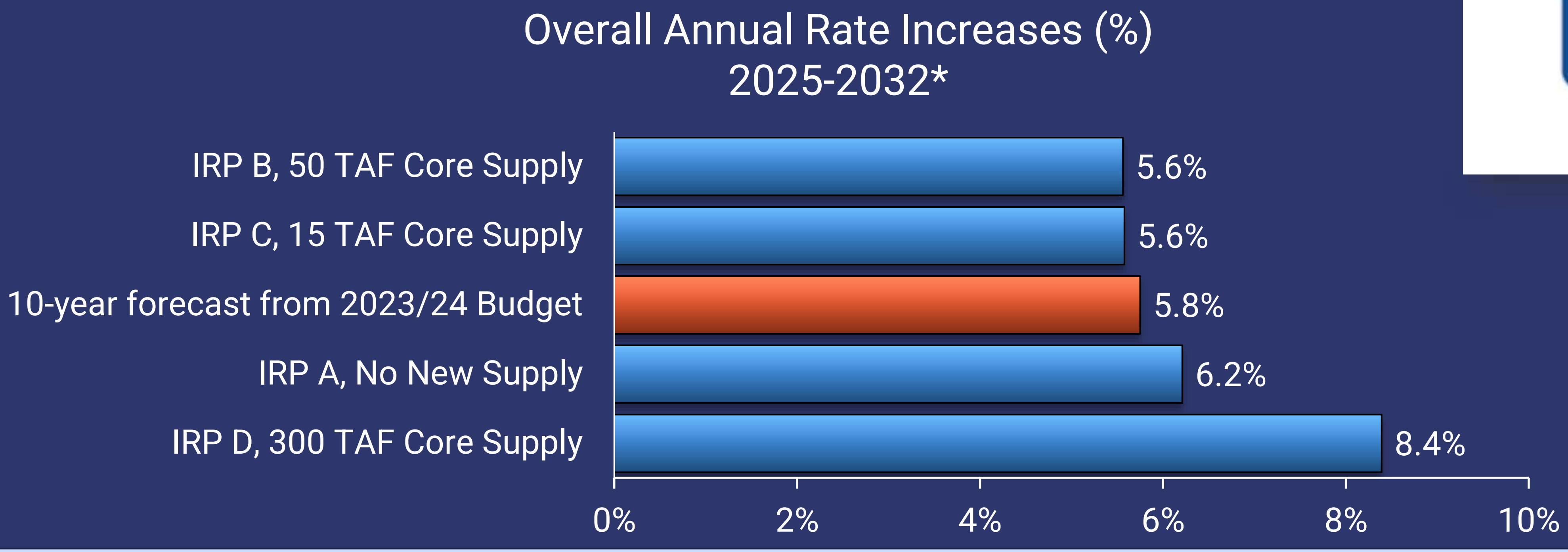
[4] Annual financing cost per AF of capacity constructed and projected annual O&M costs based on average of Chino Basin Storage Study options. Assumes 30-year financing at 4% for capital costs

[5] SWP and Yuba Accord transfers based on 2022 prices escalated to 2023 dollars.

Overall Rate Impact of IRP Scenarios

No additional storage option



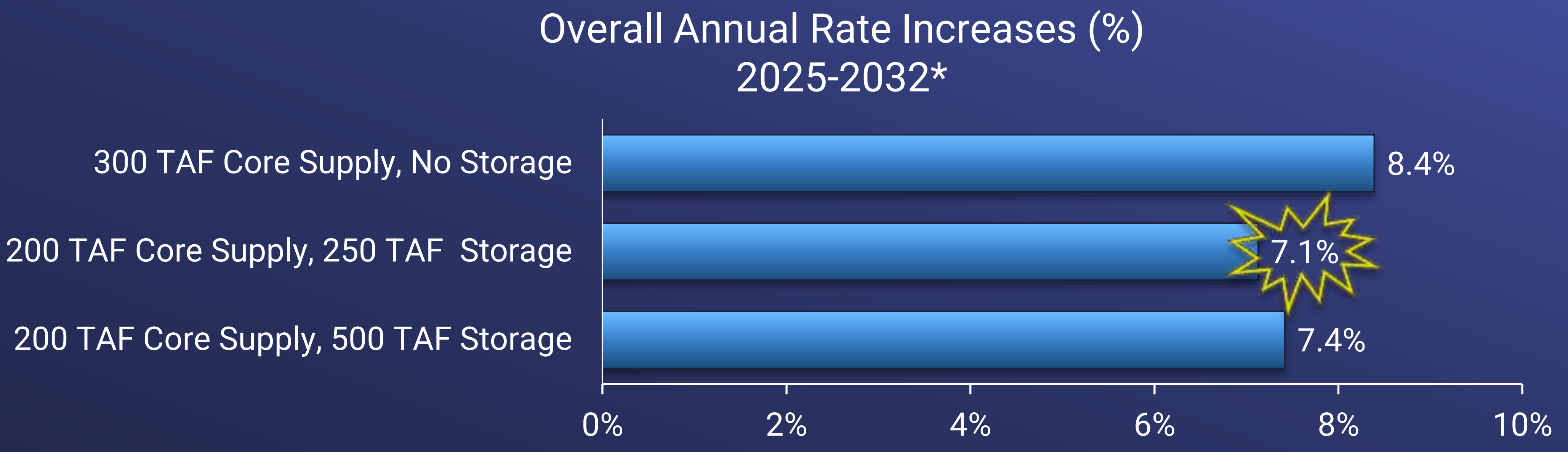


Observations:

1. Developing core supply to meet demands identified in IRP D will have the largest rate impacts.
2. The rate impact shown in IRP A results from lower water sales.

*Increases in different rate elements may vary as a result of the cost-of-service allocation and cost recovery approach for each project. Impacts on a member agency will depend on how and when they take water. For example, the more a project is allocated to supply then the full-service water rate will increase higher than the price for SDCWA exchange agreement deliveries.

Effect of Adding Storage for IRP D Scenario



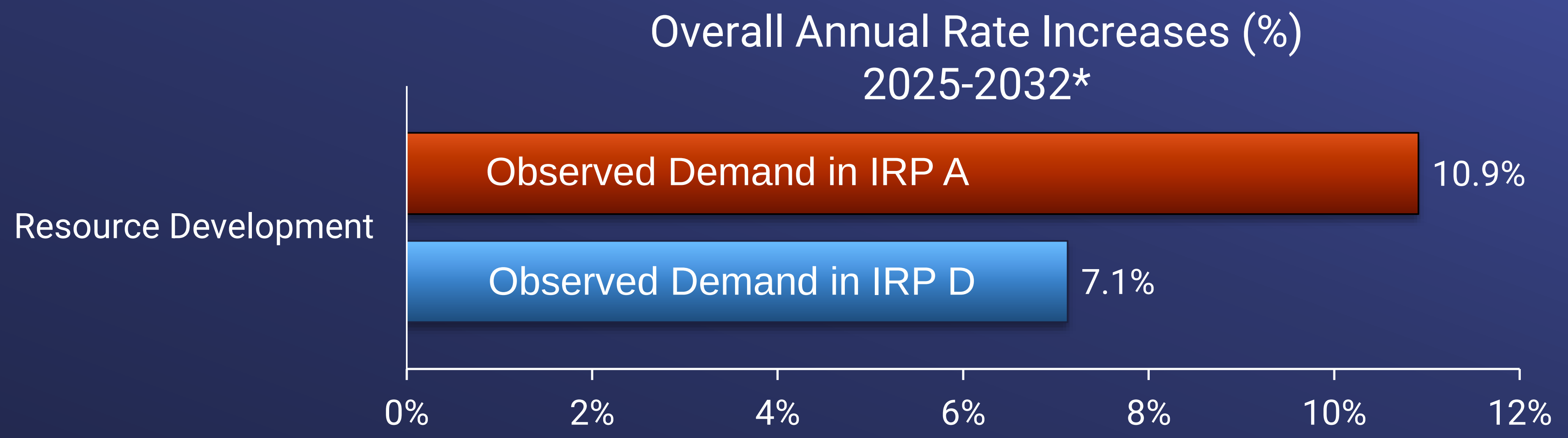
Observations:

To meet the projected water demand in IRP D, development of 200 TAF of core supply and 250 TAF of storage capacity has lower rate impacts (7.1%) than the no storage and 500 TAF storage options.

*Increases in different rate elements may vary as a result of the cost-of-service allocation and cost recovery approach for each project. Impacts on a member agency will depend on how and when they take water. For example, the more a project is allocated to supply then the full-service water rate will increase higher than the price for SDCWA exchange agreement deliveries.

Sensitivity Analysis for Lower Demand

Plan for IRP D Resource Needs with 250 TAF Storage but realize the lower water demands from IRP A

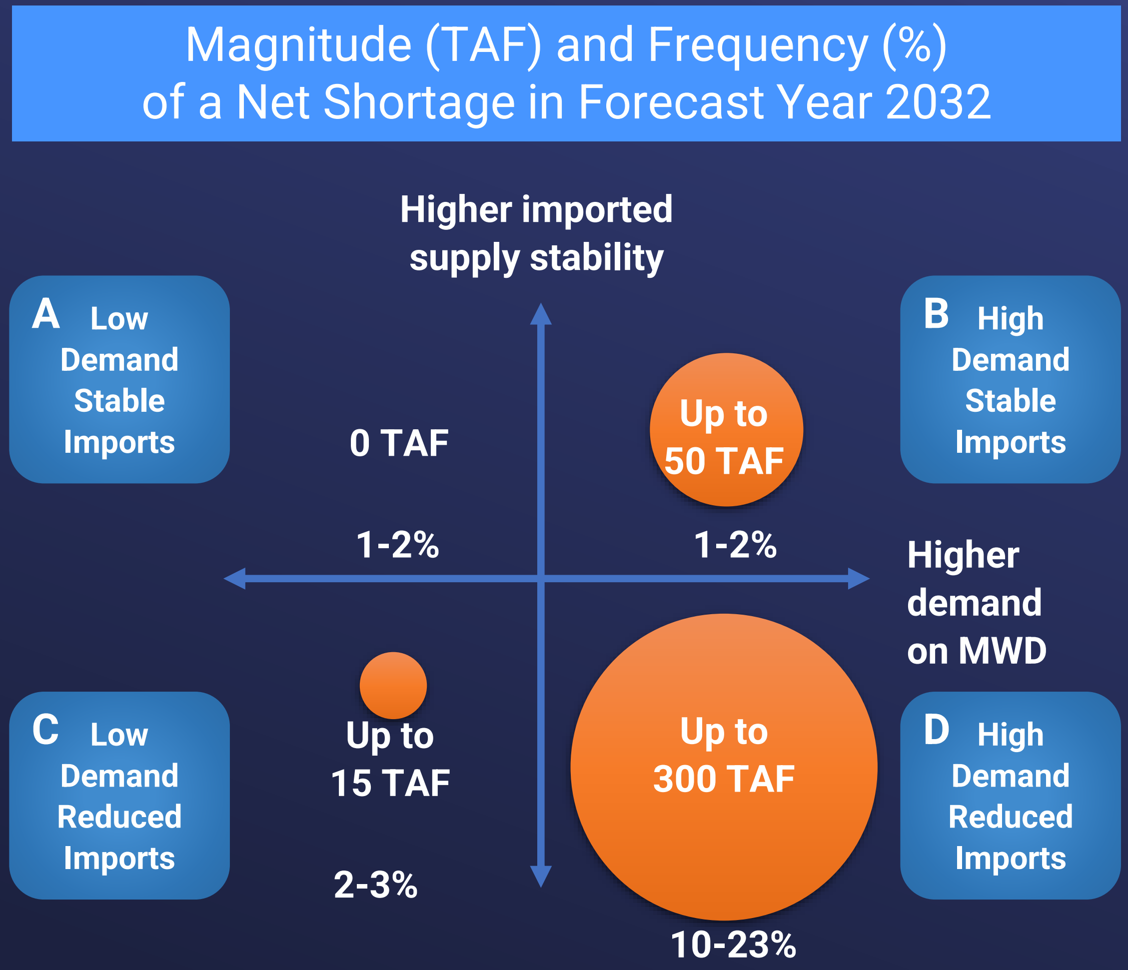


Observations:
If water demand does not materialize as projected in IRP D and instead occurs as projected in IRP A, development of core supply and storage to meet projected demand in IRP D could result in substantially higher rates.

*Increases in different rate elements may vary as a result of the cost-of-service allocation and cost recovery approach for each project. Impacts on a member agency will depend on how and when they take water. For example, the more a project is allocated to supply then the full-service water rate will increase higher than the price for SDCWA exchange agreement deliveries.

Net Shortage Assessment in 2020 IRP

Plan for IRP A (no additional resources developed) but experience the higher demands from IRP D.



1. Water supply shortages will incur economic costs
2. What level of resource development does the Board want to pursue in light of reliability, resilience, and affordability objectives?

Estimated Capital Investment
Examples for IRP D Scenario by 2032

Resource Development		Estimated Capital *
Core Supply	Storage Capacity	
200 TAF	250 TAF **	$5.5 Billion – $6.0 Billion

Engineering challenge

- 1.5x PWSC completed by 2032
- ~1/3 of Diamond Valley Lake completed by 2032

Financial challenge

- Available revenue bond capacity
- Cashflow constraints for debt coverage

* Assumptions: $3,000/AF for core supply (2023 $), 50% costs from O&M
$300/AF for storage capacity (2023 $), 0-50% costs from O&M
Capital financing @ 4%, 30-yr, 2% debt issuance cost

** 182 TAF in 2032

CAMP4W process
Example of projects to consider

- Pure Water of Southern California Project
- Delta Conveyance Project
- Sites Reservoir
- PVID Land Purchases

Can we meet the additional supply needs in IRP D with conservation?

Current Conservation Initiatives

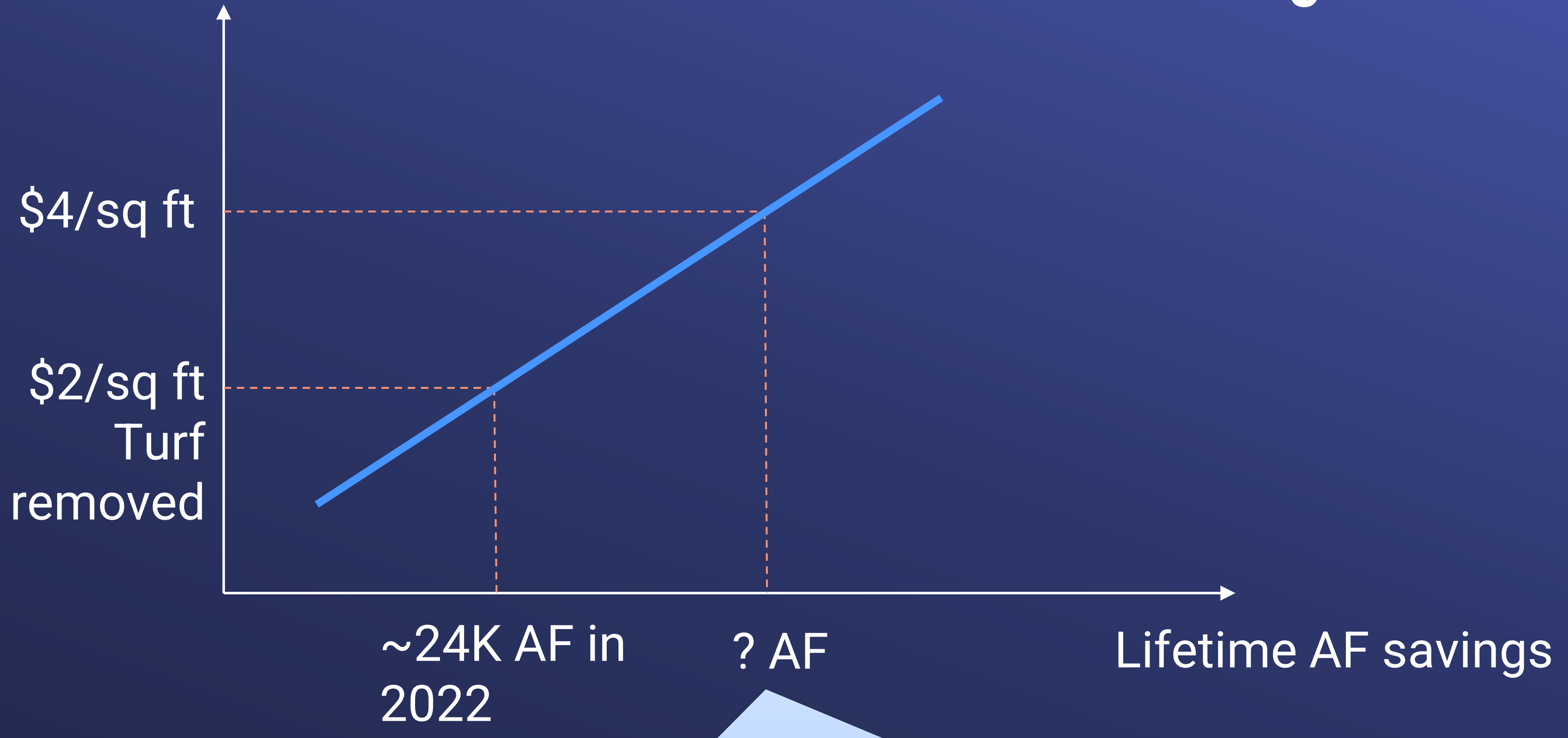
Most Utilized in 2022

Devices	Water Savings (GPD)	Life (Yrs)	Life AF Savings	Rebate	Rate ($/AF)	2022 Quantity (Units)	Total Lifetime AF Savings	Total $
	A	B	C = A x B / 892.74*	D	E = D / C	F	G = C x F	H = D x F
High Efficiency Nozzles	2.36	5	0.0132	$2	$152	22,312	295 AF	**$44,624**
High Efficiency Washer	29.32	14	0.4598	$85	$185	11,762	5,408 AF	**$999,770**
High Efficiency Toilets	9.37	20	0.2100	$40	$190	22,625	4,752 AF	**$905,000**
Showerheads	3.76	5	0.0211	$12	$570	5,029	106 AF	**$60,348**
Flow Control	7.50	10	0.0840	$5	$60	5,223	439 AF	**$26,115**
Weather Based Irrigation Controller	36.99	10	0.4143	$80	$193	9,337	3,869 AF	**$746,960**
Weather Based Controller by Station	15.98	10	0.1790	$35	$196	19,264	3,448 AF	**$674,240**
Commercial Turf Replacement	0.12	30	0.0041	$2	$494	2,933,030	11,883 AF	**$5,866,060**
Residential Turf Replacement	0.09	30	0.0032	$2	$631	3,814,405	12,081 AF	**$7,628,810**
Rain Barrel	1.70	5	0.0095	$35	$3,676	2,452	23 AF	**$85,820**
Total / Weighted Average					**$403 / AF**		**42,301**	**$17,037,747**

* 892.74 is conversion factor for GPD to AFY

Conservation Price Elasticity

How much conservation is available and at what price?



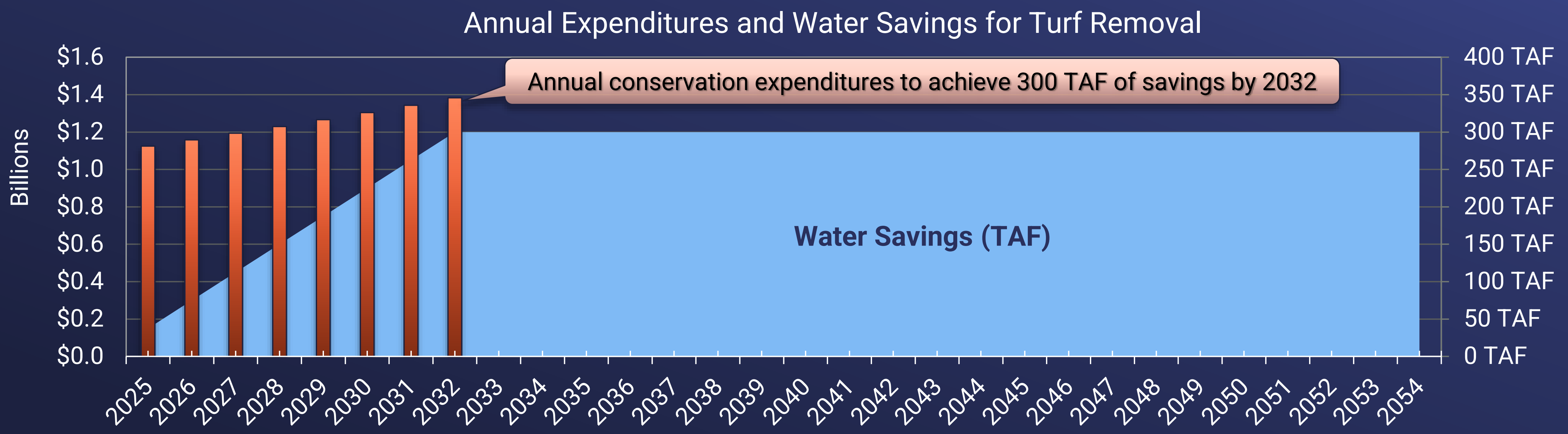
- Insufficient data on availability of additional conservation and at what price.
- Further study needed to identify the available capacity and price elasticity of conservation.

Nature of Conservation Investment

Front-loaded expenditures for water savings over the lifetime

Example: Meeting IRP D core supply needs (300 TAF) with turf removal

- Assumes 300 TAF of conservation is available at $4/sq ft (or ~$1,000/AF of lifetime savings)
- Cumulative savings must grow by 37,500 AF/yr from 2025 - 2032 to meet 2032 target of 300 TAF
- $1,000 saves 1 AF of water over the next 30 years, or 0.033 AF/year. $30,000 saves 1 AF/yr for the next 30 yrs.
- To achieve 300 TAF of annual water savings by 2032, annual conservation expenditure would be ~$1.1B/yr through 2032

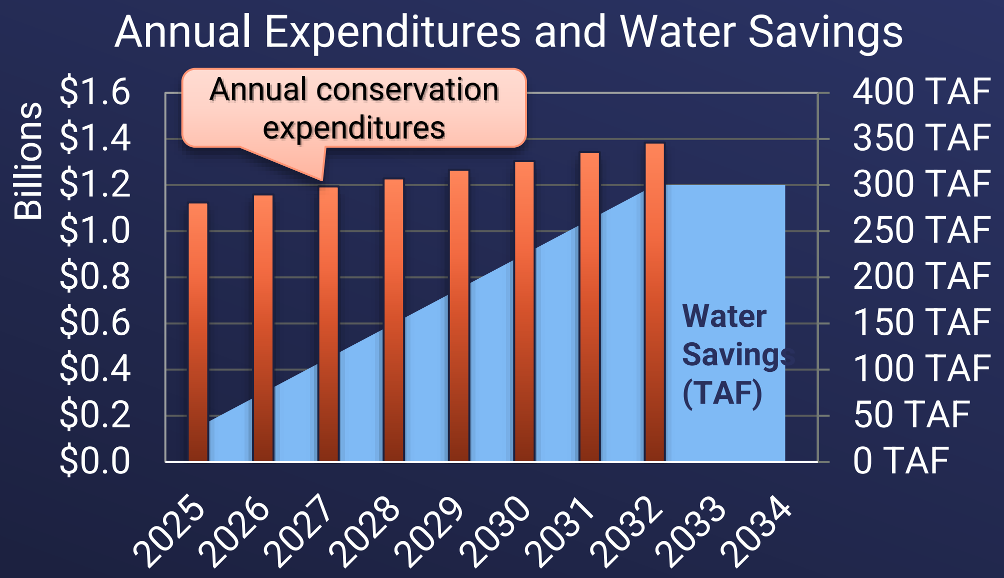


Nature of Conservation Investment …cont.

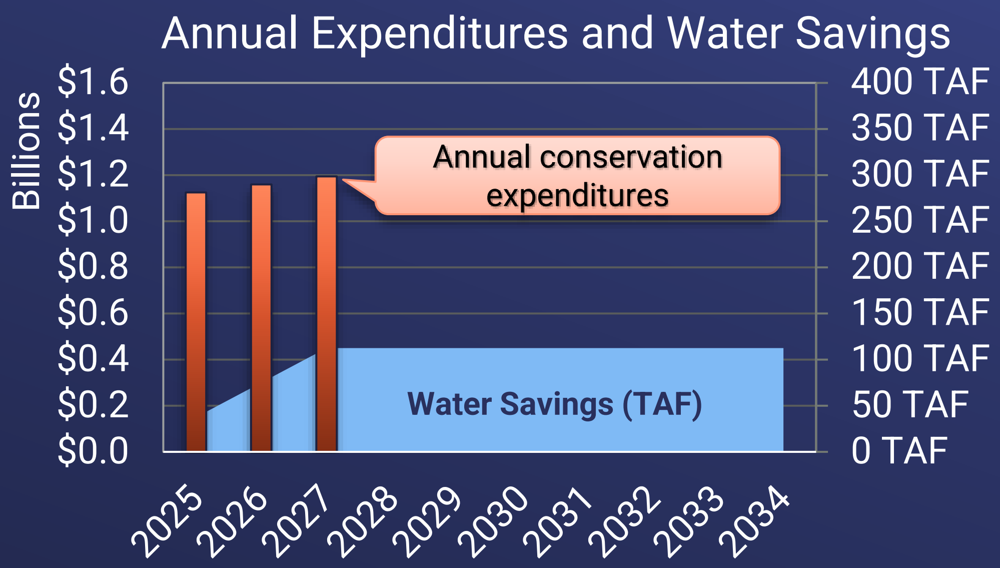
Front-loaded expenditures for water savings over the lifetime

If the water demand are lower than the projected, or the water supply situation improves, MWD can adjust or remove the conservation program along the way.

ORIGINAL CONSERVATION PLAN



ADJUSTED CONSERVATION PLAN



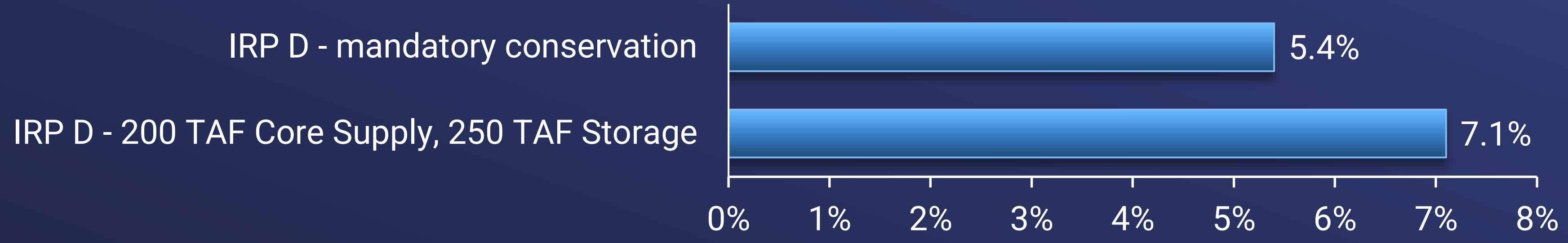
Mandatory Conservation Scenario

Mandatory conservation in response to long-term structural imbalance between supply and demand

Scenario Assumptions

- Assumes regulatory action mandating conservation
- No new resource development – new supply or incentivized conservation
- Mandatory conservation is no cost to Metropolitan ($0/AF in the model)
- Begin with projected demand in IRP D and reduce gradually to meet 2032 resource development goal - 300 TAF

Overall Annual Rate Increases (%) 2025-2032*

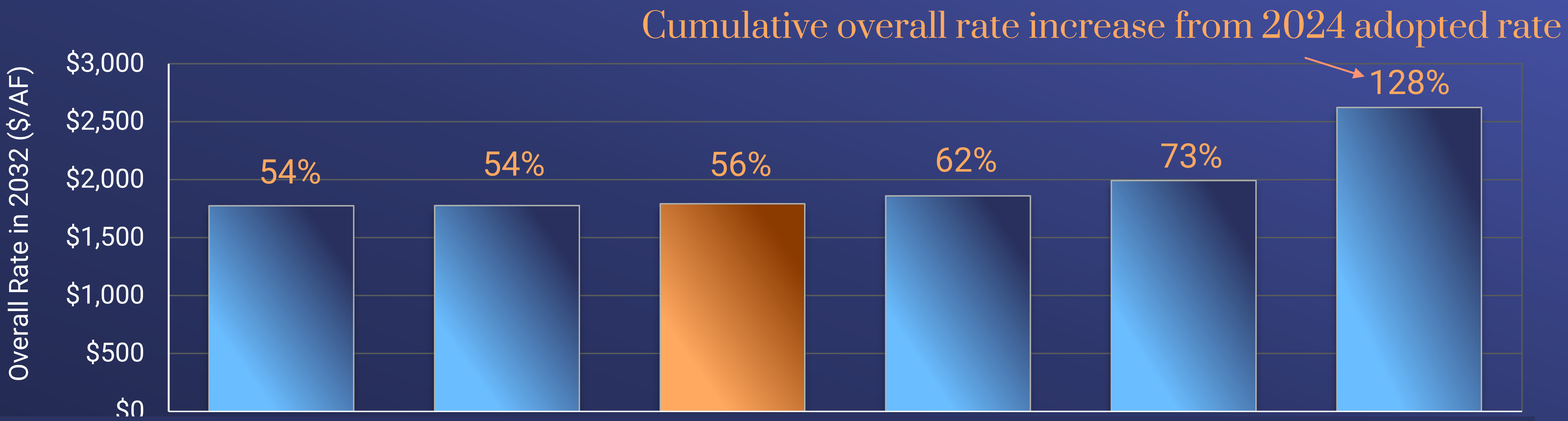


Observations:

1. Lowest rate impact as there is no financial cost to Metropolitan for mandatory conservation. However, member agencies and subagencies will incur compliance and enforcement costs.
2. What are the implications of mandatory conservation on economic growth and quality of life for region?

*Increases in different rate elements may vary as a result of the cost-of-service allocation and cost recovery approach for each project. Impacts on a member agency will depend on how and when they take water. For example, the more a project is allocated to supply then the full-service water rate will increase higher than the price for SDCWA exchange agreement deliveries.

Projected 2032 Overall Rate by IRP Scenario



	IRP B, No Storage	IRP C, No Storage	10-year forecast from 2023/24 Budget	IRP A, No Storage	IRP D, 250 TAF Storage	Plan for IRP D, Observed IRP A Demand
Core Supply	30 TAF	15 TAF	N/A	0	200 TAF	200 TAF
Storage	0	0	N/A	0	182 TAF	182 TAF
Water Demand	IRP B 1.46 MAF	IRP C 1.35 MAF	Budget 1.58 MAF	IRP A 1.24 MAF	IRP D 1.66 MAF	IRP A 1.24 MAF

*Increases in different rate elements may vary as a result of the cost-of-service allocation and cost recovery approach for each project. Impacts on a member agency will depend on how and when they take water. For example, the more a project is allocated to supply then the full-service water rate will increase higher than the price for SDCWA exchange agreement deliveries.

Long-Range Finance Plan Needs Assessment

Capital Financing Considerations

Development of Financial Plans

- A financial plan needs to consider all of Metropolitan's key financial tenets for success:
  - Affordability
  - Flexibility
  - Compliance with financial policies
  - Financial sustainability
- Feasibility of financial plans is determined by:
  - Fully-funding Metropolitan's CIP
  - Maintenance of minimum credit rating levels
  - Meeting debt service coverage ratio targets
  - Meeting liquidity / reserve targets

Primary means of funding capital

	Benefits	Considerations
Grant Funding	• "Free" money -- often the cheapest form of funding	• Typically paid on a reimbursement basis • Often contain a local-match requirement • Federal grants may "federalize" the project receiving grant funds
PAYGO Funding	• Flexible • Avoids bond interest expense; but has an opportunity cost of investment earnings • No contractual obligations with lenders • Lowers rates over time	• Project costs borne entirely by existing or past customers • Project delivery delays may occur if insufficient PAYGO funding exists
Debt Funding	• Allows acceleration of future funds for project capital funding • Intergenerational equity	• Cost of borrowing is interest • Contractual obligations to lenders • Reduced future flexibility

Debt Financing Overview

Metropolitan has or can issue several types of debt:

- Revenue Bonds (primary means of debt financing)
- General Obligation Bonds (historically issued for SWP costs)
- Certificates of Participation (JPA financings and/or if Revenue Bond capacity is unavailable)

When issuing debt, Metropolitan takes into consideration several factors:

- Amount and timing of when debt is needed
- Impact on credit ratings
- Current market interest rates
- Compliance with rate covenants and additional bonds tests
- Overall Metropolitan debt capacity

Rating Agency Considerations

- Rating are perhaps the single-most important element of determining borrowing costs
- With strong credit ratings, MWD borrows at cost- effective interest rates
- Ratings are assigned by independent Rating Agencies that analyze the fundamentals of a debt issuance representing the likelihood of timely repayment of debt service
- Each Rating Agency has its own specific criteria to measure creditworthiness

MWD's Credit Ratings			
	S&P	Moody's	Fitch
Senior Lien	AAA	Aa1	AA+
Subordinate Lien	AA+	-	AA+
GO Bonds	AAA	Aaa	-

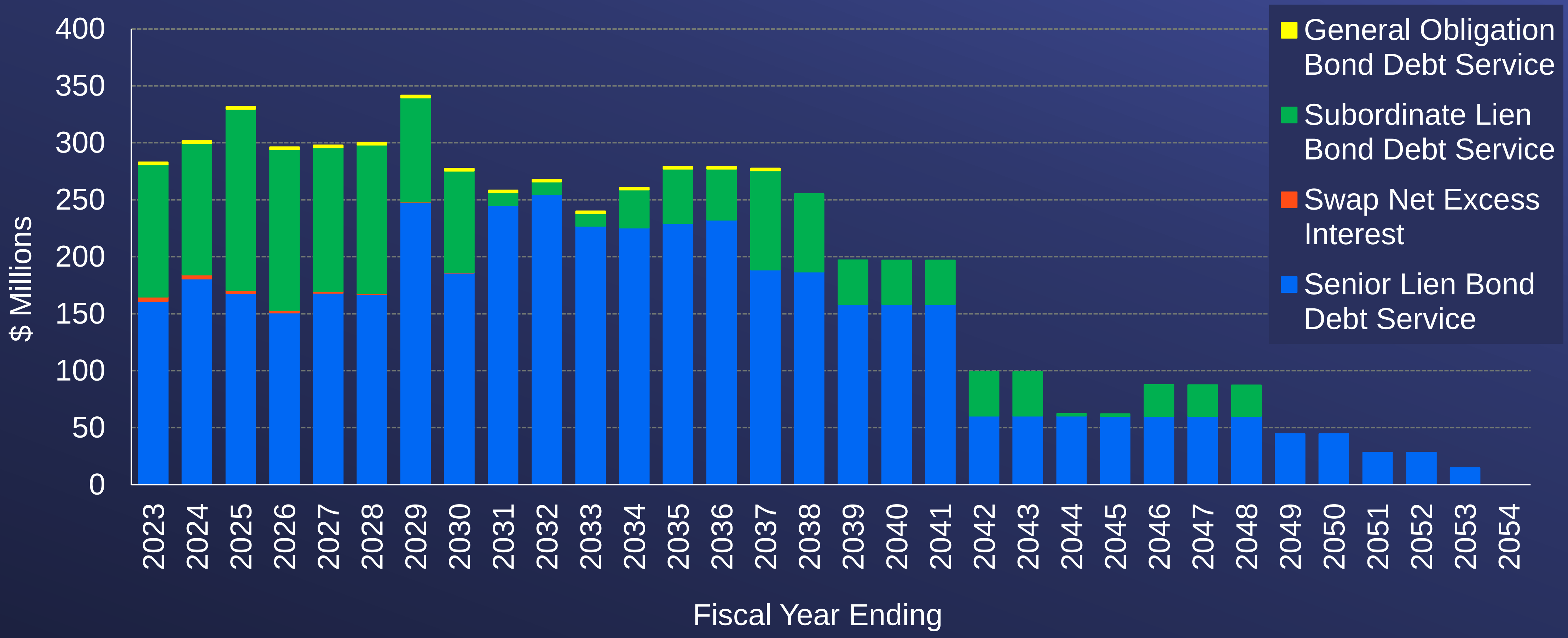
S&P's Water Utility Scorecard			
Enterprise Risk Profile (50% of Final Rating)		Financial Risk Profile (50% of Final Rating)	
Factor	Weight	Factor	Weight
Economic Fundamentals	45%	All-in Coverage	40%
Industry Risk	20%	Liquidity & Reserves	40%
Market Position	25%	Debt & Liabilities	10%
Operational Management	10%	Financial Management	10%

Debt Service Coverage

Debt service coverage is important to ratings, compliance with legal covenants, and financial health

- Debt service coverage is an important calculation measuring the robustness of Metropolitan's ability to repay debt
  - Debt service coverage is calculated as $\frac{\textit{Net Operating Revenues}}{\textit{Debt Service}}$
  - Fixed charge coverage is calculated as $\frac{\textit{Net Operating Revenues}}{\textit{All Debt Service} + \textit{SWP Capital Payments}}$
  - Metropolitan targets debt service coverage of 2.0x and fixed charge coverage of 1.2x to support maintenance of strong credit ratings
- Additional Bonds Test ("ABT")
  - In order to issue new money debt, Metropolitan must demonstrate that it will at least meet certain minimum debt service coverage ratios post-issuance

Metropolitan Existing Debt Portfolio



Other Funding Options & Approaches

	Description
Federal and State Grants	• Grant funds can potentially be used to offset costs that otherwise would be recovered through rates and charges • Most grants are dispensed on a reimbursement basis; hence, cashflow liquidity is a potential concern for many smaller governmental entities • Some federal and state programs require a local match, which may vary by program but generally range between 10 percent to 50 percent of the eligible project costs for reimbursement • Some federal and state programs provide a matching subsidy to the ultimate customer, such as with conservation programs
Federal and State Loans	• WIFIA funding provides low-cost, flexible funding for eligible projects • State loans such as SRF and IEDB loans can provide low-cost funding • Benefits and considerations should be weighed carefully
Voter Approved General Obligation Bonds	• Voter-approved general obligation bond would provide property tax secured debt to fund capital projects • Alleviate future pressure on rates
Set MWD Property Tax Rate to Fund a Higher Targeted Amount of SWP Costs	• MWD is authorized to levy a property tax to fund State Water Contract (SWC) obligations • Current rate of 0.0035% is the lowest tax rate ever levied but only fund 30% of MWD's SWC expenditures • MWD can explore options of funding more SWC costs with property taxes, as originally intended and approved by voters

Long-Range Finance Plan Needs Assessment

Conclusions & Next Steps

LRFP Needs Assessment

Conclusions

- Developing additional core supply and storage to meet higher supply reliability identified in Scenario D will result in higher rate increases than the adopted FY 2022/23 and FY 2023/24 budget 10-year forecast
- Underdevelopment of water supply resources while experiencing high water demand will result in water supply shortages
  - Up to 300 TAF with 10-23% probability of shortage in Scenario D
  - Water supply shortages will incur economic costs
- Development of core supply and storage to meet projected demand could result in substantially higher rates if future water demand does not materialize

LRFP Needs Assessment

Conclusions… cont.

- A preliminary estimate places annual conservation costs at greater than $1 billion per year through 2032 to be 100% reliable under IRP D scenario
  - Metropolitan's ability to fund this level of conservation is questionable, given financing limitations and potential rate burdens
  - Moreover, it is not clear if the amount of conservation required can be realized at the incentive level assumed
- Investing in conservation also locks in lower water demands that will increase water rates
- However, unlike the construction of additional resources conservation spending does not create a new fixed cost so if Metropolitan observes a natural reduction in demands conservation spending can be reduced
- Mandatory conservation would result in the lowest average rate impacts for IRP D scenario, but member agencies would incur compliance and enforcement costs

LRFP Needs Assessment

Conclusions… cont.

- In contrast, capital project investments for core supply and storage can:
  (1) take many years to complete
  (2) have significant upfront costs (although typically can be bond financed to spread these costs over time)
  (3) often have ongoing O&M expenses
  (4) Incur refurbishment and replacement costs over time
- However, capital project investments typically offer predictable supply reliability enhancement opportunities that can be indispensable in periods of protracted drought

Next Steps: LRFP & CAMP4W Process

- Determine what level of resource development the Board wants to pursue considering resiliency, reliability, financial sustainability, affordability and equity objectives
- Evaluate rate impacts for specific projects and portfolios of projects that meet the board-approved reliability objectives
- Through PWSC lens, evaluate business model options and financing strategies that help to meet Board objectives

LRFP Needs Assessment

Updated LRFP Timeline

- August 2023
  - Draft LRFP Needs Assessment introduced at FAIRP
- September 2023
  - Member Agency Manager Meeting
  - CAMP4W workshop on LRFP & business model
- October 2023
  - Incorporate feedback and bring revised LRFP Needs Assessment to FAIRP & Board
- October 2023 & beyond
  - Continued feedback loop with CAMP4W & finalize LRFP in FY 2024/25

THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA