

The Metropolitan Water District of Southern California

Agenda

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

E&O Committee

T. Smith, Chair
S. Blois, Vice Chair
R. Apodaca
M. Camacho
D. De Jesus
L. Dick
S. Faessel
L. Fong-Sakai
R. Lefevre
J. Morris
G. Peterson
H. Repenning
H. Williams

Engineering and Operations Committee

Meeting with Board of Directors *

December 12, 2022

12:30 p.m.

Live streaming is available for all board and committee meetings on mwdh2o.com ([Click Here](#))

A listen only phone line is also available at 1-877-853-5257; enter meeting ID: 831 5177 2466. Members of the public may present their comments to the Committee on matters within the committee's jurisdiction as listed on the agenda via in-person or teleconference. To participate via teleconference (833) 548-0276 and enter meeting ID: 815 2066 4276.

Monday, December 12, 2022 Meeting Schedule

09:00 a.m. Sp BOD
10:00 a.m. F&I
11:00 a.m. OP&T
12:00 p.m. A&E
12:30 p.m. E&O
02:00 p.m. IW
03:00 p.m. WP&S

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

* The Metropolitan Water District's meeting of this Committee is noticed as a joint committee meeting with the Board of Directors for the purpose of compliance with the Brown Act. Members of the Board who are not assigned to this Committee may participate as members of the Board, whether or not a quorum of the Board is present. In order to preserve the function of the committee as advisory to the Board, members of the Board who are not assigned to this Committee will not vote on matters before this Committee.

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

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

2. CONSENT CALENDAR OTHER ITEMS - ACTION

- A. Approval of the Minutes of Engineering and Operations Committee Meeting held November 7, 2022 (Copies have been submitted to each Director, Any additions, corrections, or omissions)

[21-1730](#)

Attachments: [12122022 EO 2A Minutes](#)

3. CONSENT CALENDAR ITEMS - ACTION

- 7-3** Authorize the General Manager to use \$80 million in grant funding from the State Water Resources Control Board to commence activities related to the initiation of the Pure Water Southern California program, and authorize an increase to Metropolitan's current staff levels by 17 full-time equivalent positions for employees to work on the program; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA **[21-1709](#)**

Attachments: [12132022 EO 7-3 B-L](#)
[12122022 EO 7-3 Presentation](#)

- 7-4** Award a \$2,165,000 contract to Caltec Corp. for physical security improvements at Metropolitan's Headquarters Building; and authorize an increase of \$250,000 to an agreement with Arcadis IBI Group for a new not-to-exceed amount of \$3.35 million for technical support during construction; the General Manager has determined that the proposed actions are exempt or otherwise not subject to CEQA **[21-1707](#)**

Attachments: [12132022 EO 7-4 B-L](#)
[12122022 EO 7-4 Presentation](#)

- 7-5** Adopt a resolution designating authorized agents for funding from the California Office of Emergency Services and the Federal Emergency Management Agency; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA **[21-1710](#)**

Attachments: [12132022 EO 7-5 B-L](#)
[12122022 EO 7-5 Presentation](#)

- 7-6** Adopt resolution to accept \$50 million in state funding from the California Department of Water Resources to support Metropolitan's drought mitigation projects; designate the Group Manager of Engineering Services to be the signatory to execute actions related to the funds; the General Manager has determined that the proposed actions are exempt or otherwise not subject to CEQA **[21-1711](#)**

Attachments: [12132022 EO 7-6 B-L](#)
[12122022 EO 7-6 Presentation](#)

- 7-7** Authorize on-call agreements with GEI Consultants, Inc., HDR, Inc., and Stantec Consulting Services Inc. in amounts not to exceed \$2.5 million each, for a maximum of five years, to support Metropolitan's Dam Safety Initiatives Program; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA [21-1765](#)

Attachments: [12132022 EO 7-7 B-L](#)
[12122022 EO 7-7 Presentation](#)

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

4. OTHER BOARD ITEMS - ACTION

NONE

5. BOARD INFORMATION ITEMS

NONE

6. COMMITTEE ITEMS

- a. Capital Investment Plan quarterly report for period ending September 2022 [21-1731](#)

Attachments: [12122022 EO 6a Report](#)
[12122022 EO 6a Presentation](#)

7. MANAGEMENT REPORTS

- a. Water System Operations Manager's Report [21-1732](#)

Attachments: [12122022 EO 7a Presentation](#)

- b. Engineering Services Manager's Report [21-1733](#)

Attachments: [12122022 EO 7b Presentation](#)

8. FOLLOW-UP ITEMS

NONE

9. FUTURE AGENDA ITEMS

10. ADJOURNMENT

NOTE: This committee reviews items and makes a recommendation for final action to the full Board of Directors. Final action will be taken by the Board of Directors. Agendas for the meeting of the Board of Directors may be obtained from the Board Executive Secretary. This committee will not take any final action that is binding on the Board, even when a quorum of the Board is present.

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 <http://www.mwdh2o.com>.

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.

THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

MINUTES

ENGINEERING AND OPERATIONS COMMITTEE

November 7, 2022

Chair Smith called the teleconference meeting to order at 10:30 a.m.

Members present: Chair Smith, Vice Chair Blois, Directors Camacho (entered after roll call), De Jesus, Dick, Faessel, Fong-Sakai, Lefevre, Morris, Peterson, and Williams

Members absent: Directors Apodaca and Repenning

Other Board members present: Directors Abdo, Ackerman, Atwater, Cordero, Dennstedt, Erdman, Goldberg, Jung, Kurtz, Miller, Pressman, Record, and Tamaribuchi

Committee staff present: Bednarski, Chapman, Figures, Hagekhalil, Lahouti, Parsons, Upadhyay, and Yamasaki

1. OPPORTUNITY FOR MEMBERS OF THE PUBLIC TO ADDRESS THE COMMITTEE ON MATTERS WITHIN THE COMMITTEE'S JURISDICTION

None

CONSENT CALENDAR ITEMS --ACTION

2. CONSENT CALENDAR OTHER ITEMS - ACTION

- A. Approval of the Minutes of the Engineering and Operations Committee held October 10, 2022.

3. CONSENT CALENDAR ITEMS - ACTION

- 7-2 Subject: Ratify an emergency contract with PCL Construction, Inc., in the amount of \$855,623.78, for replacement of the expansion joint on the Upper Feeder pipeline at the Santa Ana River bridge crossing; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA [Requires four-fifths vote of the Board]

Presented by: Brett Schickling, Engineer, Engineering Services Group

Motion: Ratify an emergency contract with PCL Construction, Inc. in the amount of \$855,623.78 for replacement of the expansion joint on the Upper Feeder pipeline at the Santa Ana River bridge crossing. [Requires four-fifths vote of the Board.]

The following Director provided comments or asked questions

1. Miller

Staff responded to the Director's questions and comments.

7-3 Subject: Award a \$1,228,607.10 contract to Howard Ridley Company, Inc. for the rehabilitation of the concrete liner at ten locations within the Rainbow Tunnel segment of San Diego Pipeline No. 1; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA

Presented by: Thomas Campbell, Unit Manager, Engineering Services Group

Motion: Award a \$1,228,607.10 contract to Howard Ridley Company, Inc. to rehabilitate the concrete liner of the Rainbow Tunnel at ten locations.

The following Director provided comments or asked questions

1. Miller

Staff responded to the Director's questions and comments.

7-6 Subject: Award an \$820,852.53 procurement contract to Whipps, Inc. for three slide gates to rehabilitate the San Jacinto Diversion Structure; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA

Presented by: Wayne Thilo, Senior Engineer, Engineering Services Group

Motion: Award an \$820,852.53 procurement contract to Whipps, Inc. to furnish three slide gates and appurtenances to rehabilitate the San Jacinto Diversion Structure.

The following Directors provided comments or asked questions

1. Faessel
2. Blois

Staff responded to the Directors' questions and comments.

After completion of the presentations, Director Peterson made a motion, seconded by Director Blois, to approve the consent calendar consisting of items 2A, 7-2, 7-3, and 7-6.

The vote was:

- Ayes: Directors Blois, De Jesus, Dick, Faessel, Fong-Sakai, LeFevre, Morris, Peterson, Smith, and Williams
- Noes: None
- Abstentions: None
- Absent: Directors Apodaca, Camacho and Repenning

The motion for Items 2A, 7-2, 7-3, and 7-6 passed by a vote of 10 ayes, 0 noes, 0 abstentions, and 3 absent.

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

- 4. OTHER BOARD ITEMS - ACTION
NONE
- 5. BOARD INFORMATION ITEMS
NONE

6. COMMITTEE ITEMS

- a. Subject: State Water Project Dependent Areas – Drought Mitigation Update
Presented by: John Shamma, Section Manager, Engineering Services

Mr. Shamma reported on the following:

- MWD drought response effort for State Water Project dependent areas
- Overview of the Integrated Water Resources Plan (IRP) process
- Discussion of the relationship between drought actions and the IRP process

The following Directors provided comments or asked questions

1. Peterson
2. Lefevre
3. Fong-Sakai
4. Miller
5. Tamaribuchi

Director Camacho entered the meeting.

Staff responded to the Directors' questions and comments.

7. MANAGEMENT REPORTS

- a. Subject: Water System Operations Manager's Report
Presented by: Brent Yamasaki, Water System Operations, Group Manager

Mr. Yamasaki reported on the following:

- Current operations and shutdowns
- Emergency exercise and emergency response partnerships
- Proposed Advanced clean fleets regulation comments

- b. Subject: Engineering Services Manager's Report
Presented by: John Bednarski, Engineering Services, Chief Engineer and Group Manager

Mr. Bednarski reported on the following:

- Inflationary trends in construction
- Alternative delivery collaboration with LADWP
- E&O Inspection Trip on October 26, 2022

- Etiwanda Pipeline Reach 3 rehabilitation
- Orange County Feeder Reach 3 rehabilitation

8. FOLLOW-UP ITEMS

NONE

9. FUTURE AGENDA ITEMS

NONE

The next meeting will be held on December 12, 2022.

Meeting adjourned at 12:05 p.m.

Tim Smith
Chair



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

12/13/2022 Board Meeting

7-3

Subject

Authorize the General Manager to use \$80 million in grant funding from the State Water Resources Control Board to commence activities related to the initiation of the Pure Water Southern California program, and authorize an increase to Metropolitan's current staff levels by 17 full-time equivalent positions for employees to work on the program; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA

Executive Summary

The need to develop additional water resources to support Metropolitan's strategic goals of providing a more reliable water supply has become increasingly evident with the challenges from recurring droughts, climate change, seismic risks, and uncertainties of imported water supplies. Metropolitan's Pure Water Southern California program (Program) was initiated to develop a new water supply that would increase the overall reliability of future water supply in Southern California. This letter reports on the award of \$80 million in grant funding from the State Water Resources Control Board (SWRCB) under Assembly Bill 179 (AB 179) for the Program, and authorizes the General Manager to use this grant funding to initiate the Program's early implementation activities. This action also increases the current full-time (FTE) equivalent staff levels at Metropolitan to support this work. This action does not authorize the use of additional funds beyond this grant funding, nor does it authorize the initiation of construction.

Details

Background

The Program (formerly referred to as the Regional Recycled Water Program) is structured as a regional undertaking with a primary leadership stemming from a partnership between Metropolitan and the Los Angeles County Sanitation Districts (Sanitation Districts). Since the formation of this partnership, additional public agencies in the region have also expressed interest in supporting the development of the program. The Program will beneficially reuse treated wastewater that is currently being discharged to the Pacific Ocean from the Sanitation Districts' Joint Water Pollution Control Plant (JWPCP) in the city of Carson. The treated wastewater would be further purified at a new advanced water purification facility at the JWPCP to produce approximately 150 million gallons per day (mgd) of purified water at full build-out. The purified water could be used to recharge regional groundwater basins through spreading facilities and injection wells, satisfy industrial demands that currently rely on imported water, and augment existing water supplies at water treatment plants owned and operated by Metropolitan. In addition to the treatment facilities, new conveyance facilities would extend from Carson as far north as the city of Azusa, and potentially as far east as La Verne to connect with Metropolitan's existing water treatment and distribution facilities.

The Program would create a new sustainable water supply by harvesting one of the region's largest untapped sources of treated wastewater from the JWPCP. This new water supply would help reduce the region's dependence on imported water and would assist the region in addressing potential disruptions to imported water supplies from droughts or seismic events. This purified water would not only provide a more diversified water supply to Southern California, but it also would enhance Metropolitan's operational resilience, reliability, and flexibility in the face of ongoing challenges, including long-term drought and climate change. This program

would also reduce the size of Metropolitan's State Water Project (SWP) dependent area, directly improving reliability for agencies that are largely reliant on Metropolitan's delivery of SWP supplies.

In November 2015, Metropolitan's Board authorized an agreement with the Sanitation Districts to establish a partnership between Metropolitan and the Sanitation Districts in developing this new local resource. In July 2017, Metropolitan's Board authorized construction of a 0.5-mgd advanced purification demonstration facility at the JWPCP to validate the proposed treatment process and develop design criteria for the full-scale facility. The facility was placed into operation in 2019. In November 2020, Metropolitan's Board authorized an amendment to the existing agreement with the Sanitation Districts to support further development and evaluation of the Program and preparation of environmental documentation, technical studies, and public outreach. In June, August, and October 2021, Metropolitan's Board authorized a series of professional services agreements for engineering, planning, and technical services to support staff's efforts to commence work on the Program's environmental planning phase. Certification of the Program's environmental documentation is planned for the first half of 2024.

In accordance with the April 2022 action on the biennial budget for fiscal years 2022/23 and 2023/24 and the November 2020 action to initiate the environmental planning phase of the Program, the General Manager previously authorized staff to proceed with environmental planning phase activities for the Program using Metropolitan's operations and maintenance (O&M) funds budgeted for this purpose. Funds for these environmental phase planning activities for the Program are included in the O&M budget for fiscal years 2022/23 and 2023/24.

To address the state's urgent water supply needs, the Governor of California signed AB 179 in September 2022 to amend the Budget Act of 2022 to include the allocation of funds to the SWRCB for water recycling projects. Pursuant to Section 19.58 of the amended Budget Act of 2022, \$80 million will be allocated directly to Metropolitan in one lump sum payment no later than January 1, 2024, to support the design of a large-scale regional recycled water project that: (1) purifies treated wastewater supplied by the Sanitation Districts that can replenish groundwater basins and provide a new water supply for industrial and residential uses; (2) can produce up to 150 million gallons of new water supply per day; and (3) advances potable reuse treatment technology. Funds are anticipated to be made available to Metropolitan by January 1, 2023, and available for expenditure until June 30, 2026.

This action authorizes the General Manager to use these state funds to initiate the Program's early implementation activities, which are described below. Funds received from the State for the work to be performed pursuant to this action will be managed separately from the Capital Investment Plan (CIP) appropriation for fiscal years 2022/23 and 2023/24. Existing work on the previously approved environmental planning efforts will continue to be progressed along with the initiation of the Program's early implementation activities.

Pure Water Southern California –Early Program Implementation Activities

Planned early implementation activities include: (1) development of the program management team; (2) continued program planning; (3) commencement of early design activities; (4) demonstration testing of advanced treatment technologies; and (5) other tasks related to program advancement and development.

Early implementation activities include: (1) establishing the program management office, conducting long-term program planning and developing an overall staffing strategy, (2) design of the initial conveyance pipeline reaches through the cities of Carson, Long Beach, and Lakewood, or other municipalities and/or jurisdictions as the pipeline alignments continue to be refined; (3) site preparation and site planning/optimization of advanced water purification facilities at the JWPCP; (4) coordination with Southern California Edison (SCE) for planning and design of a new electrical substation at the JWPCP; (5) hydraulic modeling and surge analyses, utility and substructure investigations, geotechnical exploration, and topographic surveying and mapping for conveyance and treatment facilities; (6) preparation of a bridging document for the design of the advanced water purification facility, to be used for the collaborative delivery contract; (7) initiation of term sheets with water districts and other partnering agencies; (8) planning for sustainability and innovation components for the Program; and (9) continuing operations and testing at the Pure Water Southern California demonstration facility to advance potable reuse technologies, support advanced water treatment design development, and facilitate regulatory permitting efforts.

To accomplish the activities described above, staff recommends the development of a hybrid team of in-house staff and consultants. To accelerate program implementation and accomplish the goals stated above, staff anticipates returning to the Board in early 2023 to authorize new consultant agreements related to program management and early implementation activities. The planned program management expertise will be provided by consultants specializing in the management of large-scale, similar-scope capital programs, with specific expertise in a variety of areas, including the use of alternative project delivery approaches like progressive design-build. Staff also anticipates returning to the Board by mid-2023 to authorize additional consultant agreements to advance design efforts on key components of the Program, including design of the initial reaches of the backbone pipeline system. The current agreement with the Sanitation Districts will also be amended to finalize roles and responsibilities, including cost sharing, for the full-scale program. Additional agreements with outside agencies such as SCE and the Los Angeles County Department of Public Works will be required as program responsibilities, and agreed-upon work scopes are identified. As appropriate, staff will return to the Board to authorize these agreements. These early activities will be closely coordinated with the ongoing environmental planning efforts.

In addition to support provided by consultants, staff also recommends increasing the number of FTE positions at Metropolitan to ensure that the appropriate complement of in-house staff can be assigned to either conduct critical program activities themselves, or to plan and manage the work of consultants assigned to the Program. With this action, staff recommends that 17 new FTEs be authorized by the Board to directly support the Program. The mix of new staff will include engineers, operators, field technicians, and other technical and professional staff with expertise in key areas necessary to advance the Program. The totals include ten staff in the Engineering Services Group (ESG), and seven staff in the Water System Operations Group (WSO). It is planned that the direct salaries and benefits of these staff will initially be covered by the state grant funding.

The work on the program planning efforts and treatment process development activities are currently being performed by a mix of staff from ESG and WSO that have either been entirely or partially assigned to the program. To date, ESG staff work part time on the Program while attending to their current work duties on existing CIP projects. Under the current approach to staffing the program, these staff would be assigned full time to the Program, and their prior assignments would be distributed among remaining ESG staff. While this approach is beneficial to the advancement of the Program, it results in fewer ESG staff available to work on core CIP projects, and hence productivity on the CIP will be impacted. Therefore, staff recommends that ten new FTEs identified for ESG be authorized to backfill the staff that are moved to the Program, thereby ensuring that productivity on the CIP is not negatively impacted. Staff also recommends that seven FTEs be added to WSO. These staff would be assigned to the Pure Water Southern California demonstration plant and support an expanding role in the operations, maintenance, and testing responsibilities for the facility. The additional staff would also support process development and planning for direct potable reuse facilities and advancing potable reuse technologies. It is envisioned that several of these staff may ultimately be responsible for operating or maintaining a full-scale advanced water treatment facility, and building this internal competency is critical to the success of the Program. The cost of these new positions will be fully funded by the state grant. If at some point in the three-year grant duration, the Board chooses not to continue work on the program, Metropolitan's overall authorized FTE levels will be reduced through attrition in the form of retirements or other separations by the end of the three-year period.

The \$80 million state grant funds will support these planned tasks. Allocated funds include \$50 million for professional and technical services for program management, demonstration facility support, program outreach, early implementation activities, regulatory permitting efforts, and other program-related work. Allocated funds for Metropolitan staff activities include \$12.8 million for technical oversight and review of consultant's work, surveying and mapping, hydraulics modeling, and demonstration facility operations and testing; \$13.2 million for Metropolitan program management, project controls, and agency coordination; and \$4 million for remaining budget. **Attachment 1** provides the allocations of the required funds.

Program cost estimates are currently being updated and are anticipated to be greater than those previously estimated in 2018. Factors affecting costs include rising inflation which increases the cost of materials, equipment, and labor; supply chain issues; and additional treatment and conveyance facilities required to meet state regulatory requirements for direct potable reuse through raw water augmentation. Staff is working with

program partners to determine the appropriate allocation of Program costs among the various partners. Once this cost allocation process is completed, staff will report to the Board on the recommended portion of the Program that would be funded by Metropolitan. Once this cost allocation is finalized, the rate study and cost of service analysis will be conducted to determine cost allocation within Metropolitan's rate structure. This activity is anticipated to be completed in 2023. A series of board workshops will be conducted in 2023 to discuss program costs and potential impacts on Metropolitan's rates.

Alternatives Considered

Several alternatives were considered for the use of state funds, including how and when the state funds should be used and whether to use in-house Metropolitan staff and/or consultants to perform the early program activities, such as program management and initial design activities.

Timing the Use of State Funds: Programmatic activities geared towards the initial implementation of the Program, such as establishing the Program's management team and commencing design activities, were originally planned to commence after the Board certified the program's environmental documentation in the first quarter of 2024. However, with the imminent availability of state grant funding for the program, staff assessed the alternatives related to the timing of the use of the funds. Two alternatives were considered, including the immediate use of funds through this action or deferring the use of the funds until such time as the Board is able to consider Metropolitan's anticipated share of the program's costs once water sale contracts are finalized, cost-sharing agreements are in place with project partners, and cost of service analyses are completed. Delaying the use of state funding is not recommended for several reasons. The availability of state funds is due in part to a significant current state budget surplus. Metropolitan is guaranteed receipt of these funds if the Board authorizes expenditure of the funds through this recommended action. Should the Board not authorize the use of the funds at this time, there is no guarantee that the funds will be available in the future due to uncertainties surrounding future state budget surpluses. Additionally, expenditure of the grant funding has a time limit whereby the \$80 million must be spent by June 30, 2026. Staff anticipates that if expenditures of the funds do not begin in early 2023, then Metropolitan may not be able to utilize the full complement of grant funding. For these reasons, staff recommends the use of the grant funds immediately to ensure receipt of the funds and to ensure that the full complement of funds can be expended within the prescribed time limitations.

Initial Staffing Strategy: The program's staffing strategy has always envisioned the use of a melded team of in-house staff and consultants to conduct the work activities required for program implementation. This strategy relies on the assumption that a base load of in-house staff would be assigned to the Program, while professional services agreements are selectively utilized to work on projects above this baseload or where specialized needs are required. The availability of in-house staff to work on the Program has been based on: (1) an assessment of current work assignments for in-house staff to determine the potential availability of staff to conduct work on the program and when resource needs exceed available in-house staff, consultant support would be acquired; (2) an assessment of the needs for specialized technical expertise on the program, in which case consultant support would be acquired; and (3) the need for Metropolitan staff to address issues that are best addressed by the owner/ operator of the facilities.

Due to the size of the grant, and the requirements to expend the grant funds within a prescribed timeframe, additional staffing alternatives were considered, including hiring additional full-time equivalent in-house positions, utilizing limited-duration hires, acquiring temporary staff, and contracting with additional consultants.

After assessing the current workload for in-house staff and the high priority and extended duration of this Program, staff recommends a staffing plan that includes several measures, including increasing Metropolitan's FTE headcount by hiring a combination of additional full-time in-house staff, the use of temporary staff, and the expanded use of professional services agreements for the specific activities. This combined staffing approach will allow for the completion of not only Program-related activities, but also other budgeted capital projects within their current schedules and ensure that the work is conducted in the most efficient manner possible. Hiring full-time staff positions has the advantage of attracting the most qualified and experienced personnel to work on the Program as Metropolitan employees. Some of these staff may ultimately be responsible for operating a full-scale advanced water treatment facility; building Metropolitan's internal competency is a key element to the success of the Program. Considering the significance of the Program to our region's water supply reliability, Metropolitan staff leadership is vital to advance potable reuse initiatives. If during the term of expending the

\$80 million grant funding, the Board decides not to pursue the remaining work under the Program, then the overall Metropolitan staffing levels would be reduced to current levels through attrition based on retirements and other separations of service. Additionally, the use of limited-duration employees and other forms of temporary employees will also be considered where appropriate, and the term of employment for these staff would be limited to the duration of the state grant funding unless the Board approves the continued funding of the program through subsequent board actions. Taken as a whole, the additional staff, whether full-time hires or limited-duration employees, would support the engineering, demonstration testing, and other early implementation efforts as appropriate.

Summary

This action authorizes staff to utilize \$80 million in grant funding from the SWRCB to commence initial management and other early implementation activities related to the Program, and authorizes an increase of 17 new FTEs to Metropolitan's existing employee headcount to staff the Program. See **Attachment 1** for the Allocation of Funds, **Attachment 2** for the Location Map, and **Attachment 3** for excerpts from AB 179 for state funding.

Project Milestones

January 2023 – Board to consider authorizing program management agreement to advance the Pure Water Southern California program

March 2023 – Board to consider authorizing professional services agreement(s) for design of the initial conveyance pipeline reaches to advance the Pure Water Southern California program

Policy

Metropolitan Board Report No. 01122016 IRP 8-3 B-L, "2015 Integrated Water Resources Plan Update," adopted January 2016

By Minute Item 42287, dated February 11, 1997, the Board adopted a set of policy principles on water recycling.

By Minute Item 50299, dated November 10, 2015, the Board authorized an agreement with County Sanitation District No. 2 of Los Angeles County for development of a potential regional recycled water supply program and a demonstration project.

By Minute Item 50410, dated March 8, 2016, the Board authorized agreements for design of the demonstration scale recycled water treatment plant and feasibility studies of recycled water delivery system.

By Minute Item 50884, dated July 11, 2017, the Board authorized construction of the advanced water treatment demonstration plant.

By Minute Item 52174, dated November 10, 2020, the Board authorized preparation of environmental documentation and technical studies, and public outreach activities for the Regional Recycled Water Program.

By Minute Item 52210, dated December 8, 2020, the Board authorized the General Manager to enter into an agreement with Southern Nevada Water Authority to accept up to \$6 million in financial support for the development of the Regional Recycled Water Program.

By Minute Item 52404, dated June 8, 2021, the Board authorized an agreement with Black & Veatch Corporation, Inc. for engineering and technical studies to support environmental planning phase activities of the Regional Recycled Water Program.

By Minute Item 52476, dated August 17, 2021, the Board authorized an agreement with CDM Smith for engineering and technical studies at the Advanced Water Treatment Demonstration Facility.

By Minute Item 52543, dated October 12, 2021, the Board authorized an agreement with Helix Environmental Planning, Inc. for preparation of environmental documentation for the Regional Recycled Water Program; and authorized an agreement with Stantec Consulting Services Inc. for engineering and technical studies to support environmental planning phase activities.

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. The proposed action involves the funding and minor alterations of existing private or public facilities, along with minor modifications in the condition of land, water, and/or vegetation which do not involve removal of healthy, mature, scenic trees. In addition, the proposed action consists of basic data collection and resource evaluation activities which does not result in a serious or major disturbance to an environmental resource. This may be strictly for information gathering purposes, or as part of a study leading to an action which a public agency has not yet approved, adopted, or funded. Accordingly, the proposed action qualifies under Class 1, Class 4, and Class 6 Categorical Exemptions (Sections 15301, 15304, and 15306 of the State CEQA Guidelines).

CEQA determination for Option #2:

None required

Board Options

Option #1

Authorize the General Manager to use \$80 million in grant funding from the State Water Resources Control Board, and authorize an increase of 17 staff to Metropolitan's current full-time equivalent employee headcount to commence activities related to the initiation of the Pure Water Southern California program.

Fiscal Impact: Expenditure of \$80 million in state grant funds. Funds received from the state for the work to be performed pursuant to this action will be managed separately from the CIP Appropriation for fiscal years 2022/23 and 2023/24.

Business Analysis: This option would advance the development of new water sources in Southern California to augment regional supplies within Metropolitan's entire service area while ensuring that adequate staffing levels are maintained to ensure advancement of critical ongoing core CIP work.

Option #2

Authorize the General Manager to use \$80 million in grant funding from the State Water Resources Control Board, to commence activities related to the initiation of the Pure Water Southern California program.

Fiscal Impact: Expenditure of \$80 million in state grant funds. Funds received from the state for the work to be performed pursuant to this action will be managed separately from the CIP Appropriation for fiscal years 2022/23 and 2023/24.

Business Analysis: This option would advance the development of new water sources in Southern California to augment regional supplies within Metropolitan's entire service area; however, advancement of critical ongoing core CIP activities may be delayed due to staffing shortfalls.

Option #3

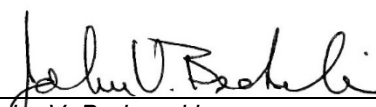

Do not proceed with use of state funds at this time, and do not increase Metropolitan's current full-time equivalent employee headcount.

Fiscal Impact: Additional funds would be required to advance the Pure Water Southern California program.

Business Analysis: This option would forgo use of allocated state funds and would delay development of a new water resource which is resilient to drought, climate change, and seismic risks.

Staff Recommendation

Option #1

 _____ John V. Bednarski Manager/Chief Engineer Engineering Services	11/21/2022 _____ Date
 _____ Adel Hagekhalil General Manager	12/1/2022 _____ Date

Attachment 1 – Allocation of Funds**Attachment 2 – Location Map****Attachment 3 – Excerpt from AB 179 for State Funding**

Ref# es12690292

**Allocation of Funds for Pure Water Southern California for FY 2022/23 and 2023/24, and
FY 2024/25 and 2025/26**

	Current Board Action (Dec. 2022)	
Labor		
Studies & Investigations	-	
Preliminary Design	12,800,000	
Owner Costs (Program mgmt., agency coordination, etc.)	12,200,000	
Submittals Review & Record Drwgs.	-	
Construction Inspection & Support	-	
Metropolitan Force Construction	-	
Materials & Supplies	750,000	
Incidental Expenses	250,000	
Professional/Technical Services	50,000,000	
Right-of-Way	-	
Equipment Use	-	
Contracts	-	
Remaining Budget	4,000,000	
Total	\$ 80,000,000	
		[Q11][RBC2]

This is the initial board action for using state grant funds for the Pure Water Southern California program. The total estimated cost to complete the program is currently being updated. The updated program costs will provide the basis of the rate study and cost of service analysis anticipated to be completed in 2023.

Location Map



Excerpt from AB 179 for State Funding

— 355 —

Ch. 249

(J) \$750,000 to fund a study and development of model plan for worker wellness centers for transit agencies throughout the state.

(2) To be allocated by the Employment Training Panel as follows:

(A) \$1,000,000 to the City of Chino, Chino City Council for the Chino Valley Chamber of Commerce for the Upskill Chino Valley to expand services.

SEC. 208. Section 19.58 is added to the Budget Act of 2022, to read:

SEC. 19.58. (a) (1) The amounts appropriated pursuant to this section reflect legislative priorities.

(2) Notwithstanding any other law, allocations pursuant to this section are exempt from the personal services contracting requirements of Article 4 (commencing with Section 19130) of Chapter 5 of Part 2 of Division 5 of Title 2 of the Government Code, from Part 2 (commencing with Section 10100) of Division 2 of the Public Contract Code, and the State Contracting Manual, and are not subject to the approval of the Department of General Services, including the requirements of Chapter 6 (commencing with Section 14825) of Part 5.5 of Division 3 of the Title 2 of the Government Code.

(3) If an item number for the appropriate department for a state entity does not exist, and such an item number is required in order to make the specified allocations, the Department of Finance may create an item number for this purpose.

(4) Unless otherwise specified in this section, funds allocated pursuant to this section shall be available for encumbrance through June 30, 2024, and expenditure until June 30, 2026.

(5) The designated state entities in this section shall be permitted to use up to 5 percent of the amount in each allocation for administrative costs.

(b) The amounts specified in paragraphs (1) to (6), inclusive, are hereby appropriated from the General Fund as follows:

(1) To be allocated to the California Natural Resources Agency as follows:

(A) \$10,000,000 for Redondo Beach Wetlands Restoration.

(i) These funds shall be for the City of Redondo Beach for wetlands restoration.

(B) \$5,000,000 for the Natural History Museums of Los Angeles County renovation and expansion of the La Brea Tar Pits and Museum site.

(2) To be allocated to the Wildlife Conservation Board as follows:

(A) 40,000,000 for San Joaquin Valley Floodplain Restoration.

(i) These funds shall be for the River Partners for the development and delivery of multi-benefit floodplain reconnection and habitat restoration projects in the San Joaquin and Tulare Basins. Eligible expenditures may include, but are not limited to, acquisition, planning and permitting, and scientific research supporting project implementation, including ground-based geophysics, habitat restoration benefitting dwindling wildlife, and habitat maintenance.

(B) \$67,000,000 for watershed climate resilience grants through the Cascades and High Sierra Upper Watersheds Program.

Ch. 249

— 356 —

(i) These funds shall support competitive grants to improve watershed protection and climate resiliency including, but not limited to, streamflow enhancement.

(C) \$67,000,000 for watershed climate resilience grants through the land acquisition and habitat enhancement program.

(i) These funds shall support competitive grants to improve watershed protection and climate resiliency in Southern California including, but not limited to, streamflow enhancement.

(3) To be allocated to the Department of Water Resources as follows:

(A) \$66,500,000 for watershed climate resilience grants.

(i) These funds shall be provided as grants to water agencies and other public agencies for drought resilience and identification and assessment of climate risks on a watershed basis.

(ii) These funds shall be prioritized in areas with greatest risk or potential to reduce environmental conflicts. Funds may be used for longer-term planning and resilience projects, including but not limited to, watershed climate risk assessment, streamflow improvement projects, streamflow measurement and remote sensing to establish baseline conditions and monitor project performance, water use efficiency projects with verifiable demand reduction, infrastructure to improve regional flexibility to address drought conditions, and conjunctive use and management between multiple water supply sources.

(4) To be allocated to the State Water Resources Control Board as follows:

(A) \$5,000,000 for water refilling stations at schools.

(B) \$90,000,000 for water recycling projects that produce potable recycled water to supplement drinking water supplies.

(i) \$80,000,000 shall be allocated directly to the Metropolitan Water District of Southern California in one lump sum payment no later than January 1, 2024, to support the design of a large-scale regional recycled water project that: (1) purifies treated wastewater supplied by the County Sanitation Districts of Los Angeles County that can replenish groundwater basins and provide a new water supply for industrial and residential uses,

(2) can produce up to 150 gallons of new water supply per day, and (3) advances potable reuse treatment technology.

(ii) \$10,000,000 shall be for the planning, design, and construction of the Euclid Avenue Recycled Water System Expansion Project in the City of Ontario.

(5) To be allocated to the California Environmental Protection Agency as follows:

(A) \$500,000 for the water energy nexus registry.

(6) To be allocated to the Department of Parks and Recreation as follows:

(A) \$75,000,000 for the statewide parks programs.

(B) \$25,000,000 for outdoor equity grants.

(c) The amounts specified in subdivisions (1) to (4), inclusive, are hereby appropriated from the Greenhouse Gas Reduction Fund as follows:

(1) To be allocated to the State Air Resources Board as follows:

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Ch. 249

(A))\$10,000,000 for financial incentives to reduce mobile and stationary sources of criteria air pollutants or toxic air contaminants consistent with community emissions reduction programs developed pursuant to Section 44391.2 of the Health and Safety Code.

(i) Up to \$10,000,000 may be used for the development of new community emission reduction programs.

(2) To be allocated to the Department of Community Services and Development as follows:

(A) \$15,000,000 for the Low-Income Weatherization Program to support weatherization services for low-income farmworkers.

(3) To be allocated to the Ocean Protection Council as follows:

(A) \$37,500,000 for implementation of Chapter 236 of the Statutes of 2021 (SB 1).

(i) The funds shall be available for state operations or local assistance.

(ii) The Ocean Protection Council shall work in collaboration with the State Coastal Conservancy to implement this funding. The Council shall structure these funds to maximize leveraging of any available federal funding.

(4) To be allocated to the State Coastal Conservancy as follows:

(A) \$37,500,000 to protect communities and natural resources from sea-level rise.

(i) These funds shall be administered through the Climate Ready Program with priority given to projects that adapt public infrastructure along the coast including urban waterfronts, ports, and ecosystems.

SEC. 209. Section 39.00 of the Budget Act of 2022 is amended to read:

SEC. 39.00. The Legislature hereby finds and declares that the following bills are other bills providing for appropriations related to the Budget Bill within the meaning of subdivision (e) of Section 12 of Article IV of the California Constitution: AB 129, AB 144, AB 146, AB 151, AB 152, AB 156, AB 157, AB 158, AB 160, AB 162, AB 165, AB 166, AB 170, AB 171, AB 181, AB 182, AB 183, AB 184, AB 185, AB 186, AB 187, AB 188, AB 189, AB 190, AB 191, AB 192, AB 193, AB 194, AB 195, AB 196, AB 197, AB 198, AB 199, AB 200, AB 201, AB 202, AB 203, AB 204, AB 205, AB 206, AB 207, AB 208, AB 209, AB 210, AB 211, AB 212, AB 213, SB 120, SB 121, SB 122, SB 123, SB 124, SB 125, SB 126, SB 127, SB 128, SB 130, SB 131, SB 132, SB 133, SB 134, SB 135, SB 136, SB 137, SB 138, SB 140, SB 141, SB 143, SB 145, SB 148, SB 149, SB 150, SB 153, SB 161, SB 163, SB 164, SB 180, SB 181, SB 182, SB 183, SB 184, SB 185, SB 186, SB 187, SB 188, SB 189, SB 190, SB 191, SB 192, SB 193, SB 194, SB 195, SB 196, SB 197, SB 198, SB 199, SB 200, SB 201, and SB 202.

SEC. 210. Section 39.10 is added to the Budget Act of 2022 to read:

SEC. 39.10. In addition to this act, the Budget Act of 2022 consists of the following statutes:

(a) Chapter 43 of the Statutes of 2022 (Senate Bill No. 154)

(b) Chapter 45 of the Statutes of 2022 (Assembly Bill No. 178)

SEC. 211. Section 99.50 of the Budget Act of 2022 is amended to read:



Engineering & Operations Committee

Pure Water Southern California Use of Grant Funds

Item 7-3

December 12, 2022

Pure Water Southern California Use of Grant Funds



Joyce Lehman

Program Accomplishments

- Studies, Reports, & White Papers
- Demonstration plant design, construction & operation
- Over 500 tours & presentations reaching nearly over 20,000 people
- ASCE Region 9 2021 Outstanding Water/Wastewater Project
- ENR California 2020 Owner of the Year
- Recycled Water Staff Person of the Year Award

Pure Water
Southern
California
Use of Grant
Funds

Program Update

- Issued Notice of Preparation, held scoping meetings & conducted outreach
- Initial conveyance alignments approved by cities
- Continued coordination with Army Corps & LA County Flood Control District
- Conducted workshops to develop process & implementation strategy for DPR
- Began secondary MBR demonstration testing
- Supported agency reuse collaborative meetings

Pure Water Southern California Use of Grant Funds

Current Action

- Authorize the General Manager to use \$80 million in grant funding from the State Water Resources Control Board to commence activities related to the initiation of the Pure Water Southern California program
- Authorize an increase to Metropolitan's current staff levels by 17 full-time equivalent positions

Pure Water
Southern
California
Use of Grant
Funds

AB 179 Amendment to Budget Act of 2022

- Governor signed AB 179 to include allocation of \$80 million to Metropolitan for Pure Water Southern California
 - Administered by State Water Resources Control Board
 - One lump sum payment no later than January 2024
 - Available for expenditure until June 30, 2026
 - Funds limited to planning & design activities only

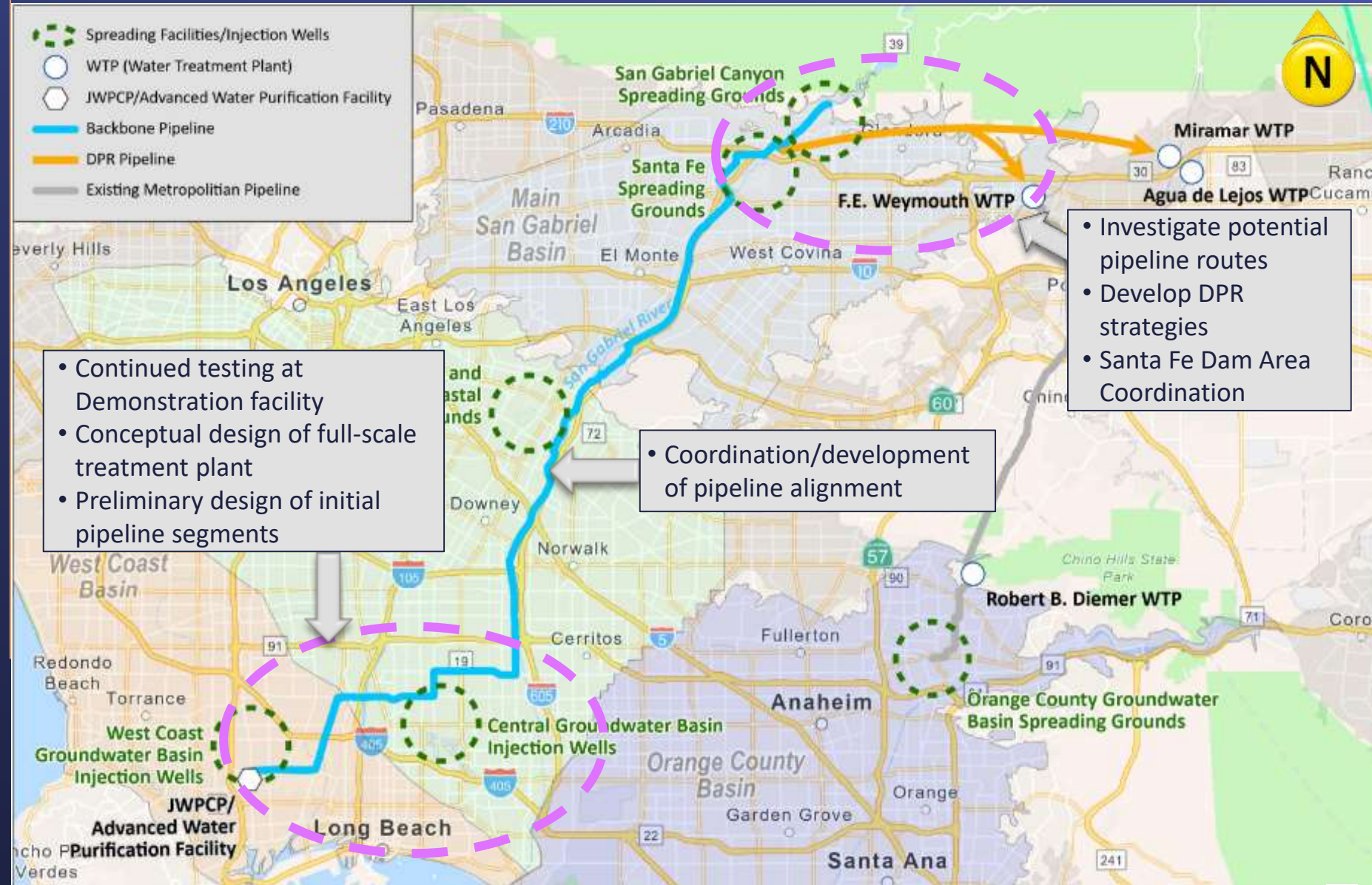
Pure Water Southern California Use of Grant Funds

Activities for Use of Grant Funds

- Establish program management team
- Commence early implementation activities
- Continue demonstration testing of advanced treatment technologies
- Other tasks related to program advancement & development

Early Implementation Activities

Pure Water
Southern
California
Use of Grant
Funds



Pure Water Southern California Use of Grant Funds

State Funding Accelerates Work on the Program

- Use of state funds will allow designs to start up to 18 months earlier than originally planned
- Early design work will support the planned 2028 early delivery and full Phase 1 program online date of 2032
 - Detailed investigations and designs now will identify unforeseen issues
 - Issues can be resolved in a timely manner
 - Early issue resolution will reduce risks to the planned schedule

Pure Water
Southern
California
Use of Grant
Funds

State Funding Accelerates Work on the Program

- Early design work:
 - Allows construction of early delivery infrastructure to start sooner
 - Enhances ability to make early deliveries by 2028

Pure Water Southern California Use of Grant Funds

Scope of Work

- Metropolitan
 - Program management, project controls & agency coordination
 - Oversight & review of consultant's work
 - Engineering and technical studies/designs
 - Continued Demonstration facility testing
- Consultant
 - Support to:
 - Program management team
 - Early implementation activities
 - Demonstration facility operations/maintenance

Pure Water Southern California Use of Grant Funds

Alternatives Considered – Grant Funding

- Defer authorization of use of funds until water sale contracts are finalized, cost sharing agreements are in place with partners & cost of service analyses are completed
- Selected alternative – Authorize use of grant funds immediately to ensure receipt of funds & to ensure full complement of funds can be expended within prescribed limitation

Pure Water
Southern
California
Use of Grant
Funds

Staffing Request for Pure Water Program



Treatment plant site mapping



Water quality testing



Equipment maintenance



Pipeline alignment development

Pure Water
Southern
California
Use of Grant
Funds

Staffing Summary

- Staff recommends 17 new full-time equivalents (FTEs) be authorized to directly support the program
 - Engineering – 10 staff
 - Operations – 7 staff
- Direct salaries & benefits initially covered by state grant funding
- If Board decides not to proceed with Program, FTEs will be reduced through attrition by end of three-year period

Pure Water
Southern
California
Use of Grant
Funds

Key Staffing Questions

- Why are additional FTEs being requested now
- What type of staff are needed and what will they be working on
- What happens to new staff if the program does not go forward
- What are the consequences of not approving the additional staff

Current Staff Request

Group	Feb. 2022 Budget Process FTE Request	Dec. 2022 FTE Request
WSO	6	7
ESG	9	10
	15	17

- Positions originally requested as part of current biennial budget
 - Staff committed to pursuit of grant funding
- Grant funding received
- Need for staff continues in order to fully stand-up program and continue critical testing

Anticipated Staff Assignments and Classifications

- Operations
 - Plan and operate Demonstration Plant to support test program
 - Perform maintenance of test facility
 - Conduct laboratory analyses to support testing program
- Engineering
 - Establish and administer Pure Water program team
 - Conduct pipeline alignment studies
 - Further develop treatment site plans
 - Provide oversight of consultants

Recommended Positions

Operations		Engineering	
Engineer	1	Associate Engineer	4
Water Quality Specialist	1	Engineer	3
Plant Operator	1	Program Control Specialist	1
O&M Technicians	4	Administrative Assistant	1
		Team Manager	1
7 positions		10 positions	

Contingency Staffing Plans

- Short term
 - Planned staff increases are fully covered by the \$80M grant
- Long term Options
 - If Board approves program in future, staff will be retained
 - If Board does not commit to funding program beyond initial \$80M
 - Metropolitan typically averages approx. 100 retirements per year
 - Approx. 2/3rds of these retirements are from Operations and Engineering
 - Relatively straight forward to roll back the added positions through retirements

Consequences of Not Increasing Staff Levels

- Work on other critical O&M and Capital projects impacted
 - Key staff assignments to Pure Water must be made
 - Staff will continue to rely heavily on consultants to conduct core work
- Misses an opportunity to develop staff for future roles on Pure Water Program

Pure Water
Southern
California
Use of Grant
Funds

Alternatives Considered - Staffing

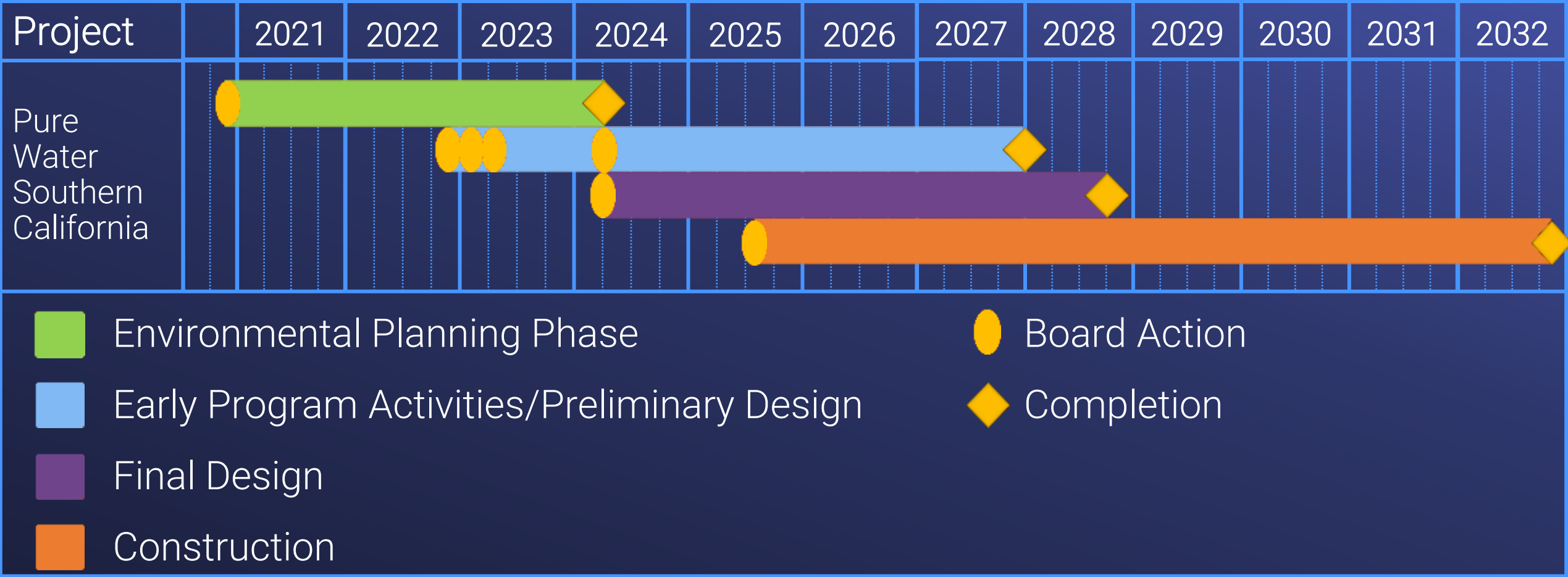
- Implement initial staffing strategy
 - Melded team of in-house staff & consultants
 - Use professional services agreements
- Defer request for additional staff until Board approves full program
- Recommended approach
 - Add full-time Metropolitan staff & supplement with professional services
 - Use limited-duration/temporary employees

Allocation of Funds

Pure Water Southern California

Metropolitan Labor	
Preliminary Design	\$ 12,800,000
Owners Costs (Proj. Mgmt., Agency Coord., etc.)	12,200,000
Materials & Supplies	750,000
Incidental Expenses	250,000
Professional/Technical Services	50,000,000
Remaining Budget	4,000,000
<hr/>	
Total	\$ 80,000,000

Project Schedule



Board Options

- Option #1
 - Authorize the General Manager to use \$80 million in grant funding from the State Water Resources Control Board, and authorize an increase of 17 staff to Metropolitan's current full-time equivalent employee headcount to commence activities related to the initiation of the Pure Water Southern California program.
- Option #2
 - Authorize the General Manager to use \$80 million in grant funding from the State Water Resources Control Board, to commence activities related to the initiation of the Pure Water Southern California program.
- Option #3
 - Do not proceed with use of state funds at this time, and do not increase Metropolitan's current full-time equivalent employee headcount.

Staff Recommendation

- Option #1





● **Board of Directors**
Engineering and Operations Committee

12/13/2022 Board Meeting

7-4

Subject

Award a \$2,165,000 contract to Caltec Corp. for physical security improvements at Metropolitan's Headquarters Building; and authorize an increase of \$250,000 to an agreement with Arcadis IBI Group for a new not-to-exceed amount of \$3.35 million for technical support during construction; the General Manager has determined that the proposed actions are exempt or otherwise not subject to CEQA

Executive Summary

Metropolitan safeguards personnel at Metropolitan's Headquarters Building in Los Angeles through a multilayered combination of physical barriers, contracted security guard services, a physical security system, and employee awareness. The ongoing and planned security improvements are consistent with guidelines for government buildings from the U.S. Department of Homeland Security and the General Services Administration. Security improvements are being implemented in three stages, and construction of the first two stages is largely complete. This action awards a construction contract for the third and final stage of physical security improvements at Metropolitan's Headquarters Building and amends an existing consultant agreement for technical support during the construction phase of the project.

Details

Background

Metropolitan's Headquarters Building is a 522,682 square-foot concrete-frame structure consisting of a 12-story high-rise tower attached to a five-story wing. The building is located next to the Los Angeles Union Station transportation hub. The Headquarters Building includes office space for approximately 840 Metropolitan staff and meeting space for the Board of Directors and members of the public. Metropolitan occupied the Headquarters Building in 1998. The business functions located in this building are critical for maintaining the continuity of Metropolitan's day-to-day operations.

A threat and physical security assessment of the Headquarters Building was completed in 2016. This assessment recommended the addition of several physical features to enhance the building's perimeter security, access control, and interior security protection systems. These recommendations conform to best security practices for government buildings, as stated in the U.S. Department of Homeland Security guidelines. The recommended features to be added in a multi-stage approach include additional cameras, sensors, barriers, improved access control, and improved communication systems.

In February 2018, Metropolitan's Board authorized final design of physical security improvements at the Headquarters Building. This upgrade work has been prioritized into several stages. The Stage 1 upgrades included enhancements to the building's perimeter windows and doors. This work was completed in 2021 as part of the Headquarters Building seismic upgrades construction contract. The Stage 2 upgrades enhanced access control and interior security protection, which was completed in November 2022. The third and final stage of improvements is the subject of this board action and will enhance the site's perimeter security to further safeguard personnel at Metropolitan's Headquarters Building. Final design of the Stage 3 improvements has been completed, and staff recommends proceeding with construction at this time.

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 Stage 3 physical security improvements at

Metropolitan's Headquarters Building, pending board award of the construction contract described below. 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 from the Capital Investment Plan Appropriation for fiscal years 2022/23 and 2023/24 (Appropriation No. 15525). This project has been reviewed in accordance with Metropolitan's CIP prioritization criteria and was approved by Metropolitan's CIP evaluation team to be included in the System Reliability Program.

Physical Security Improvements at Metropolitan's Headquarters Building, Stage 3 – Construction

The Stage 3 improvements will enhance perimeter security along the exterior of the Metropolitan site and courtyard. The work consists of installing security fencing and gates, bollards, paving, security cameras, and speaker horns; and integrating new security equipment into the existing security software. The scope of work is consistent with recommendations made in the initial physical security assessment of the Headquarters Building. Metropolitan staff will install and commission required telecommunications network equipment in support of these security system upgrades.

Arcadis IBI Group will provide technical support during construction, as described below. SWCA Environmental Consultants will perform specialized preconstruction environmental clearance and construction monitoring under an existing agreement authorized under the General Manager's Administrative Code authority. Lee & Ro, Inc. will provide certified deputy inspection, as required by the city of Los Angeles, under an existing board-authorized agreement. Finally, an enhanced level of on-site security services will be necessary during construction. Securitas will provide the additional security service required under an existing board-authorized agreement.

A total of \$4.2 million is required for this work. In addition to the construction contract amount, allocated funds for consulting work include: \$250,000 for technical support during construction by Arcadis IBI Group (as described below); \$18,000 for specialized construction inspection support by Lee & Ro, Inc.; \$55,000 for environmental clearance and construction monitoring by SWCA Environmental Consultants; and \$220,000 for security services by Securitas, as discussed above. In addition, allocated funds for Metropolitan staff include: \$260,000 for the installation and commissioning of network equipment; \$348,000 for construction management and inspection; \$235,000 for submittal review and record drawings preparation; \$384,000 for permitting, hazardous material compliance monitoring, contract administration, environmental monitoring, travel, and project management; and \$265,000 for the remaining budget.

Attachment 1 provides the allocation of required funds. The amount expended to date on the physical security improvements is approximately \$12.8 million. The total estimated cost to complete, including the amount allocated to date and funds allocated for the work described in this action, is approximately \$17 million.

Award of Construction Contract (Caltec Corp.)

Specifications No. 2003 for Stage 3 physical security improvements at Metropolitan's Headquarters Building was advertised for bids on August 3, 2022. As shown in **Attachment 2**, three bids were received and opened on September 22, 2022. The low bid from Caltec Corp., in the amount of \$2,165,000, complies with the requirements of the specifications. The other bids ranged from \$2,599,000 to \$4,348,000, while the engineer's estimate for this project was within the range of the bids at \$3,500,000. Staff investigated why the low bid was significantly lower than the engineer's estimate and attributes the difference to the engineer's estimate's conservative approach to projected inflationary labor components of the project, as well as priced risk associated with material procurement and supply chain issues. For this contract, Metropolitan established a Small Business Enterprise (SBE) participation level of at least 25 percent of the bid amount. Caltec Corp. is an SBE firm, and thus achieves 100 percent participation. The subcontractors for this contract are listed in **Attachment 3**.

This action awards a \$2,165,000 contract to Caltec Corp. for Stage 3 physical security improvements at Metropolitan's Headquarters Building.

Inspection of construction work will be performed primarily by Metropolitan staff, with specialized support from Lee & Ro, Inc. Engineering Services' performance metric, target range, for construction management and inspection of projects with construction costs less than \$3 million is 9 to 15 percent. For this project, the performance metric goal for construction management and inspection is approximately 13.8 percent of the total

construction cost. The total cost of construction for this project is \$2,645,000, which includes the amount of the contract (\$2,165,000), Metropolitan force activities (\$260,000), and on-site security services (\$220,000)

Technical Support During Construction (Arcadis IBI Group) – Amendment to Agreement

Arcadis IBI Group performed the final design of the physical security enhancements for the Headquarters Building under a board-authorized agreement. As the architect of record, Arcadis IBI Group is recommended to provide technical support during the construction phase of the project. Planned activities include responding to requests for information from the contractor, advising staff on technical issues as they arise, and assisting with start-up and testing activities.

This action authorizes an increase of \$250,000 to the existing agreement with Arcadis IBI Group for a new not-to-exceed amount of \$3.35 million to provide technical support during construction. For this agreement, Metropolitan established an SBE participation level of 18 percent. Arcadis IBI Group has agreed to meet this level of participation. The planned subconsultants for this agreement are listed in **Attachment 4**.

Alternatives Considered

To expedite the completion of the planned work, staff initially considered issuing a change order to the contractor that is performing the Stage 2 physical security improvements at the Headquarters Building. Based on cost estimates prepared by the consultant, this approach would have required a change order roughly equivalent to the original value of the Stage 2 work. This work would not have been competitively bid, staff would have negotiated the change order, and board approval for authorization would be required as the change order would have exceeded the General Manager's change order authority for the Stage 2 contract. With the selected alternative, the work was competitively bid as a separate stand-alone construction contract, which enhanced Metropolitan's ability to receive the most favorable bid and continues Metropolitan's practice of fostering a fair contracting environment.

Summary

This action awards a \$2,165,000 contract to Caltec Corp. for the Stage 3 physical security improvements at Metropolitan's Headquarters Building and authorizes an increase to an agreement with Arcadis IBI Group for technical support. See **Attachment 1** for the Allocation of Funds; **Attachment 2** for the Abstract of Bids; **Attachment 3** for the listing of Subcontractors for Low Bidder; **Attachment 4** for the listing of Subconsultants for Agreements with Arcadis IBI Group; and **Attachment 5** for the Location Map.

Project Milestone

December 2023 – Completion of construction of the final stage of Headquarters Physical Security Improvements

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 51095, dated February 13, 2018, the Board authorized final design of physical security improvements at Metropolitan's Headquarters Building.

By Minute Item 51386, dated November 6, 2018, the Board authorized construction of initial stage of building related improvements for Metropolitan's Headquarters Building.

By Minutes Item 52083, dated August 18, 2020, the Board authorized construction of Stage 2 physical security improvements at Metropolitan's Headquarters Building.

By Minute Item 21997, dated April 11, 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 actions involve operation, repair, maintenance, permitting, leasing, licensing, or minor alteration of existing public or private structures, facilities, mechanical equipment, or topographical features, involving negligible or no expansion of existing or former use and no possibility of significantly impacting the physical environment. In addition, the proposed actions include the construction and location of limited numbers of new, small facilities or structures; installation of small new equipment and facilities in small structures; and the conversion of existing small structures from one use to another where only minor modifications are made in the exterior of the structure. Accordingly, the proposed actions qualify under Class 1 and Class 3 Categorical Exemptions (Sections 15301 and 15303 of the State CEQA Guidelines).

CEQA determination for Option #2:

None required.

Board Options

Option #1

- a. Award a \$2,165,000 contract to Caltec Corp. for Stage 3 physical security improvements at Metropolitan's Headquarters Building; and
- b. Authorize an increase of \$250,000 to an agreement with Arcadis IBI Group, for a new not-to-exceed total of \$3.35 million for technical support.

Fiscal Impact: Expenditure of \$4.2 million in capital funds. All costs will be incurred in the current biennium and have been previously appropriated.

Business Analysis: This option will implement the final stage of additional security features recommended for public buildings by enhancing access control and exterior security protection at Metropolitan's Headquarters Building.

Option #2

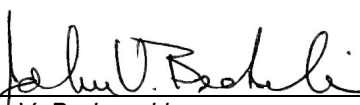

Do not proceed with the project at this time.

Fiscal Impact: None

Business Analysis: This option would defer the opportunity to enhance safeguards for Metropolitan's personnel and facility and increase the risk of security threats.

Staff Recommendation

Option #1

 _____ John V. Bednarski Manager/Chief Engineer Engineering Services	12/8/2022 _____ Date
 _____ Adel Hagekhalil General Manager	12/8/2022 _____ Date

Attachment 1 – Allocation of Budgeted Funds**Attachment 2 – Abstract of Bids****Attachment 3 – Subcontractors for Low Bidder****Attachment 4 – Subconsultants for Agreements with Arcadis IBI Group****Attachment 5 – Location Map**

Ref# es12690562

Allocation of Funds for Physical Security Improvements at Metropolitan's Headquarters Building, Stage 3

	Current Board Action (Dec. 2022)
Labor	
Studies & Investigations	\$ -
Final Design	-
Owner Costs (PM., permitting, envir.)	384,000
Submittals Review & Record Drwgs.	235,000
Construction Inspection & Support	348,000
Metropolitan Force Construction	179,000
Materials & Incidentals	81,000
Professional/Technical/Security Services	
Lee & Ro, Inc.	18,000
Arcadis IBI Group	250,000
SWCA Environmental Consultants	55,000
Securitas	220,000
Right-of-Way	-
Contracts	
Caltec Corp.	2,165,000
Remaining Budget	265,000
Total	\$ 4,200,000

The amount expended to date on the physical security improvements is approximately \$12,800,000. The total estimated cost to complete, including the amount appropriated to date and funds allocated for the work described in this action, is \$17 million.

The Metropolitan Water District of Southern California

Abstract of Bids Received on September 22, 2022 at 2:00 P.M.

Specifications No. 2003

Physical Security Improvements at Metropolitan's Headquarters Building, Stage 3

The work consists of installation of bollards for vehicle crash protection along the perimeter of the building, installation of fencing around the courtyard, integration of new security equipment into existing security software, and various electrical improvements.

Engineer's estimate: \$3,500,000

Bidder and Location	Total	SBE \$	SBE %	Met SBE¹
Caltec Corp. Westminster, CA	\$2,165,000	\$2,165,000	100%	Yes
Gilman Builders, Inc. Irvine, CA	\$2,599,000	-	-	-
Legion Contractors, Inc. San Francisco, CA	\$4,348,000	-	-	-

¹ Small Business Enterprise (SBE) participation level established at 25% for this contract.

The Metropolitan Water District of Southern California**Subcontractors for Low Bidder****Specifications No. 2003****Physical Security Improvements at Metropolitan's Headquarters Building, Stage 3**

Low bidder: Caltec Corp.

Subcontractor and Location
Coronel Demolition, Riverside, CA
Lobby Traffic Systems, Inc., Irvine, CA
Osborne Painting, Inc., Beaumont, CA
Prontto Electric, Upland, CA
Special Operations Construction, Pala, CA
Terra Pave, Inc., Whittier, CA
The Kepler Group, Inc., Altadena, CA

The Metropolitan Water District of Southern California
Subconsultants for Agreement with Arcadis IBI Group

Subconsultant and Location
ABS Consulting, Irvine, CA
Pacific Engineers Group, Los Angeles, CA
Triad Consulting System Design Group, Corona, CA
Construction Cost Consultants, Inc., Los Angeles, CA
Historic Resources Group, Los Angeles, CA





Engineering & Operations Committee

Physical Security Improvements at Metropolitan's Headquarters Building

Item 7-4

December 12, 2022

Headquarters Physical Security Upgrades Stage 3

Current Action

- Award a \$2,165,000 contract to Caltec Corp. for physical security improvements at Metropolitan's Headquarters Building
- Authorize an increase of \$250,000 to an agreement with Arcadis IBI Group for a new not-to-exceed amount of \$3.35 M

Headquarters Physical Security Upgrades Stage 3

Background

- Headquarters Building
 - Located next to the transportation hub
 - Critical for maintaining continuity of operations
- Multi-layered Security
 - Physical barriers
 - Guards
 - Employee awareness
 - Security system



Headquarters Building

Headquarters Physical Security Upgrades Stage 3

Approach & Recommendation

- Multi-stage Approach
 - **Stage 1** – enhanced building's perimeter windows & doors (completed in 2022)
 - **Stage 2** – enhanced access control and interior security protection (completed in 2022)
 - **Stage 3** – enhances the site's perimeter security (subject of this board action)



Stage 1 Upgrades



Stage 2 Upgrades

Headquarters Physical Security Upgrades Stage 3

Alternatives Considered

- Issue a change order to the Stage 2 contract
- Competitively bid as a separate contract
- Selected Alternative
 - Competitively bid as a separate contract
 - Enhances Metropolitan's ability to receive the most favorable bid
 - Fosters a fair and open contracting environment

Headquarters Physical Security Upgrades Stage 3

Scope of Work – Contractor

- Security fencing & gates around courtyard
- Bollards around building perimeter
- Additional cameras, speaker horns & card readers outside the building
- Integration of new equipment w/ existing security system network



Renderings of courtyard security fencing & gates

Headquarters Physical Security Upgrades Stage 3

Scope of Work – Metropolitan

- Construction contract management/inspection
- IT network systems installation & commissioning
- Contract administration, outreach & PM



Headquarters Improvements - Construction Management Team

Headquarters Physical Security Upgrades Stage 3

Arcadis IBI Group – Amendment to Agreement

- Architect of Record
- Construction Support Work
 - Review submittals
 - Respond to RFIs
 - Advise staff on technical issues
 - Prepare record drawings
- NTE amount: \$3.35 M
 - Estimated amount: \$250,000
- SBE participation level: 18%

Headquarters Physical Security Upgrades Stage 3

Specialty Services – No Action Required

- **SWCA Environmental**
 - Provide specialized environmental services
 - Estimated cost - \$55,000
- **Lee & Ro, Inc.**
 - Provide certified deputy inspection as required by the city of Los Angeles
 - Estimated cost - \$18,000
- **Securitas**
 - Provide enhanced security services at Headquarters Building
 - Estimated cost - \$220,000

Bid Results

Specifications No. 2003

Bids Received	September 22, 2022
No. of Bidders	3
Lowest Responsible Bidder	Caltec Corp.
Low Bid	\$2,165,000
Range of Other Bids	\$2,599,000 to \$4,348,000
Engineer's Estimate	\$3,500,000
SBE Participation*	100%

*SBE (Small Business Enterprise) participation level set at 25%

Allocation of Funds

Stage 3 Physical Security Upgrades

Metropolitan Labor

Owners Costs (Proj. Mgmt., Contract Admin., Envir. Support)	\$ 384,000
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Construction Inspection & Support	348,000
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Force Construction	179,000
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Submittals Review, Tech. Support, Record Dwgs.	235,000
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Materials & Incidentals	81,000
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Professional/Technical Services

Lee & Ro, Inc.	18,000
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Arcadis IBI Group	250,000
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SWCA Environmental Consultants	55,000
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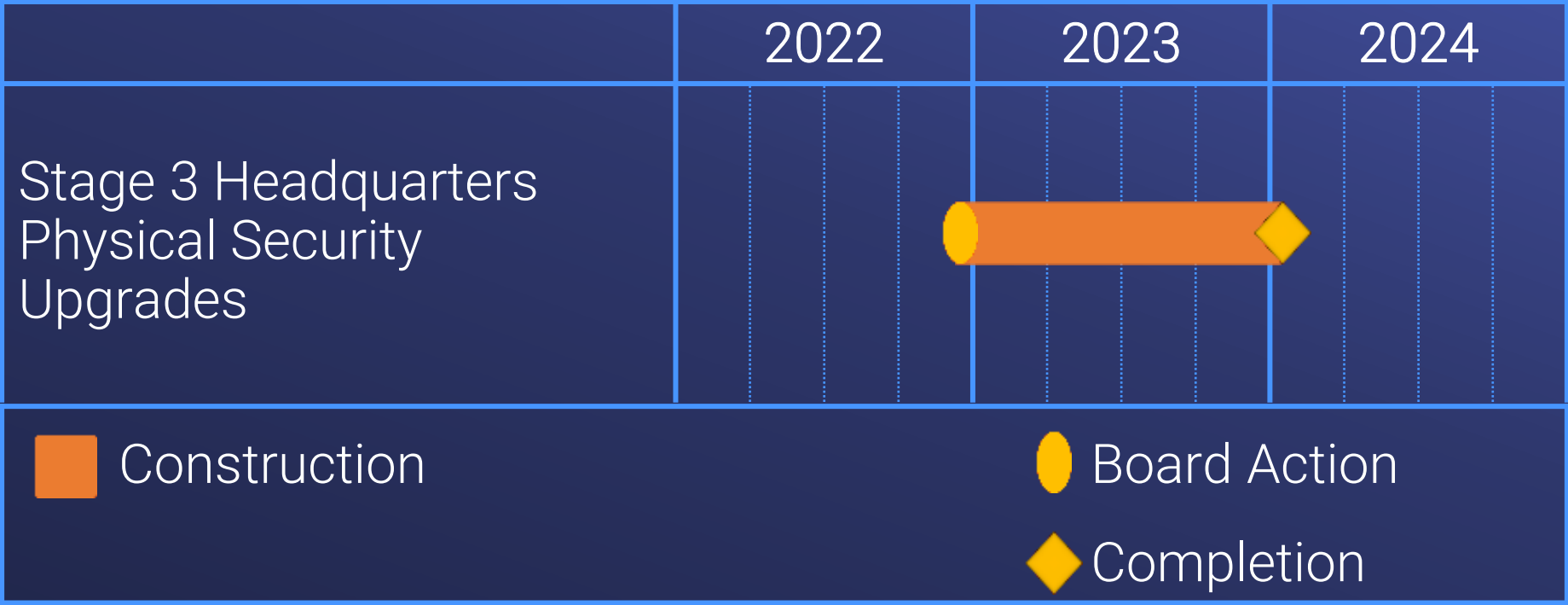
Securitas	220,000
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Contract – Caltec Corp.	2,165,000
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Remaining Budget	265,000
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Total	\$ 4,200,000
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Project Schedule



Board Options

- Option #1
 - a. Award a \$2,165,000 contract to Caltec Corp. for Stage 3 physical security improvements at Metropolitan's Headquarters Building; and
 - b. Authorize an increase of \$250,000 to an agreement with Arcadis IBI Group, for a new not-to-exceed total of \$3.35 million for technical support.
- Option #2

Do not proceed with the project at this time.

Staff Recommendation

- Option #1





• **Board of Directors**
Engineering and Operations Committee

12/13/2022 Board Meeting

7-5

Subject

Adopt a resolution designating authorized agents for funding from the California Office of Emergency Services and the Federal Emergency Management Agency; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA

Executive Summary

Metropolitan is developing a Local Hazard Mitigation Plan (LHMP) to identify hazard vulnerabilities to Metropolitan's infrastructure and develop actions that will mitigate the potential impacts. The Federal Emergency Management Agency (FEMA) approved a \$150,000 grant for the development of Metropolitan's LHMP, which requires the Board to designate a signatory to receive the grant funds. Following completion of the LHMP, staff intends to pursue additional grant funding for future projects.

This action approves an updated resolution designating authorized agents to accept funds from the California Office of Emergency Services (CalOES) and the Federal Emergency Management Agency (FEMA). The resolution is required to be updated every three years or when there are changes in authorized agents.

Details

Background

In October 2021, Metropolitan staff began the development of an LHMP. The LHMP will assess hazard vulnerabilities to Metropolitan's infrastructure and identify proactive mitigation actions that can be pursued in order to reduce the level of injury, property damage, and operational disruption that might otherwise result from such an event. Potential natural hazards may include earthquakes, wildfires, and drought. The LHMP will build upon already established Metropolitan programs to mitigate risk and ensure system reliability. Completion of the LHMP will enable Metropolitan to apply for hazard mitigation grant funding through FEMA and CalOES, including grants from the Building Resilient Infrastructure and Communities (BRIC) program and the Hazard Mitigation Grant (HMG) program.

The BRIC program was established under the 2018 Disaster Recovery Reform Act and aims to shift federal focus from reactive disaster spending and toward proactive investment in community resilience. For 2022, the total available grant funding through BRIC is approximately \$2.3 billion, with \$2.1 billion dispersed through a nationwide competitive process. The maximum grant opportunity for a single project is the lesser of \$50 million or 75 percent of the project cost. HMG funding is available, when authorized under a presidential major disaster declaration, for the areas of the state requested by the governor. Similar to BRIC, HMG program grants require a 25 percent cost share.

In April 2021, prior to the start of the LHMP, staff submitted a request for a grant to develop the LHMP. FEMA subsequently awarded Metropolitan a grant in May 2022 in the amount of \$150,000. The grant funds are disbursed as reimbursement for expenses incurred. Receipt of the grant funds requires that the Board authorize a signatory for the reimbursement request. The authorization allows for the Board to authorize the signatory for a specific grant or for all open and future grants declared up to three years after approval. Following completion of the LHMP, staff intends to submit a grant request for projects related to natural hazard mitigation under the BRIC and HMGP.

In addition, as a public agency that provides a vital service, Metropolitan is eligible for federal and state disaster relief assistance whenever Metropolitan facilities sustain disaster-related damage and there is a declaration of the disaster by the president of the United States or the governor of California. FEMA and CalOES require disaster assistance applicants to submit a board-approved resolution, using their form Applicant's Agent Resolution for Non-State Agencies (Resolution), every three years.

The Resolution (**Attachment 1**) identifies the following staff as authorized agents for FEMA and CalOES funding: (1) Assistant General Manager and Chief Financial Officer, (2) Group Manager of Water System Operations, and (3) Group Manager of Engineering Services.

Summary

The receipt of the grant funds requires that the Board designate a signatory to receive the grant funds. This action authorizes a resolution designating signatory agents for all California Office of Emergency Services and Federal Emergency Management Agency grants. This resolution allows Metropolitan to receive grant funding for the development of an LHMP, pursue grant funding for future projects, and apply for disaster relief assistance. Additionally, without this resolution, staff would utilize operation and maintenance (O&M) funds for the hazard mitigation projects, which may limit the number of other projects that can be completed under the biennium O&M budget.

Policy

Metropolitan Water District Administrative Code Section 5108: Appropriations

Metropolitan Water District Administrative Code Section 11104: Delegation of Responsibilities

Metropolitan Operating Policy C-21: Accounting and Administration of Federally Funded Grants and Cooperative Agreement

By Minute Item 51729, dated September 10, 2019, the Board approved the Designation of Applicant's Agent Resolution for Non-State Agencies.

California Environmental Quality Act (CEQA)

CEQA determination for Option #1:

The proposed action is not defined as a project under CEQA (Public Resources Code Section 21065, State CEQA Guidelines Section 15378(b)(4) and 15378(b)(5)) because it involves government funding mechanisms or government fiscal activities which do not involve any commitment to any specific project, and organizational or administrative activities that would not result in a direct or indirect physical change to the environment.

CEQA determination for Option #2:

None required

Board Options

Option #1

Adopt a resolution designating authorized agents for funding from the California Office of Emergency Services and the Federal Emergency Management Agency.

Fiscal Impact: None

Business Analysis: This option would allow Metropolitan to receive other FEMA and CalOES grants, including reimbursement for disaster-related damage.

Option #2



Do not approve the resolution.

Fiscal Impact: Additional funds would be required to advance the Local Hazard Mitigation Plan.

Business Analysis: This option would forego the opportunity to receive current and future grant funds, including reimbursement for disaster-related damage.

Staff Recommendation

Option #1

 _____ John V. Bednarski Manager/Chief Engineer Engineering Services	11/22/2022 _____ Date
 _____ Adel Hagekhalil General Manager	11/29/2022 _____ Date

Attachment 1 – Designation of Applicant’s Agent Resolution for Non-State Agencies

Ref# es12132022

GOVERNOR'S OFFICE OF EMERGENCY SERVICES
Cal OES 130

Cal OES ID No: _____

**DESIGNATION OF APPLICANT'S AGENT RESOLUTION FOR
 NON-STATE AGENCIES**

BE IT RESOLVED BY THE _____ OF THE _____
 (Governing Body) (Name of Applicant)

THAT _____, OR
 (Title of Authorized Agent)

_____, OR
 (Title of Authorized Agent)

 (Title of Authorized Agent)

is hereby authorized to execute for and on behalf of the _____,
 (Name of Applicant)

a public entity established under the laws of the State of California, this application and to file it with the California Governor's Office of Emergency Services for the purpose of obtaining federal financial assistance for any existing or future grant program, including, but not limited to any of the following:

- **Federally declared Disaster (DR), Fire Mitigation Assistance Grant (FMAG), California State Only Disaster (CDAA), Immediate Services Program (ISP), Hazard Mitigation Grant Program (HMGP), Building Resilient Infrastructure and Communities (BRIC), Legislative Pre-Disaster Mitigation Program (LPDM),** under
- Public Law 93-288 as amended by the Robert T. Stafford Disaster Relief and Emergency Assistance Act of 1988, and/or state financial assistance under the California Disaster Assistance Act.
- **Flood Mitigation Assistance Program (FMA),** under Section 1366 of the National Flood Insurance Act of 1968.
- **National Earthquake Hazards Reduction Program (NEHRP)** 42 U.S. Code 7704 (b) ((2) (A) (ix) and 42 U.S. Code 7704 (b) (2) (B) National Earthquake Hazards Reduction Program, and also The Consolidated Appropriations Act, 2018, Div. F, Department of Homeland Security Appropriations Act, 2018, Pub. L. No. 115-141
- **California Early Earthquake Warning (CEEW)** under CA Gov Code – Gov, Title 2, Div. 1, Chapter 7, Article 5, Sections 8587.8, 8587.11, 8587.12

That the _____, a public entity established under the
 (Name of Applicant)

laws of the State of California, hereby authorizes its agent(s) to provide to the Governor's Office of Emergency Services for all matters pertaining to such state disaster assistance the assurances and agreements required.

GOVERNOR'S OFFICE OF EMERGENCY SERVICES
Cal OES 130

Please check the appropriate box below

- ☐ This is a universal resolution and is effective for all open and future disasters/grants declared up to three (3) years following the date of approval.
- ☐ This is a disaster/grant specific resolution and is effective for only disaster/grant number(s): _____

Passed and approved this ____ day of _____, 20 ____

(Name and Title of Governing Body Representative)

(Name and Title of Governing Body Representative)

(Name and Title of Governing Body Representative)

CERTIFICATION

I, _____, duly appointed and _____ of
(Name) (Title)

_____, do hereby certify that the above is a true and
(Name of Applicant)

correct copy of a resolution passed and approved by the _____
(Governing Body)

of the _____ on the _____ day of _____, 20 ____.
(Name of Applicant)

(Signature)

(Title)



Engineering & Operations Committee

Adopt Resolution to Designate Signatories for CalOES and FEMA Grant Funding

Item 7-5

December 12, 2022

CalOES and FEMA Grant Funding

Current Action

- Adopt a resolution designating authorized agents for funding from the California Office of Emergency Services (CalOES) and the Federal Emergency Management Agency (FEMA)

CalOES and FEMA Grant Funding

Background

- Metropolitan is eligible for state and federal disaster relief funding
- Prior awards due to damage from wildfire and storm events
- “Applicants Agent Resolution for Non-State Agencies” requires designation of signatory
 - Three-year duration
- Previous resolution authorized September 2019

Wildfire damage to
Service Connection
OC-71 (2007)
FEMA reimbursement - \$2 million



CalOES and FEMA Grant Funding

Background

- Staff is currently developing Local Hazard Mitigation Plan (LHMP)
 - Assesses risk to infrastructure & water delivery
 - Earthquake, wildfire, flood, drought
 - Identifies potential mitigation actions
 - Once adopted, MWD can apply for FEMA grant funding to implement mitigation actions
 - Final plan adoption by MWD: anticipated Fall 2023
- MWD received \$150,000 FEMA Grant to prepare LHMP
 - Hazard mitigation grants also require resolution for designation of signatories

CalOES and FEMA Grant Funding

Resolution

- Authorizes a resolution designating signatory agents for all CalOES & FEMA grants
 - Chief Financial Officer
 - Group Manager of Water System Operations
 - Group Manager of Engineering Services
- Signatory can approve actions for open & future grants for a period of 3 years

Board Options

- Option #1
 - Adopt a resolution designating authorized agents for funding from the California Office of Emergency Services and the Federal Emergency Management Agency.
- Option #2
 - Do not approve the resolution.

Staff Recommendation

- Option #1





● **Board of Directors**
Engineering and Operations Committee

12/13/2022 Board Meeting

7-6

Subject

Adopt a resolution to accept \$50 million in state funding from the California Department of Water Resources to support the Metropolitan's drought mitigation projects; designate the Group Manager of Engineering Services to be the signatory to execute actions related to the funds; the General Manager has determined that the proposed actions are exempt or otherwise not subject to CEQA

Executive Summary

The recurring regional severe droughts have prompted an imminent, compelling need for Metropolitan to develop strategies to enhance the reliability of the current water conveyance infrastructure. In September 2022, the Governor approved an amendment to the 2021 Budget Act under AB 211 as part of the Emergency Relief Fund. This bill allocates \$50 million to the California Department of Water Resources (DWR) for Metropolitan to improve and expand its infrastructure to make its service area resilient to fluctuating imported water supplies. DWR will administer the funds and release the reimbursement after Metropolitan invoices expenses. This action authorizes the General Manager to accept funding of up to \$50 million to be used for drought mitigation projects; and designates Metropolitan's Group Manager of Engineering Services (Group Manager) to be the signatory to execute actions for reimbursement by DWR.

Details

Background

Metropolitan's distribution system was originally constructed in the 1940s to deliver treated Colorado River Aqueduct (CRA) supplies throughout its service area. The distribution system was expanded in the 1970s to connect to the State Water Project (SWP) in which Metropolitan obtained participation rights. The distribution system was designed to take advantage of the region's topography and primarily utilizes gravity to move water throughout the service. Metropolitan is able to deliver both CRA and SWP sources of supply to most of the service area; however, in certain portions of the system, Metropolitan currently can only deliver limited SWP water due to inherent hydraulic limitations (Metropolitan's SWP-dependent areas).

The current state-wide drought and resulting low allocation of SWP supplies by DWR have a direct impact on Metropolitan's ability to deliver water to SWP-dependent areas. Metropolitan has executed several board actions with the intention to expand the existing infrastructure to improve system flexibility throughout the entire service area during a state-wide drought. These board actions include a December 2021 action that amended the existing Capital Investment Plan (CIP) to start water supply reliability improvements in the Rialto Pipeline service area. The action authorized work to expand the delivery of alternative supplies from Diamond Valley Lake and possibly the CRA to the eastern SWP-dependent area, thus preserving SWP supply for the west side. Subsequently, in February 2022, the Board amended the CIP to include planning and implementation of infrastructure improvements for the western SWP-dependent areas. As a result, staff began the design of pump stations at the Sepulveda Canyon and Venice Pressure Control Facilities. This project allows Metropolitan to reverse the normal flow in the Sepulveda Feeder and augments treated water deliveries to the western service area.

In September 2022, the state approved an amendment to the 2021 Budget Act, under AB 211, as part of the Emergency Relief Fund. This bill allocated \$50 million to DWR for Metropolitan to implement drought

resilience projects. Per AB 211, the \$50 million fund will be available for encumbrance or expenditure until June 30, 2024, and five percent of this amount may be used for administrative costs by DWR. From the state-allocated amount, it allocated to Metropolitan \$47.5 million to improve and expand its infrastructure to make its entire jurisdiction resilient to fluctuating water supplies from each of its imported water sources and to allow conveyance of water throughout all its jurisdiction.

Metropolitan currently has multiple drought-related supply reliability projects in SWP-dependent areas, including new pipeline interconnections, pump stations, water storage facilities, and equipment upgrades on which it would apply the state funding. Initially, the new state funding will likely be used to fund construction contracts for the Wadsworth Pumping Plant bypass pipeline, the Inland Feeder/Rialto Pipeline intertie, the Inland Feeder Badlands Tunnel Surge Protection Facility, and the Foothill Pump Station intertie. These contracts are anticipated to be awarded by the Board by mid-2023. These infrastructure modifications will allow for the delivery of up to 107 cubic feet per second to the Rialto Pipeline service area. These state funds may also be applied to other drought-related projects, such as the Sepulveda Feeder pumping project.

Recommended Action

The receipt of state funds requires the inclusion of a board resolution that authorizes the General Manager to accept funding and designates a signatory to invoice and receive the state funds. This action designates the Group Manager to be the signatory with DWR to execute actions related to the funds. Without this resolution and designation, Metropolitan would not be able to receive state funding for multiple drought mitigation projects. Additionally, without this resolution, staff would utilize existing capital funds for the drought mitigation projects, which may limit the number of other CIP rehabilitation projects that could be completed under the biennial budget.

Policy

Metropolitan Water District Administrative Code Section 11104: Delegation of Responsibilities

Metropolitan Water District Administrative Code Section 8121: General Authority of the General Manager to Enter Contracts

By Minute Item 52581, dated November 9, 2021, the Board adopted a resolution declaring a Regional Drought Emergency.

By Minute Item 52626, dated December 14, 2021, the Board amended the current CIP to include projects to improve water supply reliability in the Rialto Pipeline service area.

By Minute Item 52703, dated February 8, 2022, the Board amended the current CIP to include planning and implementation of infrastructure projects to improve water supply reliability for the western service area.

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.

By Minute Item 52802, dated April 26, 2022, the Board adopted the Resolution and (a) declare that a Water Shortage Emergency Condition exists in the SWP Dependent Area; (b) adopt the framework of an Emergency Water Conservation Program and authorize the General Manager to finalize the Program consistent with the framework, and (c) express support for the Governor's Executive Order N-7-22.

By Minute Item 52946, dated August 16, 2022, the Board adopted the resolution committing to regional reliability for all member agencies.

California Environmental Quality Act (CEQA)

CEQA determination for Option #1:

The proposed actions are not defined as projects under CEQA (Public Resources Code Section 21065, State CEQA Guidelines Section 15378(b)(4) and 15378(b)(5)) because they involve government funding mechanisms or government fiscal activities which do not involve any commitment to any specific project and organizational or administrative activities that would not result in a direct or indirect physical change to the environment.

CEQA determination for Option #2

None required

Board Options

Option #1

- a. Adopt a resolution to accept \$50 million in state funding from the California Department of Water Resources to support Metropolitan's drought mitigation projects; and
- b. Designate the Group Manager of Engineering Services to be the signatory to execute actions related to the funds.

Fiscal Impact: Savings of approximately \$47.5 million in Metropolitan CIP funds or allows additional rehabilitation projects to proceed in the current biennium as a result of applying state grant funds towards the applicable CIP projects.

Business Analysis: This option would advance the development of drought mitigation projects in Southern California to augment regional supplies within Metropolitan's entire service area.

Option #2

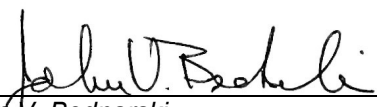

Do not proceed with the use of state funds at this time.

Fiscal Impact: None

Business Analysis: This option would forego the opportunity to receive additional funding for multiple supply reliability projects and increase Metropolitan capital spending to achieve goals under drought mitigation initiatives.

Staff Recommendation

Option #1

 _____ John V. Bednarski Manager/Chief Engineer Engineering Services	11/23/2022 Date
 _____ Adel Hagekhalil General Manager	11/29/2022 Date

Attachment 1 – Board Resolution

Ref# es12681240

Resolution for State Funding AB 211 under Emergency Relief Fund

RESOLUTION

**RESOLUTION OF THE BOARD OF DIRECTORS OF
THE METROPOLITAN WATER DISTRICT OF
SOUTHERN CALIFORNIA TO ACCEPT FUNDING
FROM THE CALIFORNIA DEPARTMENT OF WATER
RESOURCES FOR DROUGHT MITIGATION
PROJECTS**

WHEREAS, in September 2022, the Governor approved an amendment to the 2021 Budget Act under AB 211, as part of the Emergency Relief Fund. This bill allocates \$50 million to the California Department of Water Resources (DWR) for Metropolitan to improve and expand its infrastructure to provide resiliency to fluctuating imported water supplies; and

WHEREAS, the Board adopted a resolution declaring a Regional Drought Emergency on November 9, 2021;

WHEREAS, the Board adopted the resolution committing to regional reliability for all member agencies on August 16, 2022;

NOW, THEREFORE, BE IT RESOLVED by the Board of Directors of The Metropolitan Water District of Southern California that the Board supports acceptance of funding from DWR.

BE IT FURTHER RESOLVED that Metropolitan's Board authorizes Metropolitan's General Manager or his/her designee to accept grant funding of up to \$50,000,000.

BE IT FURTHER RESOLVED that Metropolitan's Board delegates' legal authority to the Group Manager of the Engineering Services Group to be designated signatory to execute, authorize, and approve actions related to the fund.

I HEREBY CERTIFY that the foregoing is a full, true and correct copy of a resolution adopted by the Board of Directors of The Metropolitan Water District of Southern California at its meeting held December 13, 2022.

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



Engineering & Operations Committee

Adopt Resolution to Accept State Funding to Support Drought Mitigation Projects

Item 7-6

December 12, 2022

Drought Resiliency Projects State Funding

Current Action

- Adopt resolution to accept \$50 million in state funding from the California Department of Water Resources to support Metropolitan's drought mitigation projects
- Designate the Group Manager of Engineering Services to be the signatory to execute actions related to the funds

Drought Resiliency Projects State Funding

Background

- State-wide drought & resulting low State Water Project (SWP) allocation directly impacts SWP-dependent areas
 - Compelling need to further enhance water conveyance flexibility and reliability
 - Continue to build upon past efforts with additional drought actions
- Metropolitan Board authorized numerous drought-related actions since 2021 to achieve these goals

Urgent Drought Projects Currently Underway

- Rialto Pipeline service area water supply reliability improvements
 - Deliver DVL & CRA water to Rialto Pipeline service area
- Infrastructure improvements for western SWP-dependent areas
 - Sepulveda Feeder & Venice Pressure Control Facilities



Planned CIP Projects under Drought Action

AB 211 - Amendment to the 2021 Budget Act

- AB 211 allocated \$50 million to DWR for Metropolitan to implement drought resilience projects
 - Up to \$47.5 million for Metropolitan to improve & expand infrastructure for resiliency to fluctuating water supplies
 - DWR will administer funds & release reimbursement after Metropolitan invoices expenses
 - 5% of fund may be used for DWR administrative costs
- State funding will off-set Metropolitan's costs for drought projects
- Board resolution required to formally accept funds

Board Options

- Option #1
 - a. Adopt a resolution to accept \$50 million in state funding from the California Department of Water Resources to support Metropolitan's drought mitigation projects; and
 - b. Designate the Group Manager of Engineering Services to be the signatory to execute actions related to the funds.
- Option #2

Do not proceed with the use of state funds at this time.

Staff Recommendation

- Option #1





● **Board of Directors**
Engineering and Operations Committee

12/13/2022 Board Meeting

7-7

Subject

Authorize on-call agreements with GEI Consultants Inc., HDR, Inc., and Stantec Consulting Services Inc. in amounts not to exceed \$2.5 million each, for a maximum of five years, to support Metropolitan's Dam Safety Initiatives Program; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA

Executive Summary

The Dam Safety Initiatives Program (Program) conducts periodic reviews and evaluations of Metropolitan's 24 dams and 20 reservoirs. The Program's assessments typically evaluate potential risks and identify alternative solutions to minimize risks. As a result of this work, both capital and O&M projects are developed to mitigate identified risks. Management of this Program is conducted by in-house staff. In-house staff also conducts technical work for the base load of projects, while professional services agreements are selectively utilized to address projects above this base load or where specialized services are required. This action authorizes three new professional services agreements to provide engineering and technical support of the Program's initiatives. The three new agreements will be the on-call type, which are typically used for shorter-term assignments, urgent projects, and projects with specialized technical needs. The maximum duration of these agreements will be five years.

Details

Background

Metropolitan owns and operates 20 reservoirs and 24 dams that store or manage water throughout Southern California. The dams are under the jurisdiction of the California Department of Water Resources Division of Safety of Dams (DSOD) and are regularly inspected by Metropolitan staff and the DSOD to ensure they continue to operate safely. Metropolitan's dam safety Program includes periodic assessments of the performance of the dams to identify any necessary improvements to maintain dam safety. As a result of these assessments, both capital and O&M projects have been identified.

The vast majority of the regulatory monitoring is conducted by in-house staff. However, when resource needs exceed available in-house staffing or require specialized technical expertise, Metropolitan uses a combination of project-specific and on-call professional services agreements. Over the next several fiscal years, a number of dam safety initiatives will require engineering and technical services beyond the level that can be supported by in-house staff. Supplemental support services will be needed in the areas of: (1) dam monitoring system evaluation and design; (2) dam safety risk assessments and improvements; (3) seismic and other structural upgrades; and (4) preparation of emergency action plans.

In order to be considered for a consulting agreement, firms are competitively evaluated, resulting in a list from which both project-specific and on-call agreements are executed as capital project needs are identified. Project-specific agreements over \$250,000 are approved individually by the Board. By contrast, on-call agreements are multi-year with not-to-exceed amounts and provide a high degree of flexibility to respond to schedule or scope adjustments, allow quicker delivery times, and lower administrative costs for both Metropolitan and the consultants. For these types of agreements, consultants are assigned work only after specific tasks are identified by staff, up to the not-to-exceed amounts of the contracts. These agreements have been relied upon for

over 15 years for the efficient execution of capital projects. There are no on-call agreements to provide specialized services for the Program at this time.

In support of Metropolitan's goal of increasing business opportunities for Small Business Enterprise (SBE) firms, staff establishes SBE participation levels for the vast majority of professional services agreements for capital projects. The only exceptions are for highly specialized areas of expertise, or for the uncommon occasions when sub-consulting opportunities are limited

Agreements for Engineering Services – GEI Consultants Inc., HDR, Inc., and Stantec Consulting Services Inc.

Request for Qualifications (RFQ) No. 1316 was issued in April 2022 to establish a pool of qualified consulting firms to support projects related to geotechnical and dam safety engineering services. The RFQ covered services in two categories: geotechnical engineering services and dam safety assessments. The consultants submitted Statements of Qualifications (SOQs) for one or both of these two categories. Twelve firms submitted SOQs, which were then evaluated based on qualifications, key personnel, experience related to planned projects, past performance, environmental sensitivity, and business outreach. All of the 12 firms were prequalified for geotechnical services, and five were prequalified for dam safety services. Prequalified firms will be eligible to submit proposals on project-specific agreements within the categories of work for which they were prequalified.

Planned engineering and technical services to be provided under the resulting agreements were identified in the RFQ and include conceptual assessments, preliminary and final design support for new facilities and rehabilitation of existing facilities; field investigations; planning studies; specialized technical analyses and reviews; cost estimating; and engineering support during bid, advertisement, and construction.

New on-call agreements for dam safety engineering and technical services are recommended to be awarded at this time to three of the five firms prequalified for dam safety services. These firms were selected based on staff's current assessment of technical resources needed for dam safety projects over the next several fiscal years. New agreements are recommended with GEI Consultants Inc., HDR, Inc., and Stantec Consulting Services Inc. These firms received the highest evaluation scores based on the criteria described above.

This action authorizes on-call agreements with GEI Consultants Inc., HDR, Inc., and Stantec Consulting Services Inc., each in an amount not to exceed \$2.5 million per agreement. The maximum duration of each agreement will be five years. Staff will return to the Board in the future to authorize additional agreements if a need for such work is identified.

Funding for the work to be assigned to the consultants under on-call agreements is available within Metropolitan's capital expenditure plan or O&M budget. No work is guaranteed to the consultants under these agreements. For each of the agreements, Metropolitan has established an SBE participation level of 25 percent of the amount of the agreement. All prequalified firms have committed to meet this level of participation.

Alternatives Considered

Alternatives considered for addressing dam safety initiatives included assessing the availability and capability of in-house Metropolitan staff to conduct this work. Metropolitan's staffing strategy for utilizing consultants and in house Metropolitan staff has been: (1) to assess current work assignments for in-house staff to determine the potential availability of staff to conduct this work; and (2) to utilize consultants when resource needs exceed available in-house staffing or require specialized technical expertise.

This strategy relies on the assumption that in-house engineering staff will handle the baseload of work on capital projects, while professional services agreements are selectively utilized to handle projects above this baseload or where specialized needs are required. Execution of the currently planned projects requires the support of external specialized engineering and dam safety expertise, in addition to Metropolitan staff. External support is needed for evaluation and design of dam monitoring systems, performing detailed structural and geotechnical seismic analysis of dams and other appurtenant structures, assisting Metropolitan in risk evaluations of dams, and supporting Metropolitan staff in necessary updates to the dam emergency action plans.

Summary

This action authorizes on-call agreements of five-year durations with GEI Consultants Inc., HDR, Inc., and Stantec Consulting Services Inc., in an amount not to exceed \$2.5 million each for support of projects related to Metropolitan's dam safety initiatives.

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 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 actions are not defined as a project under CEQA because they involve continuing administrative activities (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 of CEQA Guidelines).

CEQA determination for Option #2:

None required

Board Options

Option #1

Authorize on-call agreements with GEI Consultants Inc., HDR, Inc., and Stantec Consulting Services Inc., in amounts not to exceed \$2.5 million each, for a maximum of five years, to support Metropolitan's Dam Safety Initiatives Program.

Fiscal Impact: None; funding for the work to be assigned to the consultants under on-call agreements and performed this biennium is already authorized in the biennium budget. Future costs will be accounted for and appropriated under subsequent biennial budgets. In addition, no work is guaranteed to the consultants under these agreements.

Business Analysis: Contracting with multiple firms provides flexibility and an efficient means for Metropolitan to obtain needed technical services and to complete projects in accordance with board-adopted schedules.

Option #2

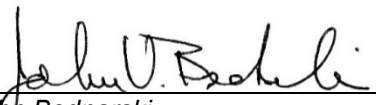
Do not authorize the consulting agreements at this time.

Fiscal Impact: None

Business Analysis: Under this option, Metropolitan staff would perform the engineering activities, or would request board authorization for agreements on a project-specific basis. This option would forego an opportunity to reduce administrative costs or address urgent projects promptly.


Staff Recommendation

Option #1



John Bednarski
Manager/Chief Engineer
Engineering Services Group

11/23/2022
Date



Adel Hagekhalil
General Manager

12/6/2022
Date

Ref# es12683514



Engineering & Operations Committee

Professional Services Agreements For Dam Safety Initiatives Program

Item 7-7

December 12, 2022

Professional Services Agreements for Dam Safety Initiatives Program

Current Action

- Authorize on-call agreements in amounts not to exceed \$2.5 million, for a maximum of five years for dam safety engineering & technical services
 - GEI Consultants Inc.
 - HDR, Inc.
 - Stantec Consulting Services, Inc.

Professional Services Agreements for Dam Safety Initiatives Program

Background

- Metropolitan owns & operates 20 reservoirs & 24 dams
 - Under jurisdiction of the California Department of Water Resources Division of Safety of Dams (DSOD)
- Periodic assessments are conducted to evaluate potentials risks
 - Capital & O&M projects developed to mitigate identified risks



Diemer Ozone Contact Basin



Lake Skinner

Professional Services Agreements for Dam Safety Initiatives Program

Examples of Upcoming Projects

- Dam Monitoring System Evaluation, Design & Rehabilitation
 - Lake Mathews Dam
 - Lake Skinner Dam
- Comprehensive Dam Safety Risk Assessments
 - Copper Basin Dam
 - Gene Wash Dam



Copper Basin



Lake Mathews

Professional Services Agreements for Dam Safety Initiatives Program

Examples of Upcoming Projects

- Seismic Hazard Analysis & other Structural Upgrades
 - Lake Skinner Dam Seismic Stability Evaluation
 - Diamond Valley Lake Seismic Hazard Analysis
 - Gene Wash Dam Seismic Hazard Analysis
- Preparation of Emergency Action Plans
 - As needed (multiple dams)



Diamond Valley Lake



Gene Wash Dam

Professional Services Agreements for Dam Safety Initiatives Program

Request for Qualifications (RFQ) 1316

- Issued April 2022 for on-call services
- Covered services in two categories:
 - Dam safety
 - Geotechnical engineering services
- Total of 12 firms responded
 - 5 firms were pre-qualified for dam safety services
 - 11 firms were pre-qualified for geotechnical services
- Three firms recommended for dam safety agreements at this time
- Future board action to authorize on-call geotechnical agreements

Professional Services Agreements for Dam Safety Initiatives Program

Alternatives Considered

- Utilize Metropolitan staff to conduct all work related to dam safety initiatives
 - Dependent on in-house staff workload
 - May not have technical expertise
- Selected Alternative – Utilize on-call agreements along with Metropolitan staff
 - Metropolitan engineering staff will address the baseload of work on capital projects
 - Professional services agreements selectively utilized to handle projects above this baseload or where specialized needs are required

Professional Services Agreements for Dam Safety Initiatives Program

Agreements

- New on-call agreements for 3 prequalified firms for dam safety services
 - GEI Consultants Inc.
 - HDR, Inc.
 - Stantec Consulting Services, Inc.
- Not-to-exceed amount of \$2.5 M per agreement
- Max duration of each agreement is 5 years
- Services to be provided include:
 - Dam safety monitoring & surveillance
 - Emergency preparedness
 - Dam safety assessments
 - Engineering design & peer review
- SBE participation level: 25% of agreement amount

Board Options

- Option #1
 - Authorize on-call agreements with GEI Consultants Inc., HDR, Inc., and Stantec Consulting Services Inc., in amounts not to exceed \$2.5 million each, for a maximum of five years, to support Metropolitan's Dam Safety Initiatives Program.
- Option #2
 - Do not authorize the consulting agreements at this time.

Staff Recommendation

- Option #1





● **Capital Investment Plan Quarterly Report for period ending September 2022**

Summary

The attached report provides a summary of actions and accomplishments on the Capital Investment Plan (CIP) during the first quarter of fiscal year 2022/23. It also provides updates on the status of capital projects and capital expenditures to date, and information regarding service connections and relocations authorized by the General Manager during the reporting period of July to September 2022, the first quarter of fiscal year 2022/23, and the first quarter of the fiscal years 2022/23 and 2023/24 biennium.

Purpose

Administrative Code Requirement Section 2720(a)(1): General Manager's Quarterly Reports

Section 2720 of Metropolitan's Administrative Code requires the General Manager to report quarterly to the Engineering and Operations Committee on the Capital Investment Plan.

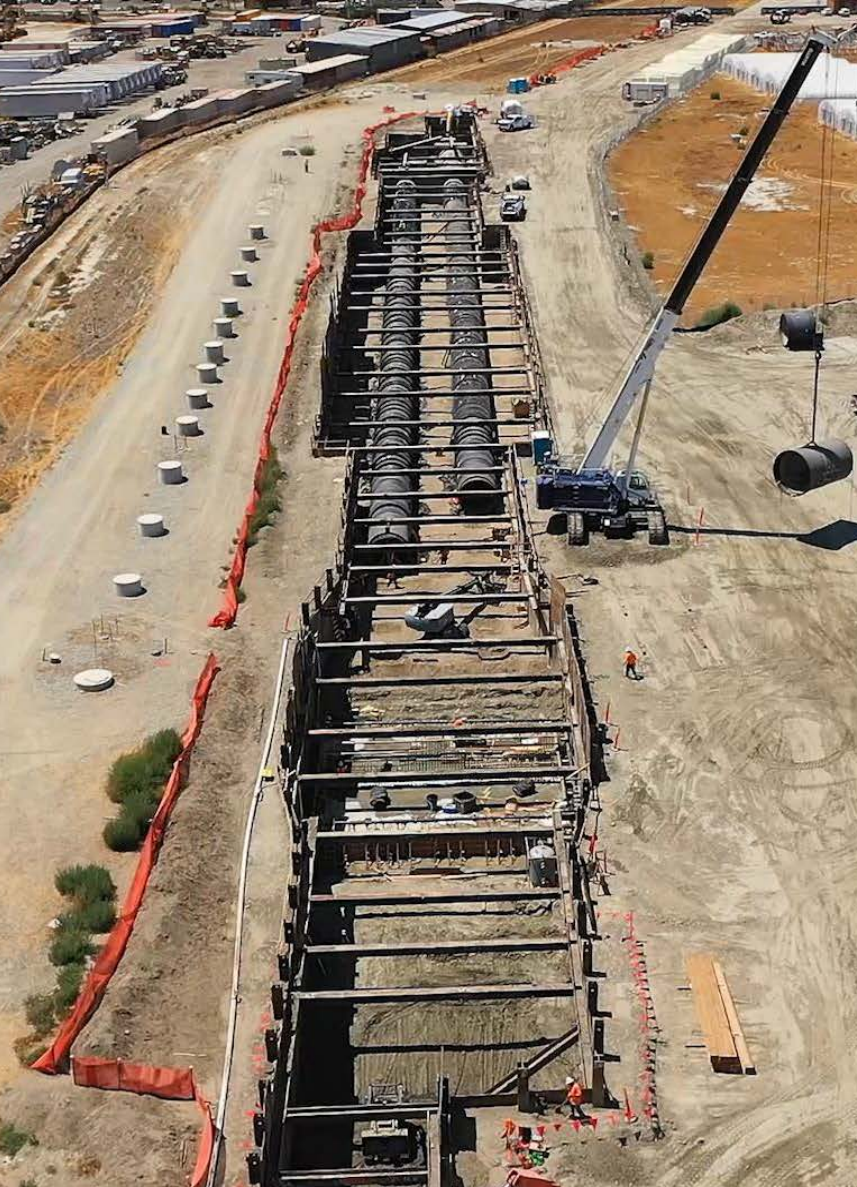
Sections 4700-4708 of Metropolitan's Administrative Code requires the General Manager to report on service connections approved by the General Manager with the estimated cost and approximate location of each.

Section 8122(c) of Metropolitan's Administrative Code requires the General Manager to report on the execution of any relocation agreement under the General Manager's authority involving an amount in excess of \$100,000.

Highlights of progress and major milestones on selected projects are presented in the attached report grouped by CIP program.

Attachments

Capital Investment Plan quarterly report for period ending September 2022



The Metropolitan Water District of Southern California

Capital Investment Plan Quarterly Report

July - September 2022



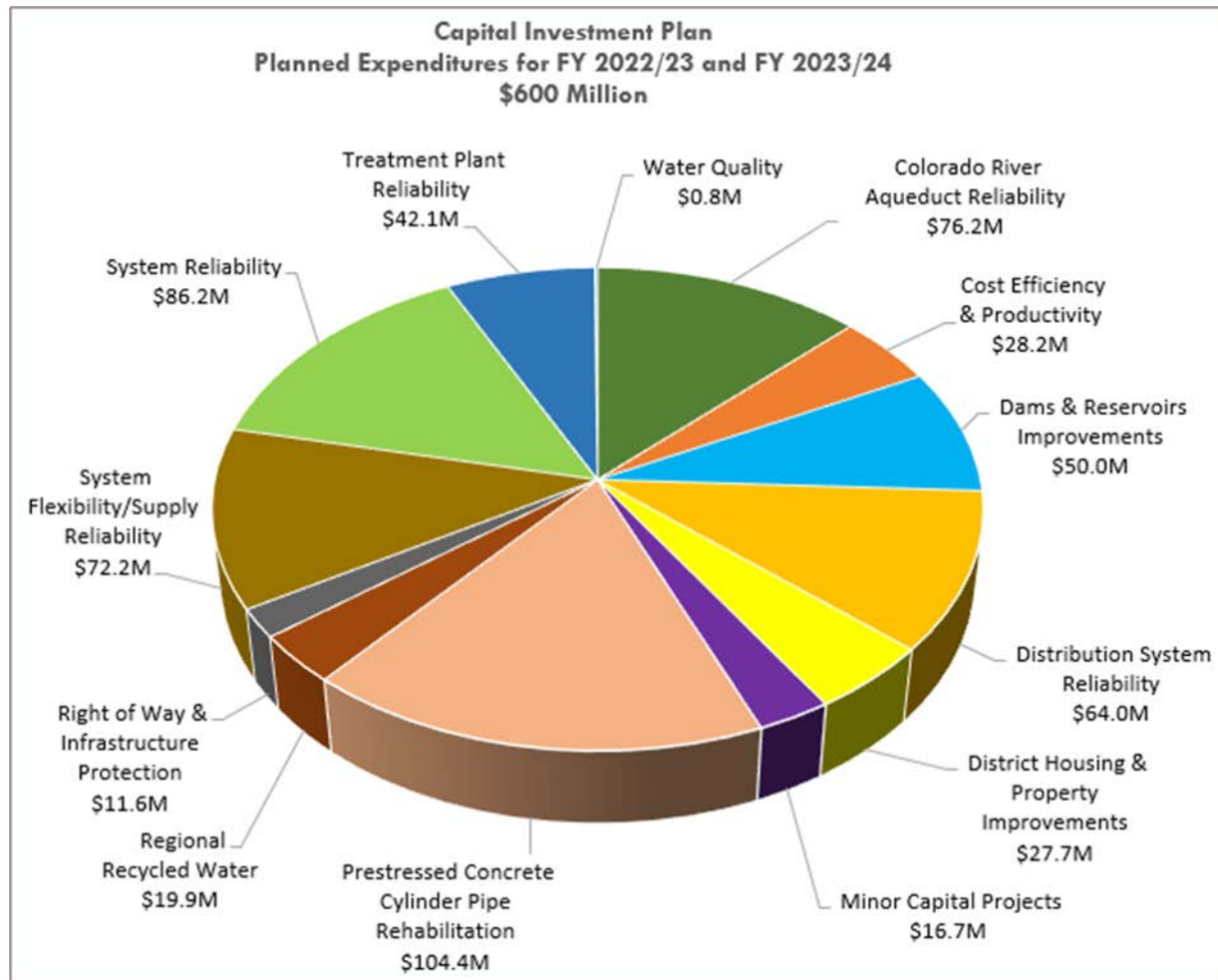
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Capital Investment Plan for Fiscal Years 2022/23 & 2023/24

Metropolitan's total planned capital expenditures for Fiscal Years (FYs) 2022/23 and 2023/24 are \$600 million. Figure 1 below shows the planned expenditures by program. In April 2022, the Board appropriated \$600 million and delegated authority to the General Manager, subject to both CEQA requirements and the General Manager's authority as addressed in Metropolitan's Administrative Code, to initiate or proceed with work on all planned capital projects identified in the Capital Investment Plan (CIP) for FYs 2022/23 and 2023/24.

Figure 1: CIP for FY 2022/23 and FY 2023/24 by Program



[Cover Photos: (left to right; top to bottom): *Casa Loma Siphon Barrel No. 1 Seismic Upgrade* – aerial overview of project site; *Upper Feeder Expansion Joint Replacement* – removal of existing expansion joint bolts; *Metropolitan Headquarters Physical Security Improvements* – completed security desk, glass handrail, and turnstiles in rotunda]

Executive Summary

This report provides a summary of the Capital Investment Plan (CIP) activities and accomplishments during the 1st Quarter of Fiscal Year (FY) 2022/23, which ended in September 2022. CIP expenditures through the 1st Quarter totaled \$30.4 million and the expenditures are projected to be slightly above the planned expenditures at the end of the biennium. The CIP funds allocated during the quarter totaled \$469.9 million, leaving approximately \$130.1 million available to be allocated during the remainder of the current biennium. Approximately \$410 million of the \$469.9 million was for work, such as on-going construction projects, authorized in the prior biennium.

During the quarter, twelve project-specific board actions were heard in open sessions including an action to amend the CIP to include Upper Feeder Expansion Joint Replacement and to continue the emergency action of executing a no-bid contract for the installation of a new expansion joint on the Upper Feeder. Also, three actions on drought mitigation-related projects, which will improve water deliveries that depend on State Water Project supplies, were presented to the Board.

Two construction contracts and one procurement contract were awarded by the Board during the reporting period with a total contract amount of approximately \$31.9 million. During the same time, five construction contracts and one procurement contract were completed with a total of approximately \$22.6 million in contract payments authorized, reflecting construction progress on projects such as Casa Loma Siphon Barrel No. 1 Seismic Upgrade, CRA Pumping Plants Overhead Crane Replacement, Lake Mathews PCCP Rehabilitation Valve Storage Building, Second Lower PCCP Rehabilitation – Reach 3A, HQ Building Fire Alarm & Smoke Control Improvements, and Weymouth Basins 5-8 & Filter Building No. 2 Rehabilitation.

Board Action Summary

During the 1st Quarter, board actions heard in open session included twelve project-specific actions summarized in Table 1 below. These actions awarded three contracts totaling approximately \$31.9 million, authorized six new professional/technical services agreements totaling a not-to-exceed amount of approximately \$11.0 million, and authorized an increase to three existing agreements totaling a not-to-exceed amount of approximately \$15.7 million. Information on the awarded contracts can be found in Table 8 of this report. The table below excludes information on board items heard in closed session.

Table 1: 1st Quarter Board Actions

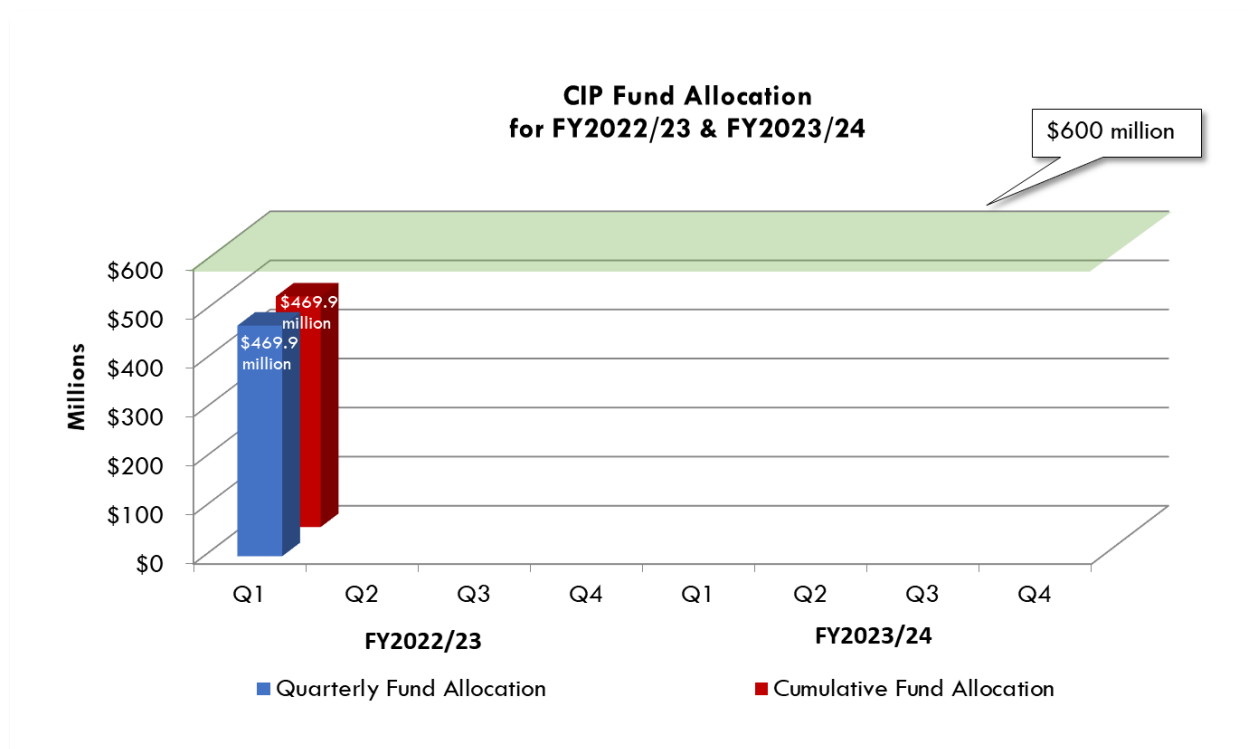
Month	Board Letter Item No.	Project	Action taken
July	7-1	Upper Feeder Expansion Joint Replacement	Authorized an unplanned project and determined the need to continue emergency action of executing a no-bid contract
July	7-2	Etiwanda Pipeline Lining Rehabilitation - Stage 3	Awarded \$25,972,700 construction contract
July	7-3	Jensen Plant Site Security Upgrades	Authorized an agreement not-to-exceed \$700,000
August	7-2	Upper Feeder Expansion Joint Replacement	Determined the need to continue the emergency action of executing a no-bid contract

Month	Board Letter Item No.	Project	Action taken
August	7-3	Electromagnetic Pipeline Inspections and Assessments; Calabasas Feeder PCCP Rehabilitation; Sepulveda Feeder North Reach	Authorized two agreements not-to-exceed \$7,000,000 and \$900,000 and authorized an increase of \$6,000,000 to an existing agreement
August	7-4	Inland Feeder/SBVMWD Foothill Pump Station Intertie	Authorized an agreement not-to-exceed \$1,300,000
August	7-5	Rialto Pipeline Water Supply Improvements	Awarded \$5,647,405 procurement contract
September	7-1	Upper Feeder Expansion Joint Replacement	Determined the need to continue the emergency action of executing a no-bid contract
September	7-2	Weymouth Administration Building Upgrades	Authorized an increase of \$1,200,000 to an existing agreement and authorized an agreement not-to-exceed \$450,000
September	7-3	Mills Maintenance Building Roof Replacement	Awarded \$287,824 construction contract
September	7-4	Sepulveda Feeder Pump Stations	Authorized an increase of \$690,000 to an existing agreement
September	7-11	District Housing and Property Improvements Program	Authorized an increase of \$8,500,000 to an existing agreement

The previously referenced April 2022 board action appropriated \$600 million to perform work on planned capital projects through the current biennium. In order to be considered a planned project, the project must be identified and described in the Capital Investment Plan Appendix for the two-year budget cycle. Consistent with this action, all requests to allocate funds and proceed with planned capital projects are reviewed and approved by the Chief Engineer acting under the General Manager's authority. Unplanned projects, those which are not already identified in the CIP Appendix, require a separate board authorization. During the 1st Quarter, the board amended the CIP to include a new emergency capital project which addressed a leak that was discovered on the Upper Feeder.

Figure 2 shows the allocation of the funds from Appropriation No. 15525 for this quarter and total for the current biennium through the quarter, which is approximately \$469.9 million, leaving approximately \$130.1 million available to be allocated during the remainder of the current biennium. This amount includes allocation of \$10 million to the Minor Capital Projects Program, approximately \$49.9 million for work authorized during the 1st Quarter, and approximately \$410 million in previously authorized work from the prior biennium that is to be completed in the current biennium. Details of the allocations for work authorized during the reporting quarter and from the prior biennium can be found in the **Project Actions** section.

Figure 2: CIP Fund Allocation from Appropriation No. 15525 – FY 2022/23 and FY 2023/24



*Numbers may not sum due to rounding

Information on construction and procurement contracts activities for the 1st Quarter of FY 2022/23 is presented in the **Construction and Procurement Contracts** section of this report. Progress payments for these contracts in the 1st Quarter totaled approximately \$22.6 million and primarily reflect construction progress on Colorado River Aqueduct Pumping Plants Overhead Crane Replacement, Colorado River Aqueduct Replacement of Casa Loma Siphon Barrel No. 1, CRA Pumping Plants Sump Rehabilitation, Lake Mathews PCCP Rehabilitation Valve Storage Building, MWD HQ Building Fire Alarm & Smoke Control Improvements, Second Lower Feeder PCCP Rehabilitation – Reach 3A, and Weymouth Basins 5-8 & Filter Building No. 2 Rehabilitation.

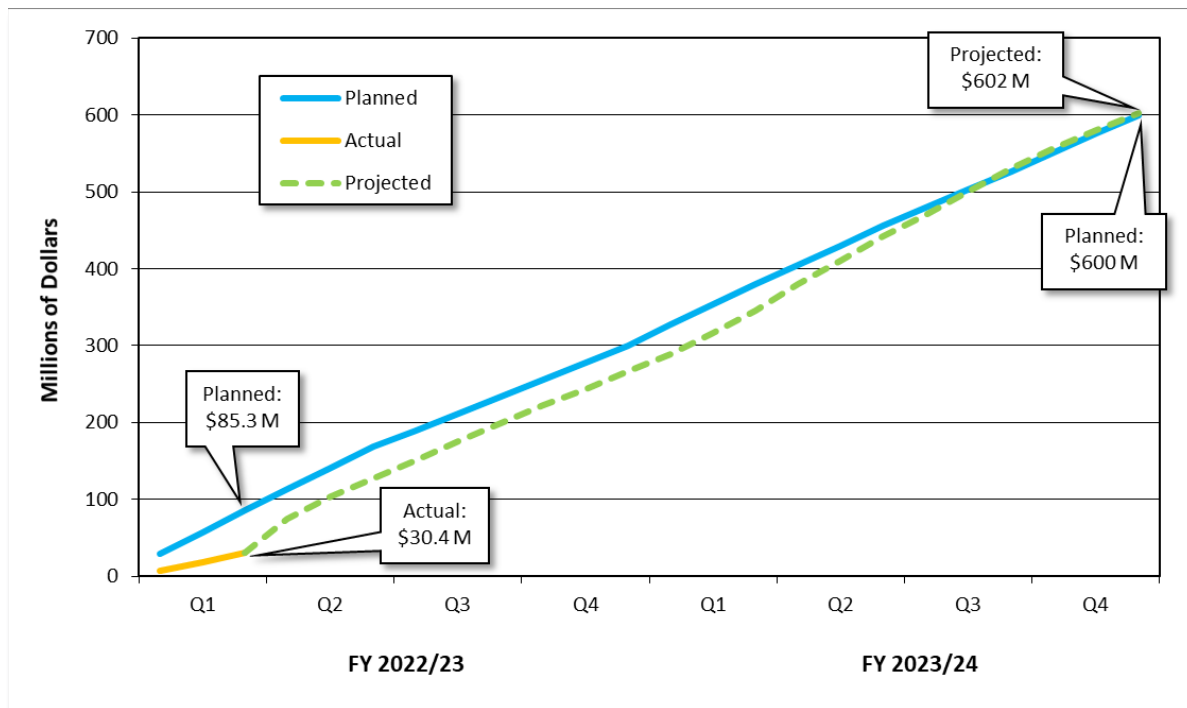
Planned Expenditure and Budget

Table 2 and Figure 3 below show planned and actual expenditures for the biennium through the end of the 1st Quarter of FY 2022/23, and the forecast of expenditures through the end of the current biennium, against planned expenditures for the same time interval. Actual expenditures through the 1st Quarter of FY 2022/23 were approximately 36% of planned expenditures.

Table 2: Planned & Actual Expenditures for FYs 2022/23 & 2023/24

Quarter	Planned Expenditures (millions)	Actual Expenditures (millions)
FY 2022/23, Q1	\$85.3	\$30.4
Totals	\$85.3	\$30.4

Figure 3: Current Biennium – Planned, Actual & Forecasted Expenditures



As shown in Figure 3, the total planned expenditures in the current biennium are \$600 million. The projected expenditures for the biennium are currently approximately \$602 million with the actual expenditures lower than the planned expenditures during the 1st Quarter of FY 2022/23. However, actual expenditures are projected to be slightly above the planned expenditures at the end of the biennium. This negative variance below the planned expenditures in this quarter is mainly due to concerted effort during the last quarter to accelerate the work that was planned for the 1st Quarter of FY 2022/23, including the work on the drought projects.

Major Capital Programs Overview

Metropolitan's CIP is structured into three levels. In descending order, they are:

- Program
- Project Group/Appropriation
- Project

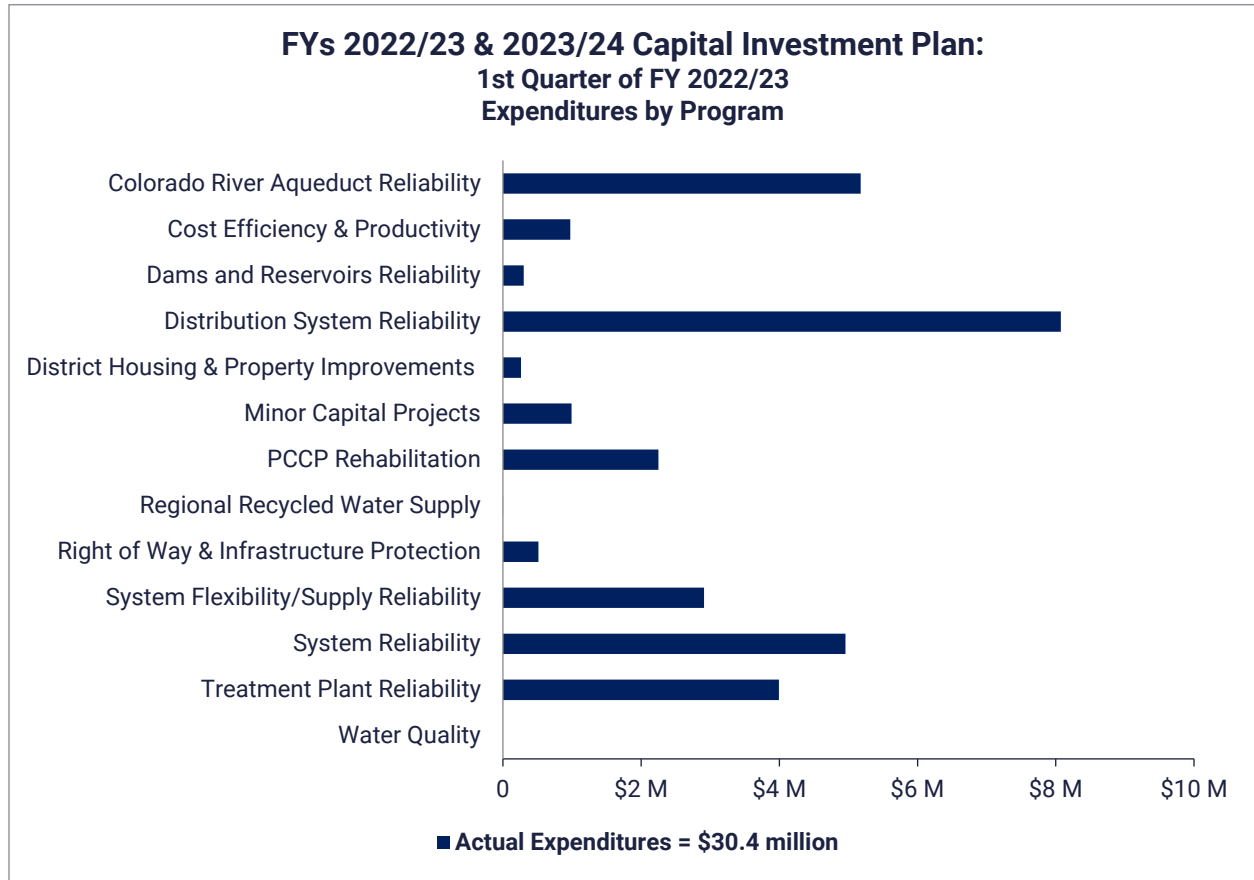
Metropolitan's CIP is comprised of 13 programs, which capture all projects within the CIP. The 13 capital programs are listed below in alphabetical order. Programs are comprised of one or more project groups/appropriations, and project group/appropriations are comprised of one or more projects. The status of each of the programs is provided later in this section of the report.

- Colorado River Aqueduct (CRA) Reliability
- Cost Efficiency & Productivity
- Dams & Reservoirs Improvements
- Distribution System Reliability
- District Housing & Property Improvements
- Minor Capital Projects
- Prestressed Concrete Cylinder Pipe (PCCP) Rehabilitation
- Regional Recycled Water Supply
- Right-of-Way and Infrastructure Protection
- System Flexibility/Supply Reliability
- System Reliability
- Treatment Plant Reliability
- Water Quality

For the current biennium, the CIP includes over 37 project groups, 60 planned appropriations, and 447 planned projects (excluding Minor Capital Projects). The list of appropriations that make up each of the programs, along with planned expenditures and actual costs to date for those appropriations, are provided in Table 15 at the end of this report.

Figure 4 below shows actual expenditures for the 13 capital programs for 1st Quarter of FY 2022/23.

Figure 4: Biennium-to-date Actual Expenditures through 1st Quarter FY 2022/23



Major Capital Project Programs – Highlights

The section that follows provides 1st Quarter highlights for the 12 Major Capital Projects Programs; the Minor Capital Projects Program is highlighted in its own section of this report. Status is provided for selected projects within each Major Capital Projects Program. The selected projects typically achieved major milestones during the 1st Quarter of FY 2022/23 or are scheduled to achieve major milestones in the next quarter.

Table 3: Major Capital Projects Programs

Program	Project
Colorado River Aqueduct (CRA) Reliability	CRA Pumping Plant Overhead Cranes Replacement
Cost Efficiency & Productivity	Battery Energy Storage System
Dams and Reservoirs Improvements	Garvey Reservoir Rehabilitation
Distribution System Reliability	Casa Loma Siphon Barrel No. 1 Seismic Upgrade
District Housing & Property Improvements	Program highlights only
Prestressed Concrete Cylinder Pipe (PCCP) Rehabilitation	Second Lower Feeder PCCP Rehabilitation – Reach 3B
Regional Recycled Water Supply	Program highlights only
Right-of-Way & Infrastructure Protection	Program highlights only
System Flexibility/Supply Reliability	Perris Valley Pipeline – Tunnels
System Reliability	La Verne Shops Building Completion – Stage 5
Treatment Plant Reliability	Mills Electrical Upgrades – Stage 2
Water Quality	Program highlights only

Colorado River Aqueduct (CRA) Reliability Program

Actual Biennium Expenditures
(Jul. 2022 through Sep. 2022)
\$5.18 million

Program Information: The CRA Reliability Program is composed of projects to replace or refurbish facilities and components of the CRA system in order to reliably convey water to Southern California.

Program Highlights (1st Quarter)

Accomplishments

- Continued construction activities for the following contracts:
 - CRA Domestic Water Treatment System Upgrades at all five pumping plants
 - i) Initiated installation of electrical conduits and pull boxes at Intake Pumping Plant.
 - ii) Initiated and completed excavation for the above-ground conduit support pedestals at Intake and Iron Mountain pumping plants
 - iii) Continued submittals for the water treatment equipment procurement with expected deliveries in two shipments, in late 2022 and early 2024, to coincide with the Domestic Water Treatment System Upgrades construction schedule
 - CRA Mile 12 Flow Meter Upgrades
 - i) Continued installation of above ground electrical conduits and junction boxes
 - ii) Continued installation of security system, solar panel array equipment, and control panels
 - CRA Pumping Plants Overhead Cranes Replacement
 - iv) Completed fabrication of the crane assembly and delivered it to Gene Pumping Plant
 - v) Initiated installation of the crane assembly at Gene Pumping Plant
 - vi) Initiated fabrication of the crane assembly for Eagle Mountain Pumping Plant
 - Gene Wash Reservoir Discharge Valve Structure Rehabilitation
 - vii) All work completed. Contractor has de-mobilized.
- CRA Pumping Plant Sump System Rehabilitation
 - Under Metropolitan's response to COVID-19, suspended on-site construction and continued submittals and fabrication activities
 - Received pump deliveries for Gene Pumping Plants
 - Continued fabrication of remaining pumps, piping, and other materials to be furnished for Hinds Pumping Plant
- CRA Pumping Plant Sump System Equipment Installation
 - Continued final design
- CRA 6.9 kV Power Cable Replacement
 - Continued to evaluate and establish the course of action and construction repackaging options of the remaining outstanding contract work items
- CRA Storage Building Replacement at Hinds, Eagle Mountain, and Iron Mountain
 - Completed Value Engineering workshop to optimize cost savings
- Continued final design of:
 - CRA Conduits Structural Protection upgrades
 - Gene Communication Reliability Upgrades
 - Copper Basin Reservoir Discharge Valve Structure Rehabilitation
- Continued preliminary design of:
 - Black Metal Mountain 2.4 kV Electrical Power Upgrades
 - CRA Desert Region Security Improvements
 - Hinds Pumping Plant Discharge Valve Platform Replacement

- CRA Main Transformer Replacement
 - Completed Risk Assessment and Value Engineering workshops
 - Continued preliminary design and preparation of procurement package
- CRA Main Pump Motor Rehabilitation
 - Continued the study to install variable frequency drive pumps at Gene and Intake Pumping Plants
 - Continued preparation of procurement package for the pilot exciter system installation at Gene Pumping Plant
- CRA Pumping Plant Village Utility Replacement
 - Continued final design of Hinds, Eagle Mountain, Iron Mountain and Gene Pumping Plants
- Hinds and Eagle Mountain Pumping Plants Village Paving Replacement
 - Initiated final design

Upcoming Activities

Upcoming work for the next quarter will include:

- Continue construction activities planned for the following contracts:
 - CRA Domestic Water Treatment System Upgrades at all five CRA pumping plants
 - CRA Mile 12 Flow Meter Upgrades
 - CRA Pumping Plants Overhead Crane Replacement
- CRA Pumping Plant Sump System Rehabilitation
 - Continue fabrication activities and receive final equipment deliveries for Hinds Pumping Plants
- Continue final design of:
 - CRA Conduits Structural Protection Upgrades
 - Gene Communication Reliability Upgrades
 - Copper Basin Reservoir Discharge Valve Structure Rehabilitation
- Continue preliminary design of:
 - Black Metal Mountain 2.4 kV Electrical Power Upgrades
 - CRA Desert Region Security Improvements
 - Hinds Pumping Plant Discharge Valve Platform Replacement
- CRA Main Transformer Replacement
 - Continue preliminary design and preparation of a procurement package
- CRA Main Pump Motor Rehabilitation
 - Complete the study to install variable frequency drive pumps at Gene and Intake Pumping Plants
 - Continue design of recirculation line up to the connection point at Eagle Mountain Pumping Plant
 - Continue preparation of a procurement package for the pilot exciter system installation at Gene Pumping Plant
- CRA Pumping Plants 2.3 kV Switchrack Rehabilitation
 - Continue study for four CRA pumping plants
 - Continue preliminary design of a pilot project at Iron Mountain Pumping Plant
- CRA Storage Building Replacement at Hinds, Eagle Mountain, and Iron Mountain
 - Initiate final design to incorporate Value Engineering recommendations to the construction bid package
- CRA Conveyance System Flow Level Sensor Installation
 - Initiate final design

CRA Reliability Program: CRA Pumping Plants Overhead Cranes Replacement

Total Project Estimate:
\$20.4 million

Total Project Cost to Date:
\$4.3 million

This project replaces the overhead bridge crane at all five pumping plants. It also makes improvements to the electrical system, abates hazardous materials, and performs seismic retrofit of the below-grade pump bays.

Phase	Construction
% Complete for Construction	22%
Construction Contract Awarded	September 2020
Estimated Construction Completion Date	September 2023
Contract Number	1946

The contractor mobilized, removed existing cranes, installed new cranes, and began operational testing at Gene Pumping Plant. In the upcoming quarter, the contractor plans to complete the operational testing at Gene Pumping Plant and mobilize at Eagle Mountain Pumping Plant.



Contractor installing new crane girder at Gene Pumping Plant

Cost Efficiency and Productivity Program

Actual Biennium Expenditures
(Jul. 2022 through Sep. 2022)
\$0.98 million

Program Information: The Cost Efficiency and Productivity Program is composed of projects to upgrade, replace, or provide new facilities, software applications, or technology, which will provide economic savings that outweigh project costs through enhanced business and operating processes.

Program Highlights (1st Quarter)

Accomplishments

- Payroll-Timekeeping Reimplementation
 - Advertised a request for proposal (RFP)

Upcoming Activities

Upcoming work for the next quarter will include:

- Battery Energy Storage Systems at Jensen, Weymouth, and Skinner Plants
 - Continue construction
- WINS Water Billing System Upgrade
 - Continue system upgrade
- Real Property Group Business System Replacement
 - Continue system replacement
- Enterprise Content Management Phase II
 - Advertise an RFP
- Payroll-Timekeeping Reimplementation
 - Authorize an agreement to begin design

Cost Efficiency & Productivity Program: Battery Energy Storage Systems

Total Project Estimate:
\$27.0 million

Total Project Cost to Date:
\$6.7 million

This project will install battery energy storage systems (BESS) at three locations: (1) one-megawatt (MW) BESS at the Jensen plant, (2) one-MW BESS at the Skinner plant, and (3) one-MW BESS at the Weymouth plant. The project is eligible for participation in the Self-Generation Incentive Program (SGIP).

Phase	Construction
% Complete for Construction of Jensen and Skinner	35%
% Complete for Construction of Weymouth	3%
Contract Awarded for Jensen and Skinner	September 2021
Contract Awarded for Weymouth	June 2022
Estimated Construction Completion Date for Jensen and Skinner	November 2024
Estimated Construction Completion Date for Weymouth	July 2023
Contract Number for Jensen and Skinner	1998
Contract Number for Weymouth	2014

Submittal review continued, construction of the fire access road at the Skinner plant continued, and construction of the equipment pads began for the Jensen and Skinner plants. A Notice to Proceed (NTP) was issued to the contractor for Weymouth plant and submittal review began. In the upcoming quarter, the contractor will continue construction of the fire access road at the Skinner plant, continue construction of the equipment pads at the Jensen and Skinner plants, and begin construction of electrical conduits at the Jensen and Skinner plant. At the Weymouth plant, the contractor will mobilize and submittal review will continue.



Contractor excavating equipment pad area at the Jensen plant

Dams and Reservoirs Improvements Program

Actual Biennium Expenditures
(July 2022 through Sep. 2022)
\$0.30 million

Program Information: The Dams and Reservoirs Improvements Program is composed of projects to upgrade or refurbish Metropolitan's dams, reservoirs, and appurtenant facilities in order to reliably meet water storage needs and regulatory compliance.

Program Highlights (1st Quarter)

Accomplishments

- Diamond Valley Lake Dam Monitoring System Upgrades
 - Completed evaluation of RFQ submittals for dam monitoring systems upgrades and identified qualified consultants to support the implementation of the upgrades
- Garvey Reservoir Rehabilitation
 - Completed Value Engineering study to support the preliminary design of the reservoir rehabilitation project
 - Completed evaluation of RFQ submittals for dam monitoring systems upgrades and identified qualified consultants to support the implementation of the upgrades
- Lake Mathews and Lake Skinner Dam Monitoring System Upgrades
 - Completed evaluation of RFQ submittals for dam safety engineering services and identified qualified consultants to complete preliminary and final design
- Lake Skinner Outlet Tower Seismic Upgrade
 - Evaluated the structural analysis approach and methodologies proposed by the consultant to perform detailed structural analysis of the outlet tower

Upcoming Activities

Upcoming work for the next quarter will include:

- Diamond Valley Lake Dam Monitoring System Upgrades
 - Establish an agreement with the selected consultant to support implementation of dam monitoring system upgrades
- Garvey Reservoir Rehabilitation
 - Continue preliminary design of the comprehensive reservoir rehabilitation project
 - Establish an agreement with the selected consultant to support implementation of dam monitoring system upgrades
- Lake Mathews and Lake Skinner Dam Monitoring System Upgrades
 - Establish on-call agreements for dam safety services with qualified consultants and initiate task orders for the preliminary design
- Lake Skinner Outlet Tower Seismic Upgrade
 - Establish project specific agreement with the selected consultant to perform the detailed structural analysis of the outlet tower

Dams and Reservoirs Improvements Program: Garvey Reservoir Rehabilitation

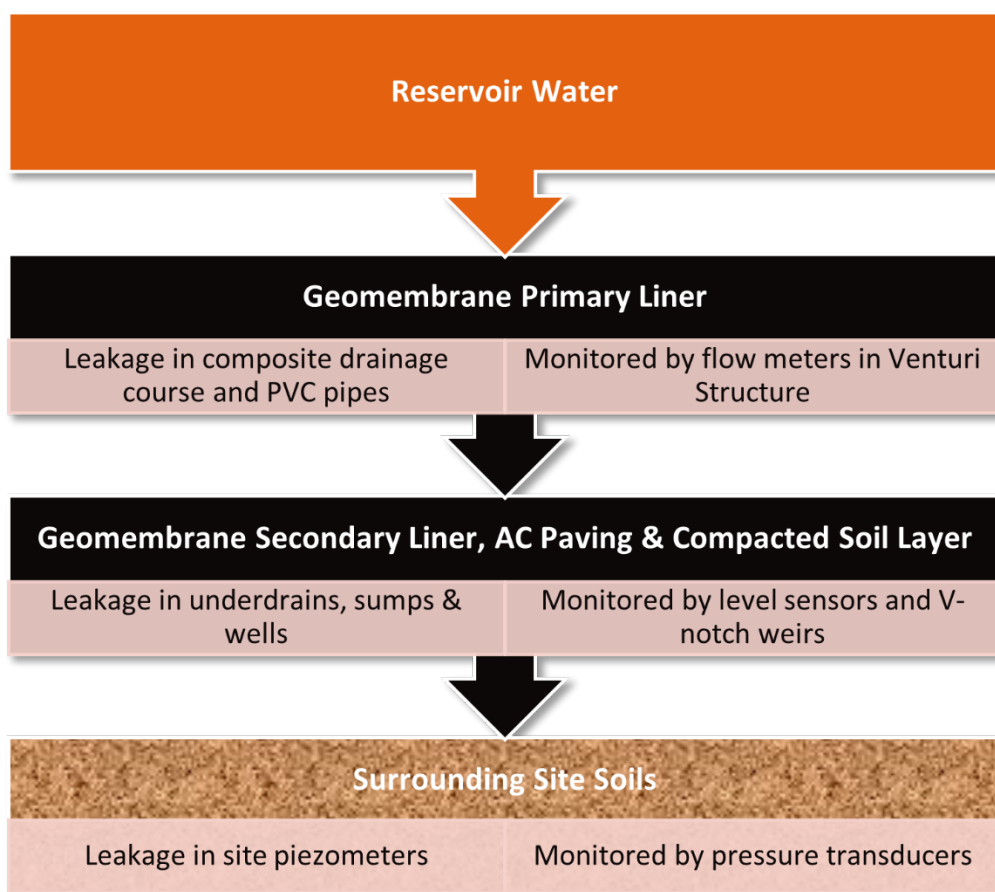
Total Project Estimate:
\$68.5 million

Total Project Cost to Date:
\$2.1 million

This project will refurbish aging facilities at the Garvey Reservoir site and restore them to reliable operating condition.

Phase	Preliminary Design
% Complete for Current Phase	65%
Current Phase Authorized	March 2021
Estimated Preliminary Design Completion Date	February 2023

Metropolitan staff and the design consultant worked on developing the preliminary design report and a value engineering (VE) workshop was completed. A scope for the of the dam monitoring system upgrade was developed and a prequalified consultant was selected for design. In the upcoming quarter, the preliminary design report will be updated with VE recommendations.



Proposed reservoir liner system design for Garvey Reservoir

Distribution System Reliability Program

Actual Biennium Expenditures
(Jul. 2022 through Sep. 2022)
\$8.07 million

Program Information: The Distribution System Reliability Program is comprised of projects to replace or refurbish existing facilities within Metropolitan’s distribution system, including reservoirs, pressure control structures, hydroelectric power plants, and pipelines, in order to reliably meet water demands.

Program Highlights (1st Quarter)

Accomplishments

- Awarded construction contracts for:
 - Etiwanda Pipeline Lining Rehabilitation – Stage 3
 - Live Oak Reservoir Pipelines Cathodic Protection
- Upper Feeder Expansion Joint Replacement at the Santa Ana River Crossing
 - Completed design, fabrication, and installation during a shutdown of the Upper Feeder. The shutdown was completed ahead of schedule.
- Garvey Reservoir Drainage and Erosion Improvements – Areas 6 to 8, 10, and 11
 - Completed construction

Upcoming Activities

Upcoming work for the next quarter will include:

- Upper Feeder Expansion Joint Replacement at the Santa Ana River Crossing
 - Ratify an emergency contract for construction
- Garvey Reservoir Sodium Hypochlorite Feed System Upgrades
 - Complete testing of the upgraded system
- Casa Loma Siphon No. 1 Seismic Upgrade
 - Continue construction

Distribution System Reliability Program: Casa Loma Siphon Barrel No. 1 Seismic Upgrades

Total Project Estimate:
\$37.2 million

Total Project Cost to Date:
\$28.6 million

This project will retrofit the Casa Loma Siphon Barrel No. 1 with earthquake resistant ductile iron pipe (ERDIP) for the estimated Casa Loma Fault seismic displacement, and non-tectonic ground subsidence.

Phase	Construction
% Complete for Construction	65%
Contract Awarded	December 2021
Estimated Construction Completion Date	June 2023
Contract Number	1958

Construction of the north and south barrel of ERDIP was completed and geofoam was installed. In the upcoming quarter, an ERDIP joints pressure testing and ERDIP zone backfill will be completed. Steel pipe installation will continue.



ERDIP to steel pipe transition thrust block construction with concrete temperature control system

District Housing & Property Improvements Program

Actual Biennium Expenditures
(Jul. 2022 through Sep. 2022)
\$0.26 million

Program Information: The District Housing & Property Improvements Program is composed of projects to refurbish or upgrade workforce housing at Metropolitan to enhance living conditions to attract and retain skilled employees.

Program Highlights (1st Quarter)

Accomplishments

- Completed a board action to amend an existing consulting services agreement to perform final design of the housing, village enhancements, and the kitchen and lodging improvements at four pumping plants – Hinds, Eagle Mountain, Iron Mountain, and Gene Pumping Plants

Upcoming Activities

Upcoming work for the next quarter will include:

- Continue preparation of the environmental documentation in support of the housing and property improvements program
- Initiate an amendment to an existing consulting services agreement to perform final design of the housing, village enhancements, and the kitchen and lodging improvements at four pumping plants – Hinds, Eagle Mountain, Iron Mountain and Gene Pumping Plants
- Initiate final design of the housing, village enhancements, and the kitchen and lodging improvements at Hinds and Eagle Mountain Pumping Plants

Prestressed Concrete Cylinder Pipe (PCCP) Rehabilitation Program

Actual Biennium Expenditures
(Jul. 2022 through Sep. 2022)
\$2.25 million

Program Information: The PCCP Rehabilitation Program is composed of projects to refurbish or upgrade Metropolitan's PCCP feeders to maintain water deliveries without unplanned shutdowns.

Program Highlights (1st Quarter)

Accomplishments

- Second Lower Feeder:
 - Reach 3A – Approved contractor submittals and initiated materials procurement for construction, which will reline approximately 1.2 miles of pipeline from Oak Street Pressure Control Structure south through City of Rolling Hills Estates to the Palos Verdes Reservoir
 - Reach 3B – Completed design and advertised construction specifications, which will reline approximately 3.6 miles of pipeline from the intertie with Sepulveda Feeder south to Oak Street PCS, through the cities of Torrance, Los Angeles, and Lomita, and will replace three 48-inch diameter sectionalizing valves at the intertie with Sepulveda Feeder
 - Isolation Valve Procurement – Continued fabrication of the sixth through tenth of the thirteen large-diameter conical plug valves and actuators. Worked with the manufacturer to schedule the shipment of completed valves until PCCP Rehabilitation Valve and Equipment Storage Building is completed.
- Allen-McColloch Pipeline:
 - Continued preliminary design for rehabilitation, including identification of proposed pipe access excavation pits for approximately nine miles of PCCP
 - Continued evaluating a member agency partnership proposal that may facilitate rehabilitation work
- Sepulveda Feeder Reach 1 – Continued final design to rehabilitate approximately three miles of Sepulveda Feeder from just north of the Inglewood Lateral south to the West Coast Feeder, through the cities of Inglewood and Hawthorne, and unincorporated Los Angeles County. Work includes preparation of final design drawings, traffic control plans, and permitting.
- Sepulveda Feeder Reach 2 – Continued final design to rehabilitate approximately 3.8 miles of Sepulveda Feeder from the Dominguez Gap Channel crossing south to the intertie with Second Lower Feeder, through the cities of Torrance and Los Angeles. Work includes preparation of final design drawings, traffic control plans, and permitting.
- Sepulveda Feeder North Reach – Obtained board authorization to amend an existing engineering services agreement to conduct a detailed evaluation and to complete preliminary design for the northern 20-mile portion of the Sepulveda Feeder, including both steel and PCCP portions of the pipe and appurtenances.
- PCCP Rehabilitation Valve and Equipment Storage Building – Began construction of concrete foundation and fabrication of the pre-engineered metal building for a new valve storage building at Lake Mathews. This building will safely store large-diameter valves and actuators to support the PCCP Rehabilitation Program.
- Calabasas Feeder – Received board authorization for an engineering services agreement to complete preliminary design work the relining of the entire approximately nine-mile-long Calabasas Feeder PCCP line.

Upcoming Activities

Upcoming work for the next quarter will include:

- Second Lower Feeder:
 - Reach 3A – Begin installation of temporary traffic controls and pipe access shaft excavations
 - Reach 3B – Open bids and prepare a board letter to award a construction contract
 - Isolation Valve Procurement – Receive delivery of two 54-inch conical plug valves in November 2022.
- Allen-McColloch Pipeline – Complete preliminary design
- Sepulveda Feeder South Reaches 1 and 2 – Continue developing final designs and initiate permitting process for long-lead permits from Caltrans, City of Los Angeles, and City of Torrance
- Sepulveda Feeder North Reach – Initiate preliminary design
- PCCP Rehabilitation Valve and Equipment Storage Building – Complete storage building foundations and site work including drainage improvements and utilities
- Calabasas Feeder – Continue preliminary design

PCCP Rehabilitation Program:
Second Lower Feeder PCCP Rehabilitation –
Reach 3B

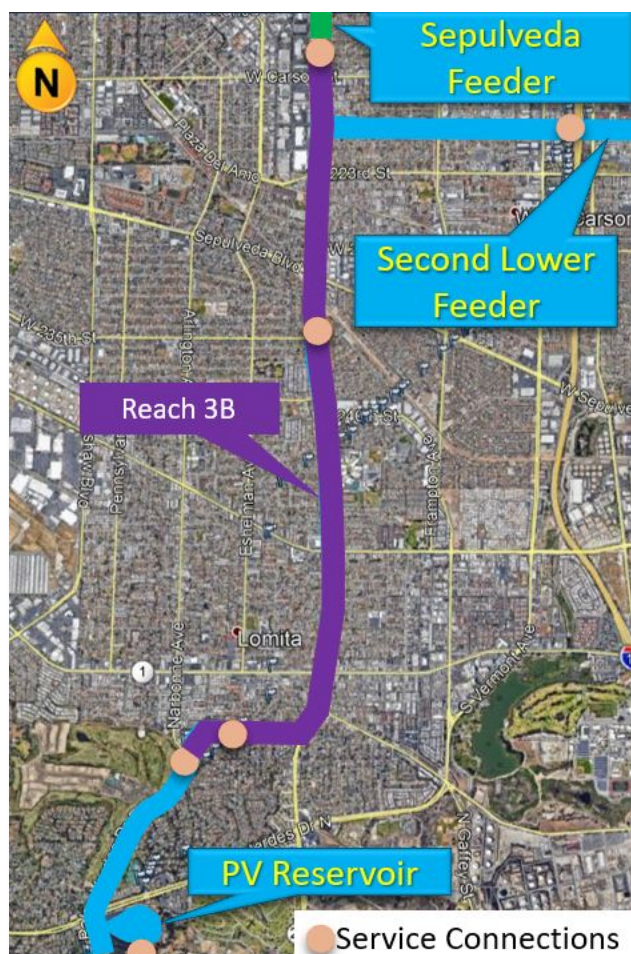
Reach 3B Total Project Estimate:
 \$68.0 million

Reach 3B Total Project Cost to
Date:
 \$13.7 million

This project will rehabilitate approximately 3.6 miles of PCCP segments of the Second Lower Feeder with steel liner and replace three existing large diameter sectionalizing valves within the cities of Torrance, Los Angeles, and Lomita.

Phase	Final Design
% Complete for Current Phase	99%
Current Phase Authorized	January 2015
Final Design Completion Date	September 2022

Reach 3B construction bid package was completed and advertised. In the upcoming quarter, a board letter to award a construction contract will be prepared.



Second Lower Feeder Reach 3B project location – in the cities of Torrance, Los Angeles, and Lomita

Regional Recycled Water Program

Actual Biennium Expenditures
(Jul. 2022 through Sep. 2022)
\$0.03 million

Program Information: The Regional Recycled Water Program includes the design and construction of the Advanced Water Treatment (AWT) Demonstration Plant, which represents the initial step in development of a potential regional recycled water system for recharge of groundwater basins within Southern California.

Program Highlights (1st Quarter)

Accomplishments

- Advanced Water Treatment Demonstration Facility
 - Obtained approval from the Division of Drinking Water (DDW) for the secondary membrane bioreactor (MBR) testing and monitoring plan
 - Obtained Southern California Air Quality Management District (SCAQMD) permit to operate the demonstration facility with a capacity of up to 1 million gallons per day (MGD)
 - Replaced MBR and reverse osmosis (RO) membranes and installed additional system/site improvements to prepare for secondary MBR testing
 - Coordinated with the independent scientific advisory panel to review Phase 1 draft testing report
- Direct Potable Reuse Demonstration Facility
 - Continued study and developed draft technical memoranda to identify potential studies for testing future direct potable reuse (DPR) processes

Upcoming Activities

Upcoming work for the next quarter will include:

- Advanced Water Treatment Demonstration Facility
 - Continue coordination with the State Water Resources Control Board to submit final reimbursement invoice as part of the grant funding agreement
 - Finalize Phase 1 testing report
 - Continue post-construction contract improvements to enhance safety and operational reliability of the AWT
 - Initiate secondary MBR testing
- Direct Potable Reuse Demonstration Facility
 - Continue study and prepare framework to modify the AWT Demonstration Facility to allow testing of future direct potable reuse processes

Right-Of-Way and Infrastructure Protection Program

Actual Biennium Expenditures
(Jul. 2022 through Sep. 2022)
\$0.51 million

Program Information: The Right of Way Infrastructure Protection Program (RWIPP) is comprised of projects to refurbish or upgrade above-ground facilities and right-of-way along Metropolitan's pipelines in order to address access limitations, erosion-related issues, and security needs.

Program Highlights (1st Quarter)

Accomplishments

- Western San Bernardino County – Stage 1
 - Continued construction

Upcoming Activities

Upcoming work for the next quarter will include:

- Western San Bernardino County Region – Stage 2
 - Continue final design
- Riverside and San Diego County Region – Stage 2
 - Continue final design for two urgent repair sites along San Diego Pipelines 4 & 5

System Flexibility/Supply Reliability Program

Actual Biennium Expenditures
(Jul. 2022 through Sep. 2022)
\$2.91 million

Program Information: The System Flexibility / Supply Reliability Program is comprised of projects to increase the capacity and flexibility of Metropolitan's water supply and delivery infrastructure to meet service demands. Projects under this program address climate change affecting water supply, regional drought, and alternative water sources for areas dependent on State Project Water.

Program Highlights (1st Quarter)

Accomplishments

- Secured passage of legislation to allow Metropolitan to utilize progressive design-build delivery for drought related projects
- Completed evaluation of the West Service Area Supply Reliability Improvements consisting of the following individual projects:
 - West Area Supply and Delivery Alternatives
 - Drought Response West Side Pump Station
- Rialto Pipeline Water Supply Reliability Improvements
 - Awarded a contract to procure large diameter isolation valves
- Sepulveda Feeder Pump Stations
 - Authorized increase of an existing agreement for an owner's advisor services to assist with the preparation of a progressive design-build contract
- Wadsworth Pumping Plant – Eastside Pipeline Intertie
 - Completed final design and advertised

Upcoming Activities

- Perris Valley Pipeline Tunnels
 - Open bids to award a construction contract Q3 of FY 2022/23
- Wadsworth Pumping Plant – Eastside Pipeline Intertie
 - Award a construction contract
- Rialto Pipeline Water Supply Reliability Improvements
 - Continue design of the following individual projects that make up the improvements effort:
 - Wadsworth Pumping Plant – Eastside Pipeline Intertie
 - Wadsworth Pumping Plant Stage 2 – Badlands Tunnel Surge Tank Facility
 - Inland Feeder/Rialto Pipeline Intertie
 - Inland Feeder/San Bernardino Valley Municipal Water District (SBVMWD) Pump Station Intertie

System Flexibility/Supply Reliability Program: Perris Valley Pipeline – Tunnels

Total Project Estimate:
\$79.3 million

Total Project Cost to Date:
\$7.1 million

This project will connect northern and southern reaches of Perris Valley Pipeline by micro-tunneling and constructing approximately 3,000 linear feet of 97-inch diameter welded steel pipe. The project will also construct four access shafts, cathodic protection test stations, and geotechnical instrumentation and monitoring equipment.

Phase	Final Design
% Complete for Current Phase	100%
Current Phase Authorized	January 2010
Final Design Completion Date	June 2022

The construction bid package was advertised and a mandatory pre-bid meeting was conducted. Negotiations continued with March Joint Powers Authority and Caltrans to obtain the necessary easements and permits prior to the start of construction. In the upcoming quarter, bids for the construction bid package is scheduled to be opened for award during the following quarter.



Example of micro-tunneling technology that will be used for the Perris Valley Pipeline – Tunnels project

System Reliability Program

Actual Biennium Expenditures
(Jul. 2022 through Sep. 2022)
\$81.30 million

Program Information: The System Reliability Program is comprised of projects to improve or modify facilities located throughout Metropolitan's service area in order to utilize new processes and/or technologies, and improve facility safety and overall reliability. These include projects related to Metropolitan's Supervisory Control and Data Acquisition (SCADA) system and other Information Technology projects.

Program Highlights (1st Quarter)

Accomplishments

- Asset Management and Monitoring System
 - Released pre-production revenue meter dashboard
- Datacenter Backup Infrastructure Upgrade
 - Advertised request for proposal (RFP)
- Desert Microwave Site Tower Upgrades
 - Continued preparation of design
- Fuel Management System Upgrade
 - Installed fuel management units at ten facilities along with corresponding equipment to facilitate fueling in several hundred vehicles
- Headquarters Fire Alarm & Smoke Control Upgrades
 - Completed fire alarm system portion of the upgrade work
- Skinner Facility Area Paving
 - Completed construction

Upcoming Activities

Upcoming work for the next quarter will include:

- Applications-Servers Upgrade
 - Continue to migrate and upgrade applications in batches
- Control System Upgrade – Phase 3
 - Begin pilot project at Mills Water Treatment Plant
- Headquarters Fire Alarm & Smoke Control Upgrades
 - Begin work on the smoke control portion of the project
- Headquarters Security Upgrade Stage 2
 - Continue installation of new interior building security features
- Maximo Mobile Upgrade
 - Continue deployment of devices to field staff
- MWD Cyber Security Upgrade
 - Continue deployment of secure web gateway software to MWD-owned workstations and laptops
 - Continue deployment of privileged access management software to MWD-owned workstations, laptops, and servers

System Reliability Program:
La Verne Shops Building Completion – Stage 5

Total Project Estimate:
 \$27.9 million

Total Project Cost to Date:
 \$4.4 million

This project will procure and install new fabrication and machine shop equipment, including a hydraulic shear, hydraulic press brake, waterjet cutting system, horizontal band saw, and vertical milling center and complete building and utility improvements for several shop buildings on the grounds of the Weymouth plant.

Phase	Construction
% Complete for Current Phase	6%
Construction Contract Awarded	May 2022
Estimated Construction Completion Date	May 2024
Contract Number	1885

The contractor mobilized and prepared submittals for review. Construction of temporary protective containment walls for machine shop equipment began. These walls will protect the machines during construction. In the upcoming quarter, the contractor will complete the containment walls and begin refurbishing machine shop walls.



Construction of containment wall structure for vertical machine area

Treatment Plant Reliability Program

Actual Biennium Expenditures
(Jul. 2022 through Sep. 2022)
\$89.26 million

Program Information: The Treatment Plant Reliability Program is comprised of projects to replace or refurbish facilities and components of Metropolitan's five water treatment plants in order to continue to reliably meet treated water demands.

Program Highlights (1st Quarter)

Accomplishments

- Continued preliminary design of:
 - Diemer Filter Rehabilitation
 - Jensen Reservoir Bypass Gate Replacement
 - Water Quality Laboratory Upgrades
- Continued construction of:
 - Jensen Ozone PSU Replacement – Stage 1
 - Mills Electrical Upgrades – Stage 2
 - Mills Module Nos. 3 and 4 Flash Mix Chemical Containment Upgrades
 - Weymouth Basins Nos. 5-8 & Filter Building No. 2 Rehabilitation
- Diemer Power and Distribution Panel Upgrade
 - Continued equipment procurement
- Jensen Ozone PSU Replacement – Stage 1
 - Received delivery of power supply units (PSU) and dielectrics
- Weymouth Administration Building Upgrades
 - Obtained board authorization of two agreements for final design and field investigation

Upcoming Activities

Upcoming work for the next quarter will include:

- Continue preliminary design of:
 - Diemer Filter Rehabilitation
 - Jensen Reservoir Bypass Gate Replacement
 - Water Quality Laboratory Upgrades
 - Mills Perimeter Security & Erosion Control Improvements
- Continue construction of:
 - Jensen Ozone PSU Replacement – Stage 1
 - Mills Electrical Upgrades – Stage 2
 - Mills Module Nos. 3 and 4 Flash Mix Chemical Containment Upgrades
 - Weymouth Basins Nos. 5-8 & Filter Building No. 2 Rehabilitation
- Diemer Power and Distribution Panel Upgrade
 - Continue equipment procurement
- Diemer Washwater Reclamation Plant Improvements
 - Begin preliminary design to stabilize the slope next to the existing washwater reclamation plant
- Weymouth Administration Building Upgrades
 - Begin final design

Treatment Plant Reliability Program: Mills Electrical Upgrades – Stage 2

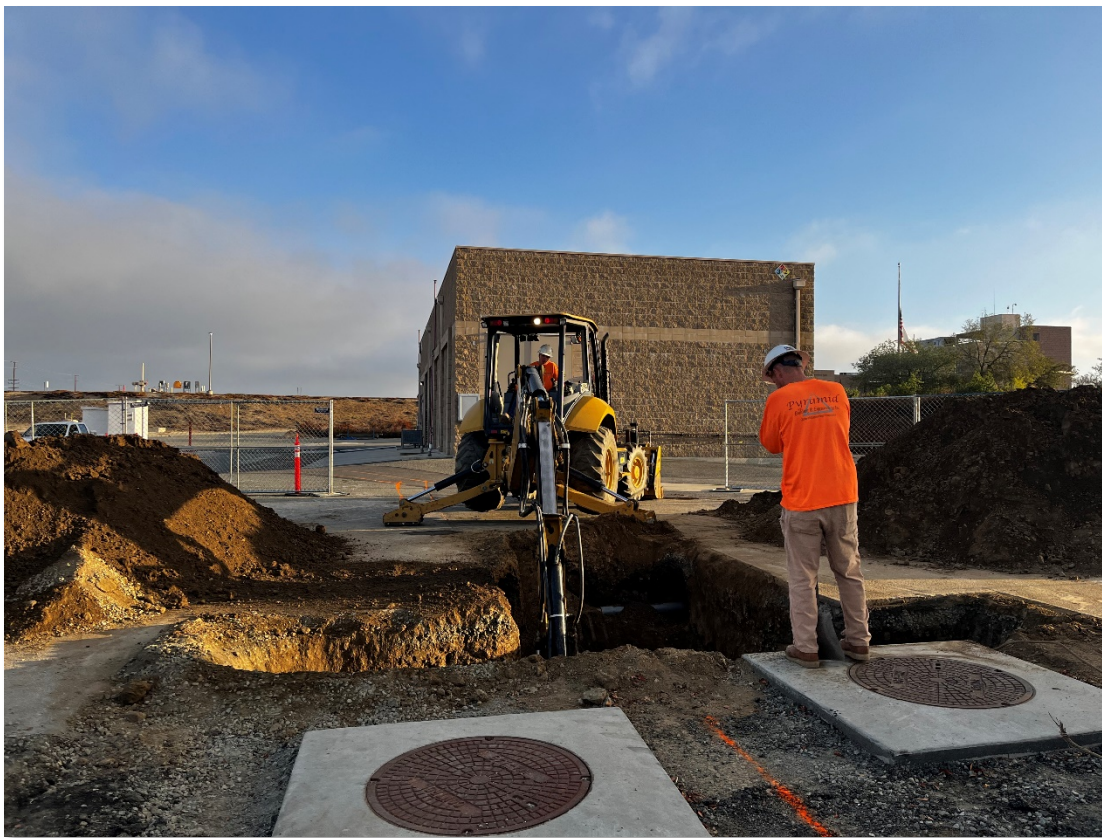
Total Project Estimate:
\$18.5 million

Total Project Cost to Date:
\$4.0 million

This project will add a second incoming 12 kV service from the Riverside Public Utilities, upgrade the plant's main medium voltage switchgear, and replace the standby generator switchgear and the emergency generator programmable logic controller.

Phase	Construction & Closeout
% Complete for Construction	17%
Construction Contract Awarded	November 2021
Construction Completion Date	January 2025
Contract Number	1990

The contractor completed excavation, conduit installation, and backfill of the new Riverside Public Utility (RPU) electrical accessway structures and duct banks. Demolition of the 4160 V cable between the ozone switchgear and Unit Power Center 12 was completed. In the upcoming quarter, the contractor will relocate Accessway No. A48 in preparation of the ozone switchgear building expansion and continue construction of the new RPU switchyard.



Excavating to construct electrical ductbanks A-1 and A-2 at Mills plant

Water Quality Program

Actual Biennium Expenditures
(Jul. 2022 through Sep. 2022)
\$0.33 million

Program Information: The Water Quality Program is comprised of projects to add new facilities to ensure compliance with water quality regulations for treated water, located at Metropolitan's treatment plants and throughout the distribution system.

Program Highlights (1st Quarter)

Accomplishments

- Mills Enhanced Bromate Control Facilities
 - Continued final design

Upcoming Activities

Upcoming work for the next quarter will include:

- Mills Enhanced Bromate Control Facilities
 - Continue final design

Minor Capital Projects Program

The Minor Capital Projects (Minor Cap) Program is authorized biennially to enable staff to expedite small capital projects. At the commencement of each biennium, the Board had appropriated the entire two-year budget for the program. For the current and the last bienniums, the minor cap budget was included in the CIP appropriation. In order to be considered for inclusion in the Minor Cap Program, a project must have a planned budget of less than \$400,000. The \$400,000 project budget cap was first established by the June 2018 board action Item 8-3 and the same cap is applied for the new minor caps that are approved for the current biennium. Prior to that action, the budget cap for minor cap projects was \$250,000.

The duration of minor capital projects typically ranges from a few months to three years. Since many of these projects require rapid response to address unanticipated failures, safety or regulatory compliance concerns, or to take advantage of shutdown opportunities, the Minor Cap Program authorizes the General Manager to execute projects that meet defined criteria without seeking additional board approval.

For the past three bienniums, the two-year budgets for the Minor Cap Program have been \$10 million, \$15.5 million, and \$20 million respectively. In April 2022, the Board appropriated funds for the projects identified in the CIP appendix for the current biennium, FYs 2022/23–2023/24, including the Minor Cap Program. \$10 million has been allocated for the current biennium.

Minor Cap Program Historical Summary

The following table provides the overall status of the Minor Cap appropriations for the fiscal years 2016/17–2017/18 through fiscal years 2022/23–2023/24.

Table 4: Minor Capital Projects Program

	Fiscal Year				Totals
	2016/17– 2017/18	2018/19– 2019/20	2020/21– 2021/22	2022/23– 2023/24	
Amount Appropriated	\$10M	\$15.5M	\$20M	\$10M	\$55.5M
Expenditures (through September 2022)	\$7.2M	\$11.7M	\$7.1M	\$0.3M	\$26.3M
Number of Projects Approved	41	48	54	11	154
Number of Projects Completed (through September 2022)	40	33	4	0	77
Number of Projects with Durations of Over 3 Years	1	6	0	0	7

Through September 2022, 77 of the 154 projects have been completed, and seven active projects have exceeded three years in duration, as described below.

- Garvey Reservoir Sodium Hypochlorite Tank Replacement has experienced delays due to the Texas deep freeze event, which caused power and resin supply chain disruptions in 2021, and delivery of the new tank was delayed. The tank was delivered in July 2022. Metropolitan force construction will complete tank installation by December 2022.
- Gene Inlet Surge Chamber Access Improvement has experienced delays due to re-scheduling of the installation of recently fabricated hatch cover, which can only occur when Gene Wash Reservoir water level is lowered. Metropolitan force construction plans to complete the hatch cover installation during the 2023 CRA shutdown and complete the project by April 2023.
- Gene Pool Refurbishment has experienced delays due to shortage of local contractors for this type of work due to increased construction activity in the region. Metropolitan force construction will complete the work and the project is scheduled to be completed by December 2022.
- Jensen Ozone Diffuser Reliability Upgrades has been completed and the project is scheduled to be closed in November 2022, upon payment of pending invoices and completion of record drawings.
- Lower Feeder Blow-Off Drain Line Replacement experienced delays in obtaining Caltrans permit for Highway 90. Construction has started and the project is scheduled to be completed by April 2023.
- OC-88 Fire Protection System Upgrades started construction in late 2021, however, the contract was terminated as a result of the contractor's debarment by the State of California's Department of Industrial Relations. A new contract has been awarded, and the project is scheduled to be completed by November 2022.
- San Diego Pipeline No. 2 Access Road Relocation was originally advertised for bids in November 2020 to be constructed by a contractor, but construction did not start in Spring 2021 as planned due to COVID-19 pandemic restrictions and the contract was terminated. Metropolitan forces have completed construction and the project will be closed by December 2022.

Actual biennium expenditures to date (July 2022 through September 2022) for the Minor Capital Projects Program were \$0.99 million.

Minor Cap Projects, 1st Quarter

Authorized Projects

Eleven projects were authorized under the Minor Cap Program during the 1st Quarter of fiscal year 2022/23 (July through September 2022). The total amount authorized for these projects was \$2,921,087:

- Conveyance and Distribution SCADA Network Switch and Router Replacement – This project will procure and replace network switches and routers for Metropolitan's control system network in Conveyance and Distribution (C&D) locations, which includes Operations Control Center and Diemer, Skinner, Weymouth, and Jensen Water Treatment Plants, that are either no longer supported by the manufacturers or the support is soon to end. The project budget is \$392,954.
- Jensen Chemical Flow Meter Replacement – This project will replace 26 chemical flow meters at the Jensen plant, which have exceeded their service life and are difficult to read due to deterioration of the meter display caused by prolonged sun exposure. The project budget is \$397,133.
- Jensen Chlorine Ejector System Pipe Replacement – This project will replace the existing chlorine service water and solution piping for the chlorine ejector system at the Jensen plant, which has exceeded its service life, to maintain chlorine system reliability. The project budget is \$68,000.
- Jensen Modules 2 and 3 Filter Surface Wash Valve Replacement – This project will replace four leaky filter surface wash valves for Filter Nos. 24, 28, 31, and 40 and install new couplings downstream of the valves to improve access for maintenance. The project budget is \$144,000.
- Mills Sodium Hypochlorite Storage System Improvements – This project will procure and install mechanical, electrical, and instrumentation equipment to place two existing spare sodium hypochlorite storage tanks into service to enhance water treatment reliability. The project budget is \$365,000.

- Mills WTP Wildlife Barrier Screen Installation – This project will provide primary and secondary exclusion screens at the Mills plant to prevent wildlife entry into the water treatment process, consistent with California Health & Safety provisions. The project budget is \$385,000.
- Sepulveda PCS to Venice PCS Valve Replacement – This project will replace 16 valves ranging in size from 4 to 6 inches on the Sepulveda Feeder between Sepulveda Pressure Control Structure (PCS) and Venice PCS, which have exceeded their service life. The project budget is \$350,000.
- Skinner Plant Lighting Upgrades – This project will replace obsolete low-pressure sodium light fixtures that are used to illuminate the plant with new LED light fixtures, which are brighter, use less power, and require less maintenance, to increase visibility and enhance safety. The project budget is \$335,000.
- Skinner Plant 1 UPS Upgrades – This project will replace nine existing 15-year-old uninterruptible power supply (UPS) units for Skinner Plant 1 with new UPS units that are easier to operate and maintain. The project budget is \$240,000.
- Water Quality Laboratory Walk-In Refrigerator Replacement – This project will procure and replace the main components of the existing source water microbiology/pathogen analysis walk-in refrigerator at Metropolitan Water Quality Laboratory in La Verne, which have been in service for over 27 years and have exceeded their service life. The project budget is \$199,000.
- WB-06A Flow Meter Replacement – This project will replace the electromagnetic flow meter at the WB-06A service connection, which is no longer supported by the manufacturer, to enhance system reliability. This project will also replace flow meter transmitter and power/signal cables. The project budget is \$50,000.

Completed Projects

Four projects were completed under the Minor Cap Program during the 1st Quarter of fiscal year 2022/23 (July through September 2022):

- Irvine Regulating Structure Sump Drain Line Modification
- Mills Industrial Wastewater Handling Facility Improvements
- OC-88 Pump Station PLC Upgrade
- Water Quality HVAC Energy Management Upgrade

Cancelled Projects

- None

Project Actions

Table 5 lists capital project actions authorized by the General Manager along with funding allocation amounts during the 1st Quarter of FY 2022/23, through the authority delegated by the Board in April 2022. The total funding amount authorized during the 1st Quarter is \$49,870,000 through eighteen management actions. In some cases listed below, the Total Amount Authorized may differ from the Amount Authorized for Current Biennium when the work authorized is scheduled to extend beyond the current biennium. In these cases, it is anticipated that staff will request sufficient funds to be allocated from the CIP Appropriation for the next biennium to cover the planned remaining future-year costs of the project. When the Amount Authorized for Current Biennium is equal to the Total Amount Authorized, the authorized work is planned to be completed within the current biennium. Table 5 excludes any board items heard in closed session and minor cap authorizations. Minor cap authorizations can be found in the Minor Capital Projects Program section of this report.

Table 5: Capital Projects Funded in 1st Quarter

Project Authorized	Activity Authorized	Amount Authorized for Current Biennium	Total Amount Authorized
Calabasas Feeder PCCP Rehabilitation ¹	Additional Preliminary Design	\$553,000	\$1,500,000
CIP Budgeting System SharePoint Enhancements	Design, Development, and Deployment	\$200,000	\$200,000
CRA Utility Replacement – Eagle Mountain Pumping Plant ²	Additional Final Design	\$753,000	\$753,000
CRA Utility Replacement – Hinds Pumping Plant ³	Additional Final Design	\$807,000	\$807,000
Diamond Valley Lake and Skinner Area Flow Meter Replacement	Study	\$100,000	\$100,000
Eagle Mountain Pumping Plant Village Pavement Replacement	Preliminary Design and Final Design	\$120,000	\$120,000
Etiwanda Pipeline North Relining – Stage 3	Construction	\$33,000,000	\$33,000,000
Hinds Pumping Plant Village Pavement Replacement	Preliminary Design and Final Design	\$120,000	\$120,000
Hollywood Tunnel North Portal Equipment Upgrades	Final Design	\$1,304,000	\$1,375,000

¹ Additional funds were required to finalize preliminary design including identifying construction reaches, identifying isolation locations, determining construction packaging and sequencing determining locations and evaluating pipe access sites, developing shutdown requirements, and evaluating construction impacts to the community.

² Additional final design funds were required to perform additional utility investigation and hydraulic analysis for the Eagle Mountain Site and to revise design to incorporate desert housing project improvements features.

³ Additional final design funds were required to perform additional utility investigation and hydraulic analysis for the Hinds Site and to revise design to incorporate desert housing project improvements features.

Project Authorized	Activity Authorized	Amount Authorized for Current Biennium	Total Amount Authorized
Inland Feeder/SBVMWD Foothill Pump Station Intertie	Preliminary Design	\$998,000	\$998,000
Iron Mountain Transformer Bank Projection Relays Replacement	Final Design and Procurement	\$600,000	\$600,000
Lake Mathews Administration and Warehouse Building Roof Upgrade	Study, Preliminary Design, and Final Design	\$240,000	\$240,000
Lower Feeder Air Entrainment Improvement	Study	\$410,000	\$450,000
Oracle Database Upgrade	Design, Development, and Deployment	\$1,200,000	\$1,980,800
Replacement of Network Switches at MWD Headquarters Building	Design, Development, and Deployment	\$25,000	\$2,750,000
Sepulveda Feeder PCCP Rehabilitation ⁴	Additional Preliminary Design	\$6,500,000	\$6,500,000
Sepulveda Feeder West Area Water Supply Reliability Pipeline Improvements	Preliminary Design	\$2,000,000	\$2,000,000
Upper Feeder Expansion Joint Replacement	Final Design	\$900,000	\$900,000
	Total	\$49,870,000	\$64,393,800

⁴ Additional funds were required for detailed preliminary design activities including updated geotechnical and subsurface utility investigations, survey, environmental planning, and permitting to comply with the updated pipeline access safety criteria for the northern 20-mile portion of the Sepulveda Feeder PCCP portions.

Table 6 lists capital projects which were authorized during the previous biennium with an unfunded portion of authorized work remaining to be funded at the end of the biennium, as the work authorized was scheduled to extend beyond the biennium. The unfunded portion of these projects were funded from Appropriation 15525 at the start of the current biennium.

Table 6: Previously Authorized Capital Projects Funded from Appropriation No. 15525

Project	Amount Authorized for Current Biennium
Applications-Servers Upgrade from Old Windows Operating Systems	\$3,040,609
Arc Flash Software Model Development	\$12,000,000
Battery Energy Storage System at Jensen, Skinner, and Weymouth Water Treatment Plants	\$18,578,521
Black Metal Mountain 2.4 kV Power Upgrade	\$533,000
Cabazon Radial Gate Facility Upgrades	\$1,440,000
Casa Loma Siphon No. 1 Seismic Upgrades	\$12,506,000
CRA Conduit Erosion Control Improvements	\$4,600,000
CRA Pumping Plants 6.9 kV Power Cables Replacement	\$600,000
CRA 6.9 kV Power Cable Replacement Units 6 to 9	\$1,550,000
CRA Desert Region Security Improvements	\$1,430,000
CRA Domestic Water Treatment System Upgrades	\$39,300,000
CRA Pumping Plant Sump Rehabilitation	\$16,000,000
CRA Pumping Plants Crane Improvement	\$9,270,100
Datacenter Backup Infrastructure Upgrade	\$788,072
Datacenter Modernization Relocation	\$1,166,819
Desert Housing Improvements	\$300,000
Desert Microwave Tower Sites Upgrades (Phase 1 of 2)	\$3,676,000
Diemer Chemical Feed System Improvements	\$3,268,000
Diemer Filter Rehabilitation	\$1,232,000
Diemer Power and Distribution Panel Upgrades	\$1,065,000
Direct Potable Reuse Demonstration Facility	\$1,500,000
Districtwide Near Zero and Zero Emissions Fleet Infrastructure	\$133,000

Project	Amount Authorized for Current Biennium
Drought Response Westside Pump Station	\$175,000
East Lake Skinner Bypass and Bypass No. 2 Screening Structure Upgrade	\$75,000
Etiwanda Pipeline North Relining – Stage 3	\$6,675,000
Garvey Hypochlorite Feed System Upgrades	\$75,000
Greg Avenue Pump Station Rehabilitation	\$1,270,910
Headquarters Fire Alarm and Smoke Control Upgrades	\$9,000,000
Hinds Transformer Bank Protection Relays Replacement	\$676,000
Inland Feeder/Rialto Pipeline Intertie	\$916,000
Iron Mountain and Gene Pumping Plant Utility Replacement	\$3,500,000
Iron Mountain Pumping Plant Station and Lighting Switchrack Rehabilitation	\$1,200,000
Jensen Electrical Upgrades Stage 3	\$2,660,000
Jensen Solids Mechanical Dewatering Facility	\$5,000
Jensen Ozone PSUs Replacement – Stage 2	\$222,000
Jensen Ozone PSUs Replacement - Stage 1	\$3,938,897
Jensen Reservoir Bypass Gate Refurbishment	\$374,000
Jensen Sulfuric Acid Tank Rehabilitation	\$251,000
La Verne Machine and Fabrication Shop Equipment Design and Procurement	\$87,600
La Verne Shops - Stage 5 Buildings Completion & Equipment Procurement	\$24,172,800
La Verne Water Quality Laboratory Upgrades	\$7,120,000
Lake Mathews Wastewater System Replacement	\$144,020
Lake Skinner Pipelines Cathodic Protection	\$74,200
Live Oak Reservoir Asphalt Liner Replacement	\$60,000
Mills Electrical Upgrades – Stage 2	\$10,700,000
Mills Plant Control System Upgrade	\$19,705,000
OC-88 Pumping Plant Chillers Replacement	\$4,100,000

Project	Amount Authorized for Current Biennium
Orange County and Riverside/San Diego County Operating Regions Valve Replacement	\$693,600
Orange County Feeder Relining - Reach 3	\$21,400,000
PCCP Rehabilitation Valve Storage Building	\$6,300,000
Payroll and Timekeeping System Upgrade	\$1,420,000
San Diego Canal Radial Gate Replacement	\$1,679,000
Second Lower Feeder PCCP Rehabilitation Remaining Budget	\$7,000,000
Second Lower Feeder PCCP Rehabilitation - Reach 3A	\$19,100,000
Sepulveda Feeder PCCP Rehabilitation - Reach 1	\$1,220,000
Sepulveda Feeder PCCP Rehabilitation - Reach 2	\$1,344,868
Skinner Facility Area Paving	\$1,000,000
Upgrades at Three Sepulveda Feeder Structures	\$4,650,000
Wadsworth Pumping Plant Stage 2 - Badlands Tunnel Surge Tank Facility	\$1,340,000
Water Information System	\$1,175,000
West Area Supply and Delivery Alternatives	\$175,500
Western San Bernardino County Operating Region Erosion Control Improvements – Stage 1	\$662,898
Western San Bernardino County Operating Region Erosion Control Improvements - Stage 2	\$667,000
Weymouth Treatment Basins Nos. 5-8 and Filter Building No. 2 Rehabilitation	\$109,000,000
Total:	\$409,982,414

CEQA Determinations

Table 7 lists CEQA exemption determinations made by the General Manager during the 1st Quarter. Consistent with CEQA, the Board delegated this authority to the General Manager in April 2020. Adoption of Negative Declarations and Mitigated Negative Declarations, and certification of Environmental Impact Reports will continue to require action by Metropolitan's Board. This table excludes information on board items heard in closed session.

Table 7: CEQA Exemption Determinations

Projects
Iron Mountain Pumping Plant Station and Lighting Switchrack Replacement
Hinds Village Paving Replacement
Inland Feeder Foothill Pump Station - Geotech Investigation
San Diego Pipeline No. 1 Rainbow Tunnel Rehabilitation

Construction and Procurement Contracts

The table below summarizes the status of all construction and procurement contracts that were active during the reporting quarter. These contracts are listed in Table 9, Table 11, and Table 12. Total contract earnings for the 1st Quarter were approximately \$41,702,349. Tables in this section exclude contracts for minor capital projects.

Table 8: 1st Quarter Contract Action

Contract Actions during Q1 for FY 2022/2023, July 2022 through September 2022	
Contracts Awarded by Board	2 construction contracts totaling \$26.26 million (Table 10) 1 procurement contract totaling \$5.65 million (Table 10)
Total Payments Authorized	\$22.56 million
Construction Contracts Completed	Notice of Completion was filed for 5 construction contracts (Table 9)
Procurement Contracts Delivery Completed	Delivery of all items completed for 1 procurement contract (Table 12)
Active Contracts at end of Q1 ⁵	25 construction contracts, totaling \$370.89 million (Table 11) 15 procurement contracts, totaling \$71.01 million (Table 12) \$441.90 million total value*

*Numbers may not sum due to rounding

The figures on the next two pages show the locations of the twenty-five construction contracts that were active through the end of the 1st Quarter.

⁵ Active contracts at the end of the 1st Quarter are those that are ongoing at the end of September 2022. In other words, contracts completed during the reporting quarter are excluded.

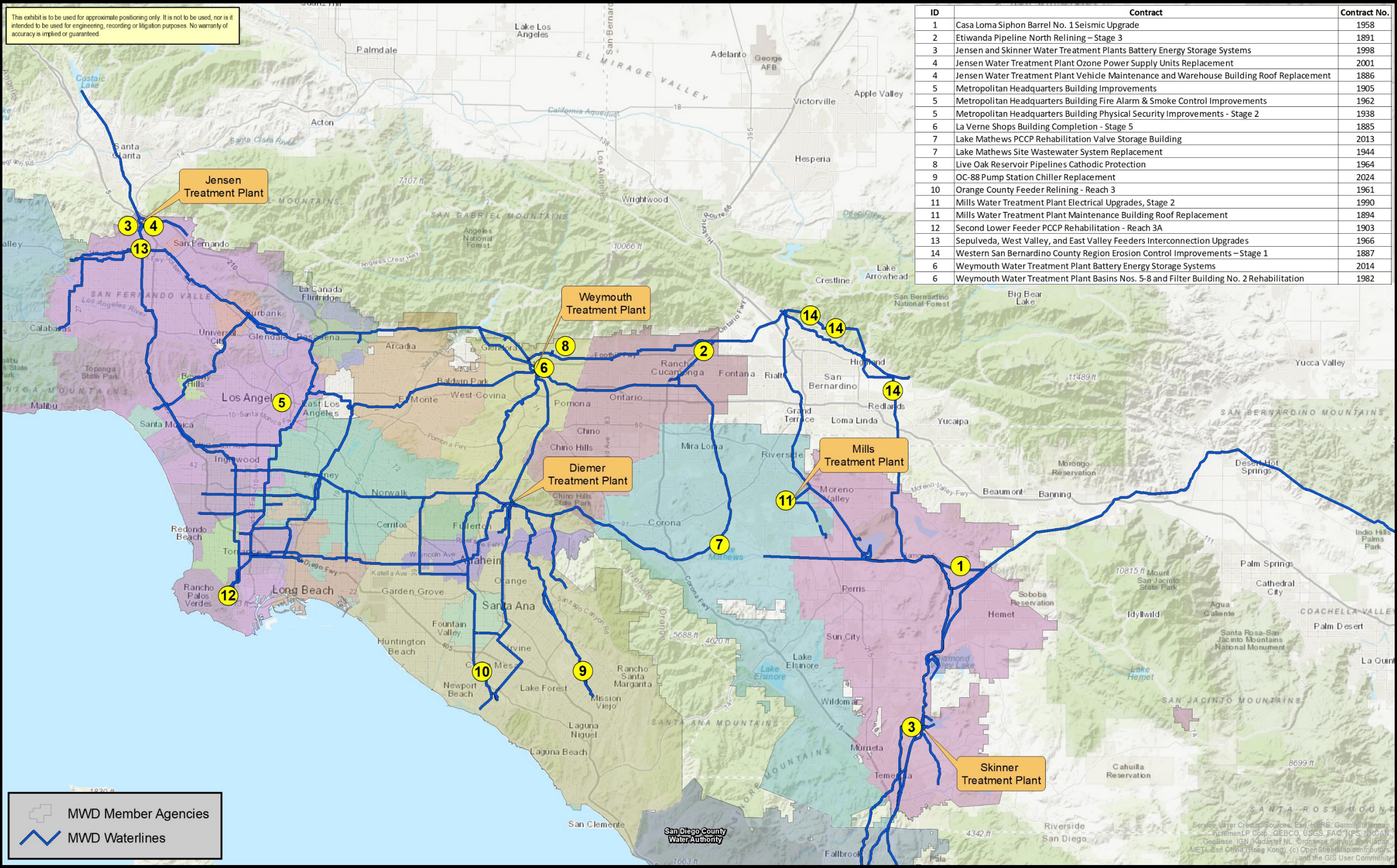


Figure 5: Construction Contracts – Greater Los Angeles Region

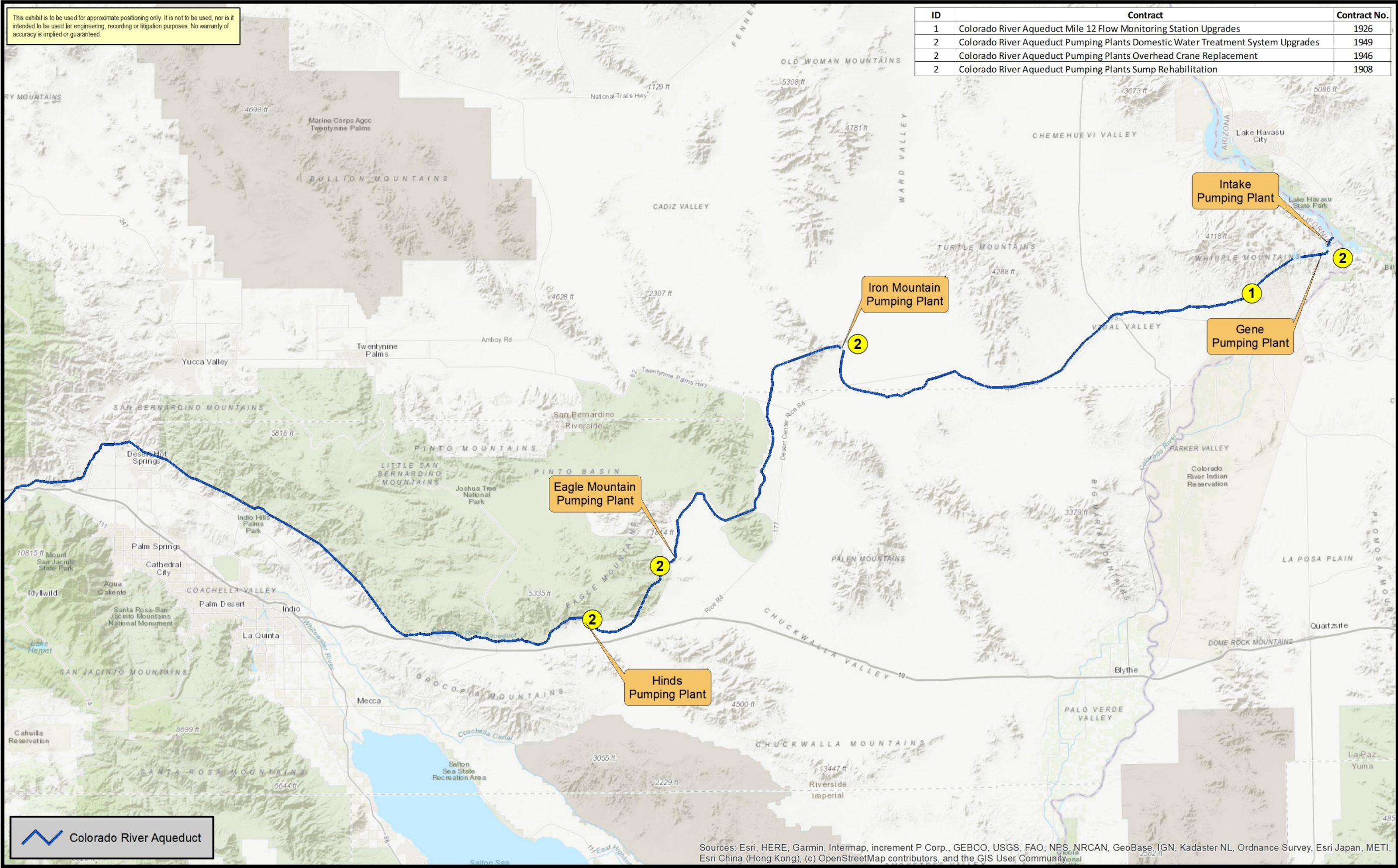


Figure 6: Construction Contracts – Colorado River Aqueduct

Metropolitan's Administrative Code authorizes the General Manager to execute change orders on construction contracts in an aggregate amount not to exceed five percent of the original amount of the contract or \$250,000, whichever is greater. If changes occur on a construction contract that will exceed this total, additional authorization from the Board is required. In addition, the General Manager is authorized to execute change orders on procurement contracts in an amount not to exceed \$250,000. In the 1st Quarter, the Board did not authorize any increases to the General Manager's change order authority.

Notices of Completion during 1st Quarter:

The following table shows the five construction contracts for which Metropolitan accepted the contract as completed during the 1st Quarter of FY 2022/23 and filed a Notice of Completion (NOC) with the county where the work was performed. In accordance with Section 9204 of the Civil Code of the State of California, an NOC is filed within 15 days of acceptance by Metropolitan of completion of construction by the contractor.

Table 9: Notices of Completion Filed This Quarter

Contract No.	Construction Contract	Notice of Completion	Original Bid Amount	Final Contract Costs	Change Order	Change Order %
1884	Garvey Reservoir Sodium Hypochlorite Feed System Upgrade	July 2022	\$2,418,149	\$2,430,457	\$12,308	0.5%
1951	Skinner Water Treatment Plant Cathodic Protection	July 2022	\$240,933	\$247,053	\$6,120	2.5%
1984	Skinner Water Treatment Plant Facility Area Paving	July 2022	\$1,936,977	\$2,110,339	\$173,362	9.0%
1970	Garvey Reservoir Drainage and Erosion Improvements - Areas 6, 7, 8, 10, and 11	September 2022	\$1,294,800	\$1,542,553	\$247,753	19.1%
2045	Upper Feeder Santa Ana River Crossing Expansion Joint Replacement	September 2022	N/A	\$855,624	N/A	N/A
Totals:			\$5,890,859			

For the 1st Quarter, the total bid amount of the completed construction contracts was approximately \$5.9 million. As for the Contract Number 2045, Upper Feeder Santa Ana River Crossing Expansion Joint Replacement, the General Manager awarded the contract under the emergency contracting provisions in the administrative code, after a leak was discovered, without going through the competitive bid process. Therefore, the work under this contract was performed with an estimated budget of \$1.2 million instead of a set bid amount. As for Contract 1970, change orders include an extension of drainage piping, replacement of asphalt pavement, construction of a concrete block wall due to differing site conditions discovered during construction and to complete the work that would have otherwise been completed in a future contract. Contract 1984 change orders include utility relocation, drainage restoration, and asphalt paving due to differing site conditions discovered during construction and to complete the work that would have otherwise been completed in a future contract.

The final contract costs can differ from the original bid amount due to change orders and actual costs incurred on unit price or other various bid items. The rolling average of change orders on completed construction contracts during the preceding 12-month period (October 2021 through September 2022) is 3.75 percent⁶.

⁶ Original amount of construction contracts completed (Oct. 2021 through Sept. 2022) = \$42,008,373
Change orders for completed construction contracts (Oct. 2021 through Sept. 2022) = \$1,574,617
Change order percentage (Oct. 2021 through Sept. 2022) = 3.75%

Contracts Awarded by the Board during 1st Quarter:

During the period of July through September 2022, two construction contracts totaling \$26,260,524 and one procurement contract totaling \$5,647,405, were awarded by the Board.

Table 10: Construction and Procurement Contracts Awarded This Quarter

Construction Contracts	
Etiwanda Pipeline North Relining - Stage 3	
Contract Number	1891
Contractor	Mladen Buntich Construction Co., Inc.
Amount	\$25,972,700
Mills Plant Maintenance Building Roof Replacement	
Contract Number	1894
Contractor	Bishop, Inc.
Amount	\$287,824
Procurement Contracts	
Furnishing Butterfly Valves for the Wadsworth Bypass Pipeline, Inland Feeder-Rialto Pipeline Intertie, and Badlands Tunnel Isolation Surge Tanks	
Contract Number	2022
Contractor	Sojitz Machinery Corporation of America
Amount	\$5,647,405

The table on this page lists the 25 ongoing construction contracts through the end of the 1st Quarter. Also, Metropolitan is negotiating a settlement with the contractor on Construction Contract No. 1908 to remove the remaining construction portion of the contract, which was suspended due to Metropolitan's response to COVID-19. As part of the settlement, Metropolitan is procuring materials and equipment from the contractor for a future construction contract. This list does not contain construction contracts for minor capital projects.

Table 11: Active Construction Contracts at the End of 1st Quarter

	Cont. No.	Contract Title	Contractor	Contract Amount ⁷	Earnings Through September 2022	Start Date	Est. Completion Date	Est. Percent Complete
1	1885	La Verne Shops Building Completion – Stage 5	Woodcliff Corporation, Inc.	\$18,930,000	\$1,217,960	6/10/22	5/24	6%
2	1886	Joseph Jensen Water Treatment Plant Vehicle Maintenance Building Roof Replacement ⁸	AME Builders, Inc. dba AME Roofing	\$282,390	\$236,583	11/1/21	10/22	84%
3	1887	Western San Bernardino County Region Erosion Control Improvements – Stage 1	Jeremy Harris Construction, Inc.	\$677,898	\$611,488	4/1/22	11/22	90%
4	1891	Etiwanda Pipeline North Relining - Stage 3	Mladen Buntich Construction Co., Inc.	\$25,972,700	\$618,000	8/19/22	10/23	2%
5	1894	Mills Plant Maintenance Building Roof Replacement	Bishop, Inc.	\$287,824	\$0	10/12/22	6/23	0%
6	1903	Second Lower Feeder PCCP Rehabilitation – Reach 3A	J. F. Shea Construction, Inc.	\$11,884,700	\$3,260,000	6/6/22	6/23	27%
7	1905	Metropolitan Headquarters Building Improvements ⁸	Bernards Bros. Inc.	\$50,689,760	\$50,645,831	1/14/19	12/22	99%
8	1908	CRA Pumping Plants – Sump Rehabilitation ⁹	Michels Construction, Inc.	\$27,242,360	\$12,615,770	1/24/19	12/22	46%
9	1926	CRA Mile 12 Flow Monitoring Station Upgrades	R2 Engineering dba R2Build	\$2,053,567	\$1,622,457	6/16/21	1/23	79%

⁷ The Contract Amount may differ from the original bid amount due to periodic change orders approved by the General Manager or, if required, by the Board.

⁸ Granting of additional working days to complete construction are being considered.

⁹ Contract 1908 has exceeded the contract working days and Metropolitan is assessing liquidated damages.

	Cont. No.	Contract Title	Contractor	Contract Amount ⁷	Earnings Through September 2022	Start Date	Est. Completion Date	Est. Percent Complete
10	1938	MWD HQ Bldg. Physical Security Improvements ⁸	Bernards Bros. Inc.	\$5,998,980	\$5,944,666	9/22/20	12/22	99%
11	1944	Lake Mathews Reservoir Wastewater System Replacement	Creative Home dba CHI Construction	\$3,815,000	\$2,209,050	12/13/21	3/23	58%
12	1946	Colorado River Aqueduct Pumping Plants - Overhead Crane Replacement	J.F. Shea Construction, Inc.	\$13,518,670	\$3,024,867	10/14/20	9/23	22%
13	1949	Colorado River Aqueduct Pumping Plants Domestic Water Treatment System Replacement	J.F. Shea Construction, Inc.	\$32,824,000	\$2,758,438	1/20/22	2/25	8%
14	1958	Colorado River Aqueduct Replacement of Casa Loma Siphon Barrel No. 1	J.F. Shea Construction, Inc.	\$11,499,000	\$8,315,907	1/20/22	6/23	72%
15	1961	Orange County Feeder Relining – Reach 3	Spiniello Infrastructure West, Inc.	\$17,226,250	\$771,272	5/11/22	9/23	4%
16	1962	MWD HQ Building Fire Alarm & Smoke Control Improvements	Bernards Bros. Inc.	\$14,165,888	\$8,672,379	9/24/20	1/23	61%
17	1964	Live Oak Reservoir Pipelines Cathodic Protection	Exaro Technologies Corporation	\$182,800	\$0	9/28/22	3/23	0%
18	1966	Sepulveda, West Valley, and East Valley Feeders Interconnection Upgrades	Blois Construction, Inc.	\$3,143,592	\$50,383	7/7/22	8/23	2%
19	1982	Weymouth Water Treatment Plant Basins Nos. 5-8 & Filter Building No. 2 Rehabilitation	J. F. Shea Construction, Inc.	\$93,840,000	\$7,597,716	6/10/22	5/25	8%
20	1990	Henry J. Mills Water Treatment Plant Electrical Upgrades, Stage 2	CSI Electrical Contractors, Inc.	\$9,200,000	\$1,543,366	12/13/21	1/25	17%
21	1998	Jensen and Skinner Water Treatment Plants Battery Energy Storage Systems ⁸	Ameresco, Inc.	\$11,604,521	\$3,136,668	10/7/21	11/24	27%

	Cont. No.	Contract Title	Contractor	Contract Amount ⁷	Earnings Through September 2022	Start Date	Est. Completion Date	Est. Percent Complete
22	2001	Jensen Water Treatment Plant Ozone Power Supply Units Replacement	Leed Electric, Inc.	\$2,257,897	\$56,098	7/20/22	12/23	2%
23	2013	Lake Mathews PCCP Rehabilitation Valve Storage Building	Facility Builders & Erectors, Inc.	\$4,759,000	\$1,970,047	3/10/22	8/23	41%
24	2014	Weymouth Plant Battery Energy Storage System	Siemens Industry, Inc.	\$6,176,521	\$0	7/18/22	7/23	0%
25	2024	OC-88 Pump Station Chiller Replacement	Mehta Mechanical Co., Inc. dba MMC Inc.	\$2,654,000	\$114,000	6/6/22	6/23	4%
Total contract value for active construction contracts:				\$370,887,318				

The following table lists the 15 ongoing procurement contracts at the end of the 1st Quarter.

Table 12: Active Procurement Contracts at the End of 1st Quarter

	Cont. No.	Contract	Contractor	Contract Amount ¹⁰	Earnings Through September 2022	Start Date	Est. Delivery Completion Date	Est. Percent Complete ¹¹
1	1861	Furnishing Lubricated Plug Valves for Second Lower Feeder	Southwest Valve & Equipment, Inc.	\$2,380,909	\$2,362,968	9/11/17	D ¹²	99%
2	1867 ¹³	Furnishing Butterfly Valves for the Weymouth Water Treatment Plant – Schedule 1	Crispin Valve, LLC	\$5,066,975	\$2,674,908	12/18/17	12/22	53%
3	1868	Furnishing Butterfly Valves for the Weymouth Water Treatment Plant – Schedule 2	DeZurick, Inc.	\$771,984	\$760,384	12/18/17	D ¹²	98%
4	1873	Furnishing One Hydraulic Shear System for the La Verne Maintenance Shops	Landmark Solutions, LLC	\$151,870	\$146,970	3/21/18	D ¹²	97%
5	1912	Furnishing Large-Diameter Conical Plug Valves	Ebara Corporation	\$23,750,060	\$17,157,856	12/24/18	6/23	72%
6	1922	Furnishing One Double Column Vertical Machining Center for the La Verne Maintenance Shops	Gosiger Machine Tools, LLC (Gosiger West)	\$2,193,356	\$2,170,295	9/17/18	D ¹²	99%
7	1948	Refurbishing Valve Actuators for the Diemer Water Treatment Plant	Flowserve Limatorque	\$3,532,700	\$2,399,089	2/16/19	3/23	68%
8	1955	Furnishing Membrane Filtration Systems for the CRA Domestic Water Treatment Systems	Wigen Water Technologies	\$1,244,535	\$529,166	5/28/20	7/25	43%

¹⁰ The Contract Amount may differ from the original bid amount due to periodic change orders approved by the General Manager or, if required, by the Board.

¹¹ Estimated Percent Complete is based on contract payments and may not reflect actual progress of fabrication. The contract will be 100% complete upon delivery of fabricated items and field services.

¹² All items were delivered prior to this reporting quarter but contract remains open pending use of manufacturer field services.

¹³ Contract 1867 includes tariff and work on Furnishing Butterfly Valves for the Weymouth Water Treatment Plant – Schedule 1 per extra work directed in the November 2020 Board Letter, Item 7-1.

	Cont. No.	Contract	Contractor	Contract Amount ¹⁰	Earnings Through September 2022	Start Date	Est. Delivery Completion Date	Est. Percent Complete ¹¹
9	1965	Furnishing Equipment for the Jensen Ozone Power Supply Units Upgrades	Suez Treatment Solutions, Inc.	\$4,141,194	\$2,025,325	3/30/20	D ¹⁴	86%
10	1968	Furnishing Earthquake-Resistant Ductile Iron Pipe for the Casa Loma Siphon Barrel No. 1	Kubota Corporation	\$9,237,782	\$9,224,982	2/12/20	D ¹²	99%
11	1969	Furnishing Inlet Valve Gearboxes for Skinner Module No. 7	R&B Automation, Inc.	\$224,510	\$207,035	4/29/20	2/24	92%
12	1978	Furnishing Steel Pipe for the Casa Loma Siphon Barrel No. 1	Northwest Pipe Company	\$6,134,208	\$5,860,701	1/16/20	12/23	96%
13	2011	Furnishing Steel Pipe for Etiwanda Pipeline North Relining, Stage 3	Northwest Pipe Company	\$6,044,897	\$5,400,744	12/20/21	12/23	89%
14	2022	Furnishing Butterfly Valves for the Wadsworth Bypass Pipeline, Inland Feeder-Rialto Pipeline Intertie, and Badlands Tunnel Isolation Surge Tanks	Sojitz Machinery Corp. of America	\$5,647,405	\$0	10/3/22	9/25	0%
15	PO 206047	Furnish Equipment to Upgrade the Ozone Control System at the Mills Water Treatment Plant	Royal Industrial Solutions	\$492,440	\$0	12/6/21	10/22	0%
Total contract value for active procurement contracts:				\$71,014,825				

¹⁴ All items were delivered during the reporting quarter but contract remains open pending use of manufacturer field services.

Performance Metrics

In order to measure project performance efficiency and to identify areas for continuous improvements, Metropolitan's Engineering Services Group has established two primary performance metrics for projects that will result in construction activities. These metrics serve as performance targets for Metropolitan staff for both final design and inspection activities. The inspection metric includes fabrication and construction inspection, as well as construction management services.

Separate performance targets have been established for two categories of project size: those with projected construction costs greater than \$3 million, and those with projected construction costs less than \$3 million.

Metropolitan's **performance metric targets** for the two categories of construction projects are listed below:

Project Category	Final Design, % of Construction	Inspection % of Construction
Projects with Construction Costs > \$3 Million	9% to 12%	9% to 12%
Projects with Construction Costs < \$3 Million	9% to 15%	9% to 15%

Prior to proceeding with final design or construction, budgets are established for design and inspection that best provide a quality and timely product. Efforts are made to optimize staff and consultant hours based on project complexity and location. The calculated values for the design and inspection costs, as a percentage of total construction costs, in most cases lie within or below the metric target ranges. In select cases, the calculated values may exceed the metric target ranges.

Once a project phase is complete, either final design or construction, staff's performance against these metrics is then calculated and compared to the target metrics. Table 13 and Table 14 on the following page summarize the comparison between the target metrics and the actual performance metrics for each project category for the current reporting period. In cases where the actual performance exceeded the target metric, explanations for the variance are provided. Actual performance for in-house construction projects and minor capital projects are not reported in this section since the efforts required for final design and inspection are different.

Table 13: Performance Metric Actuals, Construction Costs > \$3 Million

Project	Metric	Actual Cost of Metric	Construction Cost	Target Range	Actual %
Etiwanda Pipeline Lining Replacement Stage 3	Final Design	\$800,054	\$32,795,097	9-12%	2.4%

Table 14: Performance Metric Actuals, Construction Costs < \$3 Million

Project	Metric	Actual Cost of Metric	Construction Cost	Target Range	Actual %
Garvey Reservoir Drainage & Erosion Improvements - Areas 6, 7, 8, 10, and 11	Inspection	\$497,570	\$1,594,198	9-15%	31.2% ¹⁵
Garvey Reservoir Sodium Hypochlorite Feed System Upgrades	Inspection	\$327,156	\$2,700,580	9-15%	12.1%
Live Oak Reservoir Pipelines Cathodic Protection	Final Design	\$43,211	\$196,000	9-15%	22.0% ¹⁶
Mills Maintenance Building Roof Replacement	Final Design	\$47,000	\$464,824	9-15%	10.1%
Skinner Facility Area Paving	Inspection	\$320,000	\$2,316,977	9-15%	13.8%
Skinner Pipelines Cathodic Protection	Inspection	\$45,497	\$311,144	9-15%	14.6%
Upper Feeder Expansion Joint Replacement at the Santa Ana River Crossing	Final Design	\$224,560	\$2,334,624	9-15%	9.6%
Upper Feeder Expansion Joint Replacement at the Santa Ana River Crossing	Inspection	\$163,653	\$2,334,624	9-15%	7.0%

¹⁵ Inspection costs for Garvey Reservoir Drainage & Erosion Improvements Areas 6, 7, 8, 10, & 11 were higher than the target range due to contractor issues which resulted in significant contract delays and increased inspection expenditures. Issues included a lapse of the contractor's license and the contractor contemplating closing the business, which resulted in inspection staff investigating the use of a bonding company to complete the construction.

¹⁶ Final design cost for the Live Oak Reservoir Pipelines Cathodic Protection were higher than the target range due to changes made during final design to convert to a stand-alone, solar-power system and higher than anticipated cost of construction.

Service Connections and Relocations

Service Connections

No new agreements for service connections were approved by the General Manager pursuant to Sections 4700-4708 during the reporting period (July through September 2022).

Relocations

No new relocation agreements involving an amount in excess of \$100,000 were approved under the authority of Section 8122(c) during the reporting period.

Projects Expensed to Overhead

There are no expensed projects to report during the 1st Quarter of FY 2022/23 (July through September 2022).

Program/Appropriation Status

The following table provides the program and appropriation level budget versus cost-to-date and biennium planned expenditures versus actuals-to-date.

Table 15: Program and Appropriation Budget vs. Cost and Planned Expenditures vs. Actuals

Capital Programs/Appropriations	Appn. No.	Total to Date		Biennium to Date	
		Appn. Amount (\$1,000's)	Costs thru September 2022 (\$1,000's)	Biennium to Date Planned Expenditures (\$1,000's)	Biennium Actual Expenditures (\$1,000's)
Colorado River Aqueduct Reliability Program	Total	\$554,437	\$430,713	\$11,670	\$5,176
Cabazon Radial Gate Facility Improvements	15320	\$2,456	\$740	\$0	\$35
White Water Siphon Protection	15341	\$15,585	\$14,492	\$1,820	\$8
CRA - Conveyance Reliability	15373	\$117,828	\$116,600	\$520	\$224
CRA Pumping Plant Reliability	15374	\$24,467	\$24,005	\$0	\$2
CRA - Electrical/Power Systems Reliability	15384	\$58,665	\$49,688	\$600	\$1,198
CRA – Discharge Containment	15385	\$8,129	\$7,976	\$0	\$1
CRA - Reliability for FY2006/07 through FY2011/12	15438	\$150,194	\$119,839	\$2,710	\$367
CRA Main Pump Reliability	15481	\$75,000	\$54,586	\$3,600	\$1,529
CRA - Reliability for FY2012/13 through FY2017/18	15483	\$90,967	\$37,411	\$1,880	\$1,530
CRA - Reliability for FY2018/19 through FY2023/24	15507	\$11,146	\$5,377	\$540	\$283
Cost Efficiency & Productivity Program	Total	\$162,645	\$104,644	\$1,350	\$975
DVL Recreation Facilities	15334	\$87,104	\$59,456	\$0	\$71
Yorba Linda Power Plant Modifications	15446	\$17,125	\$17,093	\$0	\$1
Business Operations Improvement	15484	\$19,441	\$10,540	\$580	\$302

Capital Programs/Appropriations	Appn. No.	Total to Date		Biennium to Date	
		Appn. Amount (\$1,000's)	Costs thru September 2022 (\$1,000's)	Biennium to Date Planned Expenditures (\$1,000's)	Biennium Actual Expenditures (\$1,000's)
Project Controls and Reporting System	15490	\$6,440	\$6,307	\$0	\$5
Enterprise Content Management	15500	\$3,600	\$3,595	\$480	\$0
DVL Recreation Rehabilitation & Refurbishment	15515	\$1,030	\$972	\$150	\$59
Energy Sustainability Improvements	15521	\$27,905	\$6,682	\$140	\$537
Dams and Reservoirs Reliability Program	Total	\$76,514	\$69,289	\$600	\$301
Reservoir Cover and Replacement	15417	\$65,214	\$59,587	\$320	\$219
Dam Rehabilitation & Safety Improvements	15419	\$11,300	\$9,702	\$280	\$82
Distribution System Reliability Program	Total	\$472,162	\$376,201	\$14,040	\$8,073
Conveyance and Distribution System - Rehabilitation	15377	\$125,961	\$102,581	\$3,070	\$836
Conveyance and Distribution System - Rehabilitation for FY2006/07 through FY2011/12	15441	\$155,912	\$118,347	\$170	\$2,858
Hydroelectric Power Plant Improvements	15458	\$20,403	\$17,425	\$1,950	\$149
Conveyance and Distribution System - Rehabilitation for FY2012/13 through FY2017/18	15480	\$139,666	\$116,682	\$5,710	\$3,030
Pipeline Rehabilitation and Replacement	15482	\$1,143	\$1,033	\$60	\$0
Conveyance and Distribution System - Rehabilitation for FY2018/19 through FY2023/24	15503	\$29,077	\$20,133	\$3,080	\$1,200

Capital Programs/Appropriations	Appn. No.	Total to Date		Biennium to Date	
		Appn. Amount (\$1,000's)	Costs thru September 2022 (\$1,000's)	Biennium to Date Planned Expenditures (\$1,000's)	Biennium Actual Expenditures (\$1,000's)
District Housing & Property Improvements Program	Total	\$10,907	\$6,813	\$2,100	\$263
Employee Village Enhancement	15513	\$10,907	\$6,813	\$2,100	\$263
Minor Capital Projects Program	Total	\$45,500	\$19,120	\$2,400	\$993
Capital Program for Projects Costing Less Than \$400,000 for FY2018/19 through FY2019/20	15504	\$15,500	\$11,734	\$650	\$310
Capital Program for Projects Costing Less Than \$400,000 for FY2020/21 through FY2021/22	15518	\$20,000	\$7,103	\$1,270	\$400
Capital Program for Projects Costing Less Than \$400,000 for FY2022/23 through FY2023/24	15526	\$10,000	\$283	\$480	\$283
Prestressed Concrete Cylinder Pipe Rehabilitation Program	Total	\$346,345	\$269,918	\$17,150	\$2,250
PCCP Rehabilitation and Replacement	15471	\$24,243	\$22,722	\$450	\$48
Sepulveda Feeder PCCP Rehabilitation	15496	\$39,590	\$28,412	\$1,000	\$489
Second Lower Feeder PCCP Rehabilitation	15497	\$266,827	\$207,775	\$14,800	\$1,410
Allen-McColloch Pipeline, Calabasas Feeder, and Rialto Pipeline PCCP Rehabilitation	15502	\$15,685	\$11,009	\$900	\$303
Regional Recycled Water Supply Program	Total	\$24,350	\$20,304	\$1,150	\$3
Demonstration-Scale Recycled Water Treatment Plant	15493	\$24,350	\$20,304	\$1,150	\$3
Right of Way & Infrastructure Protection Program	Total	\$31,715	\$27,573	\$1,410	\$513
Right of Way & Infrastructure Protection	15474	\$31,715	\$27,573	\$1,410	\$513

Capital Programs/Appropriations	Appn. No.	Total to Date		Biennium to Date	
		Appn. Amount (\$1,000's)	Costs thru September 2022 (\$1,000's)	Biennium to Date Planned Expenditures (\$1,000's)	Biennium Actual Expenditures (\$1,000's)
System Flexibility/Supply Reliability Program	Total	\$679,098	\$644,459	\$7,400	\$2,911
Hayfield and Lake Perris Groundwater Recovery	15402	\$1,500	\$1,116	\$80	\$2
Perris Valley Pipeline	15425	\$133,500	\$131,427	\$3,550	\$309
Water Delivery System Improvements	15488	\$82,279	\$72,101	\$3,030	\$2,495
Verbena Property Acquisition	15492	\$264,000	\$262,027	\$710	\$79
Delta Wetlands Properties (Delta Islands)	15494	\$197,819	\$177,789	\$30	\$24
System Reliability Program	Total	\$448,836	\$311,888	\$19,400	\$4,957
Information Technology System - Infrastructure	15376	\$51,306	\$47,761	\$20	\$43
Information Technology System - Security	15378	\$12,351	\$11,009	\$0	\$194
La Verne Shop Facilities Upgrade	15395	\$71,348	\$47,755	\$0	\$435
Water Operation Control	15467	\$71,359	\$42,335	\$1,820	\$253
Union Station Headquarters Improvements	15473	\$107,845	\$87,497	\$2,500	\$1,271
IT Infrastructure Reliability	15487	\$57,968	\$38,024	\$3,960	\$1,231
Operations Support Facilities Improvement	15495	\$32,558	\$20,349	\$8,700	\$807
Metropolitan Security System Enhancements	15499	\$15,910	\$11,282	\$975	\$230
Infrastructure Reliability Information System	15501	\$17,970	\$2,982	\$75	\$116
System-Wide Paving & Roof Replacements for FY 2020/21 through FY 2021/22	15516	\$4,791	\$1,762	\$400	\$168
System-Wide Paving & Roof Replacements for FY2020/21 through FY2023/24	15519	\$1,741	\$1,076	\$200	\$158

Capital Programs/Appropriations	Appn. No.	Total to Date		Biennium to Date	
		Appn. Amount (\$1,000's)	Costs thru September 2022 (\$1,000's)	Biennium to Date Planned Expenditures (\$1,000's)	Biennium Actual Expenditures (\$1,000's)
Enterprise Data Analytics	15522	\$3,690	\$55	\$750	\$50
Treatment Plant Reliability Program	Total	\$922,722	\$752,076	\$6,669	\$3,993
Weymouth Water Treatment Plant Improvements	15369	\$195,711	\$188,336	\$80	\$196
Jensen Water Treatment Plant Improvements	15371	\$47,062	\$46,638	\$310	\$0
Diemer Water Treatment Plant Improvements	15380	\$213,657	\$208,699	\$1,190	\$369
Mills Water Treatment Plant Improvements	15381	\$5,525	\$5,277	\$0	\$1
Diemer Water Treatment Plant Improvements for FY2006/07 through FY2011/12	15436	\$74,707	\$66,202	\$1,900	\$530
Weymouth Water Treatment Plant Improvements for FY2006/07 through FY2011/12	15440	\$138,079	\$28,348	\$430	\$832
Jensen Water Treatment Plant Improvements for FY2006/07 through FY2011/12	15442	\$91,376	\$84,954	\$1,410	\$258
Mills Water Treatment Plant Improvements for FY2006/07 through FY2011/12	15452	\$39,852	\$25,195	\$30	\$603
Weymouth Water Treatment Plant Improvements for FY2012/13 through FY2017/18	15477	\$77,539	\$77,014	\$39	\$56
Diemer Water Treatment Plant Improvements for FY2012/13 through FY2017/18	15478	\$1,425	\$1,423	\$120	-\$13
Mills Water Treatment Plant Improvements for FY2012/13 through FY2017/18	15479	\$1,094	\$882	\$0	\$35
Jensen Water Treatment Plant Improvements for FY2012/13 through FY2017/18	15486	\$8,339	\$7,485	\$0	\$1

Capital Programs/Appropriations	Appn. No.	Total to Date		Biennium to Date	
		Appn. Amount (\$1,000's)	Costs thru September 2022 (\$1,000's)	Biennium to Date Planned Expenditures (\$1,000's)	Biennium Actual Expenditures (\$1,000's)
Weymouth Water Treatment Plant Improvements for FY2020/21 through FY2023/24	15505	\$685	\$390	\$0	\$88
Jensen Water Treatment Plant Improvements for FY2020/21 through FY2023/24	15508	\$17,323	\$5,842	\$40	\$637
Diemer Water Treatment Plant Improvements for FY2020/21 through FY2023/24	15510	\$3,758	\$914	\$0	\$159
Skinner Water Treatment Plant, Improvements for FY 2020/21 Through FY 2023/24	15512	\$3,961	\$3,680	\$1,120	\$43
Mills Water Treatment Plant Improvements for FY2020/21 through FY2023/24	15520	\$2,631	\$796	\$0	\$199
Water Quality Program	Total	\$10,240	\$9,615	\$0	\$0
Enhanced Bromate Control	15472	\$10,240	\$9,615	\$0	\$0
Total CIP		\$3,785,472	\$3,042,612	\$85,339	\$30,409

Notes on above table:

- Numbers may not sum due to rounding.
- Numbers are based on the general ledger information downloaded on 10/10/2022.
- \$0 under Planned Expenditures indicate that while no expenditures are planned during the reporting period, expenditures may be planned during upcoming periods.
- Negative actual expenditures indicate the result of cost transfers, write-offs, or credits greater than actual costs for this biennium through the reporting quarter.

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Engineering & Operations Committee

Capital Investment Plan Quarterly Report for Period Ending September 2022

Item 6a

December 12, 2022

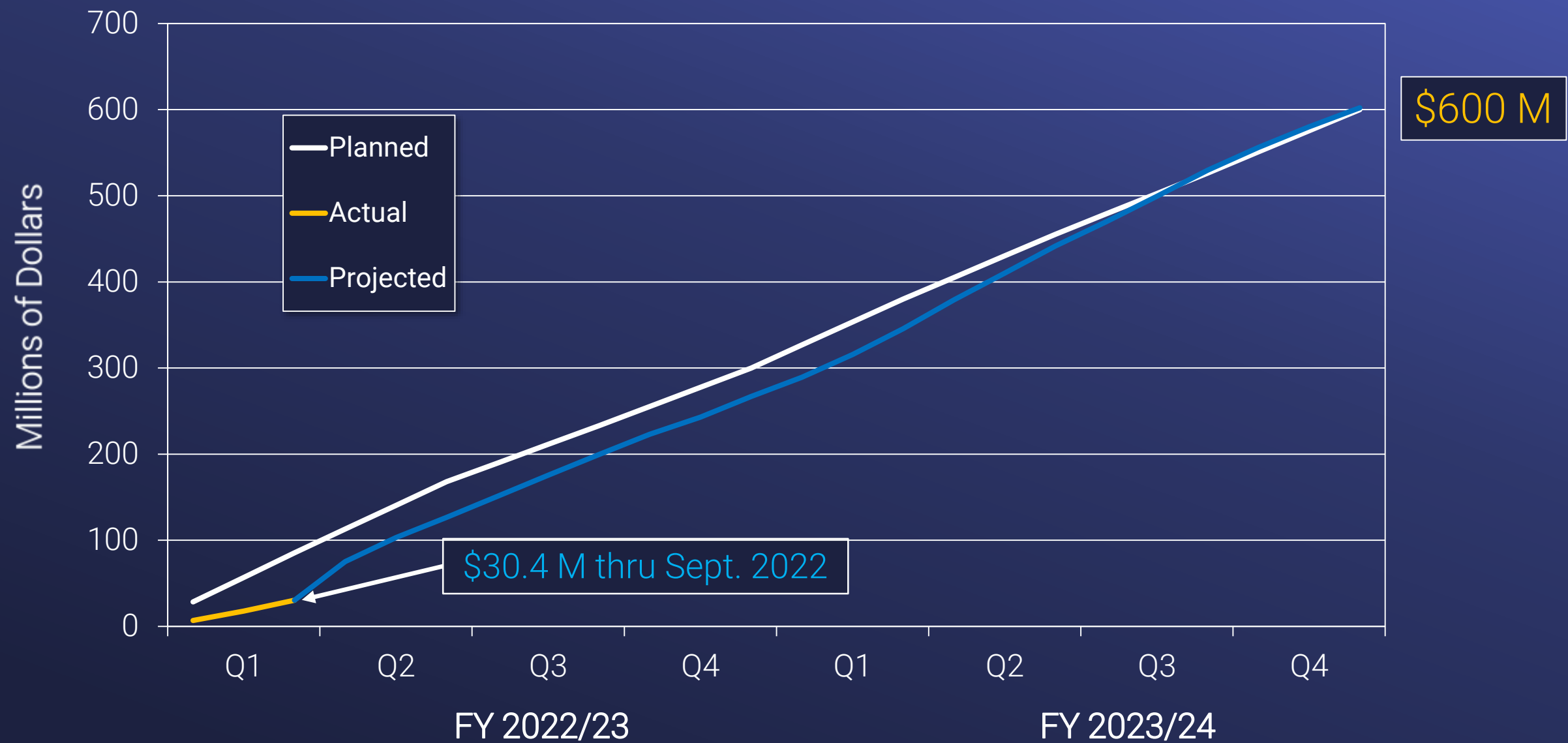
Capital Investment Plan Quarterly Report

Period Ending
September 2022

1st Quarter Summary for FY 2022/23

- 2 Construction contracts awarded - \$26.3 M
- 1 Procurement contract awarded - \$5.6 M
- 9 Professional service agreements authorized - \$26.7 M
- Contracts currently underway - \$441.9 M
- 25 construction - \$370.9 M
- 15 procurement - \$71.0 M

CIP Performance – FYs 2022/23 & 2023/24



Casa Loma Siphon Barrel No. 1 Seismic Upgrades

- Contract awarded in December 2021
 - Expected construction completion in June 2023
- Total Project Estimate: \$37.2 M
- Total Project Cost to Date: \$28.6 M



Aerial overview of project site

Mills Electrical Upgrades – Stage 2

- Contract awarded in November 2021
 - Expected construction completion in January 2025
- Total Project Estimate: \$18.5 M
- Total Project Cost to Date: \$4.0 M



Excavating to construct electrical ductbanks A-1 and A-2 at Mills plant

Construction Contract Completion and Change Orders

Contract	Original Contract Amount	Contract Change Orders	Change Order %
Garvey Reservoir Sodium Hypochlorite Feed System Upgrade	\$2,418,149	\$12,308	0.5%
Skinner Water Treatment Plant Bypass Pipeline Cathodic Protection	\$240,933	\$6,120	2.5%
Skinner Water Treatment Plant Facility Area Paving	\$1,936,977	\$173,362	9.0%
Garvey Reservoir Drainage and Erosion Improvements - Areas 6, 7, 8, 10, and 11	\$1,294,800	\$247,753	19.1%
Upper Feeder Santa Ana River Crossing Expansion Joint Replacement	N/A	N/A	N/A
Total	\$5,890,859		

Performance Metrics – 1st Quarter of FY 2022/23

Projects w/ Construction Costs < \$3 Million

	Final Design % of Construction	Inspection % of Construction
Target Performance Range	9% to 15%	9% to 15%
Actual Performance	10.5%	14.6%

Projects w/ Construction Costs > \$3 Million

	Final Design % of Construction	Inspection % of Construction
Target Performance Range	9% to 12%	9% to 12%
Actual Performance	2.4%	N/A

Minor Capital Projects

Fiscal Year Appropriation	2016/17 2017/18	2018/19 2019/20	2020/21 2021/22	2022/23 2023/24
Amount Appropriated	\$10 M	\$15.5 M	\$20.0 M	\$10.0 M
Amount Allocated	\$7.8 M	\$13.6 M	\$16.0 M	\$2.9 M
Expenditures Through September 2022	\$7.2 M	\$11.7 M	\$7.1 M	\$0.3 M
# of Projects Approved	41	48	54	11
# of Projects Completed Through September 2022	40	33	4	0
% of Work Complete	99%	90%	47%	1%

7 projects exceeded 3 years in duration





Engineering & Operations Committee

Water System Operations Manager's Report

Item 7a

Monday, November 12, 2022

12:30 p.m.

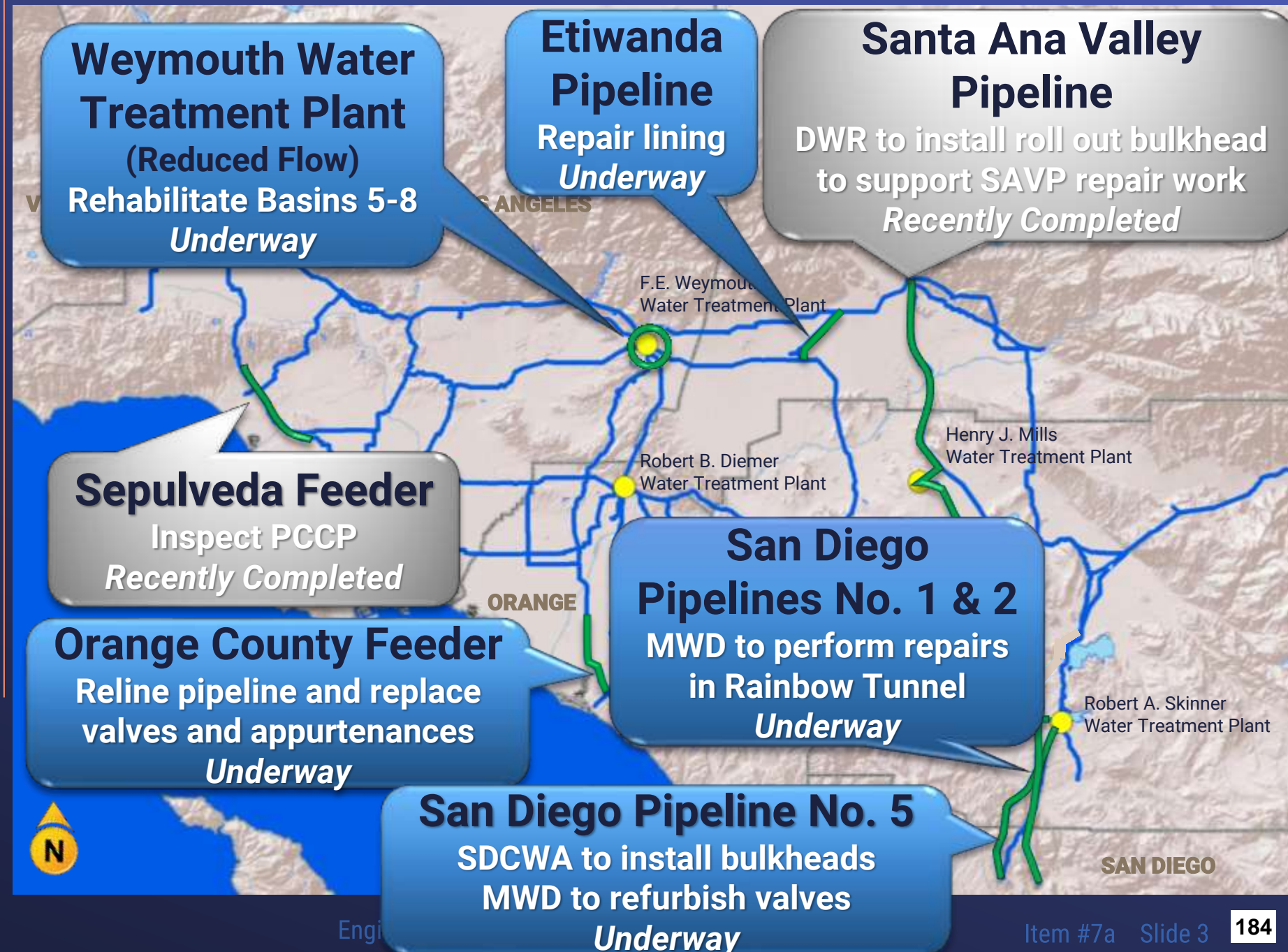
Current Operational Conditions



Continuing Drought Operations

- 2022 SWP Allocation is 5%
- SWP blend targets are 0% at Diemer, Weymouth, and Skinner plants
- DVL to Mills drought operation continues to perform well
- Managing storage based on WSDM principles
- Maintaining 8-pump CRA flow
- November 2022 deliveries of ~114 TAF were ~33 TAF lower than November 2021

Ensuring Continued System Reliability





Preparing for Emergencies



Successful Full-Scale Exercise at Diemer

- Collaboration between Metropolitan and local first responders
 - OC Fire Authority, OC Sheriff's Department, California National Guard, and other emergency response organizations
 - Over 100 participants
- Diemer Incident Command Post activated
- Exercise simulated an active shooter and hazardous materials scenario



Successful Full-Scale Emergency Exercise at Diemer Plant

November 17, 2022







Engineering & Operations Committee

Engineering Services Manager's Report

Item 7b

December 12, 2022

Construction & Procurement Contracts October 2022

Construction & Procurement Contracts Through October 2022

Number of Contracts at end of October 2022	43
Total Bid Amount of Contracts in Progress at end of October 2022	\$471M
Contracts Awarded in October 2022	1
Contracts With Notice To Proceed Issued in October 2022	1
Contracts Completed in October 2022	2
Contract Gross Earnings in October 2022	\$8.2M

Weymouth Water Treatment Plant

Basins 5-8 and Filter Building No. 2 Rehabilitation



Removal of valves during
½-plant shutdown



Lead Paint Abatement of
backwash flow control valve

Singapore Public Utilities Bureau (PUB) Visit November 10, 2022



Mills Plant SCADA Partnering Session

November 16, 2022



Regional Water Reuse Collaboration Meeting

November 17, 2022



Great Lakes Water PCCP Collaboration Meeting

November 28, 2022

