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.

EOT Committee
D. Erdman, Chair
S. Faessel, Vice Chair
D. Alvarez
G. Bryant
J. Crawford
B. Dennstedt
L. Fong-Sakai
R. Jay
J. Lewitt
M. Luna
J. McMillan
C. Miller
M. Petersen
K. Seckel

Engineering, Operations, and Technology Committee

Meeting with Board of Directors *

October 13, 2025

8:30 a.m.

Monday, October 13, 2025 Meeting Schedule
08:30 a.m. EOT
10:45 a.m. LEG
12:30 p.m. Break
01:00 p.m. CWC
02:30 p.m. OWA

Written public comments received by 3:00 p.m. the business day before the meeting is scheduled will be posted under the Submitted Items and Responses tab available here: https://mwdh2o.legistar.com/Legislation.aspx.

The listen-only phone line is available at 1-877-853-5257; enter meeting ID: 862 4397 5848.

Members of the public may present their comments to the Board on matters within their jurisdiction as listed on the agenda via teleconference and in-person. To provide public comment by teleconference dial 1-833-548-0276 and enter meeting ID: 815 2066 4276 or to join by computer click here.

Disclaimer: Written and oral public comments are received in compliance with the Ralph M. Brown Act. Please note that Metropolitan does not endorse or ensure the accuracy or reliability of the information provided as public comment or by third parties.

MWD Headquarters Building • 700 N. Alameda Street • Los Angeles, CA 90012
Teleconference Locations:
1005 South Cardiff Street • Anaheim, CA 92806
3008 W. 82nd Place • Inglewood, CA 90305
Cedars-Sinai Imaging Medical Group • 8700 Beverly Boulevard, Suite M 313 • Los Angeles, CA 90048
Peters Ridge • 2136 Spyglass Trail West • Oxnard, CA 93036

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* 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.

US 2-456

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 ****

2. COMMITTEE ACTION (ONLY)

A. Approval of the Minutes of the Engineering, Operations, and Technology Committee for September 8, 2025 **21-5083**

Attachments: 10132025 EOT 2A (09082025) Minutes

3. COMMITTEE ITEMS (FOR BOARD CONSIDERATION)

7-1 Amend the Capital Investment Plan for fiscal years 2024/25 and 2025/26 to include invasive mussel mitigation and control at Metropolitan facilities; and authorize an increase of $500,000 in the operating equipment budget for the current biennium to purchase equipment to control the growth of invasive mussels; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA **21-5067**

Attachments: 10142025 EOT 7-1 B-L

7-9 Award a $6,412,126 contract to Houalla Enterprises Ltd. DBA Metro Builders & Engineers Group Ltd. to rehabilitate and improve a chemical feed facility at the Robert B. Diemer Water Treatment Plant; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA **21-5068**

Attachments: 10142025 EOT 7-9 B-L

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

4. COMMITTEE ITEMS (ACTION FOR BOARD CONSIDERATION)

8-1 Appropriate an additional $30 million for projects identified in the Capital Investment Plan for Fiscal Years 2024/25 and 2025/26, increasing the biennial Capital Investment Plan appropriation to $666.48 million; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA **21-5066**

Attachments: 10142025 EOT 8-1 B-L

5. COMMITTEE ITEMS (INFORMATIONAL FOR BOARD CONSIDERATION)

NONE

6. COMMITTEE ITEMS (INFORMATIONAL)

a. Pure Water Southern California Quarterly Update **21-5100**

b. Treatment Plant Utilization and Capital Improvement Plan Strategy **21-5101**

c. Colorado River Aqueduct High Voltage Transmission System Update on Affected System Study and Mitigation Agreements **21-5129**

7. MANAGEMENT ANNOUNCEMENTS AND HIGHLIGHTS

a. Engineering Services activities
Information Technology activities
Water System Operations activities **21-5084**

Attachments: 10132025 EOT 7a Engineering Services Activities
10132025 EOT 7a Information Technology Activities
10142025 EOT 7a Water System Operations Activities

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. Committee agendas may be obtained on Metropolitan's Web site https://mwdh2o.legistar.com/Calendar.aspx. 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 https://mwdh2o.legistar.com/Calendar.aspx.

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

THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

MINUTES

ENGINEERING, OPERATIONS & TECHNOLOGY COMMITTEE

September 8, 2025

Chair Erdman called the meeting to order at 8:30 a.m.

Members present: Directors Alvarez, Bryant, Dennstedt, Erdman, Faessel, Fong-Sakai, Jay (entered after roll call), Lewitt, McMillan (entered after roll call), Miller, Petersen (entered after roll call), and Seckel.

Members absent: Director Crawford and Luna

Other board members present: Chair Ortega, Directors Ackerman, Camacho, Dick, Katz, Kurtz, and Shepherd Romey

Committee staff present: Bednarski, Carter, Chapman, Chaudhuri, Eckstrom, Hattar, Parsons, Rubin, and Upadhyay

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))

None

Director Jay entered the room

CONSENT CALENDAR ITEMS – ACTION

1. CONSENT CALENDAR OTHER ITEMS – ACTION

A. Approval of the Minutes of the Engineering, Operations, and Technology Committee for August 18, 2025.

2. CONSENT CALENDAR OTHER ITEMS ACTION

7-2 Subject: Authorize an agreement with West Monroe Partners in an amount not to exceed $722,500 for Metropolitan's Intramet Redesign project; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA.

Presented by: No presentation requested.

Motion: Authorize an agreement with West Monroe Partners in an amount not to exceed $722,500 for Metropolitan's Intramet Redesign project;

7-3 Subject: Award a contract with EyeP Solutions Inc., in an amount not to exceed $334,791 to upgrade the Wireless Networks at Metropolitan's Riverside locations, including Skinner, Mills, Diamond Valley Lake, and Lake Mathews; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA.

Presented by: No presentation requested.

Motion: Award a contract with EyeP Solutions Inc., in an amount not to exceed $334,791 to upgrade the Wireless Networks at Metropolitan's Riverside locations, including Skinner, Mills, Diamond Valley Lake, and Lake Mathews.

7-4 Subject: Authorize an agreement with Carasoft Technology Corp. in an amount not to exceed $920,000 for the Network Visibility and Situational Awareness Upgrades to enhance Metropolitan's network monitoring capabilities through the implementation of advanced technology; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA.

Presented by: No presentation requested.

Motion: Authorize an agreement with Carasoft Technology Corp. in an amount not to exceed $920,000 for the Network Visibility and Situational Awareness Upgrades to enhance Metropolitan's network monitoring capabilities through the implementation of advanced technology.

Director Seckel made a motion, seconded by Director Bryant, to approve the consent calendar consisting of item 2A, and items 7-2, 7-3, and 7-4.

The vote was:

Ayes:	Directors Alvarez, Bryant, Dennstedt, Erdman, Faessel, Fong-Sakai, Jay, Lewitt, Miller, and Seckel.
Noes:	None
Abstentions:	None
Not voting:	None
Absent:	Directors Crawford, Luna, McMillan, and Peterson

The motion for Items 2A, 7-2, 7-3, and 7-4 passed by a vote of 10 ayes, 0 noes, 0 abstention, and 4 absent.

7-5 Subject: Amend the Capital Investment Plan for fiscal years 2024/2025 and 2025/2026 to include the Palos Verdes Reservoir Helicopter Dip Tank Facility project; the General Manager has determined that the proposed action is exempt or not subject to CEQA.

Presented by: James Spicer, Unit Manager, Engineering Services

Motion: Amend the Capital Investment Plan for fiscal years 2024/2025 and 2025/2026 to include the Palos Verdes Reservoir Helicopter Dip Tank Facility project.

The following Directors provided comments or asked questions

1. Miller
2. Jay
3. Faessel
4. Dennstedt
5. Fong-Sakai
6. Bryant
7. Erdman
8. Camacho

Staff responded to Directors' questions and comments.

Directors McMillian and Petersen entered the room

Director Dennstedt made a motion, seconded by Director Bryant, to approve item 7-5.

The vote was:

Ayes:	Directors Alvarez, Bryant, Dennstedt, Erdman, Faessel, Fong-Sakai, Jay, Lewitt, McMillan, Miller, Peterson, and Seckel.
Noes:	None
Abstentions:	None
Not voting:	None
Absent:	Directors Crawford and Luna

The motion for Item 7-5 passed by a vote of 12 ayes, 0 noes, 0 abstention, and 2 absent.

7-10 Subject: Award a $7.988 million contract to Legion Contractors Inc. to construct electrical conduits at the Henry J. Mills Water Treatment Plant to support replacement of the plant's control system; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA.

Presented by: No presentation requested.

Motion: Award a $7.988 million contract to Legion Contractors Inc. to construct electrical conduits at the Henry J. Mills Water Treatment Plant to support the replacement of the plant's control system.

The following Director provided comments and asked questions

1. Miller

Staff responded to the directors' questions.

Director Bryant made a motion, seconded by Director Dennstedt, to approve item 7-10.

The vote was:

Ayes:	Directors Alvarez, Bryant, Dennstedt, Erdman, Faessel, Fong-Sakai, Jay, Lewitt, McMillan, Miller, Petersen, and Seckel.
Noes:	None
Abstentions:	None
Not voting:	None
Absent:	Directors Crawford and Luna

The motion for Item 7-10 passed by a vote of 12 ayes, 0 noes, 0 abstention, and 2 absent.

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

3. OTHER BOARD ITEMS – ACTION

NONE

4. BOARD INFORMATION ITEMS

NONE

5. COMMITTEE ITEMS

a. Subject: State Water Project Resilience Update

Presented by: Behzad Soltanzadeh, Department of Water Resources, Operations and Maintenance Division Chief

Mr. Soltanzaheh reported on the following:

- SWP Infrastructure Improvements
- Emergency Preparedness Program
- Risk Informed Project Prioritization
- Maintenance Management Strategy
- Forecast Informed Reservoir Operations (FIRO)
- Local Partnerships

The following Directors provided comments or asked questions.

1. Erdman
2. Seckel

Staff responded to the Directors' questions and comments.

b. Subject: Project Labor Agreement Annual Report

Presented by: Doaa Aboul-Hosn, Pr. Engineer - Engineering Services Group/Engineering Planning Section

Ms. Aboul-Hosn reported on the following:

- PLA adopted in October 2022; initial 5-year term expiring in October 2027
- PLA contains 60% goal for employment of local workers and 15% goal for employment of transitional workers
- PLA requires 95% local workers and 21% transitional workers, $40 M to local
- workers and $8 M to transitional workers
- $42 M in wages and benefits paid to craft workers
- Partner spotlight: San Bernardino Community College District
- Continued support for small businesses
- PLA administration costs decreasing

The following Directors provided comments or asked questions.

1. Dick
2. Miller
3. Fong-Sakai

Staff responded to the Directors' questions and comments.

c. Subject: Seismic Resilience Report 2025

Presented by: Mai Hattar, Group Manager, Engineering Services

Ms. Hattar reported on the following:

- The Seismic Resilience Report was posted

d. Subject: Capital Investment Plan Quarterly Report for Period Ending June 2025

Presented by: Jeffrey Nikolas, Sr. Engineer – CIP Office, Engineering Services

Mr. Nikolas reported on the following:

- CIP Quarterly Report
- Funding of Infrastructure Projects with Outside Sources
- Badlands Tunnel Surge Protection Facility
- CIP Budget System Improvements
- Construction Contract Completion & Change Orders
- Performance Metrics – for 4th Quarter of FY 2024/25
- Minor Capital Projects

The following Directors provided comments or asked questions.

1. Fong-Sakai
2. Chair Ortega

Staff responded to the Directors' questions and comments.

6. MANAGEMENT ANNOUNCEMENTS AND HIGHLIGHTS

a. Subject: Engineering Services, Information Technology, and Water System Operations Activities
Presented by: John Bednarski, Assistant General Manager, Water Resources and Technical Resources
Shane Chapman, Assistant General Manager, Operations

Mr. Bednarski reported on the following:

- Engineering Operations & Technology Annual Field Inspection Trip Wednesday, Oct. 29 & Thurs. Oct. 30, 2025

Mr. Chapman reported on the following:

- 2025/26 Annual Shutdown Meeting held on August 20, 2025 – the Shutdown Schedule will be presented to Member Agencies on September 19

7. SUBCOMMITTEE REPORTS AND DISCUSSION

NONE

8. FOLLOW-UP ITEMS

NONE

9. FUTURE AGENDA ITEMS

1. Director Dick would like to know how many people are involved in the apprenticeship program.
2. Director Fong-Sakai would like further analysis on the PLA to see how things have changed as compared to three years prior to the PLA.

10. ADJOURNMENT

The next meeting will be on October 13, 2025.

Meeting adjourned at 10:08 a.m.

Dennis Erdman
Chair

THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

Board Action

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

10/14/2025 Board Meeting

7-1

Subject

Amend the Capital Investment Plan for fiscal years 2024/25 and 2025/26 to include invasive mussel mitigation and control at Metropolitan facilities; and authorize an increase of $500,000 in the operating equipment budget for the current biennium to purchase equipment to control the growth of invasive mussels; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA

Executive Summary

Since the discovery of quagga mussels in the lower Colorado River in 2007, Metropolitan has implemented surveillance and control measures within the Colorado River Aqueduct (CRA) to mitigate potential impacts on critical infrastructure. The detection of adult quagga mussels along the State Water Project (SWP) at Pyramid Lake in 2016 and Castaic Lake in 2021 resulted in the implementation of the ongoing extensive monitoring of adult mussels and veligers (mussel larvae) along the west and east branches of the SWP. In October 2024, golden mussels were discovered in the Port of Stockton and O'Neill Forebay at San Luis Reservoir and quickly spread throughout the Delta and SWP, including a veliger detected in Silverwood Lake in September 2025. The discovery of both quagga and golden mussels in the SWP prompts the need for a program to immediately address control of invasive mussels and a long-term strategy to protect Metropolitan's critical infrastructure exposed to SWP supplies.

This action amends the Capital Investment Plan (CIP) for fiscal years 2024/25 and 2025/26 to include invasive mussel mitigation and control at Metropolitan facilities receiving SWP supplies. It also authorizes an increase of $500,000 in the operation and maintenance budget for fiscal year 2025/26 to purchase operating equipment to control the growth of invasive mussels and veligers. See **Attachment 1** for the Allocation of Funds and **Attachment 2** for the Location Map.

Proposed Action(s)/Recommendation(s) and Options

Staff Recommendation: Option #1

Option #1

a. Amend the Capital Investment Plan for fiscal years 2024/25 and 2025/26 to include invasive mussel mitigation and control at Metropolitan facilities; and

b. Authorize an increase of $500,000 in the operation and maintenance budget for fiscal year 2025/26 to purchase operating equipment to control the growth of invasive mussels.

Fiscal Impact: Expenditure of $1.97 million in capital funds and $500,000 in operation and maintenance funds for fiscal year 2025/2026. All capital costs will be incurred in the current biennium and have been previously appropriated. Adding the project listed above to the CIP is not anticipated to increase CIP expenditures in the current biennium beyond those that the Board has previously appropriated.

Business Analysis: This option will enable the implementation of an invasive mussel mitigation and control initiative designed to protect critical infrastructure in Metropolitan's system and ensure reliable water deliveries to meet member agency and other local customer supply needs.

Option #2

Do not proceed with this project at this time.

Fiscal Impact: None

Business Analysis: Under this option, staff would continue monitoring invasive mussels, coordinating with the Department of Water Resources, and notifying member agencies. Water deliveries could be reduced, or outages experienced, as mussel control operations are performed.

Alternatives Considered

Staff considered incorporating the project into the next biennial CIP budget and deferring operations expenditures until the following fiscal year. However, this option would delay the implementation of the recommended actions to protect Metropolitan facilities from invasive mussels in the SWP. Based on the observed rapid migration of mussels through the SWP and staff experience with the 2007 CRA quagga mussel control program, rapid deployment of mobile operating equipment is critical to better control the growth of invasive mussels and veligers, and early evaluation of mitigation strategies will allow the implementation of potential infrastructure upgrades promptly. Staff determined that the current approach to begin the invasive mussel mitigation and control initiative will reduce the risk of mussels damaging equipment and infrastructure and impacting operational reliability.

Applicable 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

Related Board Action(s)/Future Action(s)

By Minute Item 53596, dated April 9, 2024, the Board appropriated $3,453.2 million for O&M and operating equipment, and other operations costs for fiscal years 2024/25 and 2025/26.

By Minute Item 53598, dated April 9, 2024, the Board appropriated a total of $636.48 million for projects identified in the Capital Investment Plan for fiscal years 2024/2025 and 2025/2026.

California Environmental Quality Act (CEQA)

CEQA determination for Option #1:

The proposed actions are not defined as a project under CEQA because it involves the creation of government funding mechanisms or other government fiscal activities, which do not involve any commitment to any specific project which may result in a potentially significant physical impact on the environment. (State CEQA Guidelines Section 15378(b)(4).)). Metropolitan, as the Lead Agency, will be responsible for complying with the requirements of CEQA and the State CEQA Guidelines for each project that meets the CIP criteria prior to final approval of that project. As preliminary work and design on CIP projects proceed, Metropolitan staff will conduct any necessary CEQA review and prepare the appropriate environmental documentation for consideration and approval by the Board or the General Manager, as appropriate.

CEQA determination for Option #2:

None required

Details and Background

Background

Quagga mussels and zebra mussels infestations can adversely impact aquatic environments, devastate the aquatic ecology of lakes and rivers by altering or destroying fish habitats, and render lakes more susceptible to harmful algae blooms. These mussels can also reproduce prolifically and infest critical infrastructure, including storage, pumping, conveyance, and water treatment facilities.

The first quagga mussel population established in the western United States was discovered in January 2007 at the Las Vegas Boat Harbor in Lake Mead. As quagga mussels began spreading throughout the CRA, Metropolitan established a program to conduct surveillance and to implement mitigation strategies for the control of mussel populations within Metropolitan's raw water conveyance system, which included continuous chlorination at Copper Basin, Lake Mathews and Lake Skinner; periodic cleaning of trash racks and fish screens; desiccation, cleaning and inspections during routine CRA shutdowns; extensive monitoring of veligers; and additional control measures for raw water discharges.

Mussel infestation within California was limited to the CRA until December 2016, when adult quagga mussels were first discovered in the SWP at Pyramid Lake and the Angeles Tunnel. Based on Metropolitan's previous experience with quagga mussel control, extensive monitoring of adult mussels and veligers was applied for the west and east branches of the SWP, in coordination with the Department of Water Resources and member agencies. Since invasive mussels require calcium to reproduce and thrive, and naturally occurring calcium levels in the CRA are approximately two to three times higher than calcium levels in the SWP, the risk of mussel invasion along the SWP had been considered lower than the CRA. However, veligers were consistently detected in Pyramid Lake, Castaic Lake, Foothill Feeder Pressure Control Structure, and the Jensen plant's influent during the last two years. Water leaving Castaic Lake is now considered to be infested with quagga mussels.

California's invasive mussel issue was exacerbated with the first discovery of golden mussels in North America at the Port of Stockton and O'Neill Forebay at San Luis Reservoir in October 2024. Subsequent inspections found golden mussels throughout the Delta and upper SWP. Golden mussels, like quagga and zebra mussels, are invasive and proliferate quickly, but can also adapt and thrive in harsher environments, making them a greater threat. On September 3, 2025, the Department of Water Resources confirmed the presence of a golden mussel veliger in a sample from Silverwood Lake. This finding, verified through DNA sequencing, represents the southernmost detection of golden mussels in the SWP to date.

Leveraging lessons from the 2007 CRA quagga mussel control program, staff have initiated a multi-disciplinary task force to develop a three-phased approach for mussel mitigation and control at Metropolitan facilities receiving SWP supplies. Phase I includes increased monitoring and testing, feasibility studies, and conceptual design of prioritized infrastructure upgrades, vulnerability assessments, and near-term mitigation measures utilizing rapidly deployable portable equipment. Phase I will also involve developing conceptual design for chemical injection or other control measures to control mussel and veliger growth at critical locations, such as Joseph Jensen Water Treatment Plant, Magazine Canyon, and Live Oak Reservoir. Phase II will implement prioritized infrastructure upgrades identified in Phase I of the initiative. Phase III will address long-term needs focused on refining mitigation strategies for district-wide invasive mussel control. Based on the observed rapid migration of mussels through the SWP, staff recommends moving forward with Phase I of SWP invasive mussel mitigation and control at this time.

In April 2024, the Board appropriated funds and authorized the General Manager to initiate or proceed with work on all capital projects identified in the CIP, subject to any limits on the General Manager's authority and CEQA requirements. Board authorization is required to commence work on new projects not originally included in the Board-authorized CIP. This action amends the CIP to include the SWP Invasive Mussel Mitigation and Control project. It is not anticipated that the addition of this project to the CIP will increase CIP expenditures in the current biennium beyond the amount appropriated by the Board. Funds required for work to be performed pursuant to the subject projects after fiscal year 2025/26 will be budgeted within the Capital Investment Plan Appropriation for fiscal years 2026/27 and 2027/28. 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 Additional Facilities and Systems Program.

SWP Invasive Mussel Mitigation and Control – Preliminary Investigations

Planned Phase I activities include: (1) assessment of invasive mussel control measures targeting Metropolitan facilities receiving SWP supplies; (2) pilot and bench-scale testing of proposed control measures; (3) development of conceptual plans for chemical injection or other control measures at critical facilities described above; and (4) development of a programmatic approach for long-term mussel control and a master plan for potential infrastructure upgrades. All activities will be performed by Metropolitan staff.

A total of $1.97 million is allocated for this work. Allocated funds include $1.48 million for field investigations, conceptual design drawings, and technical reports; $420,000 for project management and environmental support; and $70,000 for remaining budget.

Operating Equipment for Invasive Mussel Control – Procurement

New operating equipment is necessary to support surveillance, detection, and control of mussels and larvae along Metropolitan's facilities receiving SWP supplies. Rapid deployment of mobile operating equipment is also essential to pilot proposed mitigation strategies designed to protect Metropolitan's critical infrastructure. The proposed operating equipment includes portable chlorination units, consisting of a trailer-based chemical tank farm provided with sodium hypochlorite tanks, chemical feed pumps and piping, secondary containment, a small electrical generator, and safety equipment including leak detectors, safety showers, and eye-wash stations. This equipment will be stationed at targeted facilities to periodically apply a controlled dosage of chlorine. Additional equipment includes dechlorination units, filtration and inactivation equipment, water quality monitoring equipment (e.g., nets, sampling pumps, sensors), remotely operated vehicles for mussel inspections, and microscopes.

Under Section 5108(b) of Metropolitan's Administrative Code, the Board delegates authority to purchase operating equipment through the budget process. Under Section 8122(g)(2), the General Manager may execute contracts for the purchase of materials, supplies, other consumable items such as fuels, water treatment chemicals, materials for construction projects and other bulk items, and for routine services such as waste disposal and maintenance services, which are generally identified in the budget, regardless of dollar value, provided that sufficient funds are available within the adopted budget for such materials, supplies and routine services.

The adopted budget for the purchase of operating equipment for fiscal year 2025/26 is $10.1 million. This action authorizes an increase of $500,000 in the operating equipment budget for fiscal year 2025/26 for the purchase of equipment to control the spread of invasive mussels at Metropolitan's facilities receiving SWP supplies. Purchase of the chemicals and materials required to support the operating equipment will be executed under Section 8122(g)(2), as they have been generally identified in the budget, and there are sufficient funds available. The requested amount of $500,000 will increase the 2025/26 operating equipment budget from $10.1 million to $10.6 million.

Project Milestone

June 2026 – Complete study of short-term control measures and deployment of operating equipment

9/25/2025
Mai M. Hattar *Date*
Chief Engineer
Engineering Services

9/25/2025
Deven Upadhyay *Date*
General Manager

Attachment 1 – Allocation of Funds

Attachment 2 – Location Map

Ref# es12707437

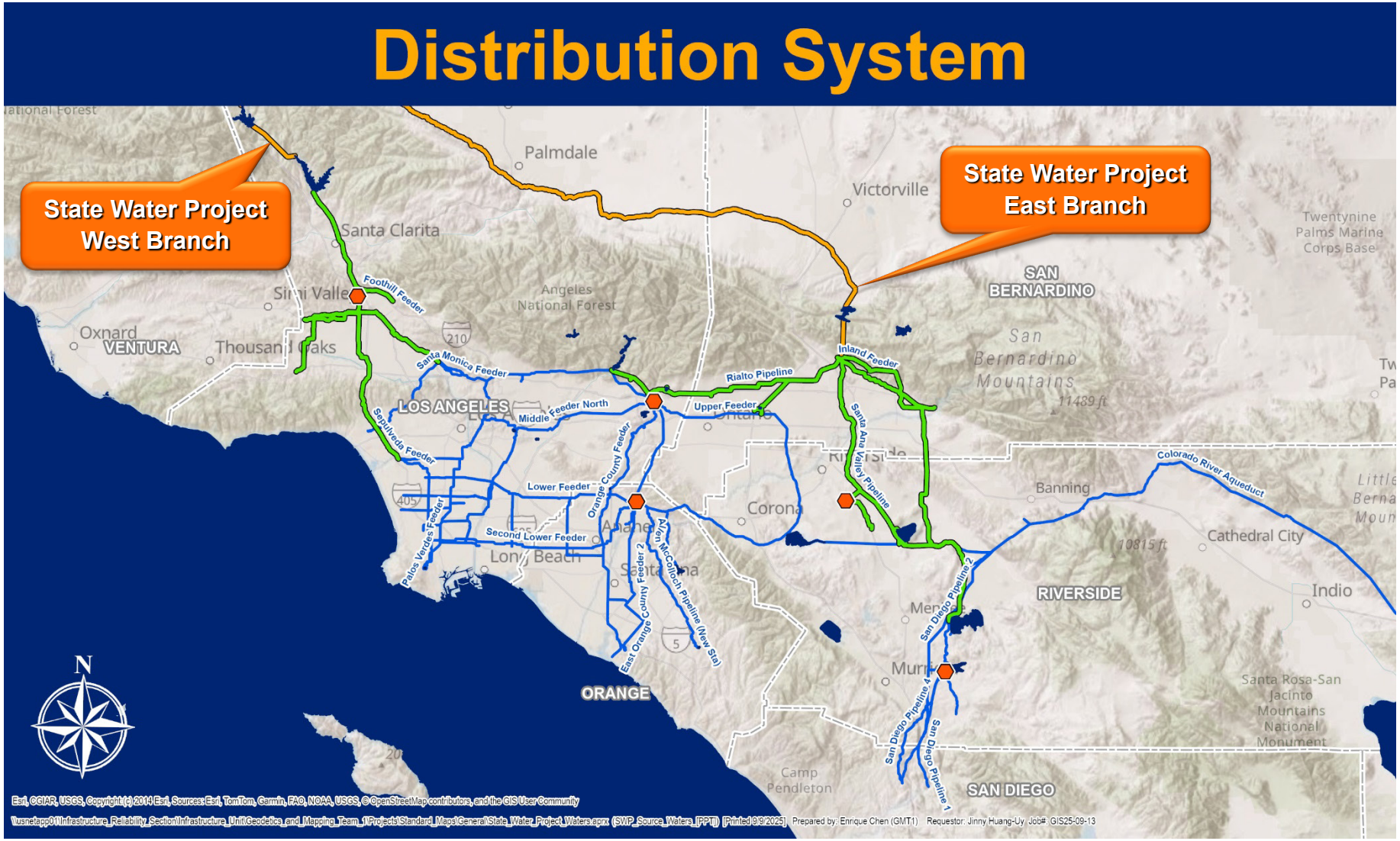
Allocation of Funds for the SWP Invasive Mussel Mitigation and Control

	Current Board Action (Oct. 2025)
Labor	
Studies & Investigations	$ 1,480,000
Final Design	-
Owner Costs (Program mgmt., envir. monitoring)	420,000
Submittals Review & Record Drwgs.	-
Construction Inspection & Support	-
Metropolitan Force Construction	-
Materials & Supplies	-
Incidental Expenses	-
Professional/Technical Services	-
Right-of-Way	-
Equipment Use	-
Contracts	-
Remaining Budget	70,000
Total	**$ 1,970,000**

This is the initial allocation of capital funds to implement invasive mussel mitigation and control at Metropolitan facilities receiving SWP supplies. The total estimated cost to complete the capital project, including the funds allocated for the work described in this action, and future construction costs is anticipated to range from $30 million to $45 million.

This action also authorizes an additional expenditure of $500,000 in O&M funds in fiscal years 2025/26 to purchase operating equipment to control the growth of invasive mussels.

Distribution System



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

10/14/2025 Board Meeting

7-9

Subject

Award a $6,412,126 contract to Houalla Enterprises Ltd. DBA Metro Builders & Engineers Group Ltd. to rehabilitate and improve a chemical feed facility at the Robert B. Diemer Water Treatment Plant; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA

Executive Summary

Metropolitan's treatment plants utilize several chemicals within the treatment process to ensure the safety and reliability of the water delivered, in compliance with state and federal regulations. As chemical feed systems have a limited service life, periodic replacement is necessary. Upgrades to several chemical storage and feed facilities are planned at the Diemer plant, beginning with the fluorosilicic acid storage facility and a multipurpose chemical feed facility.

Fluorosilicic acid is added to the filtered water to efficiently provide fluoridation on a regional scale throughout Metropolitan's service area, consistent with state operating permits. The structure supporting the fluoridation equipment at the Robert B. Diemer Water Treatment Plant (Diemer plant) and its roof were built in 1963 and have been repurposed several times. The storage tanks have been continuously used since 2003, and the feed system has been in operation since 2008. These tanks, originally repurposed from another chemical storage application, have exceeded their service life and are located within a confined containment structure that restricts interior inspections and maintenance. This limitation increases the risk of a significant leak or failure that could disrupt the treatment process and jeopardize safety. The facility is in need of rehabilitation along with necessary improvements to maintain operational reliability and meet Metropolitan's current chemical safety standards. An existing dry polymer feed facility will also be converted into a multipurpose feed facility for fluorosilicic acid during construction, and later will be used to feed other chemicals under a subsequent chemical upgrade project. Design of improvements to the fluorosilicic acid feed facility is complete, and staff recommends moving forward with construction at this time.

This action awards a $6,412,126 construction contract to Houalla Enterprises Ltd. DBA Metro Builders & Engineers Group Ltd. (Metro Builders) to rehabilitate and improve a chemical feed facility at the Diemer plant. This contract will be conducted under the terms of Metropolitan's project labor agreement (PLA).

See **Attachment 1** for the Allocation of Funds, **Attachment 2** for the Abstract of Bids, **Attachment 3** for the Subcontractors for the Low Bidder, and **Attachment 4** for the Location Map.

Proposed Action(s)/Recommendation(s) and Options

Staff Recommendation: Option #1

Option #1

Award a $6,412,126 construction contract to Houalla Enterprises Ltd. DBA Metro Builders & Engineers Group Ltd. to rehabilitate and improve a chemical feed facility at the Robert B. Diemer Water Treatment Plant.

Fiscal Impact: Expenditure of $9.6 million in capital funds. Approximately $2.5 million will be incurred in the current biennium and have been previously authorized. The remaining funds for this action will be accounted for in the next biennium's Capital Investment Plan budget.
Business Analysis: This option will enhance reliability and worker safety at the Diemer plant.

Option #2

Do not proceed with this project at this time.
Fiscal Impact: None
Business Analysis: Under this option, staff would continue to operate the fluorosilicic acid feed facility with limited ability to perform tank inspections and maintenance. This option would increase the risk of a chemical system failure that may impact worker safety and operational reliability. In addition, an extended fluoride feed outage would require public notification.

Alternatives Considered

Staff initially considered implementing a liner for the cross-linked polyethylene storage tanks in lieu of a complete replacement. The liner would be installed inside the tank and welded to fit the existing tank elements. Anchoring below the tank's roof and structural supports would be required and the tank overflow line would be modified. Several chemical tanks with the same service life and similar construction have failed in recent years. After investigating the mechanism of these failures, staff concluded that lining the tank would not substantially extend its life. In addition, the current confined structure and roof would have to be significantly altered to gain access into the tank to perform this work. Lastly, this option does not address long-term operational reliability and recommended safety improvements.

Staff also examined the feasibility of staging construction of the project by prioritizing the replacement of the storage tanks and deferring the safety and maintenance-related facility improvements to a later date. However, the chemical storage tanks and feed systems are located in an enclosed concrete containment with a roof clearance that limits access to the tanks. Replacing the tanks requires removing the feed equipment and major portions of the roof. Staging replacement of individual feed facility components would be ineffective due to the age of the surrounding equipment and limited accessibility within the existing containment.

The selected option will implement Metropolitan's latest chemical safety standards through comprehensive replacement of the chemical storage tanks, facility roof, and chemical feed system components to maintain plant reliability and enhance worker safety.

Applicable 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

Related Board Action(s)/Future Action(s)

By Minute Item 49158, dated August 21, 2012, the Board authorized preliminary design of chemical tank farm improvements at the Diemer plant.

By Minute Item 53598, dated April 9, 2024, the Board appropriated a total of $636.6 million for projects identified in the Capital Investment Plan for Fiscal Years 2024/2025 and 2025/2026.

California Environmental Quality Act (CEQA)

CEQA determination for Option #1:

The proposed action is exempt from CEQA because the action consists of the operation, repair, maintenance, permitting, leasing, licensing, or minor alteration of existing public or private structures, facilities, mechanical equipment, or topographical features involving negligible or no expansion of existing or former use and no possibility of significantly impacting the physical environment. In addition, the proposed action consists of replacement or reconstruction of existing structures and facilities where the new structure will be located on the same site as the structure replaced and will have substantially the same purpose and capacity as the structure replaced. (State CEQA Guidelines Sections 15301 and 15302.).

CEQA determination for Option #2:

None required

Details and Background

Background

The Diemer plant was placed into service in 1963 with an initial capacity of 200 million gallons per day (mgd) and was expanded in 1969 to its present capacity of 520 mgd. It delivers a blend of waters from the Colorado River Aqueduct and State Water Project to Metropolitan's Central Pool and an exclusive Orange County service area. The Diemer plant is located within the City of Yorba Linda.

Metropolitan's five water treatment plants feature multiple unit processes, including oxidation and primary disinfection with ozone, coagulation, flocculation, sedimentation, and filtration. These processes are supported by chemical storage and feed facilities, including storage tanks, feed equipment, instrumentation, and containment systems. The tanks are needed for safe storage of chemicals and to enable continuous flow-paced addition to meet treated water quality goals. Due to the corrosive or scaling tendencies of chemicals used in the water treatment process, chemical feed equipment typically has a shorter service life than other equipment used for water service. As a result, periodic replacement of chemical feed system components is required. Upgrades to the coagulant, liquid polymer, dry polymer, ammonia, and fluorosilicic acid storage and feed facilities at the Diemer plant are planned, starting with the fluorosilicic acid storage facility and a multipurpose chemical feed facility.

Metropolitan adds fluorosilicic acid to its filtered water to efficiently provide fluoridation on a regional scale throughout Metropolitan's service area, consistent with regulations and state operating permits for the treatment plants. The quantity of fluorosilicic acid added is based on the target dosage established by the California Division of Drinking Water. The chemical feed facility consists of two chemical storage tanks, control and feed equipment, a secondary containment structure serving both tanks and feed lines, and a roof structure encompassing all components within the feed facility.

This central chemical feed facility was built in 1963 as part of the original plant construction and has been repurposed for various chemical uses since then. The existing fluorosilicic acid storage tanks were installed in 2003 and were originally used to store sulfuric acid for several years until they were repurposed in 2008 for fluorosilicic acid. After more than 20 years of continuous use, these tanks have also reached the end of their service life and require replacement. A dry polymer tank farm was added in 1991 on the northern side of the facility, and its tanks and equipment have also reached the end of their service life. Staff has developed a strategy to minimize the interruption of chemical feed and rehabilitate both the polymer and the fluorosilicic acid tank farms. The existing dry polymer tank farm will be converted into a multipurpose feed facility to temporarily store and dose fluorosilicic acid during construction. Upon completion of the fluorosilicic acid storage tank replacement, the multipurpose feed facility will later be used to feed other chemicals under a subsequent chemical upgrade project.

The chemical feed facility was designed to comply with the codes, safety, and regulatory requirements of their time. The storage tanks are located within a confined containment structure with a low roof and limited clearance, which prevents staff from accessing the interior of the tanks for inspections and maintenance. This limitation

increases the risk that deterioration could go undetected, potentially resulting in a significant leak or failure that could disrupt the treatment process and jeopardize safety. Metropolitan's latest chemical safety standards enhance worker safety during tank inspections and tank replacement. Consistent with these standards, the original roof structure must be replaced with an upgraded structure to provide additional height and access hatches. Safety enhancements include relocation of all feed and monitoring controls to the perimeter of the facility and integration of elevated platforms over all chemical containment areas. Finally, replacement of feed pumps and control valves is required to enhance chemical dosing accuracy across a wide range of flows.

The final design for the chemical feed facility improvements is complete, and staff recommends awarding a construction contract.

Diemer Chemical Feed Facility Improvements – Construction

The scope of the construction contract includes replacing two fluorosilicic acid storage tanks, refurbishing and replacing chemical feed equipment and piping, improvements to the secondary containment layout, including relocation of controls and addition of safety features, conversion of the polymer tank farm into a multipurpose feed facility which will serve as temporary chemical feed system during construction as described above, and replacement of the roof structure which requires asbestos removal and abatement. Metropolitan force activities include shutdown coordination, programming the Supervisory Control and Data Acquisition (SCADA) system, and equipment start-up and commissioning.

A total of $9.6 million is allocated for this work. In addition to the amount of the construction contract described above, allocated funds for Metropolitan staff include $676,000 for submittal review, responses to requests for information, and preparation of record drawings; $700,000 for Metropolitan force work described above; $820,000 for construction management and inspection; $660,000 for contract administration, environmental monitoring support, PLA administration, and project management; and $331,874 for remaining budget. **Attachment 1** provides the allocation of the required funds.

Award of Construction Contract (Metro Builders)

Specifications No. 2083 for improvements to the fluorosilicic acid feed facility at the Diemer plant was advertised for bids on May 7, 2025. As shown in **Attachment 2**, three bids were received and opened on July 9, 2025. The low bid from Metro Builders in the amount of $6,412,126 complies with the requirements of the specifications. The other bids were $6,466,000 and $7,798,555, while the engineer's estimate for this project was $6.2 million. Metropolitan established a Small Business Enterprise (SBE) participation level of at least 25 percent of the bid amount of this contract. Metro Builders is a certified SBE firm and thus achieves 100 percent participation. The subcontractors for this contract are listed in **Attachment 3**. This contract will be conducted under the terms of Metropolitan's PLA.

This action awards a $6,412,126 contract to Metro Builders to improve a chemical feed facility at the Diemer plant. As mentioned above, Metropolitan staff will perform construction management and inspection. Engineering Services' performance metric target range for the construction management and inspection of projects with construction costs greater than $3 million is 9 to 12 percent. For this project, the performance metric for inspection is 11.5 percent of the total construction cost ($7,112,126), which includes the construction contract ($6,412,126) and Metropolitan force construction ($700,000).

Project Milestone

December 2027 – Completion of construction of the feed facility improvements

9/25/2025
Mai M. Hattar *Date*
Chief Engineer
Engineering Services

9/25/2025
Deven Upadhyay *Date*
General Manager

Attachment 1 – Allocation of Funds

Attachment 2 – Abstract of Bids

Attachment 3 – Subcontractors for Low Bidder

Attachment 4 – Location Map

Ref# es12706657

Allocation of Funds for Diemer Chemical Feed Facility Improvements

	Current Board Action (Oct. 2025)
Labor	
Studies & Investigations	$ -
Final Design	-
Owner Costs (Program mgmt., envir. monitoring)	628,000
Submittals Review & Record Drwgs.	676,000
Construction Inspection & Support	820,000
Metropolitan Force Construction	700,000
Materials & Supplies	-
Incidental Expenses	-
Professional/Technical Services	-
PLA Administration	32,000
Right-of-Way	-
Equipment Use	-
Contracts	-
Houalla Enterprises Ltd.	6,412,126
Remaining Budget	331,874
Total	**$ 9,600,000**

The total amount expended to date for the Diemer plant's chemical feed facility improvements is approximately $2.03 million. The total estimated cost to complete this project, including the amount appropriated to date and funds allocated for the work described in this action, is $11.63 million.

The Metropolitan Water District of Southern California

Abstract of Bids Received on July 9, 2025, at 2:00 P.M.

Specifications No. 2083
Diemer Chemical Feed Facility Improvements

The work consists of replacing two chemical storage tanks, refurbishing and replacing chemical feed equipment and piping, improvements to the secondary containment layout, including relocation of controls and addition of safety features, installation of a temporary chemical feed system for use during construction, removal of asbestos and lead-containing materials, and replacement of the roof structure.

Engineer's estimate: $6,200,000

Bidder and Location	Total	SBE $	SBE %	Met SBE[1]
Houalla Enterprises Ltd. DBA Metro Builders & Engineers Group Ltd. Newport Beach, CA	**$6,412,126**	**$6,412,126**	**100%**	**Yes**
Myers & Sons Construction LLC Sacramento, CA	$6,466,000	-	-	-
J.F. Shea Construction Inc. Walnut, CA	$7,798,555	-	-	-

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

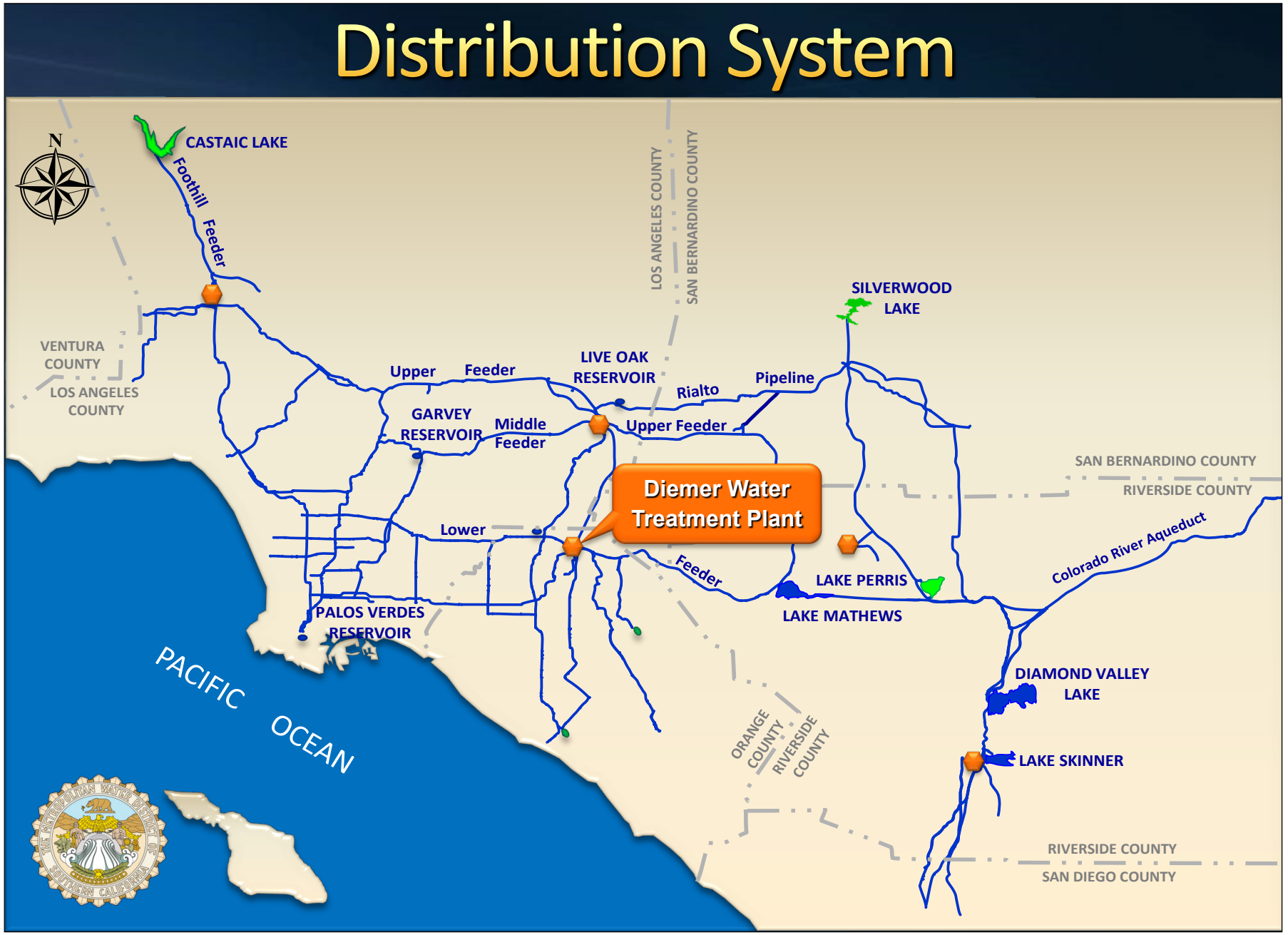
The Metropolitan Water District of Southern California

Subcontractors for Low Bidder

Specifications No. 2083
Diemer Chemical Feed Facility Improvements

Low bidder: Houalla Enterprises Ltd. DBA Metro Builders & Engineers Group Ltd.

Subcontractor	Service Category; Specialty
GGG Demolition Inc. Orange, CA	Demolition
Kretschmar & Smith Inc. Riverside, CA	Masonry
Leed Electric Inc. Santa Fe Springs, CA	Electrical & Instrumentation
Allied Steel Co. Inc. Riverside, CA	Structural Steel & Misc. Metals
Atlas Sheet Metal Inc. Irvine, CA	Sheet Metals
Capital Industrial Inc. Huntington Beach, CA	Coating


Distribution System
N
CASTAIC LAKE
Foothill Feeder
VENTURA COUNTY
LOS ANGELES COUNTY
LOS ANGELES COUNTY
SAN BERNARDINO COUNTY
SILVERWOOD LAKE
Upper Feeder
LIVE OAK RESERVOIR
Rialto Pipeline
GARVEY RESERVOIR
Middle Feeder
Upper Feeder
Diemer Water Treatment Plant
SAN BERNARDINO COUNTY
RIVERSIDE COUNTY
Lower Feeder
Colorado River Aqueduct
LAKE PERRIS
LAKE MATHEWS
PALOS VERDES RESERVOIR
PACIFIC OCEAN
DIAMOND VALLEY LAKE
ORANGE COUNTY
RIVERSIDE COUNTY
LAKE SKINNER
RIVERSIDE COUNTY
SAN DIEGO COUNTY

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

10/14/2025 Board Meeting

8-1

Subject

Appropriate an additional $30 million for projects identified in the Capital Investment Plan for Fiscal Years 2024/25 and 2025/26, increasing the biennial CIP appropriation to $666.48 million; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA

Executive Summary

In April 2024, Metropolitan's Board appropriated $636.48 million for projects identified in the Capital Investment Plan (CIP) for fiscal years (FYs) 2024/25 and 2025/26. An increase in funding for the current biennium would allow Metropolitan to address known vulnerabilities to Metropolitan's conveyance, distribution, and treatment systems by awarding additional construction contracts in the remainder of the current fiscal year.

This action approves and appropriates an increase of $30 million to the CIP appropriation for FYs 2024/25 and 2025/26 for a new biennium amount of $666.48 million. This action is consistent with Metropolitan's Administrative Code, which states that the General Manager must request that the Board appropriate additional CIP funding if total expenditures are expected to exceed the appropriated amount. If approved, work on the additional construction contracts awarded in this biennium will continue into the next biennium. As a result, approximately $950 million to $990 million in CIP funding would be required in the next biennial budget to fund construction contracts ongoing at the start of the next biennium. This is approximately $262 million to $302 million more than the amount currently assumed in the 10-year CIP expenditure plan. Without the increase in funding for the CIP as described in this letter, work on critical infrastructure projects would be deferred until sufficient funding is available in subsequent budgets.

Proposed Action(s)/Recommendation(s) and Options

Staff Recommendation: Option #1

Option #1

Appropriate an additional $30 million for projects identified in the Capital Investment Plan for Fiscal Years 2024/25 and 2025/26, increasing the biennial CIP appropriation to $666.48 million.

Fiscal Impact: This action will increase the CIP appropriation for the FY 2024/25 and FY 2025/26 biennial budget to $666.48 million. However, if some of the invoices are not able to be processed before June 30, 2026, some of the $30 million may be carried over to the FY 2026/27 budget. The additional $30 million for FY 2025/26, if approved, will be funded from unrestricted reserves. While the increased CIP appropriation will not impact rates in the current year, the award of additional construction contracts in FY 2025/26 will add approximately $262 million to the FY 2026/27 and FY 2027/28 biennial budget, which will need to be financed through long-term debt. The resulting annual debt service of about $17 million is expected to increase rates by roughly one percent over the next biennium.

Business Analysis: This option will enable the continued efficient management of the CIP and timely execution of needed refurbishment and replacement (R&R) projects.

Option #2

Do not increase the budget for the Capital Investment Plan for FYs 2024/25 and 2025/26 at this time.
Fiscal Impact: None
Business Analysis: Under this option, staff would defer contractor awards until the next fiscal year begins in July 2026. This effectively reduces the amount of new work that can be conducted in the current biennium and defers needed R&R projects increasing the risk of unplanned maintenance.

Alternatives Considered

Staff initially sought to identify opportunities to reduce the CIP expenditures and minimize any fiscal impact by modifying project scopes or deferring projects. However, continuing to defer refurbishment projects increases safety risks and the frequency of failures, potentially disrupting essential water deliveries. The recommended alternative to increase the biennium budget by approximately five percent to address conveyance, distribution, and treatment vulnerabilities will protect Metropolitan's assets and enhance delivery reliability to member agencies.

Applicable Policy

Metropolitan Water District Administrative Code Section 2431: Engineering and Operations Committee Duties and Functions

Metropolitan Water District Administrative Code Section 5108: Appropriations

Metropolitan Water District Administrative Code Section 11104: Delegation of Responsibilities

Administrative Code Section 5108: Appropriations

Related Board Action(s)/Future Action(s)

By Minute Item 53598, dated April 9, 2024, the Board appropriated a total of $636.48 million for projects identified in the Capital Investment Plan for Fiscal Years 2024/2025 and 2025/2026.

By Minute Item 54133, dated June 24, 2025, Capital Investment Plan Process (Information Item).

Committee Item dated August 18, 2025, Increase of funding for the Capital Investment Plan for Fiscal Years 2024/25 and 2025/26 (Information Item).

California Environmental Quality Act (CEQA)

CEQA determination for Option #1:

The proposed actions are not defined as a project under CEQA because they involve the creation of government funding mechanisms or other government fiscal activities, which do not involve any commitment to any specific project, which may result in a potentially significant physical impact on the environment (State CEQA Guidelines Section 15378(b)(4)).

Metropolitan, as the Lead Agency, will be responsible for complying with the requirements of CEQA and the State CEQA Guidelines for each project that meets the CIP criteria prior to final approval of that project. As preliminary work and design on CIP projects proceed, Metropolitan staff will conduct any necessary CEQA review and prepare the appropriate environmental documentation for consideration and approval by the Board or the General Manager, as appropriate.

CEQA determination for Option #2:

None required

Details and Background

Background

As part of Metropolitan's budget process, staff develop a recommended two-year budget expenditure plan for the CIP. At the time the two-year budget is adopted by the Board, projections for the 10-year CIP expenditure plan

are also established. The budget and expenditure plan for the CIP are reflected in the CIP Appendix and included in Metropolitan's overall two-year budget and associated budget documents. Following approval of the biennial budget, the Board also takes action to appropriate the funds necessary to fund the CIP in the upcoming biennium. In addition, the Board authorizes the General Manager to initiate or proceed with work on capital projects identified in the CIP Appendix, subject to the requirements of CEQA and the limits of the General Manager's authority. This approach to appropriating funds for the CIP and authorizing the General Manager to conduct work has been in effect since October 2018. Since then, staff have utilized the streamlined approach to efficiently perform work on the CIP, resulting in a higher percentage of planned CIP work being conducted in a biennium compared to the prior authorization practices.

In June and August 2025, staff presented information and conducted a workshop with the Board on the need to increase current and future CIP appropriations. These items provided a broad overview of Metropolitan's aging water infrastructure systems and the projects competing for CIP funds. Approximately 80 percent of the 500 projects in the CIP aim to mitigate an undesirably high risk to reliable water delivery or safety. Staff also described how, after a severe state-wide drought and resulting low allocation of State Water Project (SWP) supplies, Metropolitan fast-tracked a series of projects in 2021 to make supply availability improvements for service areas that depend exclusively on water deliveries from the SWP. In addition, staff described how the rapid deterioration of infrastructure has required shifting of CIP funding to address urgent projects, including the Urgent Allen McColloch Pipeline Prestressed Concrete Cylinder Pipe Rehabilitation and Garvey Reservoir Improvements. These combined project interests have resulted in the deferment of rehabilitation projects, which increases the risk of failures that could potentially disrupt essential water delivery services.

Before the 2020/2022 budget cycle, Metropolitan's CIP budget had been held constant at approximately $500 million per biennium for eight years or four budget cycles. In the FY 2022/23 and 2023/24 biennium, CIP appropriations increased to $625 million to address aging infrastructure. In the current FY 2024/25 and 2025/26 budget, the CIP was increased by 1.8 percent to $636.48 million to address inflation.

The CIP includes a mix of projects that support Metropolitan's strategic plan and financial targets. However, under current CIP funding levels, significant inflationary trends, supply chain disruptions, and the significant backlog of critical infrastructure work needing refurbishment place at risk Metropolitan's commitment to identify, assess, and reduce potential vulnerabilities to Metropolitan's system, operations, and infrastructure.

Proposed Capital Investment Plan Appropriation Increase for the Current Biennium

An increase in capital expenditures is required to adequately implement needed CIP projects that will ultimately reduce Metropolitan's risk exposure and ensure the reliability of its aging critical systems. Staff have identified several industry-wide metrics from the American Water Works Association and other asset management organizations to determine the appropriate level of increased CIP funding. These metrics indicate that Metropolitan should be investing in R&R projects related to its existing infrastructure, at a minimum of 1-to-1.1 percent of its asset replacement value, which is estimated at approximately $46 billion. This equates to a biennial CIP budget ranging from $920 million to $1.4 billion. Recently, Metropolitan's capital investments have been well below these ranges. The lower level of spending results in a lack of progress on key R&R projects which can result in reduced operational flexibility, increased costs due to urgent repairs, and an increased reliance on field staff to perform unplanned corrective maintenance. Increases in the CIP appropriation should also include the funds needed to advance projects such as drought-resiliency and others that support Metropolitan's strategic priorities.

Per Metropolitan's Administrative Code Section 5108(e), "If, during the biennial budget period, the total Capital Investment Plan expenditures are expected to exceed the appropriated amount, the General Manager shall request that the Board appropriate additional funding and submit a report supporting said request."

This action appropriates an additional $30 million for projects identified in the CIP for FYs 2024/25 and 2025/26, increasing the CIP appropriation to $666.48 million. With this level of funding, staff can award contracts and initiate work on a greater number of the critical refurbishment and rehabilitation projects highlighted in **Attachment 1**, Potential Key Contract Awards for Fiscal Year 2025/2026. Without a CIP increase, most of these projects will be deferred until they can be accommodated within future approved biennial budgets.

An increase in the current biennium and subsequent contract awards will impact the next biennium's CIP budget, currently estimated to be $688 million. Most of the costs incurred under contracts awarded in the second year of this biennium will be spent in the upcoming years. As such, staff estimates that the anticipated recommended FYs 2026/27 and 2027/28 budget will be approximately $950 million to $990 million. The increased costs will need to be financed through long-term debt.

10/6/2025
Mai M. Hattar *Date*
Chief Engineer
Engineering Services

10/6/2025
Deven Upadhyay *Date*
General Manager

Attachment 1 – Potential Key Contract Awards for Fiscal Year 2025/2026

Ref# es12702050

The Metropolitan Water District of Southern California

Potential Key Contract Awards for Fiscal Year 2025/2026

Contracts under $10 million	Contracts $10 to $70 million	Contracts over $70 million
Cabazon Radial Gate Facility Rehabilitation	Copper Basin Discharge Valve Replacement	Garvey Reservoir Rehabilitation
Diemer Chemical Feed Facility Improvements	CRA Pumping Plants Sump Piping Rehabilitation	Sepulveda PCCP Rehabilitation – Reach 2
San Diego Canal Radial Gates Replacement	Eagle & Hinds Pumping Plants Utilities Replacement	Sepulveda Feeder Pump Stations
	Foothill Pump Station/Inland Feeder Intertie	
	Gene & Iron. Mountain Utilities Replacement	
	Jensen Security Upgrades	
	Lakeview Pipeline Stage 2 Rehabilitation	
	Weymouth Administration Building Seismic Upgrade	

Engineering Services Group

- **Engineering Services Group Monthly Activities Report for September 2025**

Summary

This monthly report provides highlights and a summary of Engineering Services Group activities for September 2025 in the following key areas:

- Colorado River Aqueduct (CRA) Program
- Dams and Reservoirs Program
- Distribution System Program
- Additional Facilities and Systems Program
- Prestressed Concrete Cylinder Pipe (PCCP) Program
- Water Treatment Plants Program
- Pure Water Southern California
- Drought Mitigation – State Water Project Dependent Areas
- Value Engineering Program
- Integrated Strategy for Infrastructure Reliability Workshop

Purpose

Informational

Attachments

Detailed Report – Engineering Services Group's Monthly Activities for September 2025

Date of Report: October 2025

Engineering Services
Monthly Activities for September 2025

Highlights

In the month of September, Engineering Services embarked on the following major actions in support of the General Manager's business plan for Fiscal Year 2025/2026:

Goal: Follow Through on Business Model Refinement Recommendations
Outcome: Initiate an Integrated Strategy for Infrastructure Reliability (ISIR)
• Workshop 3, with member agency managers, was conducted on September 19, 2025. • Phase 2 of the Regional East-West Conveyance Study was initiated in August 2025, and multiple meetings with the consultant were conducted to develop a methodology to refine alignments for the raw water pipeline. • Phase 3 of the Surface Water Storage Study was initiated in early September 2025.
Goal: Complete Environmental Impact Report (EIR) and Planning for Board to Consider Pure Water Southern California
Outcome: Complete EIR analyses and public process
• Completed 60-day public review period for the draft EIR. Currently responding to comments received from agencies, organizations, and individuals. Certification of EIR in early 2026 is on track.
Outcome: Update program cost and staging approach
• A board workshop was conducted on September 23, 2025, to provide an update on program costs and staging approaches.

Goal: Achieve Equitable Supply Reliability for State Water Project Dependent Areas
Outcome: Execute board-approved supply reliability projects
• Construction of four projects to enhance supply reliability to State Water-dependent areas continues. This includes three eastern region projects, which are scheduled to be completed in late 2025/early 2026.
Outcome: Advance Foothill Pump Station/Inland Feeder Intertie Project
• Final design is anticipated to be complete by December 2025. Environmental permitting is ongoing with anticipated completion by February 2026.

In support of the General Manager's Business Plan goal of providing organizational stability and delivering operational excellence, Engineering Services manages and executes projects within the adopted CIP to maintain infrastructure resiliency, ensure regulatory compliance, enhance sustainability, and provide flexibility in system operations to address uncertain water supply conditions. In addition, Engineering Services provides technical services to enhance reliable system operation and real property planning, valuation, acquisition, and disposition services to protect Metropolitan's assets. Engineering Services empowers our staff and partners with our business partners and the communities we serve to accomplish Metropolitan's mission.

Recent key activities on CIP programs and other key engineering functions are described below.

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

Colorado River Aqueduct (CRA) Program

The CRA program includes CIP projects to replace or refurbish facilities and components of the CRA system to reliably convey water from the Colorado River to Southern California.

- Gene Communications Upgrade — This project will construct a new fiber optic cable line from Parker Dam to Gene Pumping Plant. The new line is predominantly located within Metropolitan fee property on new power poles with a small underground portion of the alignment within the Bureau of Reclamation's property. Construction is complete, and internet service via the fiber optic cable is now fully operational.
- Black Metal Mountain Electrical Upgrades — This project replaces the existing single-phase 2.4 kV power line delivering power to the Black Metal Mountain communication site with a more robust

three-phase power line rated for 4.16 kV usage. The project will also enhance the main access road to the communications sites. Final design is 70 percent complete and scheduled to be complete by January 2026.

- Erosion Control Improvements — This project will install erosion control features along the CRA conveyance system at 23 conduit locations that are vulnerable to major erosion damage during storm events. Final design is 10 percent complete and is scheduled to be complete by September 2027.
- Hinds Discharge Valve Platforms — This project will replace corroded steel members, such as ladders and floor grates, at all nine discharge valve pits at the Hinds Pumping Plant. Final design is five percent complete and is scheduled to be complete by December 2026.
- Main Pump Access Improvements — This project will construct new platform systems at each pumping plant and implement additional access improvements to enhance the efficiency of maintenance activities on the lower motor guide-bearing assemblies. Preliminary design is 20 percent complete and is scheduled to be complete by December 2025.

Dams and Reservoirs Program

The Dams and Reservoirs Program includes CIP projects to upgrade or refurbish Metropolitan's dams, reservoirs, and appurtenant facilities to reliably meet water storage needs and regulatory compliance.

- Copper Basin Discharge Valve Replacement — This project installs a new 54-inch fixed cone valve and actuator at the base of the dam, refurbishes a slide gate and the existing valve house, and upgrades all associated electrical systems and access ladders at the Copper Basin Reservoir. This project will also include the replacement of access ladders at the Gene Wash Dam. Final design is complete and acquisition of environmental permits is in progress.
- Garvey Reservoir Rehabilitation Stage 1 — This project will replace the aging reservoir floating cover and liner; strengthen the structure of the reservoir outlet tower to reduce the risk of damage following a major seismic event; and upgrade the reservoir's rainwater collection, pumping, and subdrain systems. Final design is complete, and the project was advertised for bids in August 2025. Award of a construction contract is planned for December 2025.
- Lake Mathews Pressure Control Structure (PCS) and Electrical System Upgrades — This project will replace the aging Lake Mathews discharge facility and electrical system. The project includes the construction of a new PCS with a bypass pipeline alongside the existing forebay, a new chlorination facility, and upgrading the electrical system to accommodate future power needs. This project utilizes a progressive design-build project delivery method. An RFQ for Phase 1 design-build services was released on September 18, 2025, and the Phase 1 contract is expected to be awarded in spring 2026. The project is anticipated to be completed by 2031.

Distribution System Program

The Distribution System Program includes CIP projects to replace, upgrade, or refurbish existing facilities within Metropolitan's distribution system, including PCSs, hydroelectric power plants, and pipelines, to reliably meet water demands.

- San Gabriel Tower Gate Frame Removal — This project will remove existing gate frames and locate the existing steel reinforcing bars at the San Gabriel Tower. The project will also perform a 3D survey of the tower. The contractor is preparing submittals, and the construction is scheduled to start in January 2026.
- San Jacinto Diversion Structure Gate Replacement — This project will replace three cast-iron slide gates at the San Jacinto Diversion Structure with stainless steel slide gates designed for throttling. The three new slide gates were procured under a separate procurement contract and were delivered in June 2025 with electric actuators scheduled for delivery in November 2025. The construction contract was awarded in August 2025, and on-site construction is scheduled for January 2026.
- Skinner East Bypass Gates — This project will replace three existing cast-iron slide gates at the East Lake Skinner Bypass inlet channel. The existing gates are heavily corroded and bind during lifting operations. The existing gates will be replaced with three stainless steel gate assemblies and new actuators. The new gates have been procured and are being stored onsite at the Skinner Plant. The new actuators are scheduled for delivery in December 2025. Final design for the contract package that includes installation of the new gates is starting this month and is scheduled to be completed in May 2026.

Additional Facilities and Systems Program

The Additional Facilities and Systems Program includes CIP projects to refurbish, replace, upgrade, or provide new facilities and systems that support Metropolitan's business and district-wide operations.

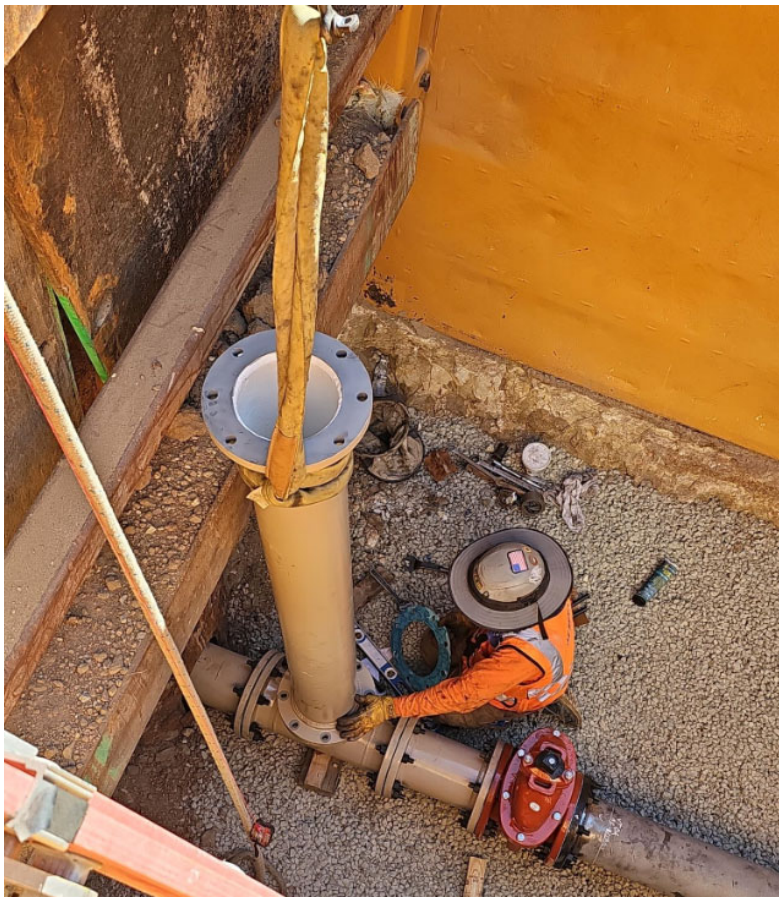
- Diamond Valley Lake (DVL) Wave Attenuator Replacement — This project adds a second attenuator to the existing wave attenuating system at the East Marina in Diamond Valley Lake. As part of the improvements, the existing floating wave attenuator (FWA) will be relocated to a new location, and the new attenuator will be installed in its place. The contractor completed concrete rehabilitation of the existing FWA; fabrication of the new FWA modules; assembly and fit-up of the new FWA modules; and continued installation and hydraulic tensioning of the tie-rods for the new FWA. Construction is 93 percent complete and is scheduled to be complete in October 2025.
- Lake Mathews Tank Replacement — This project will procure and install a new 6,000-gallon above-ground diesel fuel tank at Lake Mathews. A fuel dispensing system will also be installed, as well as control systems for the fuel tank, electrical connections, and employee safety features. Final design is complete, and the project will be re-advertised for bids in September 2025. A board action for award of a construction contract is scheduled for December 2025.
- CRA Kitchens and Lodging — This project will replace the existing kitchens and lodges at Eagle and Iron Mountain pumping plants and construct a second lodge at the Gene Pumping Plant. Conceptual design was completed in September 2025.

Diamond Valley Lake (DVL) Wave Attenuator Replacement —
Installation of Winches on New Floating Wave Attenuator

Prestressed Concrete Cylinder Pipe (PCCP) Program

The PCCP Program includes CIP projects to refurbish or upgrade Metropolitan's PCCP feeders to maintain water deliveries without unplanned shutdowns.

- Second Lower Feeder PCCP Rehabilitation Reach 3B — This project installs 3.7 miles of steel lining and three conical plug valves along a portion of the Second Lower Feeder that traverses the cities of Lomita, Los Angeles, and Torrance. The contract completed the installation of the three conical plug valves and the installation of steel lining in April 2025. The electrical and SCADA work at the valve vaults and site restoration is complete. The contractor continues warranty work and punch list items on Western Avenue and continues with the modifications to the Palos Verdes Reservoir Bypass Line. Construction is 99 percent complete and is scheduled to be complete in October 2025.
- Sepulveda Feeder PCCP Rehabilitation Reach 2 — This project installs steel lining along 3.8 miles of PCCP through several cities, including the cities of Torrance and Los Angeles. Final design is complete and a board action for a contract award is planned for December 2025. The project is expected to be completed by mid-2027.
- Foothill Feeder Acoustic Fiber Optics (AFO) Installation — This project will install an acoustic fiber optic monitoring system within the 201-inch diameter Foothill Feeder to allow continuous monitoring of the 6.5 miles of PCCP portions, minimizing the need for expensive, prolonged shutdowns. Final design is approximately 50 percent complete and is planned for completion by March 2026. The project team is evaluating options for dewatering the pipeline now that mussels have been discovered in the West Branch of the State Water Project. Installation of the AFO system is currently scheduled during the Foothill Feeder shutdown in January 2027.



Second Lower Feeder PCCP Rehabilitation Reach 3B — Installing Mechanical Piping for Helopod Water Source

Water Treatment Plants Program

The Water Treatment Plants Program includes CIP projects to replace or refurbish facilities and components at Metropolitan's five water treatment plants to continue to reliably meet treated water demands.

- Weymouth Basins 5–8 and Filter Building No. 2 Rehabilitation — This project rehabilitates major mechanical and structural components of Basins 5–8 and Filter Building No. 2 at the Weymouth plant, including the flocculation/sedimentation equipment, sludge pumps, baffle boards, walls, launders, and outlet drop gates. The project also includes seismic upgrades of basin walls and inlet channel, hazardous material abatement, and replacement of inlet gates in Basins 1-4 and filter valves and actuators in Filter Building No. 2. Rehabilitation work and equipment testing for the basins is complete. The contractor continued the replacement of filter valves and actuators in Filter Building No. 2. Construction is approximately 98 percent complete and is scheduled to be complete in December 2025.
- Weymouth Administration Building Upgrades — This project upgrades the Weymouth Administration Building to withstand a significant earthquake. The planned upgrades include structural strengthening consistent with current seismic standards for essential facilities, accessibility, and fire/life safety improvements, architectural modifications near the areas of structural upgrades, and improvements

associated with the preservation of historic architectural features. Final design is complete, and a board action for a contract award is planned for January 2026.

- Diemer Filter Rehabilitation — This project rehabilitates the 48 filters at the Diemer plant to enhance filter performance, minimize filter media loss, and rehabilitate or replace aging components. Planned upgrades include replacing filter media, filter valve actuators, and instruments; modifying the filter upstream influent weir and surface wash laterals; and improving the coal grit removal facilities for the east and west sides of the plant. Final design is approximately 99 percent complete and is scheduled to be complete in December 2025.
- Diemer Chemical Feed Facility Improvements — This project rehabilitates the Diemer plant's chemical feed facility to mantain operational reliability, meet Metropolitan's current chemical safety standards, and enhance worker safety. Planned improvements include replacing the two existing fluorosilicic acid storage tanks which have reached the end of their service life; refurbishing and replacing chemical feed equipment and piping; improving the secondary containment layout, inlcuding relocation of controls and addition of safety features; conversion of the dry polymer tank farm into a multipurpose feed facility to serve as backup for other compatible chemicals as needed; and replacement of the facility roof structure. Final design is complete, and a board action for award of a construction contract is planned for October 2025.
- Water Quality Lab Building Upgrades — This project upgrades the Michael J. McGuire Water Quality Laboratory in La Verne to increase its seismic resiliency and to efficiently address new and evolving water quality issues and regulations. Planned improvements include strengthening of the existing structure to meet current seismic criteria for essential facilities; building expansion and functional layout improvements; replacement of specialized laboratory equipment; and implementation of technology upgrades to support current and future water quality regulations. Final design is approximately five percent complete and is scheduled to be complete in spring 2028.

Weymouth Basins 5–8 and Filter Building No. 2 Rehabilitation — Inspecting Valve Display Installation Near Front Entrance by Moreno Avenue

Adapt to changing climate and water resources

Pure Water Southern California

Pure Water Southern California (Pure Water) is a large regional recycled water program that will provide a new local source of safe and reliable drinking water for Southern California. Pure Water currently focuses on five areas: program management, environmental planning, advanced water purification facility (AWPF) planning, demonstration testing, and preliminary design of initial pipeline reaches. Pure Water will produce up to 150 million gallons per day of purified water from the AWPF in Carson for indirect potable reuse (IPR) and direct potable reuse (DPR) applications.

- Program Management — Program management activities include project controls, scheduling, budget development, risk management, coordination with program partners and stakeholders, grants and funding, and preparation of various plans and studies. The Pure Water Program Management team was engaged in the following activities during this reporting period:
    - Completed and presented updated program cost estimate updates, schedules, and cashflow projections to the Board in September.
    - Continued coordination and grant reporting efforts with the United States Bureau of Reclamation (USBR) for the $125,472,855 Large-Scale Water Recycling Program grant. Metropolitan has received approximately $17.4 million to date. Additional reimbursements are anticipated in October.
    - Completed the CAMP4W preliminary assessments for 45-, 75-, and 150-mgd scenarios.
    - Completed the SB149 draft application for streamlining potential CEQA litigation, and continued coordination with the state to meet application requirements.

  Met with the San Gabriel Valley Municipal Water District for use of their Azusa pipeline to convey water to the Weymouth Plant for DPR, and their potential investment in Pure Water.
- Environmental Planning — The draft EIR was published in May 2025, and the 60-day public review period has closed. Staff is reviewing comments received and preparing responses. A Board action to consider certification of the final EIR is anticipated in January 2026.
- Advanced Water Purification Facility — The AWPF will purify treated wastewater from the Los Angeles Sanitation Districts' (LACSD) A.K. Warren Water Resource Facility using membrane bioreactors (MBRs), reverse osmosis (RO), and ultraviolet/advanced oxidation. With its expertise in biological wastewater treatment, LACSD will be responsible for implementing the AWPF pretreatment, including the MBR facilities. A final draft of conceptual facilities report has been prepared. This document records key assumptions of AWPF components and would be used for the upcoming RFQs for the progressive design-build contracts to design and construct the full-scale AWPF.
- Demonstration Testing — Operational improvements have been made at the Napolitano Innovation Center for the continued testing of the IPR processes, including the installation of a RO concentrate

pilot testing system and more MBR cassettes. Planning of pilot-scale and demonstration-scale testing of DPR processes is in progress. Key testing equipment will be procured in the coming months to facilitate the design of the DPR testing facility.

- Preliminary Design of Initial Pipeline Reaches —The PWSC conveyance system consists of the backbone pipeline that extends 39 miles from the AWPF, repurposing an existing pipeline owned by the San Gabriel Valley Municipal Water District, and constructing a new DPR pipeline to convey water from the backbone eastward for raw water augmentation at Metropolitan's Weymouth plant. Conceptual Design Report for the conveyance system has been completed.
    - The utility and geotechnical field investigations for Reaches 1 and 2 are in progress, with preliminary design anticipated to be completed by the year's end.

Drought Mitigation — State Water Project Dependent Areas

The Drought Mitigation—State Water Project Dependent Areas Program includes CIP projects to replace, refurbish, upgrade, or construct new facilities, which are identified to mitigate the vulnerability experienced by specific member agencies that are affected during shortages of State Water Project supplies.

- Wadsworth Bypass Pipeline — This project installs a bypass pipeline and an isolation valve to interconnect the Wadsworth Pumping Plant with the Eastside Pipeline. This project is one of the four Rialto Pipeline service area supply reliability improvement projects. The contractor is currently installing owner-furnished control components. Construction is 99 percent complete and is scheduled to be complete in November 2025.
- Inland Feeder Rialto Pipeline Intertie — This project installs an interconnection pipeline and isolation valve structure between the Inland Feeder and Rialto Pipeline so that water can be delivered from DVL to the Rialto Pipeline. This project is one of the four Rialto Pipeline service area supply reliability improvement projects. The contractor has completed the SCADA and power duct bank and is currently performing electrical work in preparation for the MCC electrical equipment delivery in early 2026. Construction is 90 percent complete and is scheduled to be complete in July 2026.
- Inland Feeder-Badlands Tunnel Surge Protection — This project installs a new open-to-atmosphere surge tank at the south portal of the Badlands Tunnel, which will protect the Inland Feeder from hydraulic transients when pumping water from Diamond Valley Lake to the Rialto Pipeline. This project is one of the four Rialto Pipeline service area supply reliability improvement projects. The contractor is currently performing final electrical work and site grading. Construction is 98 percent complete and is scheduled to be complete in October 2025.
- Foothill Pump Station Intertie and Butterfly Valve Procurement — This project will connect Metropolitan's Inland Feeder to San Bernardino Valley Municipal Water District's Foothill Pump Station. The project is one of four Rialto Pipeline service area supply reliability improvement projects. Foothill Pump Station will provide the hydraulic lift needed for direct water delivery from Diamond Valley Lake to the Rialto Pipeline. The project will install supply and discharge bypass pipelines, isolation valves and their vault, and a surge protection system. The project requires permits from CA Fish and Wildlife and US Fish and Wildlife (USFWS) to address impacts to endangered species found at the project site. The project received a $5M USBR grant, and USBR is assisting Metropolitan

with permit consultation with USFWS. USFWS is expected to issue a Biological Opinion by December 2025. Final design is currently in progress and is anticipated to be completed by November 2025.

- Sepulveda Feeder Pump Stations — This project installs new pump stations at the existing Venice and Sepulveda Canyon pressure control facilities, providing the ability to reverse flow in the Sepulveda Feeder and deliver 30 cubic feet per second from the Central Pool to portions of the western State Water Project exclusive area. This project plans to utilize the progressive design-build (PDB) project delivery method. The Board authorized an amendment to the PDB agreement in July 2025 to initiate construction for the Venice Pump Station. The PDB entity will mobilize onsite in October to begin construction of the Venice Pump Station.

Inland Feeder Rialto Pipeline Intertie — Electrical Duct Bank Encasement Looking North

Inland Feeder-Badlands Tunnel Surge Protection – Spiral Staircase Door Installation

Sustain Metropolitan's mission with a strengthened business model

Value Engineering Program

Engineering Services conducts a Value Engineering (VE) program to review capital projects and identify opportunities and alternatives to enhance project performance, optimize funding for CIP projects, and demonstrate responsible use of public funds. The objective of the VE program is to improve the overall value of CIP projects by applying an industry-accepted assessment methodology to examine a project's function, design, equipment, material selections, and contracting approach. This comprehensive assessment is conducted at strategic stages in a project's life cycle.

- CRA Pumping Plant Delivery Line Rehabilitation – Gene Pumping Plant
  In September, Engineering conducted a VE workshop for the CRA Pumping Plant Delivery Line Rehabilitation project at Gene Pumping Plant. The project aims to extend the service life of the delivery lines and enhance the reliability of the CRA system. The scope includes replacement and rehabilitation of delivery line linings, replacement of all delivery line expansion joints, internal sealing of rivets in Delivery Line No. 1, construction of a flow meter platform, relining of the surge chamber relief lines, and repairs to the transition structures at the headgate. The workshop featured a site visit to Gene Pumping Plant and involved staff from Design, Construction Management, Construction Contracts, Operations, and Environmental Planning, along with consultant Subject Matter Experts. Using the value methodology, the team reviewed the project, generated and evaluated alternatives, and developed high-value recommendations for the project team's consideration.

Partner with interested parties and the communities we serve

Integrated Strategy for Infrastructure Reliability Workshop

Engineering held another workshop with the Member Agencies on the Integrated Strategy for Infrastructure Reliability (ISIR) this month. This is the workshop series to identify infrastructure improvements that increase resilience, reduce vulnerabilities, and ensure reliable water services for all member agencies. Workshop #3 included discussions on infrastructure development policies and level of service elements, equitable supply reliability projects update, System Flexibility Study methodology, Operational System Overview Study approach, and Spatial Storage Assessment components. It also addressed coordination with CAMP4W processes. Overall, the team received valuable feedback through the exchange of ideas, candid discussions, and interactive collaboration with Member Agency participants.

ISIR Workshop #3

Information Technology Group

- **Information Technology Group Monthly Activities for September 2025**

Summary

This report provides a summary of activities related to the Information Technology Group for September 2025.

Purpose

Informational

Detailed Report

► Strategic Priority #3: ADAPT to changing climate and water resources

Objective 2: Implementation of Major Communication Systems Upgrades to Improve Operational Resiliency

Metropolitan's Desert region microwave network consists of 24 sites with 62 microwave radios. The Desert region requires high-capacity communication links that are carrier-grade to provide reliable data, voice, and video transmission. The existing microwave radios are over 12 years old and approaching their end of useful service life. In addition, the existing microwave radios do not provide carrier-grade transmission and have reliability issues, causing intermittent network communication failures. The design of the new microwave system included an assessment to determine replacement radios, antennas, and waveguides, and the licensing of new Federal Communications Commission frequencies to provide a carrier-grade transmission.

The Desert Microwave Upgrade Project is currently underway and provides oversight of full deployment, vendor installation, final acceptance tests, and cutover transition plans. These activities are considered phase 1, with phase 2 reaching facilities in the western portion of Metropolitan's service area.

Recently, the Desert Microwave Upgrade Project cut over the Black Metal to the Gene Camp path. This activity involved the installation, testing, and commissioning of radio frequency stations at both the Black Metal Mountain site and the Gene Camp site. The antennas and waveguides on both towers at both sites were replaced. The results were documented and were acceptable, and all communication circuits were reestablished within specification.

While construction is still underway for phase 1, the project team is initiating the design phase for the Western Region.

Date of Report: 10/14/2025

Operations Groups

- **October Operations Groups Monthly Activities Report**

Summary

This monthly report for the Operations Groups provides updates to the General Manager's Business Plan and a summary of activities for September 2025 in the following key areas:

- Enhance Workforce Safety and Security
- Manage Business Operations, Budget, and Staffing
- Develop New Solutions to Enhance Operational and Business Processes
- Ensure Resilient and Reliable Operations
- Advance Pure Water Southern California
- Protect Source Waters
- Optimize Water Treatment and Distribution Operations
- Optimize Maintenance and Asset Management
- Support Capital Project Development and Implementation
- Ensure Power and Environmental Regulatory Compliance
- Engage in Legislative and Regulatory Processes
- Advance Education and Outreach Initiatives
- Engage with Member Agencies and Other Stakeholders on Technical Matters

Purpose

Informational by the Operations Groups on a summary of key activities and updates for the month of September 2025.

Attachments

Attachment 1: Detailed Report –Operations Groups' Monthly Activities for September 2025

Date of Report: October 14, 2025

GM Business Plan Updates

GOAL: Develop a Biennial Budget that Meets Metropolitan's Needs
OUTCOME: Implement risk-informed capital investment planning to ensure reliable critical infrastructure
UPDATE: Staff completed the final report for the Asset Management (AM) Maturity Assessment. Staff kicked off efforts with a consultant to begin benchmarking Metropolitan's AM practices with other utilities and to identify a strategy for incorporating Metropolitan's Climate Adaptation practices into the AM Program.
OUTCOME: Budget for enhanced mission-critical capabilities
UPDATE: Staff are evaluating the risk data collected through the capital investment plan evaluation process.

GOAL: Execute CAMP4W Implementation Strategy to Integrate Climate Adaptation District-Wide
OUTCOME: Assess climate risks and vulnerabilities
UPDATE: No update.
OUTCOME: Set and refine targets and policies
UPDATE: No update.
OUTCOME: Identify climate adaptation strategies
UPDATE: No update.
OUTCOME: Evaluate projects and programs using the CAMP4W assessment criteria
UPDATE: Operations staff continued participating in the assessment of two CAMP4W projects - Pure Water (45 MGD, 75 MDG, and 150 MGD) and Sites Reservoir. On September 4, CAMP4W presented the Initial assessment to Member Agencies Managers.
OUTCOME: Integrate climate considerations and implement adaptation strategies
UPDATE: As a result of the protective measures to guard against nitrification earlier in the summer, nitrite levels throughout the distribution system are low, and the limited flushing operation to maintain water quality ended on September 22. Ongoing lessons learned are being incorporated into a formalized nitrification control plan.

GOAL: Complete EIR and Planning, for Board to Consider Pure Water Southern California

OUTCOME: Prepare for possible implementation through contractor outreach and water quality research

UPDATE: Work at the reuse demonstration plant included preventative maintenance and cleaning of membrane bioreactor and reverse osmosis modules, and installation of tie-ins to support upcoming snail mitigation testing.

On September 17, the Independent Science Advisory Panel's final report on the July 2 workshop was distributed to the project team. A formal response to any questions asked by the Panel will be developed in the coming weeks.

GOAL: Achieve Equitable Supply Reliability for State Water Project Dependent Areas

OUTCOME: Evaluate further potential investments toward addressing State Water Project Dependent Areas

UPDATE: Operations staff continue to analyze future drought sequences and identify potential vulnerabilities to State Water Project (SWP)-dependent areas.

GOAL: Improve the Workplace and Promote START Values

OUTCOME: Use annual assessments to inform workplace improvement strategies

UPDATE: No Update.

GOAL: Provide Organizational Stability and Deliver Operational Excellence

OUTCOME: Maintain excellence in daily operations and reliability

UPDATE: Water continues to be managed according to Water Surplus and Drought Management (WSDM) principles and operational objectives according to the Annual Operating Plan, with an emphasis on positioning SWP supplies to meet future demands in the SWP-dependent areas.

The golden mussel response task force continued to assess strategies and approaches for protecting infrastructure and groundwater replenishment deliveries, conducted site visits to review potential control locations, and drafted control plans.

California Assembly Bill 149, which was initiated by Metropolitan and a coalition of water agencies, was signed into law on September 17. The legislation will protect water agencies that operate under approved mussel control plans from liability resulting from their conveyance of water supplies.

OUTCOME: Support a smooth and efficient transition to the next GM

UPDATE: No Update.

The Metropolitan Water District of Southern California

Monthly Operations At-A-Glance

September 2025

30-day window: August 24–September 23

Distribution

** denotes change compared to previous 30-Day period*

30-Day Member Agency Deliveries
4,690 AF/Day

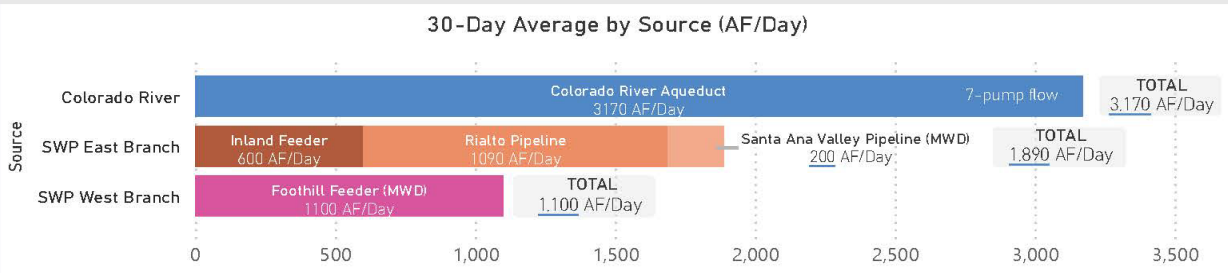
Change in Deliveries*
▲ **250 AF/Day**

Recorded August Deliveries to Member Agencies
Consumptive and Replenishment
123 TAF

Forecast September Deliveries to Member Agencies
Consumptive and Replenishment
121 TAF

Recorded August Deliveries utilizing water programs
(CYC, RCYC, CUP, CCOP)
18 TAF

Supply



Storage

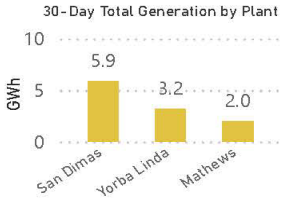
Data as of September 23, 2025

Lake Mathews	Lake Skinner	Diamond Valley Lake
166,300 AF	38,600 AF	771,000 AF
▲ 14,780 AF*	▼ -470 AF*	▼ -940 AF*
83%	89%	95%

Hydropower

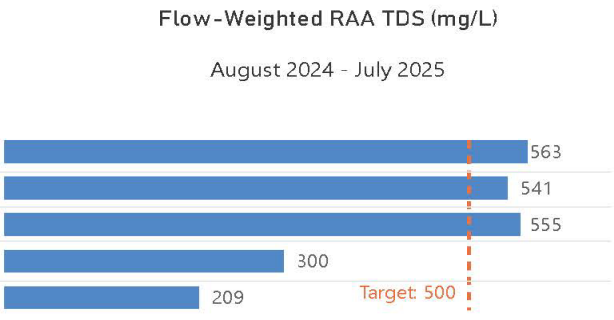
30-Day Total Generation:
11.1 GWh

30-Day Average Power:
15.4 MW



Water Quality

Plant Name	Targeted Blend (% SPW) As of 9/24/2025	Current TDS (mg/L) As of 9/24/2025	TTHMs (µg/L) As of 9/2/2025
Weymouth	40%	455	29.0
Diemer	40%	488	27.0
Skinner	40%	468	18.0
Jensen	100%	286	9.9
Mills	100%	168	16.0



TDS = Total Dissolved Solids **TTHM** = Total Trihalomethanes **RAA** = Running Annual Average

Operations Groups Business Plan Strategic Priorities & Objectives

Strategic Priority #1: EMPOWER

Enhance Workforce Safety and Security

Staff from various teams across the Desert took part in a yearly high-voltage switching refresher class. This training is held in the simulator room located at the Gene facility and reinforces System Operating Order Manual information related to switching, valving, clearances, and related safe operational practices.

Staff attending high-voltage switching refresher class at Gene camp

Develop Workforce and Prepare Employees for New Opportunities

Nothing to report.

Promote an Inclusive and Positive Workplace Culture

Nothing to report.

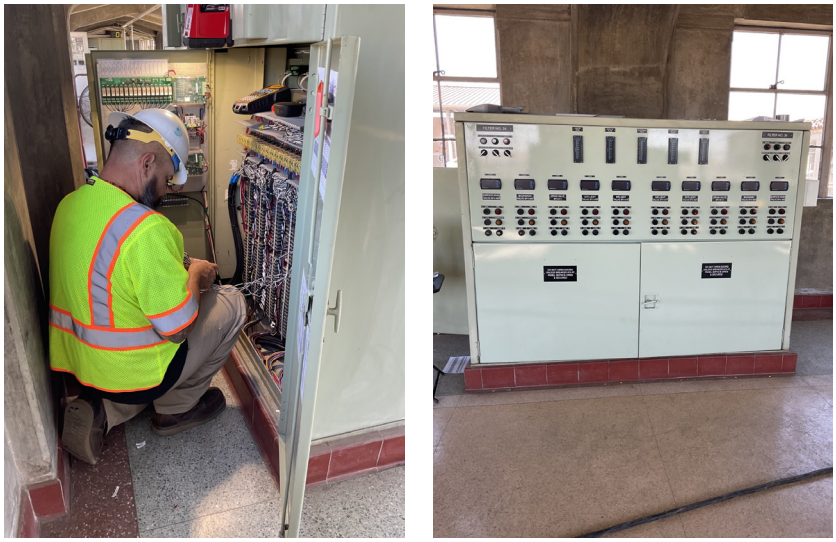
Strategic Priority #2: SUSTAIN

Manage Business Operations, Budget, and Staffing

The Business Management Team (BMT) is currently supporting the Operations Groups in preparing final biennium budget presentations for Executive Management, which include non-fleet operating equipment requests and staffing plans, with preliminary development of FY 2027/28 Biennium Budget Books beginning in Workiva. The Operating Expenditures (Fleet and Non-Fleet) analysis and submission were finalized in close coordination with MWD Groups and Finance. In addition, the new streamlined BVC reporting timeframes, supported by IT, Accounting, and Finance, have been finalized and are anticipated to launch in October. BMT staff are also advancing KPI/dashboard development and implementing a new reporting template to enhance consistency and efficiency. Finally, BMT is collaborating with External Affairs on a recognition initiative honoring Grade 5 treatment and distribution certificate holders as part of Water Professional Appreciation Week in October.

Develop Solutions to Enhance Operational and Business Processes

Staff completed wiring installation for new filter valves in Filter Building #2 at the Weymouth plant. This will provide new wiring for half of the filters at the Weymouth plant. The existing valves had been in service for over 60 years and were replaced as part of the Basins 5-8 and Filter Building #2 Rehabilitation Project. This upgrade will ensure the filter valves are more reliable, resilient, and provide years of service.



Staff working on wiring new valves at the valve control cabinet.

Ensure Accurate Billing and Support Revenue Generation

Nothing to report.

Strategic Priority #3: ADAPT

Ensure Resilient and Reliable Operations

Metropolitan member agency water deliveries were 137,000 acre-feet (AF) for September, with an average of 4,570 AF per day, which was about 70 AF per day higher than in August. Treated water deliveries were 2,900 AF higher than August for a total of 70,800 AF, or 52 percent of total deliveries for the month. The Colorado River Aqueduct (CRA) pumped a total of 95,500 AF in September. SWP imports averaged 2,990 AF per day, totaling about 89,700 AF for the month. The target SWP blend is currently 40% for Diemer, Weymouth, and Skinner plants.

Metropolitan has sufficient SWP, Colorado River supplies, and storage to meet demands in 2025. Water continues to be managed in accordance with WSDM principles and operational objectives, with an emphasis on positioning SWP supplies to meet future demands in the SWP-dependent areas. The SWP Allocation is expected to remain at 50% for the calendar year. Metropolitan is continuing to manage Table A supplies to preserve supplies for the SWP-dependent area. At the same time, Metropolitan has shifted operations to manage surplus supplies. With the additional supplies, Metropolitan is delivering to member agency cyclic programs and to Desert Water Agency and Coachella Valley Water District in 2025.

Staff continued work on replacing older copper communication lines throughout the district at remote locations. A Starlink antenna will be installed at the Corona Hydroelectric Plant for higher bandwidths, enhanced security capabilities, and improved reliability. The installation will include routing new conduit, a mast for the antenna, and a dedicated power circuit to power the new equipment.

Threading conduit for installation (left) and conduit placement (right)

Weymouth plant staff were able to diagnose the failure of a flocculator shaft in the reclamation process. The reclamation plant processes water from the settled water in the sedimentation basin and filters backwash water to separate the solids for further dewatering. The shaft's bearings, pillow block, drive chain, and sprockets were damaged due to excessive wear. With the shaft removed, Engineering and the La Verne shops assisted in making repairs. Skilled welders and machinists fabricated a new stainless-steel shift. Once repairs were completed, the shift was reassembled and returned to service.

Damaged equipment, fabricating new stainless-steel stub shafts & replacement of equipment

Advance Pure Water Southern California

As part of routine maintenance, clean-in-place procedures were completed on one of the two membrane bioreactor systems and the reverse osmosis (RO) system at the Napolitano Innovation Center demonstration plant. The demonstration plant was temporarily shut down to enable Los Angeles County Sanitation Districts staff to complete tie-in installations in support of upcoming snail mitigation projects.

Staff coordinating equipment installation at the reuse demonstration facility

Staff presented technical results at the WateReuse California Annual Conference in San Diego from September 21-23, in two presentations titled “Performance Optimization of RO at the Pure Water Southern California Demonstration Facility” and “UV Collimated Beam Testing for UV-AOP Treatment Optimization.”

Staff presenting reuse demonstration testing results at the WateReuse California Annual Conference

Develop New Supplies and Optimize System Flexibility

Nothing to report.

Enhance Sustainability Practices at Facilities and within Operations

Nothing to report.

Strategic Priority #4: PROTECT

Optimize Water Treatment & Distribution Operations

Staff are preparing for the CRA Shutdown and the Hinds Pilot Venting Project by performing flange fit-up and welding at the Lake Mathews Shop. The ten-inch vent piping will limit the turbulence within the Hinds Headgate Structure, while gate throttling will maximize the CRA flow.

Staff welding stainless-steel piping

Staff recently installed a 16-inch hydraulic globe valve refurbished by the Manufacturing Services Unit at Rio Hondo Pressure Control Structure. This structure is a major regulating facility on the Middle Feeder South in the southwestern portion of Metropolitan's service area. The installation of this valve allows for better control in an area where flow varies frequently.

Skinner plant staff have been repairing and/or replacing failed flow meters at several locations. The meters are used to measure the water flow in Metropolitan's system, calculate chemical feed rates, and serve as revenue billing meters. Staff can troubleshoot the failed components and configure specific parameters within the flow meters to ensure accurate measurements are restored.

Staff configuring flowmeter parameters after repair

Ensure Water Quality and Environmental Compliance

Metropolitan complied with all water quality regulations and primary drinking water standards during August 2025.

Following an extensive third-party audit of laboratory procedures and practices, the Water Quality Laboratory received its renewed accreditation certificate from the State Water Resources Control Board's Environmental Laboratory Accreditation Program on September 11. This accreditation must be renewed every two years and is required to allow Metropolitan to test drinking water samples and report the results of regulatory compliance monitoring to regulatory authorities.

Optimize Maintenance and Asset Management

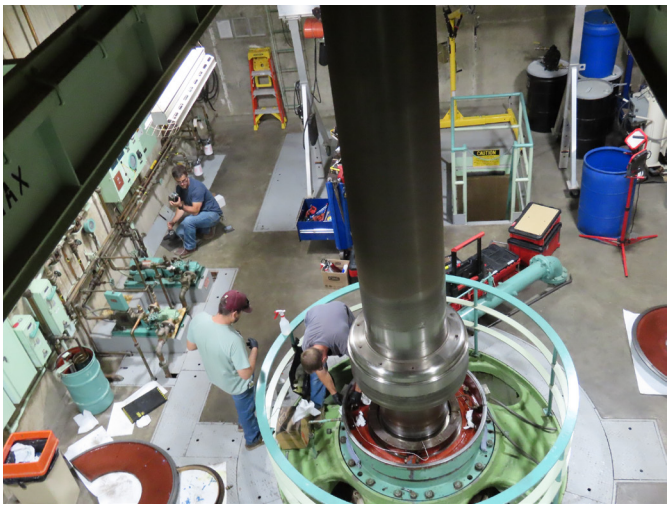
Staff repaved areas of the Gene Facility. The original asphalt had degraded resulting in uneven surface that was becoming a safety concern. The repair ensures the safety of staff walking in the area and provides better stormwater drainage.

Repaving parking areas around the Gene facility

Desert staff continue repairs on Gene Unit 1 Discharge Valve. Staff readies the headcover for the installation of a new bushing. The headcover had been recently recoated; upon replacement of the bushing, it will be ready to install.

Staff locating the discharge valve headcover for bushing installation

Desert staff replaced the pump bearing on Hinds Unit 9. Staff noted bearing temperatures increasing. Further investigation revealed the need for the bearing to be replaced. Staff removed the existing bearing; the new bearing is currently being machined and is expected to be completed within a month.



Hinds Unit 9 pump bearing replacement

Desert staff calibrate the main motor unit protection relays. This calibration is completed on a two-year cycle at all Desert pump plants. Calibrating the relays is essential maintenance, as these electromechanical relays are used to detect abnormal electrical conditions and automatically interrupt power to prevent damage to the motor and associated equipment. These relays are a critical component for ensuring the longevity of the pump motors, reducing downtime, and improving safety.

Staff calibrating relays at the Gene pumping plant

Desert staff are performing civil site work to expand the buildable area for the upcoming switch rack rehabilitation project at Iron Mountain. Project scope required an increase in the area, which will create more room behind the future building to facilitate access for operations and maintenance. The hillside is mostly rock, requiring hammering and clearing.

Staff excavating at Iron Mountain for the switch rack project expansion

Desert staff are blasting and coating the Hinds Unit 9 pump headcover. Consistent operation and moisture can lead to rapid corrosion issues. Staff will complete surface preparation and coating of the headcover in place while machine work is being performed on the new pump bearing.

Coating replacement containment structure on Hinds Unit 9

Staff began routine grading of the Orange County Patrol Roads. Routine maintenance provides operations staff with ready access to field sites. The routine maintenance typically includes patrol road grading, erosion repair, vegetation removal, and corrective maintenance of stormwater drainage.

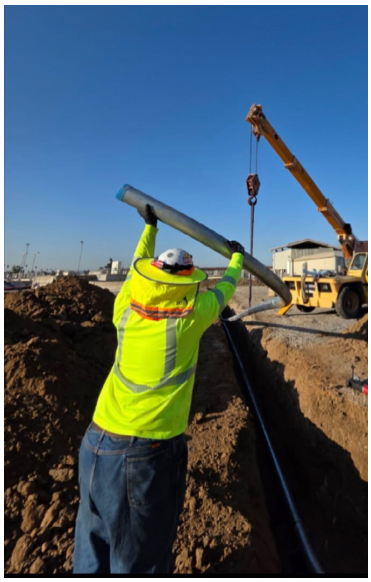
Staff performing routine patrol road maintenance in Orange County

Support Capital Project Development and Implementation

Diemer plant staff partnered with the SCADA Team to replace all Human Machine Interface (HMI) screens within the Ozone Facility. The HIMs allow for local control, communication, and status of the Power Supply Units, which provide data that allows staff to ensure proper operations. The new screens increase communications and improve system reliability.

Staff is wiring a new HMI screen for a power supply unit.

Weymouth plant staff collaborated with the Construction Services Unit to install two four-inch conduit pathways to support the installation of new fiber optic cable. This fiber optic cable will facilitate the final commissioning of the new Battery Energy Storage System and enable it to become fully operational. The BESS units are designed to store a portion of the excess energy generated by the plant's two solar fields during daylight hours and discharge this stored energy during peak demand, helping the Weymouth plant maximize its use of clean, renewable solar power.



Staff installing conduit with crane support (left) and completed installation (right)

North Battery Energy Storage System

Enhance Emergency Preparedness and Response

Nothing to report.

Ensure Power and Environmental Regulatory Compliance

The mid-summer operating period to date has been relatively mild across the California Independent System Operator (CAISO) and Western Electricity Coordinating Council operational footprints. Energy markets in September have seen adequate natural gas supplies and moderate energy prices.

The CRA averaged slightly less than seven pumps in September. The CRA energy cost forecast for fiscal year 2025/26 is $83.8 million, and current forecasts are tracking significantly lower at $61.3 million, due to lower forward cost curves and active management of Hoover scheduling to optimize for market conditions.

Staff continued work on the Metropolitan's first-ever affected system cluster study for generation developers wishing to connect to transmission systems adjacent to the Colorado River Aqueduct transmission system (CRATS). This study encompasses eleven generation projects connecting to the Southern California Edison and Western Area Power Administration systems, which impact Metropolitan's 230 kV transmission system. Preliminary results were released on April 17, 2025, and a stakeholder meeting was held on April 30, 2025, to review the results and field questions from the eight generation developers that are participating in the study. Staff are concurrently working on developing preliminary interim mitigation agreements, or "bridge agreements", to allow generation developers to secure funding by demonstrating a provisional agreement with Metropolitan to allow them to reach commercial operation while permanent mitigations are in development. This would also include an agreement with CAISO to temporarily limit the amount of energy generated by these projects until permanent system upgrades are in place. Staff has received a request for early accommodation from three-generation developers and will update the Board in October at the Engineering, Operations, and Technology (EOT) Committee meeting.

In 2024, Metropolitan received our first-ever formal request to interconnect independent generation directly to the CRATS from AES, a major generation and transmission developer, and proceeded with execution of an interconnection study agreement and study deposit in accordance with Metropolitan's interconnect study process. In early August, AES requested a suspension of the interconnection study process due to evolving energy markets and regulatory developments and requested a refund of the unused portion of the study deposit.

Staff is assisting SRI in evaluating an offer to participate in AES's Twin Palms solar generation and Bulk Energy Storage (BES) project. This project is proposed to be built on land leased to AES from Metropolitan in the Palo Verde area by the Colorado River. The terms of the lease agreement included a Right of First Refusal for Metropolitan. The offer was received from AES on September 5, 2025, and Metropolitan has 45 days from the receipt of the offer from AES to respond. Staff is evaluating the value of the offer against market forecasts and Metropolitan's forecast energy needs.

Power scheduling staff are closely monitoring the U.S. Bureau of Reclamation (USBR) 24-month forecast for Hoover generation following the announcement in January 2025 that USBR will severely curtail Hoover generation for Lake Mead elevations below 1,035 feet. Generally, the monthly updates to the 24-month forecast done by USBR show that the situation is continuing to deteriorate. Staff are evaluating potential cost impacts and mitigation strategies for presentation at the EOT Committee meeting as early as November 2025.

Strategic Priority #5: PARTNER

Engage in Legislative and Regulatory Processes

California Assembly Bill 149, which was initiated by Metropolitan and a coalition of water agencies and provides urgently needed protections against the spread of invasive golden mussels, was signed into law by Governor Gavin Newsom on September 17. Key provisions of the bill include expanding existing quagga and zebra mussel laws to include all invasive mussel species, increasing the invasive mussel prevention fee on vessel registrations, and requiring water management agencies to develop and update prevention and control plans to address all known invasive mussel species in their waters by December 31, 2026. The expanded legislation will protect water agencies that operate under approved mussel control plans from liability resulting from their conveyance of water supplies.

On May 14, the U.S. Environmental Protection Agency (EPA) announced plans to rescind maximum contaminant levels (MCLs) for PFNA, PFHxS, and GenX, as well as the Hazard Index for mixtures with PFBS, while retaining MCLs for PFOA and PFOS at 4 ppt. EPA also intends to extend the compliance date for PFOA and PFOS to 2031, with a final rule expected in spring 2026. These actions respond to petitions filed in 2024, and on August 7, a federal appellate court directed parties to file motions by September 10. The rule became effective June 25, 2024, with monitoring for PFOA and PFOS beginning in 2027 and compliance required in 2029. On September 11, the EPA filed a motion to vacate four PFAS standards, conceding procedural flaws; the American Water Works Association and Association of Metropolitan Water Agencies support the correction, while the Natural Resources Defense Council opposes. Metropolitan has supported regulating PFOA and PFOS but cautioned against premature regulation of other PFAS. Staff will continue to monitor developments.

On February 16, 2023, the Division of Drinking Water (DDW) proposed lowering the manganese Notification Level (NL) and Response Level (RL) to 20 parts per billion (ppb) and 200 ppb, well below the current NL of 500 ppb and RL of 5,000 ppb, identifying this as a 2025 priority. While not finalized, DDW has published notice of an informational item for the October 7, 2025, State Water Resources Control Board (SWRCB) meeting proposing revised levels of 0.05 mg/L (50 ppb) and 0.20 mg/L (200 ppb). The changes align with bottled water standards enforced by the California Department of Public Health – Food and Drug Branch, strengthening public notice requirements tied to the existing secondary maximum contaminant level of 50 ppb. Adoption would increase reporting and may require operational changes. Staff will monitor and provide updates following the October meeting.

On September 15, staff submitted comments on the California Air Resources Board's (CARB) proposed amendments to the Advanced Clean Fleets Regulation, raising key issues including expanding the definition of Traditional Utility-Specialized Vehicles (TUSVs) to cover Class 2b vehicles, adjusting mileage thresholds for TUSVs to gain early exemption access, and modifying the Mutual Aid exemption to permit more than 25% internal combustion engine trucks for emergency response. Staff also recommended removing "tractors" from the list of trucks excluded from the Mutual Aid exemption when available as near-zero-emission vehicle options and expressed concerns about pre-approved TUSV lists and the need for working groups to evaluate zero-emission vehicle performance for at least 12 months before approving them as one-to-one replacements. CARB is scheduled to adopt amendments on September 25, 2025, with additional 15-day comment language to follow. Staff will continue to monitor.

On September 3, the SWRCB adopted amendments to the Underground Storage Tank (UST) Regulations (California Code of Regulations, Title 23, Division 3, Chapter 16). Metropolitan currently operates 39 double-walled USTs that comply with these regulations. The amendments, effective January 2026, remove outdated provisions for single-walled tanks, phase out ineffective monitoring and spill-prevention equipment, clarify the enforcement role of Certified Unified Program Agencies, and update regulatory language. Staff will continue to monitor for additional updates.

Advance Education and Outreach Initiatives

Tours of the Water Quality Laboratory were provided for a delegation from Daegu Metropolitan Waterworks in Korea on September 15, and for the Los Angeles County Economic Development Corp on September 18.

Staff describe microbiological monitoring during a tour of the Water Quality Laboratory for the Los Angeles County Economic Development Corp

Engage with Member Agencies & Other Stakeholders on Technical Matters

On September 25, staff provided an update on golden mussels in the SWP to the Southern California Water Users Association.