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. Lefevre
J. McMillan
C. Miller
J. Morris
M. Petersen
K. Seckel

Engineering, Operations, and Technology Committee - Final - Revised 1

Meeting with Board of Directors *

March 10, 2025

9:00 a.m.

Monday, March 10, 2025 Meeting Schedule
09:00 a.m. EOT
11:00 a.m. LEG
12:00 p.m. Break
12:30 p.m. EEDEI
02:30 p.m. OWA

Agendas, live streaming, meeting schedules, and other board materials are available here: https://mwdh2o.legistar.com/Calendar.aspx. Written public comments received by 5:00 p.m. the business days before the meeting is scheduled will be posted under the Submitted Items and Responses tab available here: https://mwdh2o.legistar.com/Legislation.aspx.

If you have technical difficulties with the live streaming page, a listen-only phone line is available at 1-877-853-5257; enter meeting ID: 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 in-person or teleconference. To participate via teleconference 1-833-548-0276 and enter meeting ID: 815 2066 4276 or to join by computer click here.

MWD Headquarters Building • 700 N. Alameda Street • Los Angeles, CA 90012
Teleconference Locations:
3008 W. 82nd Place • Inglewood, CA 90305
525 Via La Selva • Redondo Beach, CA 90277
Cedars-Sinai Imaging Medical Group • 8700 Beverly Boulevard, Suite M313 • Los Angeles, CA 90048

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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.

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))

US2-456

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

2. CONSENT CALENDAR OTHER ITEMS - ACTION

A. Approval of the Minutes of the Engineering, Operations, and Technology Committee for February 10, 2025 Copies have been submitted to each Director, any additions, corrections, or omissions) **21-4319**

Attachments: 03102025 EOT 2A (02102025) Minutes

3. CONSENT CALENDAR ITEMS - ACTION

7-1 Award a $407,740.66 procurement contract to Ireland Inc. (dba Core-Rosion Products) to furnish two sodium hypochlorite tanks for the Copper Basin Reservoir;the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA **21-4303**

Attachments: 03112025 EOT 7-1 B-L
03102025 EOT 7-1 Presentation

7-2 Award procurement contracts in the amount of $321,575 to Integrated 8a Solutions, Inc. for two 24-inch knife gate valves and in the amount of $2,151,947 to Bailey Valve for two 24-inch sleeve valves for the Hollywood Tunnel pressure control structure; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA **21-4304**

Attachments: 03112025 EOT 7-2 B-L
03102025 EOT 7-2 Presentation

7-3 Authorize an increase of $1.0 million to a professional services agreement with Grid Subject Matter Experts, LLC for a new not-to-exceed total amount of $1.245 million for electric transmission planning and National Electric Reliability Corporation related electric reliability compliance services; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA. [DEFERRED on 3/4/2025] **21-4305**

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

4. OTHER BOARD ITEMS - ACTION

NONE

5. BOARD INFORMATION ITEMS

NONE

6. COMMITTEE ITEMS

a. Capital Investment Plan Quarterly Report for period ending December 2024 **21-4321**

Attachments: 03102025 EOT 6a Report
03102025 EOT 6a Presentation

b. Asset Management Program Update **21-4354**

Attachments: 03102025 EOT 6b Presentation

c. Risk Management in Capital Project Planning and Delivery **21-4322**

Attachments: 03102025 EOT 6c Presentation

7. MANAGEMENT ANNOUNCEMENTS AND HIGHLIGHTS

a. Engineering Services activities **21-4323**
Information Technology activities
Water System Operations activities

Attachments: 03102025 EOT 7a Engineering Services Activities
03102025 EOT 7a Water System Operations Activities
03102025 EOT 7a Presentation

8. FOLLOW-UP ITEMS

NONE

9. FUTURE AGENDA ITEMS

10. ADJOURNMENT

NOTE: This committee reviews items and makes a recommendation for final action to the full Board of Directors. Final action will be taken by the Board of Directors. 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

February 10, 2025

Chair Erdman called the meeting to order at 9:00 a.m.

Members present: Directors Alvarez, Bryant, Camacho, Dennstedt, Erdman, Faessel, Fong-Sakai, Lefevre (teleconference posted location), McMillan, Miller (teleconference posted location), Morris, Petersen (entered after roll call), and Seckel.

Members absent: Director Crawford.

Other board members present: Chair Ortega, Directors Armstrong, Dick, Goldberg, Gray (teleconference posted location), Kurtz, Lewitt, and McCoy.

Committee staff present: Bednarski, Carter, Chapman, Chaudhuri, Eckstrom, Hattar, Nobriga, 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))

Wiggs Mendoza –Native American Employees. Spoke in support of the Chemeheuvi tribe request for interconnection with CRA transmission system.

CONSENT CALENDAR ITEMS – ACTION

2. CONSENT CALENDAR OTHER ITEMS – ACTION

A. Approval of the Minutes of the Engineering, Operations, and Technology Committee for January 13, 2025 (Copies have been submitted to each Director, any additions, corrections, or omissions)

3. CONSENT CALENDAR OTHER ITEMS – ACTION

7-1 Subject: Award a $2,556,478.19 construction contract to MasTec Network Solutions LLC for upgrades to the Desert microwave communications system; award a $1,531,044 procurement contract to Logicalis Inc. for communications sites network equipment; authorize an increase of $591,000 to an existing agreement with Nokia of America Corporation, for a new not-to-exceed amount of $5,888,000 for network materials and manufacturer's field services; and authorize an increase of $680,000 to an existing agreement with Hatfield & Dawson Consulting Engineers LLC, for a new not-to-exceed amount of $1,410,000 to provide technical support during construction; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA

Presented by: No presentation requested

Motion: a. Award a $2,556,478.19 construction contract to MasTec Network Solutions LLC for upgrades to the desert microwave communication tower sites;
b. Award a $1,531,044 procurement contract to Logicalis Inc. for communications site network equipment;
c. Authorize an increase of $591,000 to the agreement with Nokia of America Corporation for a new not-to-exceed amount of $5,888,000 for network materials and manufacturer's field services; and
d. Authorize an increase of $680,000 to the agreement with Hatfield & Dawson Consulting Engineers LLC for a new not-to-exceed amount of $1,410,000 to provide specialized technical support during construction and commissioning.

The following Directors provided comments or asked questions.

1. Director Faessel

Staff responded to the Directors question.

7-2 Subject: Award a $1,931,217 contract to Fencecorp Inc. for perimeter fencing at the housing and playground areas and playground area shade improvements at four Colorado River Aqueduct Pumping Plant villages; 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 $1,931,217 contract to Fencecorp. Inc. for perimeter fencing for housing and playground areas and shade improvements for the playground area at four CRA pumping plant villages.

7-3 Subject: Authorize an agreement with Computer Aid, Inc. in an amount not to exceed $6 million for co-managed support services for the operation and maintenance of the Metropolitan Cybersecurity Operations Center; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA. [REVISED SUBJECT 2/4/2025]

Presented by: No presentation requested

Motion: Authorize an agreement with Computer Aid, Inc. (CAI) in an amount not to exceed $6 million for co-managed support services for the operation and maintenance of the Metropolitan Cybersecurity Operations Center.

The following Directors provided comments or asked questions.

1. Director Seckel

Staff responded to the Directors question.

Director Faessel made a motion, seconded by Director Seckel, to approve the consent calendar consisting of item 2A, and items 7-1, 7-2, and 7-3.

The vote was:

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

The motion for Items 2A, 7-1, 7-2, and 7-3 passed by a vote of 12 ayes, 0 noes, 0 abstention, and 2 absent.

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

4. OTHER BOARD ITEMS – ACTION

NONE

5. BOARD INFORMATION ITEMS

NONE

6. COMMITTEE ITEMS

a. Subject: Metropolitan's Emergency Response to January 2025 Wildfires [ADDED ITEM 1/29/2025]

Presented by: Shane Chapman, Assistant General Manager, Operations

Mr. Chapman reported on the following:

- Emergency Operations Center and Incident Command Posts activated virtually
- Prioritized safety and relocated Eagle Rock staff to backup facilities
- Regular communications with Board, Member Agencies, and employees
- HR and Unions provided assistance to impacted employees
- Operational actions and system protection in response to wildfires
- Mutual assistance for water utilities impacted by the Eaton Fire
- Six mutual assistance missions included Critical Facility Protection, Debris Removal, Equipment, Fleet Services, Standby Generator Support, and Water Infrastructure Technical Service

Director Petersen entered the room.

The following Directors provided comments or asked questions.

1. Dennstedt
2. Bryant
3. Camacho
4. Morris
5. Dick
6. Erdman
7. Petersen
8. Fong-Sakai
9. Ortega

Staff responded to the Directors' questions and comments.

b. Subject: Power Operations and Planning Update

Presented by: John Jontry, Interim Power Operations and Planning Section Manager

Mr. Jontry reported on the following:

- Renewable energy goals driving electric grid evolution
- Dynamic energy market and regulatory forces shifting toward renewables
- Metropolitan's planning efforts for a sustainable future
- Increasingly complex demands on Metropolitan's energy systems
- Generation reduction under low Lake Mead water levels
- Assessing impacts on Metropolitan's system from generation development
- Strategies for managing Metropolitan's transmission and energy assets
- Staffing and professional services to manage increased workload

The following Directors provided comments or asked questions.

1. Seckel
2. Dick
3. Erdman
4. Fong-Sakai

Staff responded to the Directors' questions and comments.

7. MANAGEMENT ANNOUNCEMENTS AND HIGHLIGHTS

a. Subject: Engineering Services, Information Technology, and Water System Operations Activities

Presented by: John Bednarski, Interim Assistant General Manager, Water Resources and Technical Services
Shane Chapman, Assistant General Manager, Operations

Mr. Bednarski reported on the following:

- The retirement of Phil Drooks after 43 years of service at Metropolitan in the Engineering Services Group, Corrosion Control.

Mr. Chapman reported on the following:

- Expecting an increase in the State Water Project allocation
- Staff reviewing opportunities on how best to bring additional water into Metropolitan's system to store

Mr. Eckstrom reported on the following:

- As requested by Metropolitan's Emergency Operations Center (EOC), staff developed a Geographic Information System (GIS) layer to assist Member Agency fire recovery efforts.

8. SUBCOMMITTEE REPORTS AND DISCUSSION

a. Report from Subcommittee on Subcommittee on Pure Water Southern California and Regional Conveyance

Presented by: Director Camacho

Director Camacho reported on the following:

- Pure Water Southern California Quarterly Update
- Regional Benefits of Pure Water Southern California
- Pure Water Southern California Updates on Staging Options
- Surface Water Storage Study
- State Water Project Dependent Area Drought Mitigation Updates

9. FOLLOW-UP ITEMS

NONE

10. FUTURE AGENDA ITEMS

- Power-related items including storage

11. ADJOURNMENT

The next meeting will be held on March 10, 2025.

Meeting adjourned at 10:30 a.m.

Dennis Erdman
Chair

THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

Board Action

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

3/11/2025 Board Meeting

7-1

Subject

Award a $407,740.66 procurement contract to Ireland Inc. (dba Core-Rosion Products) to furnish two sodium hypochlorite tanks for the Copper Basin Reservoir; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA

Executive Summary

The Copper Basin Reservoir has two 15,000-gallon fiberglass-reinforced plastic (FRP) tanks that store and continuously dispense sodium hypochlorite as part of a system to protect the Colorado River Aqueduct (CRA) system from quagga mussel infestation. Recent inspections of the tanks revealed significant degradation of the interior corrosion barrier in each tank. Failure of the tanks would disrupt the chlorination process, jeopardize quagga mussel control, and potentially disrupt CRA operations. Staff recommends award of the tank procurement contract at this time.

This action awards a $407,740.66 procurement contract to Ireland Inc. (dba Core-Rosion Products) to furnish two 15,000-gallon FRP tanks for the Copper Basin Reservoir. See **Attachment 1** for the Allocation of Funds, **Attachment 2** for the Abstract of Bids, and **Attachment 3** for the Location Map.

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

Staff Recommendation: Option #1

Option #1

Award a $407,740.66 procurement contract to Ireland Inc. dba Core-Rosion Products to furnish two 15,000-gallon fiberglass-reinforced tanks for the Copper Basin Reservoir.

Fiscal Impact: Expenditure of $590,000 in capital funds. All costs will be incurred in the current biennium and have been previously authorized.

Business Analysis: This option will enhance the reliability of the Colorado River Aqueduct and protect the system from quagga mussel infestation.

Option #2

Do not proceed with the project at this time.

Fiscal Impact: None

Business Analysis: This option would forego an opportunity to protect the Colorado River Aqueduct conveyance system from quagga mussel infestation.

Alternatives Considered

Staff considered relining the existing tanks. Upon inspection, it was determined that the interior corrosion barrier of the tanks had deteriorated, and relining would not significantly strengthen the structural integrity or extend the life span of the tanks. Further, the required extensive rehabilitation will result in a cost comparable to

replacement. The selected alternative will replace the tanks, providing long-term reliability and flexibility to ensure uninterrupted CRA water deliveries.

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 53598, dated April 8, 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 action is exempt from CEQA because there is no potential for the activity in question to have a significant effect on the environment.

CEQA determination for Option #2:

None required

Details and Background

Background

The CRA is a 242-mile-long conveyance system that transports water from the Colorado River to Lake Mathews. It consists of five pumping plants, 124 miles of tunnels, siphons, reservoirs, 63 miles of canals, and 55 miles of cut-and-cover conduits. The aqueduct was constructed in the late 1930s and placed into service in 1941.

The Copper Basin Reservoir was constructed in 1938 and is located downstream of the Gene Pumping Plant. It holds 24,200 acre-ft of water. The reservoir stores water and controls flow along the CRA system. Quagga mussels were first encountered within the CRA system in 2007. Quagga mussels are invasive species that prolifically breed and grow in layers on surfaces. This can have a detrimental effect on the CRA conveyance system and the equipment within the pumphouses. A sodium hypochlorite storage and feed facility was constructed at Copper Basin Reservoir in 2008 to protect the CRA system from quagga mussel infestation. Continuous dosing with sodium hypochlorite is a proven mitigation method against quagga mussel growth.

This facility has two 15,000-gallon FRP tanks that store and dispense sodium hypochlorite in a controlled manner for maximum effectiveness. These FRP tanks were replaced in 2018. FRP tanks in sodium hypochlorite service generally have a life span of 8 to 10 years. During the 2024 CRA shutdown, Metropolitan staff performed inspections of the two tanks and found them in poor condition. The observed tank deterioration consisted of structurally compromised corrosion barriers, separation cracks, and exposed fiberglass. Due to the deteriorated condition of these tanks, staff recommends replacement of the tanks. The tanks will be installed by Metropolitan forces following their fabrication and delivery to the project site.

Copper Basin Reservoir Sodium Hypochlorite Tanks Replacement - Procurement

This procurement contract will provide two sodium hypochlorite storage tanks, each 14 feet in diameter and 17 feet tall, with a storage capacity of 15,000 gallons. The tanks are constructed with thicker fiber-reinforced plastic and resin corrosion barriers, which provide improved structural properties and life spans. Metropolitan forces will receive, offload, and replace the existing tanks with the newly purchased tanks.

A total of $590,000 is required to perform this work. In addition to the amount of the procurement contract described below, the allocated funds for Metropolitan staff include $49,000 for factory fabrication inspection; $15,000 for Metropolitan force construction to receive and offload at the site; $47,000 for submittals review and responding to manufacturer requests for information; $56,000 for contract administration and project

management; and $15,259.34 for the remaining budget. **Attachment 1** provides the allocation of the required funds.

Award of Procurement Contract

Specifications No. ME-5547 for furnishing two 15,000-gallon FRP tanks was advertised for bids on December 13, 2024. As shown in **Attachment 2**, five bids were received and opened on January 22, 2025. The bid from Ireland Inc. (dba Core-Rosion Products) in the amount of $407,740.66 complies with the requirements of the specifications. This amount includes delivery and all sales and use taxes imposed by the state of California. The other bids, including taxes, ranged from approximately $432,000 to $703,000.

This action awards a $407,740.66 procurement contract to Ireland Inc. dba Core-Rosion Products to furnish two 15,000-gallon FRP tanks for the Copper Basin Reservoir. As a procurement contract, there are no subcontracting opportunities, and no Small Business Enterprise participation level was established for this contract.

Project Milestone

September 2025 – Delivery of tanks

2/25/2025
Mai M. Hattar *Date*
Interim Chief Engineer
Engineering Services

2/25/2025
Deven Upadhyay *Date*
General Manager

Attachment 1 – Allocation of Funds

Attachment 2 – Abstract of Bids

Attachment 3 – Location Map

Ref#es12702337

Allocation of Funds for Copper Basin Reservoir Sodium Hypochlorite Tanks Replacement

	Current Board Action (Mar. 2025)
Labor	
Studies & Investigations	$ -
Final Design	-
Owner Costs (Program mgmt., envir. monitoring)	56,000
Submittals Review & Record Drwgs.	47,000
Construction Inspection & Support	49,000
Metropolitan Force Construction	15,000
Materials & Supplies	-
Incidental Expenses	-
Professional/Technical Services	-
Right-of-Way	-
Equipment Use	-
Contract	-
Ireland Inc. dba Core-Rosion Products	407,740.66
Remaining Budget	15,259.34
Total	**$ 590,000**

The total amount expended to date to replace the Copper Basin Reservoir sodium hypochlorite tanks is approximately $100,000. The total estimated cost to complete the procurement and installation of the Copper Basin Reservoir Sodium Hypochlorite Tanks including the amount appropriated to date, funds allocated for the work described in this action, and future construction costs, is anticipated to range from $1,100,000 to $1,300,000.

The Metropolitan Water District of Southern California

Abstract of Bids Received on January 22, 2025, at 11:00 A.M.

Specifications No. ME-5547
Chemical Storage Tanks Fiberglass Reinforced Plastic

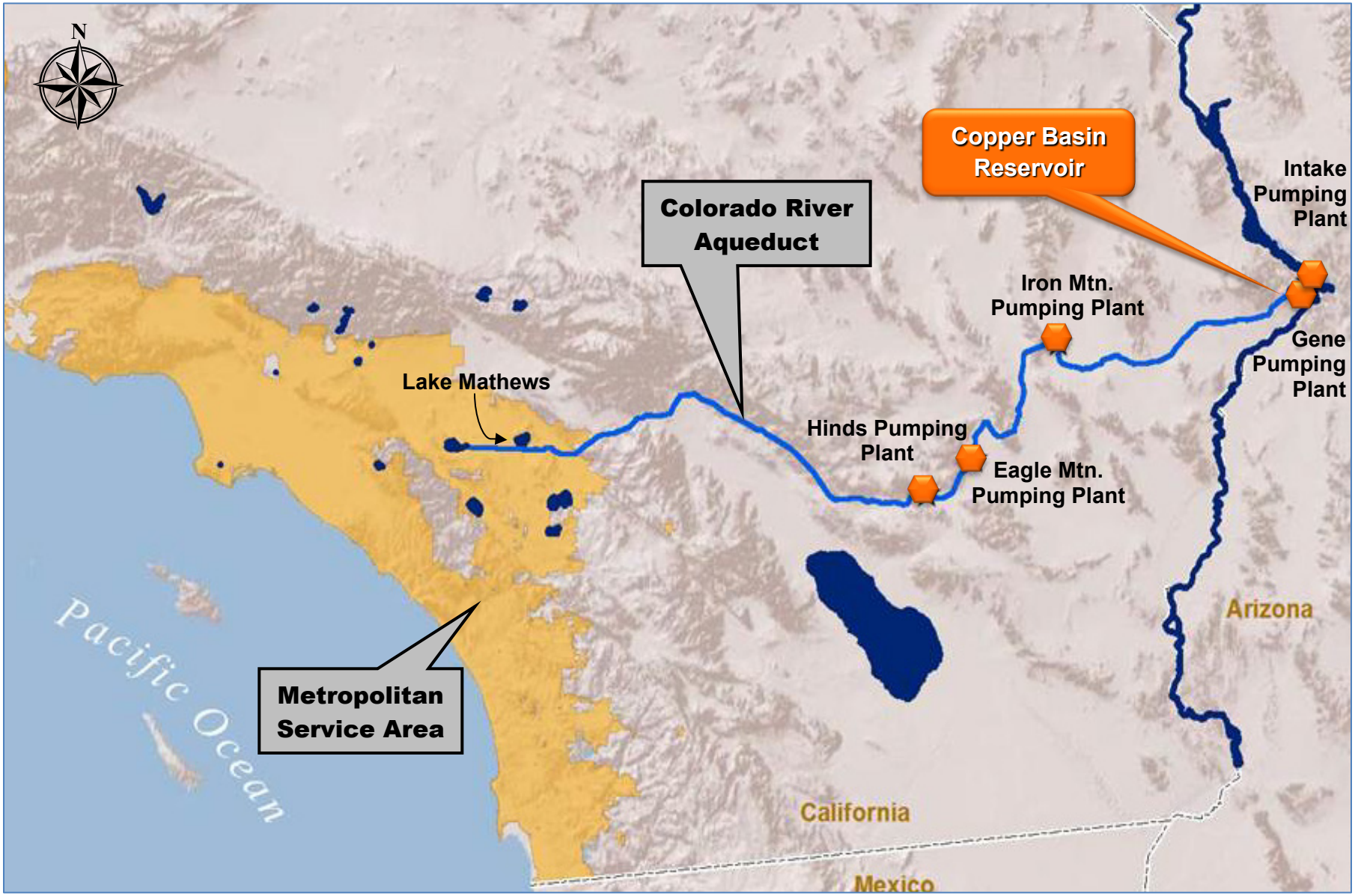
The work includes furnishing and delivery of two 15,000-gallon fiberglass reinforced plastic tanks for Copper Basin Reservoir.

Budgetary range estimate: $400,000 – $450,000

Bidder and Location	Total[1,2]
Ireland Inc. dba Core-Rosion Products Signal Hill, CA	**$381,984.00**
Blue Angel International LLC Berkeley, CA	$400,930.00
Environmental Water Solutions Inc. Gardena, CA	$643,351.92
MISCOwater Foothill Ranch, CA	$650,824.00
DXP Enterprises Inc. Anaheim, CA	$652,255.00

1 Excludes delivery and taxes of 7.75 percent imposed by the state of California. The total award amount for the low bid is $407,740.66.
2 As a procurement contract, there are no subcontracting opportunities.

Location Map



Engineering, Operations, & Technology Committee

Copper Basin Reservoir Sodium Hypochlorite Tanks Replacement

Item 7-1

March 10, 2025

Item 7-1
Copper Basin Reservoir Sodium Hypochlorite Tanks Replacement

Subject

Award a $407,740.66 procurement contract to Ireland Inc. dba Core-Rosion Products to furnish two sodium hypochlorite tanks for the Copper Basin Reservoir

Purpose

Protects the Colorado River Aqueduct system from quagga mussel infestation to enhance reliability

Recommendation & Fiscal Impact

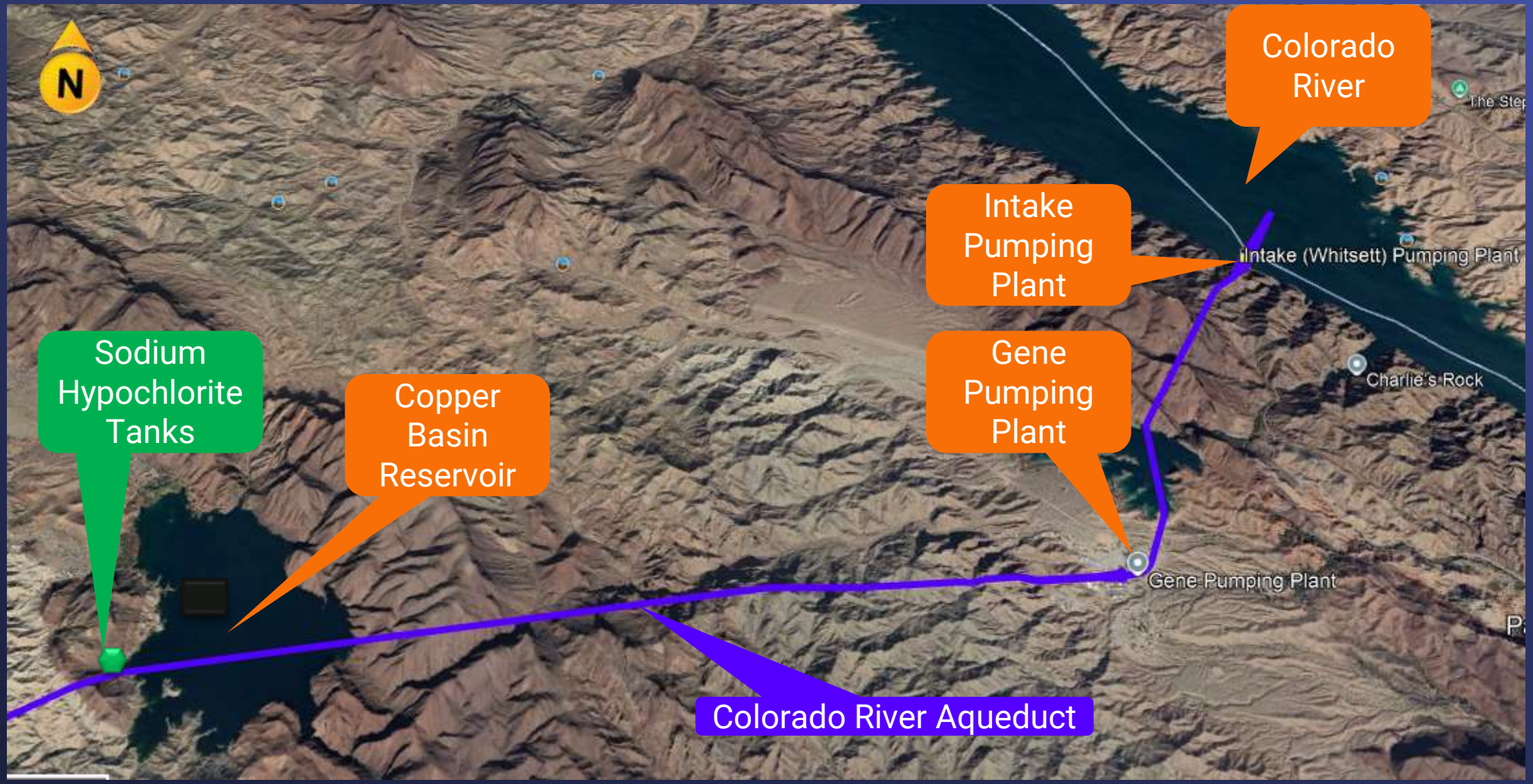
Award a procurement contract for two sodium hypochlorite tanks

Fiscal Impact – $590,000

Budgeted

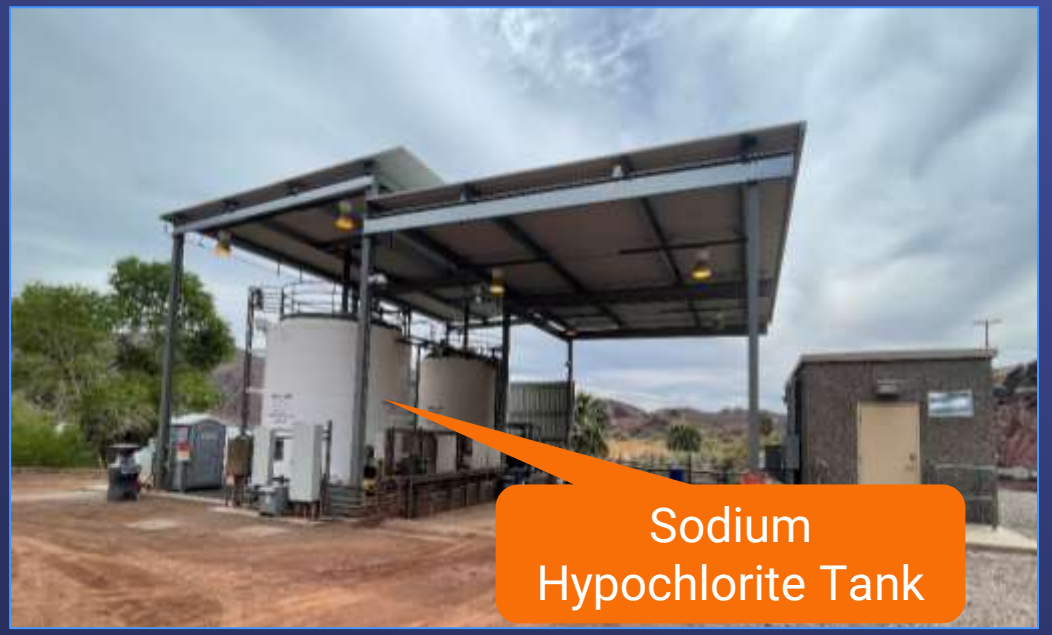
Location Map

Vicinity Map



Background

- Sodium hypochlorite facility
  - Used to control quagga mussel growth
  - Two 15,000-gallon fiberglass reinforced plastic (FRP) storage tanks
- 2024 Inspection findings
  - Degradation of interior corrosion barrier



Copper Basin Sodium Hypochlorite Facility

Copper Basin Sodium Hypochlorite Tanks Replacement

Alternatives Considered

- Considered Alternative – Reline tank
  - Extensive damage to tanks
  - Rehabilitation not cost-effective
- Selected Alternative – New tanks
  - Provides longer useful life
  - Improves reliability

Copper Basin Sodium Hypochlorite Tanks Replacement

Scope of Work

Tank Manufacturer

- Fabricate & deliver two 15,000-gallon FRP tanks

Metropolitan

- Review submittals
- Perform factory fabrication inspection
- Perform contract administration & project management
- Off-load & store tanks

Bid Results
Specifications No. ME-5547

Bids Received	January 22, 2025
No. of Bidders	5
Lowest Responsive Bidder	Ireland Inc. dba Core-Rosion Products
Low Bid	$407,740.66
Range of Other Bids	$432,000 - $703,000
Budgetary Estimate	$400,000 - $450,000

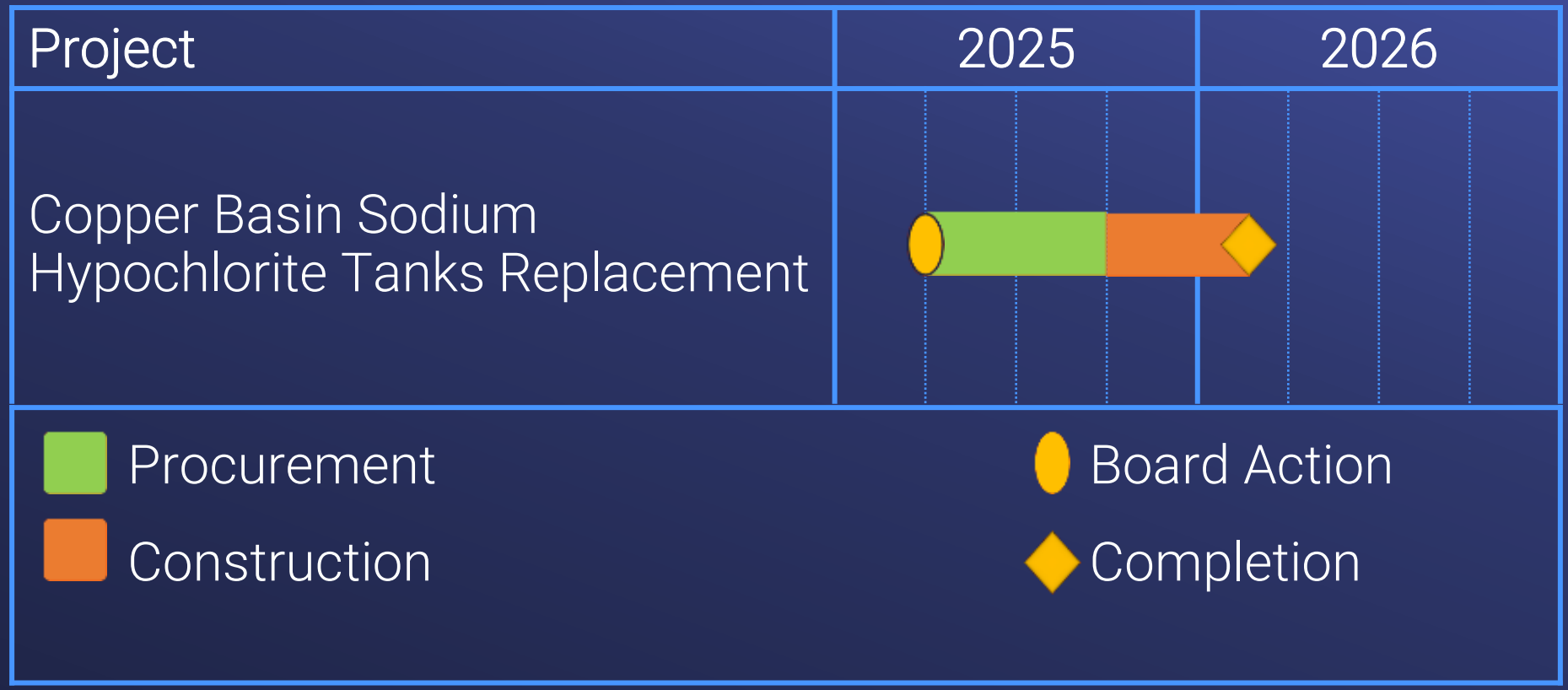
*No SBE (Small Business Enterprise) participation level set for procurement contract

Allocation of Funds

Copper Basin Sodium Hypochlorite Tanks Replacement

Metropolitan Labor		
Owner Costs (Proj. Mgmt., Contract Admin.)	$	56,000
Submittals Review, Tech. Support, Record Dwgs.		47,000
Fabrication Inspection & Support		49,000
Metropolitan Force Construction		15,000
Contract		
Ireland Inc. dba Core-Rosion Products		407,741
Remaining Budget		15,259
Total	$	590,000

Project Schedule



Board Options

- Option #1

  Award a $407,740.66 procurement contract to Ireland Inc. dba Core-Rosion Products to furnish two 15,000-gallon fiberglass-reinforced tanks for the Copper Basin Reservoir.

- Option #2

  Do not proceed with the project at this time.

Staff Recommendation

- Option #1


THE METROPOLITAN WATER DISTRICT OF
SOUTHERN CALIFORNIA
1928

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

3/11/2025 Board Meeting

7-2

Subject

Award procurement contracts in the amount of $321,575 to Integrated 8a Solutions, Inc. for two 24-inch knife gate valves and in the amount of $2,151,947 to Bailey Valve for two 24-inch sleeve valves for the Hollywood Tunnel pressure control structure; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA

Executive Summary

The Hollywood Tunnel North Portal pressure control structure (Hollywood Tunnel PCS) is situated along the Santa Monica Feeder and controls downstream flows to the cities of Beverly Hills and Santa Monica. At this location, the 42-inch Santa Monica Feeder splits into two 24-inch flow control lines. The facility has two aging sleeve valves that control flow, two plug valves that isolate flows, and an outdated control system requiring staff to travel to the site to make frequent manual adjustments. The existing sleeve and plug valves have deteriorated to the point that they can no longer be refurbished.

This action awards a $321,575 procurement contract to Integrated 8a Solutions Inc. for two 24-inch diameter gate valves and a $2,151,947 procurement contract to Bailey Valve for two 24-inch diameter sleeve valves to be installed at the Hollywood Tunnel PCS. See **Attachment 1** for the Allocation of Funds, **Attachment 2** for the Abstract of Bids, and **Attachment 3** for the Location Map.

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

Staff Recommendation: Option #1

Option #1

a. Award a $321,575 procurement contract to Integrated 8a Solutions Inc. to furnish two 24-inch diameter gate valves; and
b. Award a $2,151,947 contract to Bailey Valve to furnish two 24-inch diameter sleeve valves for the Hollywood Tunnel pressure control structure.

Fiscal Impact: Expenditure of $3,100,000 in capital funds. All costs will be incurred in the current biennium and have been previously authorized.
Business Analysis: This option will enhance the operational reliability of water deliveries in the west service area.

Option #2

Do not proceed with the project at this time.
Fiscal Impact: None
Business Analysis: This option would forego enhancing the reliability of service in the western service area. Under this option, staff would continue to maintain the existing valves and make field adjustments to operate the system properly.

Alternatives Considered

During the planning phase of this project, staff considered refurbishing the existing equipment; however, replacement parts are no longer available and must be custom fabricated or procured and adapted for this application, making the rehabilitation cost prohibitive. In addition, the valve's control system is also obsolete and unreliable.

Upon inspection, it was determined that the valves have deteriorated to the point that refurbishment was no longer feasible. The selected option to procure and install new valves will improve operational flexibility and enhance service quality within the western service area. In addition, valve replacements will improve efficiency by minimizing the frequent call-outs currently needed to troubleshoot and adjust the existing system. This efficiency gain can lead to more productive use of resources, allowing staff to focus on other critical tasks.

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 53598, dated April 8, 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 action does not constitute an approval of the project for the purposes of CEQA. Environmental review will be completed prior to any decision by the Board which commits Metropolitan to the project. (State CEQA Guidelines Section 15352.)

CEQA determination for Option #2:

None required

Details and Background

Background

The Hollywood Tunnel PCS was built as part of the construction of the Santa Monica Feeder in 1941. It is one of three control points along the 25-mile Santa Monica Feeder, which delivers water to the cities of Burbank, Beverly Hills, Los Angeles, and Santa Monica. The PCS maintains the hydraulic grade elevation in the Hollywood Tunnel. The structure consists of two 24-inch-diameter hydraulically operated sleeve valves modulated by a mechanical control system, two 24-inch conical plug valves used for flow isolation and a single 16-inch-diameter bypass valve. The conical plug valve and bypass valve are manually operated.

The existing control and isolation valves are 50 years old and periodically fail, requiring regular corrective maintenance. In addition, repair parts for the valves are no longer available and must be custom fabricated or procured and adapted for this service. The existing mechanical control system has existed since the structure's original construction and was custom designed by Metropolitan staff. This mechanism no longer operates properly during low hydraulic pressure scenarios and does not allow for remote operation. In addition, staff is required to make weekly adjustments to the system to keep it in proper operation. Staff is also frequently called out to the site during non-business hours to troubleshoot the system and make manual adjustments. This facility is unique in Metropolitan's distribution system and requires staff to be specially trained to operate the facility.

Preliminary design for improvements to the Hollywood Tunnel North Portal facility was recently completed. Staff recommends proceeding with the procurement of long-lead time valves at this time. Staff will return to the Board to award a construction contract for installation of these valves.

Hollywood Tunnel North Portal Control Structure Upgrades – Procurement

The scope of the procurement contract includes furnishing two 24-inch diameter sleeve valves operated by electric actuators for pressure control and two 24-inch diameter bonneted knife gate valves operated by manual actuators for flow isolation. The bonneted knife gate valves will replace the existing deteriorating conical plug valves. Metropolitan forces will receive, offload, and store the valves. The 16-inch-diameter bypass valve was found to be in good condition and will not be replaced.

A total of $3,100,000 is required to perform this work. In addition to the amount of the procurement contracts described below, the allocated funds for Metropolitan staff include $147,000 for factory fabrication inspection and functional testing; $194,000 for submittals review and responding to manufacturer requests for information; $148,000 for contract administration, project management, and unloading of the valve; and $137,478 for the remaining budget. **Attachment 1** provides the allocation of the required funds.

Award of Procurement Contract

Specifications No. 2099 for furnishing two 24-inch diameter gate valves (Schedule 1) and two 24-inch diameter sleeve valves (Schedule 2) for the North Hollywood Tunnel was advertised for bids on November 22, 2024, and opened on January 16, 2025.

As shown in **Attachment 2**, two bids were received for Schedule 1. The bid from Integrated 8a Solutions Inc. in the amount of $321,575 complies with requirements of the specifications for the 24-inch gate valves (Schedule 1). This bid amount includes all sales and use taxes imposed by the state of California. The other bid was deemed non-responsive as they did not submit a bid bond as required. The budgetary cost estimate for this equipment, based on a survey of vendors, ranged from $325,000 to $375,000.

As shown in **Attachment 2**, three bids were received for Schedule 2. The bid from Bailey Valve in the amount of $2,151,947 complies with the requirements of the specifications for the 24-inch sleeve valves (Schedule 2). This amount includes all sales and use taxes imposed by the state of California. The two other bidders were deemed non-responsive as their bids were not for the type of valve specified; additionally, one of these bidders also did not submit a bid bond as required. The budgetary cost estimate for this equipment, based on a survey of vendors, ranged from $1,600,000 to $1,800,000.

Staff investigated the reason for the higher-than-expected bid for the Schedule 2 valves and attributes it to the limited number of valve manufacturers. Also, some manufacturers preferred not to undertake the custom engineering and fabrication required for valves that would fit within the existing structure and meet the hydraulic conditions.

This action awards a $321,575 procurement contract to Integrated 8a Solutions Inc. to furnish two gate valves and a $2,151,947 procurement contract to Bailey Valve to furnish two sleeve valves for the Hollywood Tunnel PCS. As a procurement contract, there are no subcontracting opportunities, and a small Business Enterprise participation level was not required for this contract.

Project Milestone

June 2026 – Delivery of valves

2/19/2025
Mai M. Hattar *Date*
Interim Chief Engineer
Engineering Services

2/19/2025
Deven Upadhyay *Date*
General Manager

Attachment 1 – Allocation of Funds

Attachment 2 – Abstract of Bids

Attachment 3 – Location Map

Ref# es12704588

Allocation of Funds for the Hollywood Tunnel Valve Procurement

	Current Board Action (Mar. 2025)
Labor	
Studies & Investigations	$ -
Final Design	-
Owner Costs	118,000
Submittals Review & Record Drwgs.	194,000
Construction Inspection & Support	122,000
Metropolitan Force Construction	10,000
Materials & Supplies	-
Incidental Expenses	20,000
Professional/Technical Services	25,000
Right-of-Way	-
Equipment Use	-
Contracts	-
Integrated 8a Solutions Inc.	321,575
Bailey Valve	2,151,947
Remaining Budget	137,478
Total	**$ 3,100,000**

The total amount expended to date is approximately $1.7 million. The total estimated cost to complete the improvements to the Hollywood Tunnel Pressure Control Structure, including the amount appropriated to date, funds allocated for the work described in this action, and future construction costs, is anticipated to range from $7 million to $8 million.

The Metropolitan Water District of Southern California

Abstract of Bids Received on January 16, 2025, at 2:00 P.M.

Specifications No. 2099
Furnishing Knife Gate Valves and Sleeve Valves for the
Hollywood Tunnel Pressure Control Structure

Schedule 1: The work includes furnishing two 24-inch knife gate valves

Budgetary estimate range: $325,000 - $375,000

Bidder and Location	Bid Amount
Integrated 8a Solutions Inc. Newport Beach, CA	**$ 321,575**
Vogt Valves Inc.[1] Stafford, TX	$ 309,380

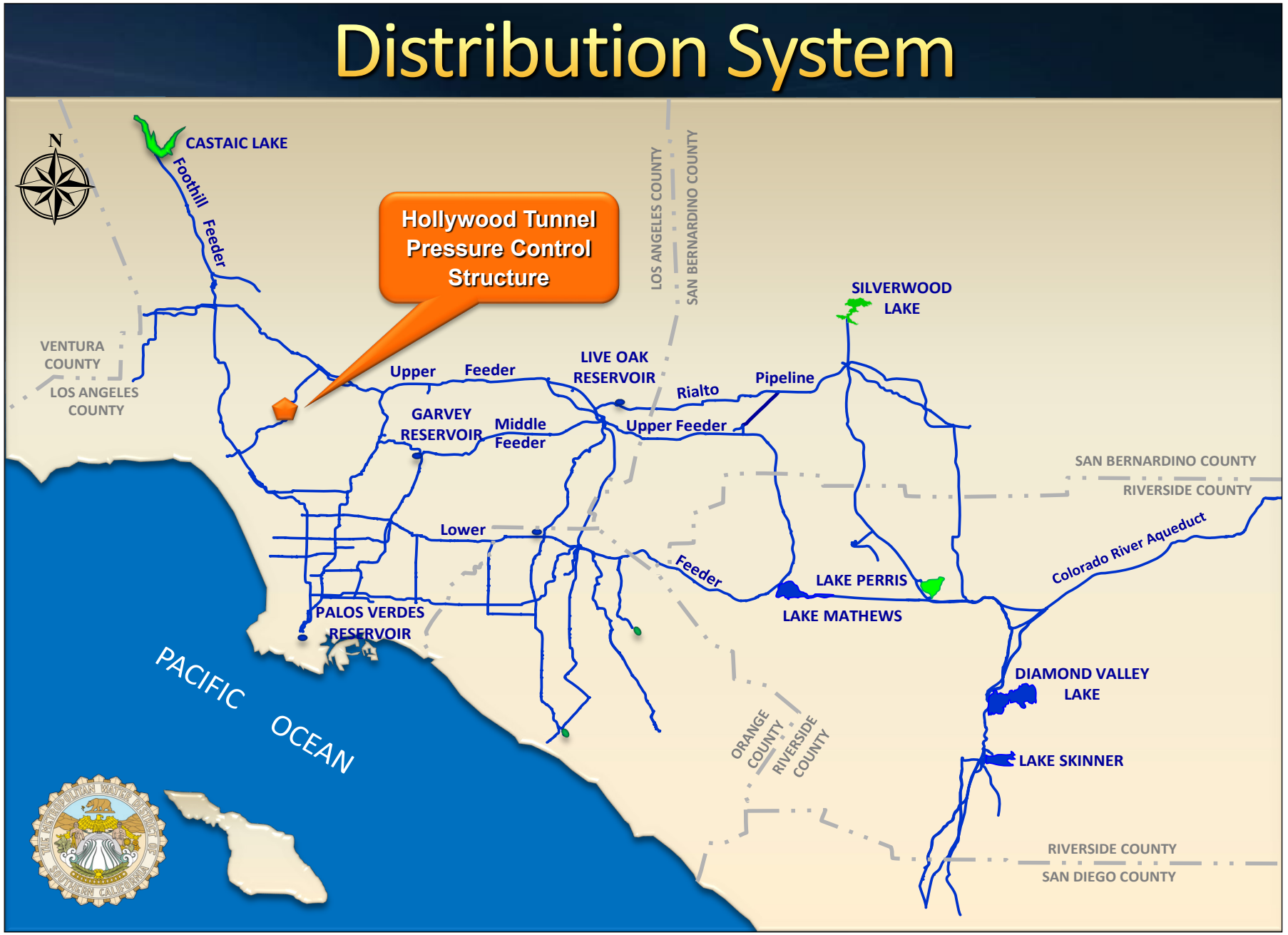
[1] Vogt Valves Inc. is deemed non-responsive because a bid bond was not received.

Schedule 2: The work includes furnishing two 24-inch sleeve valves.

Budgetary estimate range: $1,600,000 - $1,800,000

Bidder and Location	Bid Amount
Integrated 8a Solutions Inc.[1] Newport Beach, CA	$ 901,925
Vogt Valves Inc.[1] Stafford, TX	$ 922,660
Bailey Valve Fresno, CA	**$ 2,151,947**

[1] Integrated 8a Solutions Inc. and Vogt Valves Inc. are deemed non-responsive because both bidders did not meet the specifications. Additionally, Vogt Valves Inc. did not provide a bid bond.


Distribution System
N
CASTAIC LAKE
Foothill Feeder
Hollywood Tunnel Pressure Control Structure
LOS ANGELES COUNTY
SAN BERNARDINO COUNTY
SILVERWOOD LAKE
VENTURA COUNTY
LOS ANGELES COUNTY
Upper Feeder
LIVE OAK RESERVOIR
Rialto Pipeline
GARVEY RESERVOIR
Middle Feeder
Upper Feeder
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

Engineering, Operations, & Technology Committee

Hollywood Tunnel PCS Valves Procurement

Item 7-2

March 10, 2025

Item 7-2
Hollywood Tunnel PCS Valves Procurement

Subject

Award a procurement contract in the amount of $321,575 to Integrated 8a Solutions Inc. for two 24-inch knife gate valves and award a procurement contract in the amount of $2,151,947 to Bailey Valve for two 24-inch sleeve valves for the Hollywood Tunnel pressure control structure

Purpose

Replace aging valves to improve operational reliability

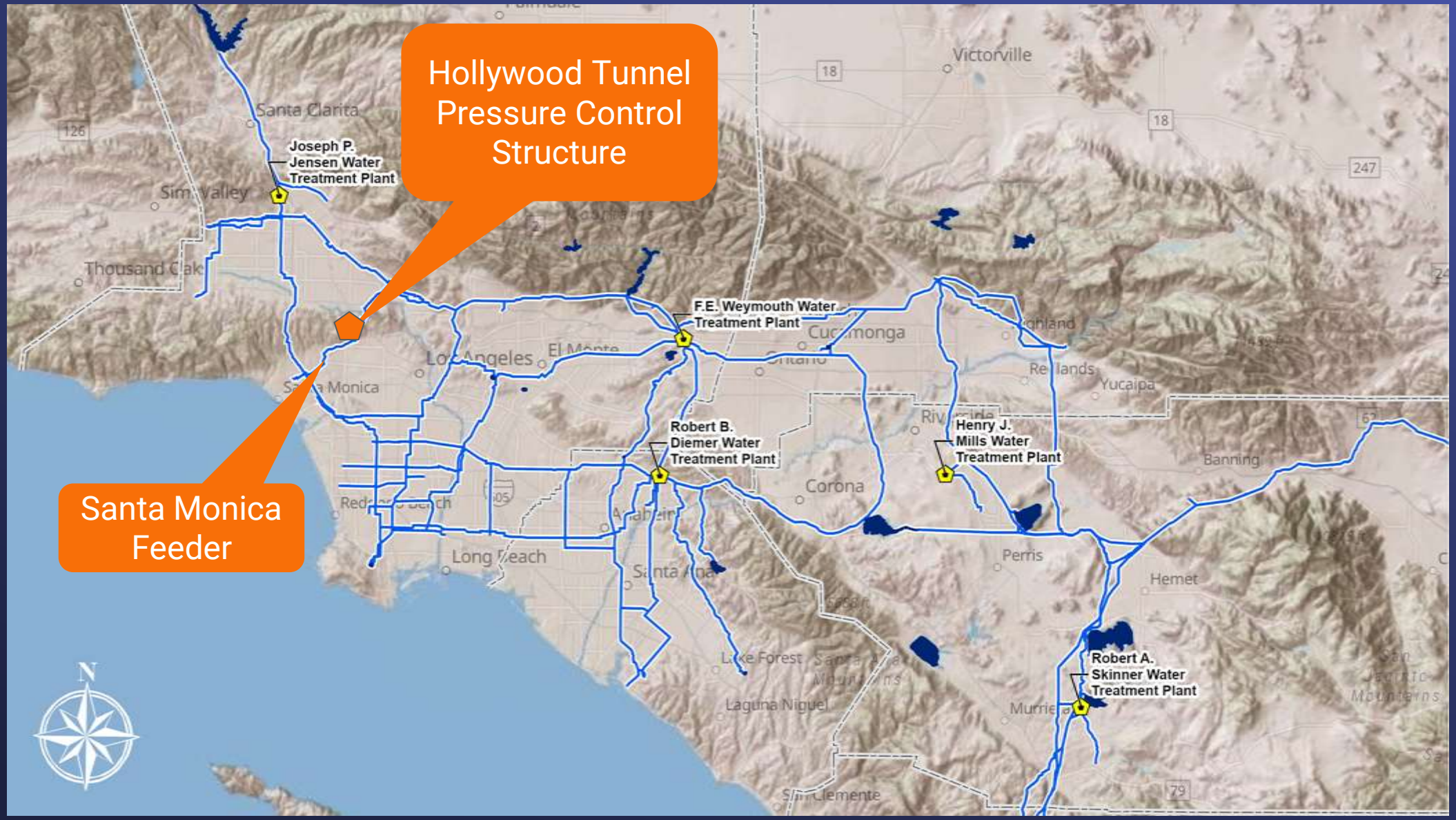
Recommendation and Fiscal Impact

Award procurement contracts for valves

Fiscal Impact – $3,100,000

Budgeted

Location Map



Hollywood Tunnel PCS Valves Procurement

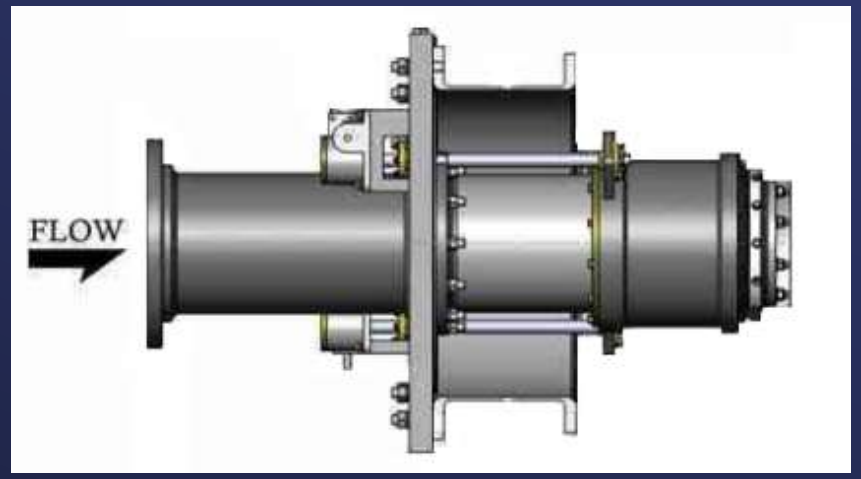
Background

- Hollywood Tunnel Pressure Control Structure (PCS)
  - Regulates flows on Santa Monica Feeder
- PCS with mechanical control system built in 1941
  - Control system uses pulleys, cables and counterweights
  - Requires frequent maintenance and adjustments
  - Valves can no longer be refurbished

Hollywood Tunnel PCS
Valves Procurement

Alternatives Considered

- Considered – Valve refurbishment
  - Extensive damage to aging valve
  - Repair not cost-effective
- Selected Alternative – New knife gate and sleeve valves
  - Improves reliability
  - Increases maintenance efficiency



Internal Section of a Sleeve Valve

Hollywood Tunnel PCS Valves Procurement

Scope of Work

- Valve Manufacturers
  - Fabricate and deliver
    - Two 24-inch gate valves with manual actuators
    - Two 24-inch sleeve valves with electro-hydraulic actuators
- Metropolitan
  - Fabrication inspection and testing
  - Submittal reviews
  - Project management and contract administration
  - Off-load and store valves

Bid Results

Specifications No. 2099 – Schedule 1: Knife Gate Valves

Bids Received	January 16, 2025
No. of Bidders	2
Responsive Bidder	Integrated 8a Solutions Inc.
Low Bid	$321,575
Other Bid	Non-responsive
Budgetary Range	$325,000 - $375,000

*No SBE (Small Business Enterprise) participation level set for procurement contract

Bid Results

Specifications No. 2099 – Schedule 2: Sleeve Valves

Bids Received	January 16, 2025
No. of Bidders	3
Responsive Bidder	Bailey Valve
Low Bid	$2,151,947
Other Bids	Two non-responsive bids
Budgetary Range	$1,600,000 - $1,800,000

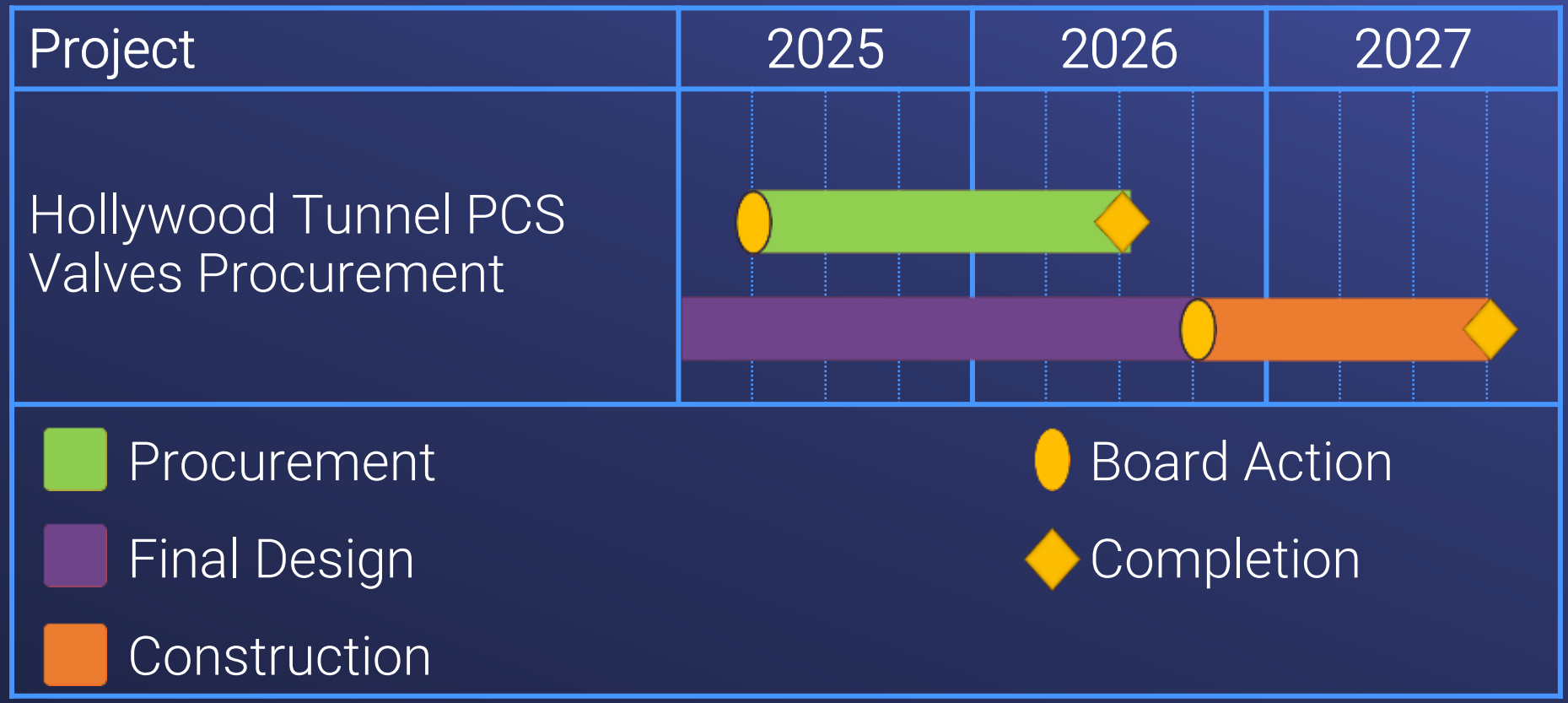
*No SBE (Small Business Enterprise) participation level set for procurement contract

Allocation of Funds

Hollywood Tunnel PCS Valves Procurement

Metropolitan Labor		
Owner Costs (Proj. Mgmt., Contract Admin.)	$	138,000
Submittals Review, Tech. Support, Record Dwgs.		194,000
Fabrication Inspection & Support		122,000
MetForce Construction		10,000
Professional/Technical Services (Inspection)		25,000
Contracts		
Integrated 8a Solutions Inc.		321,575
Bailey Valve		2,151,947
Remaining Budget		137,478
Total	$	3,100,000

Project Schedule



Note: Valves to be installed during a future shutdown under separate construction contract.

Board Options

- Option #1
  a. Award a $321,575 procurement contract to Integrated 8a Solutions Inc. to furnish two 24-inch diameter gate valves; and
  b. Award a $2,151,947 contract to Bailey Valve to furnish two 24-inch diameter sleeve valves for the Hollywood Tunnel pressure control structure.
- Option #2

  Do not proceed with the project at this time.

Staff Recommendation

- Option #1


THE METROPOLITAN WATER DISTRICT OF
SOUTHERN CALIFORNIA
1928

THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

Board Report

Engineering Services Group

- **Capital Investment Plan Quarterly Report for Period Ending December 2024**

Summary

The attached report provides a summary of actions and accomplishments on the Capital Investment Plan (CIP) during the second quarter of fiscal year 2024/25. It also provides updates on the status of capital projects and capital expenditures to date, and information regarding service connections and relocations authorized by the General Manager during the reporting period of October to December 2024, the second quarter of fiscal year 2024/25, and the second quarter of the fiscal years 2024/25 and 2025/26 biennium.

Purpose

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

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

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

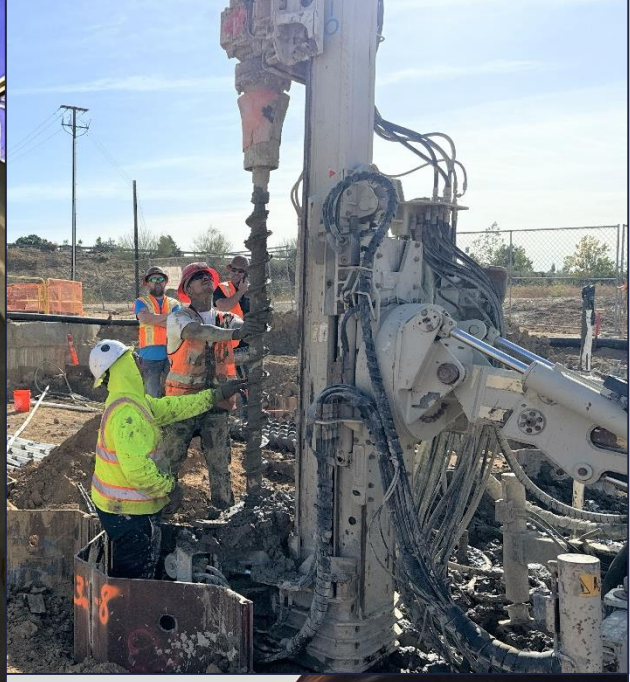
Section 8122(c) of Metropolitan's Administrative Code requires the General Manager to report on the execution of any relocation agreement under the General Manager's authority involving an amount in excess of $100,000.

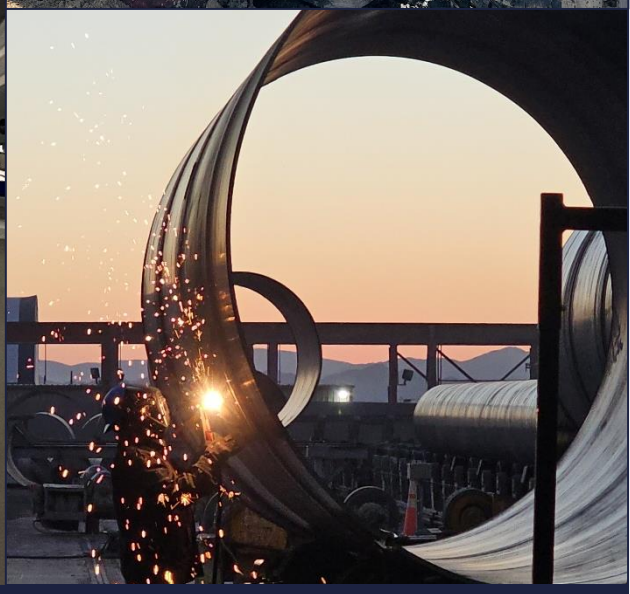
Highlights of progress and major milestones on selected projects are presented in the attached report grouped by CIP program.

Attachments

Capital Investment Plan quarterly report for period ending December 2024

Date of Report: March 10, 2025





The Metropolitan Water District of Southern California

Capital Investment Plan
Quarterly Report

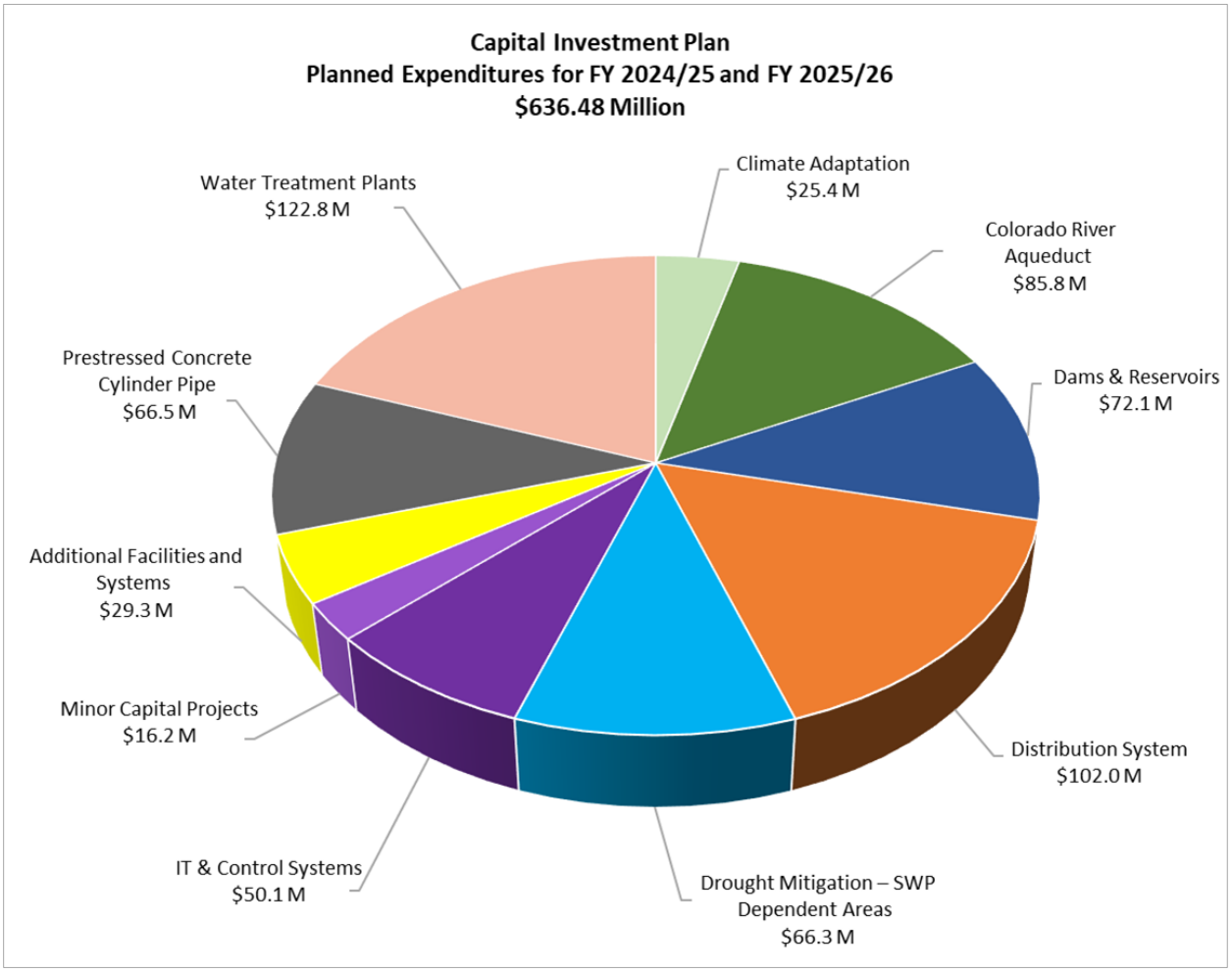
October - December 2024

Table of Contents

Capital Investment Plan for Fiscal Years 2024/25 & 2025/26

Metropolitan's total planned capital expenditures for Fiscal Years (FYs) 2024/25 and 2025/26 are $636.48 million. In April 2024, the Board appropriated $636.48 million and delegated authority to the General Manager, subject to both CEQA requirements and the General Manager's authority as addressed in Metropolitan's Administrative Code, to initiate or proceed with work on all planned Capital Investment Plan (CIP) projects identified in the CIP Appendix for FYs 2024/25 and 2025/26. Figure 1 below shows the planned expenditures by program.

Figure 1: CIP for FY 2024/25 and FY 2025/26 by Program



[Cover photos: (left to right; top to bottom): *Badlands Tunnel Surge Protection Facility* – 96-inch diameter pipe installation inside of the isolation valve vault; *Perris Valley Pipeline I-215 Tunnel Crossing* – Drilling grout holes for Shaft No. 1; *Allen-McColloch Pipeline PCCP Urgent Rehabilitation–Stage 2* – Welding 117-inch diameter steel liner]

Executive Summary

This report provides a summary of the Capital Investment Plan (CIP) activities and accomplishments during the 2nd Quarter of Fiscal Year (FY) 2024/25, which ended in December 2024. CIP expenditures through the 2nd Quarter totaled approximately $193.7 million with 45 active procurement and construction contracts at the end of the quarter. The expenditures are projected to stay above plan through the 1st half of the next fiscal year before ending the biennium near the planned expenditure of $636.48 million. The CIP funds allocated to specific projects through the reporting quarter totaled approximately $453.7 million, leaving approximately $182.8 million available to be allocated during the remainder of the current biennium.

During the quarter, eight project-specific board actions were heard in open sessions. Two construction contracts and two procurement contracts were awarded by the Board during the reporting period with a total contract amount of approximately $3.5 million. During the same time, a total of approximately $49.8 million in contract payments were authorized, reflecting construction progress on projects such as Allen-McColloch Pipeline PCCP Urgent Relining – Stage 2, Diamond Valley Lake Floating Wave Attenuator System Improvements – Stage 2, Hinds, Eagle Mountain, and Iron Mountain Pumping Plants Storage Buildings, Badlands Tunnel Surge Protection Facility, Inland Feeder/Rialto Pipeline Intertie, Jensen and Skinner Water Treatment Plants Battery Energy Storage Systems, Perris Valley Pipeline I-215 Tunnel Crossing, Second Lower Feeder PCCP Rehabilitation – Reach 3B, and Weymouth Basins Nos. 5-8 & Filter Building No. 2 Rehabilitation.

Staff continues to manage over 500 CIP projects and project spending in this and future budget cycles. Some of the major construction projects that could potentially be started in the next three years include Phase 2 Design Build of the Sepulveda Feeder Pump Stations, Lakeview Pipeline Relining – Stage 2, Sepulveda Feeder PCCP Rehabilitation – Reaches 2 and 9, Lake Mathews Pressure Control Structure and Electrical Upgrades, Garvey Reservoir Rehabilitation – Stage 1, Foothill/Inland Feeder Intertie, Diemer Filter Improvements, and numerous zero emissions fleet infrastructure and security projects.

Staff will commence the next biennial CIP budget process early next year. The majority of projects are refurbishment and replacement (R&R) projects, and in each biennium, approximately 100 new projects are proposed.

Board Action Summary

During the 2nd Quarter, board actions heard in open session included eight CIP project-specific actions summarized in Table 1 below. These actions awarded four contracts totaling approximately $3.5 million; authorized four new on-call professional/technical services agreements totaling not-to-exceed $12.0 million; certified a Final Environmental Impact Report; and authorized an amendment to add four new projects to an existing Project Labor Agreement. The table below excludes information on board items heard in closed session.

Table 1: 2nd Quarter Board Actions

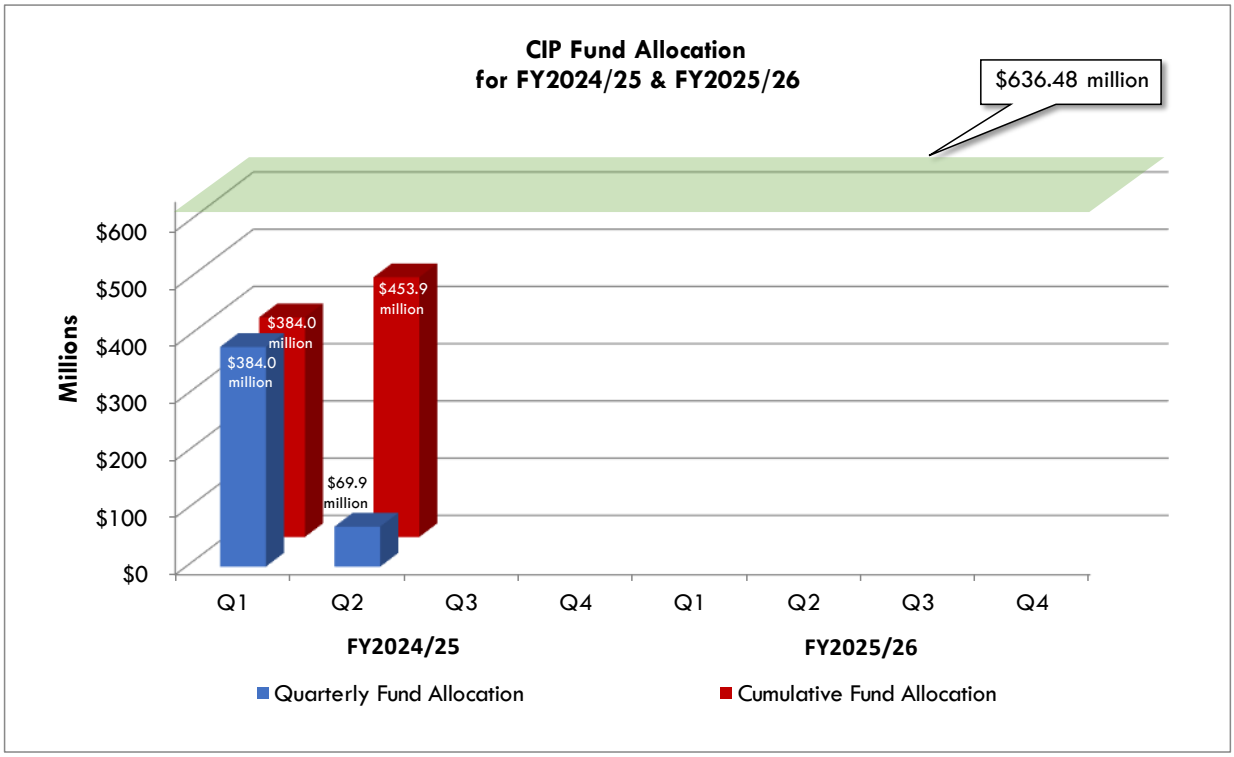
Month	Board Letter Item No.	Project	Action Taken
October	7-1	Auld Valley and Red Mountain Control Structures Upgrades	Awarded a $589,957 procurement contract
October	7-2	San Diego Canal Concrete Liner Replacement – Site 236	Awarded a $1,833,650 construction contract
October	7-3	Diemer Helicopter Hydrant Facility	Awarded a $448,000 procurement contract
October	8-2	On-call Agreements for Engineering Services for Zero-Emission Vehicle Infrastructure	Authorized four on-call agreements not to exceed $3 million each

Month	Board Letter Item No.	Project	Action Taken
November	7-1	Desert Housing and Property Improvements	Authorized amending the scope of an existing agreement
November	7-2	Garvey Reservoir Rehabilitation	Certified the Final Environmental Impact Report
November	8-1	Project Labor Agreement (PLA)	Authorized an amendment to add four new projects
December	7-2	Lake Skinner Dam Drainage System Improvements	Awarded a $588,000 construction contract

The previously referenced April 2024 board action appropriated a total of $636.48 million to perform work on planned CIP projects through the current biennium. To be considered a planned project, the project must be identified and described in the CIP Appendix for the two-year budget cycle. Consistent with the April 2024 action, all requests to allocate funds and proceed with planned CIP projects are reviewed and approved by the Chief Engineer acting under the General Manager's authority. Unplanned projects, those that are not already identified in the CIP Appendix, require a separate board authorization. During the 2nd Quarter, no unplanned CIP projects were authorized by the Board.

Figure 2 shows the allocation of the funds from Appropriation No. 15535 for this quarter and a total for the current biennium through the quarter, which is approximately $453.9 million, leaving approximately $182.6 million to be allocated during the remainder of the current biennium. This amount includes the allocation of $10 million to the Minor Capital Projects Program. During the 2nd Quarter, approximately $60.8 million was allocated for new work authorized, and approximately $9.1 million was reallocated for previously authorized work. Details of the allocations and reallocations of funds during the reporting quarter can be found in the **Project Actions** section.

Figure 2: CIP Fund Allocation from Appropriation No. 15535 – FY 2024/25 and FY 2025/26



*Numbers may not sum due to rounding.

Information on construction and procurement contracts activities for the 2nd Quarter of FY 2024/25 is presented in the **Construction and Procurement Contracts** section of this report. Progress payments for these contracts in the 2nd Quarter totaled approximately $49.8 million and primarily reflect construction progress on Allen-McColloch Pipeline PCCP Urgent Relining – Stage 2, Diamond Valley Lake Floating Wave Attenuator System Improvements – Stage 2, Hinds, Eagle Mountain, and Iron Mountain Pumping Plants Storage Buildings, Badlands Tunnel Surge Protection Facility, Inland Feeder/Rialto Pipeline Intertie, Jensen and Skinner Water Treatment Plants Battery Energy Storage Systems, Perris Valley Pipeline I-215 Tunnel Crossing, Second Lower Feeder PCCP Rehabilitation – Reach 3B, and Weymouth Basins Nos. 5-8 & Filter Building No. 2 Rehabilitation.

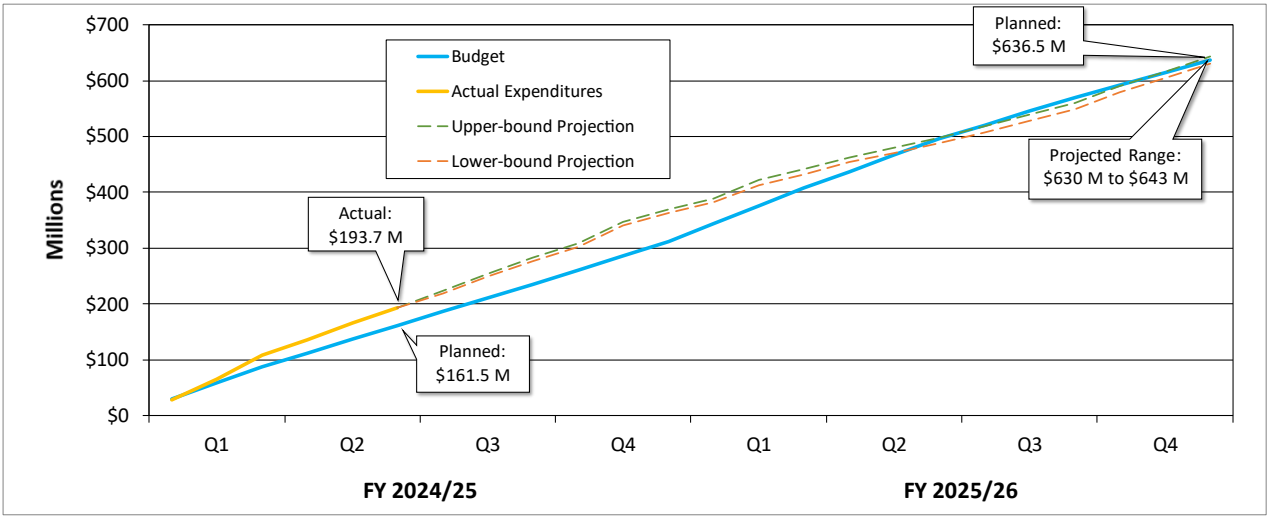
Planned Expenditure and Budget

Table 2 below shows the planned and actual expenditures for the biennium through the end of the 2nd Quarter of FY 2024/25. Figure 3 shows the forecast of expenditures through the end of the current biennium, against planned expenditures for the same time interval. Actual expenditures through the 2nd Quarter of FY 2024/25 were approximately 120% of planned expenditures.

Table 2: Planned & Actual Expenditures for FYs 2024/25 & 2025/26

Quarter	Planned Expenditures (millions)	Actual Expenditures (millions)
FY 2024/25, Q1	$87.2	$107.7
FY 2024/25, Q2	$74.3	$86.0
Totals	**$161.5**	**$193.7**

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



As shown in Figure 3, the total planned expenditures in the current biennium are $636.48 million. The projected expenditures for the biennium are currently projected to be between $630 million and $643 million, with the actual expenditures approximately 20% higher than the planned expenditures during the 2nd Quarter of FY 2024/25. The variance above the planned expenditures in this quarter is mainly due to several factors, including unplanned spending on urgent relining of distressed PCCP segments of the Allen-McColloch Pipeline, revised construction contract payments for awarded contracts based on updated project schedules and contractor work plan shifts, and anticipated higher contract bids for key upcoming contracts.

Funding of Infrastructure Projects with Outside Sources

This section provides information on select grants and other outside sources of funds that Metropolitan receives to support infrastructure projects. The expenditures related to these outside funding sources are described below and will be updated in subsequent quarters as the funds are received and expenditures are recorded.

Pure Water Southern California

In December 2022, Metropolitan's Board authorized the General Manager to use $80 million in project funding from the State Water Resources Control Board (SWRCB) to commence activities related to the initiation of the Pure Water Southern California program. Metropolitan received the $80 million funding in one lump sum payment on May 24, 2023, to support the design activities for the program. Funds are available for expenditure until June 30, 2026. The use of these funds is not included as part of Metropolitan's CIP expenditures. During the reporting quarter, State funds were used to support program management tasks, including the preparation of various plans for program implementation and preliminary design of the initial two reaches of the conveyance pipelines.

Metropolitan is currently discussing with the program partners, Southern Nevada Water Authority (SNWA), and planning to discuss with the Arizona Department of Water Resources to determine their potential contributions to the program. Los Angeles County Sanitation Districts (LACSD) has agreed to be responsible for implementation of the pretreatment and nitrogen management facilities, which includes the membrane bioreactor (MBR). The amended and restated agreement with LACSD was authorized on September 9, 2024. Metropolitan is currently discussing with other program partners to determine their potential contributions to the program.

The U.S. Bureau of Reclamation (USBR) awarded a $5 million WaterSMART grant to Metropolitan in 2023. The grant agreement was finalized in May 2024. A three-time matching fund is required for this grant. Metropolitan also received a notice of intent to award a Large-Scale Water Recycling Project (LSWRP) grant in May 2024, which will reimburse 25 percent of the planning and design costs up to $99,199,096 through the grant term. In November 2024, Metropolitan again received a notice of intent to award an LSWRP grant in the amount of $26,273,759, for a total LSWRP grant amount of $125,472,855. Metropolitan will share the LSWRP grant with LACSD, who will provide their share of the matching funds. The Board authorized the acceptance of the grant award on December 10, 2024.

Drought Mitigation Projects

In December 2022, Metropolitan's Board adopted a resolution to accept $50 million in state funding from the California Department of Water Resources to support Metropolitan's drought mitigation projects. The Board also designated the Group Manager of Engineering Services to be the signatory to execute actions related to the funds. The California Department of Water Resources (DWR) will administer the funds and release the reimbursement after Metropolitan invoices expenses. The $50 million fund is available for reimbursement through June 30, 2026, and five percent of this amount may be used for administrative costs by DWR. From the state-allocated amount, it allocated to Metropolitan $47.5 million to improve and expand its infrastructure to be more resilient and flexible to respond to fluctuating water supplies. The improved system will enhance the ability to convey water throughout all its service area. Under this grant, staff will be required to submit invoices to DWR to receive reimbursement for expenditures that comply with the grant requirements. To date, three projects on the east side of Metropolitan's system are covered under this grant. These three projects are part of an overall plan to provide direct delivery of Diamond Valley Lake (DVL) supplies to the Rialto Pipeline. During the reporting quarter, a progress report and invoices through September 2024 were submitted and approved by DWR for $5.08 million. As of December 2024, a total of $17.2 million in reimbursement has been received from the State for the three projects. This funding allows additional rehabilitation projects to proceed as a result of applying state grant funds towards the applicable CIP projects.

In November 2023, Metropolitan submitted a grant application to USBR requesting $5 million to support Inland Feeder/SBVMWD Foothill Pump Station project as part of water supply reliability improvements in the Rialto Pipeline service area. USBR offers funding through its WaterSMART Drought Response Program: Drought Resiliency Projects for Fiscal Year 2024 to water districts in the Western United States to increase water supply reliability through investments in existing infrastructure and increased water management flexibility. The USBR program funds up to $5 million per project for projects that can be completed within three years. The grant requires a 50 percent cost-sharing. If the grant award is $5 million, Metropolitan would provide at least the same amount ($5 million). The source of the cost-share funds is budgeted CIP funds planned to be spent on the project and will fulfill Metropolitan's grant matching funds requirement. The total cost of this project is estimated to be $34 million. During the reporting

quarter, USBR continued compiling information to prepare a National Environmental Policy Act (NEPA) document, preparing a consultation letter to initiate the permit consultation process, and developing a formal funding agreement.

Battery Energy Storage System Projects

In October 2020, Metropolitan's Board authorized adding battery energy storage system (BESS) projects to the CIP to enhance the efficiency of Metropolitan's long-term power use, provide a hedge against projected electricity price increases, and improve the resiliency of the electric power supply at the Jensen, Skinner, and Weymouth Water Treatment Plants. This decision was aided by the California Public Utilities Commission's enhanced incentives for microgrid-capable BESS at critical facilities, which are expected to reimburse Metropolitan for $8.147 million of project costs. Construction of the BESS systems is underway, with Weymouth BESS construction estimated to be completed in the second half of FY 2024/25 and Jensen & Skinner BESS construction estimated to be completed in FY 2025/26. Unlike the funds received for Pure Water discussed above, the incentive will be paid to Metropolitan in phases: 50 percent at project completion, with the remaining 50 percent paid equally over five years upon annual proof of a 5 kg CO_2/kWh reduction in greenhouse gas emissions.

Webb Tract Delta Island Flooded Wetlands and Rice Field System Project

In May 2023, Metropolitan's Board adopted a resolution to support a grant application for a $20.9 million grant from the Sacramento-San Joaquin Delta Conservancy (Delta Conservancy), and staff signed a grant agreement with Delta Conservancy in March 2024 that funds two projects on Webb Tract, a Metropolitan-owned island located in Contra Costa County. The two projects include construction of up to 1,500 acres of rice fields and design, permitting, and construction of up to 3,500 acres of wetland on the island. Under this grant, staff will be required to submit invoices to Delta Conservancy to receive reimbursement of expenditures that comply with the grant requirements. As of December 2024, a total reimbursement of $555,966 has been received from the Delta Conservancy. Staff is currently negotiating with a farming partner to convert the existing agricultural lands to rice farming. A Metropolitan board action to award a farming lease agreement is expected in the spring of 2025. Wetland design is ongoing, with the final design and permitting of the Wetlands estimated to be completed in the summer of 2025 with construction estimated to begin in spring of 2026.

Diemer Helicopter Hydrant Project

Metropolitan and the Yorba Linda Water District (YLWD) signed a memorandum of understanding outlining the commitment to jointly fund and construct a helicopter hydrant facility at the Robert B. Diemer Water Treatment Plant (Diemer plant). The project will be partially funded by a $500,000 grant previously awarded by the United States Forest Service (USFS) to YLWD to construct the facility. Metropolitan is now a subrecipient of the grant and the grant funds will be used to defray Metropolitan's cost for the project. The construction is underway and is estimated to be completed by August 2025.

Major Capital Programs Overview

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

- Program
- Project Group/Appropriation
- Project

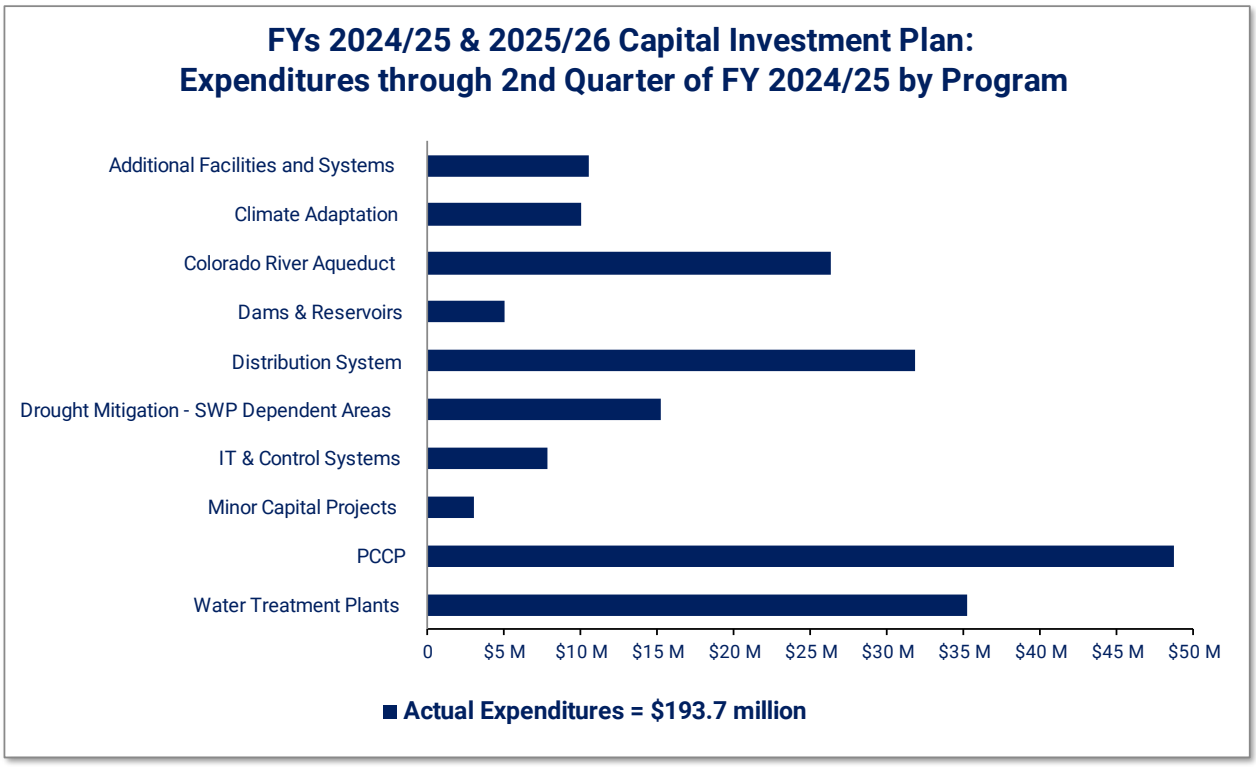
Metropolitan's CIP is comprised of 10 programs, which capture all projects within the CIP. The 10 programs are listed below in alphabetical order. Programs are comprised of one or more project groups/appropriations, and project group/appropriations are comprised of one or more projects. The status of each of the programs is provided later in this section of the report. A comparison of the program planned expenditures and actual costs to date for each of the programs is provided in Table 13 at the end of this report.

- Additional Facilities and Systems
- Climate Adaptation
- Colorado River Aqueduct (CRA)
- Dams & Reservoirs
- Distribution System
- Drought Mitigation - SWP Dependent Areas
- Information Technology (IT) & Control Systems
- Minor Capital Projects
- Prestressed Concrete Cylinder Pipe (PCCP)
- Water Treatment Plants

For the current biennium, the CIP includes over 500 planned projects (excluding minor capital projects).

Figure 4 below shows actual expenditures for the 10 capital programs for 2nd Quarter of FY 2024/25.

Figure 4: Biennium-to-date Actual Expenditures through 2nd Quarter FY 2024/25



Major Capital Project Programs – Highlights

This section provides 2nd Quarter highlights for the nine Major Capital Projects Programs; the Minor Capital Projects Program is highlighted in its own section of this report. Status is provided for selected projects within each Major Capital Projects Program. The selected projects typically achieved major milestones during the 2nd Quarter of FY 2024/25 or are scheduled to achieve major milestones in the next quarter.

Table 3: Major Capital Projects Programs

Program	Project
Additional Facilities and Systems	Desert Housing and Property Improvements
Climate Adaptation	Battery Energy Storage Systems
Colorado River Aqueduct (CRA)	Hinds, Eagle Mountain, and Iron Mountain Pumping Plants Storage Buildings
Dams & Reservoirs	Diamond Valley Lake Dam Monitoring System Upgrades - Stage 3
Distribution System	Perris Valley Pipeline I-215 Tunnel Crossing
Drought Mitigation - SWP Dependent Areas	Sepulveda Feeder Pump Stations
Information Technology (IT) & Control Systems	Real Property Group Business System Replacement
Prestressed Concrete Cylinder Pipe (PCCP)	Allen-McColloch Pipeline PCCP Urgent Relining – Stages 1 & 2
Water Treatment Plants	Diemer Helicopter Hydrant Facility

Additional Facilities and Systems Program

Actual Biennium Expenditures (Jul. 2024 through Dec. 2024) $10.46 million

Program Information: The Additional Facilities and Systems Program is composed of projects to refurbish, replace, upgrade, or provide new facilities and systems that support Metropolitan's business and operations.

Program Highlights (2nd Quarter)

Accomplishments

- Completed construction for the following project:
  - Headquarters Building Physical Security Improvements – Stage 3
- Continued construction for the following projects:
  - Diamond Valley Lake Floating Wave Attenuator System Improvements – Stage 2
  - La Verne Shops Upgrades – Building Completion – Stage 5
- Continued final design for the following projects:
  - Diamond Valley Lake East Marina Utilities
  - Diamond Valley Lake Floating Restroom Replacement
  - Diamond Valley Lake to Lake Skinner Trail
  - Eagle Rock Security Upgrade – Stage 1
  - Lake Mathews Aboveground Storage Tank Replacement
- Continued preliminary design for the following projects:
  - CRA Aircraft Facility Improvement – Stage 1
  - Desert Housing and Property Improvements
  - La Verne Water Quality Laboratory Building Upgrades
- Initiated preliminary design for the following projects:
  - Apprentice Training Center Facility
  - Headquarters Building Automation System Upgrades
  - Headquarters HVAC System Rehabilitation
  - La Verne Shops Upgrades – Stage 6
- Initiated study for the following project:
  - CRA Aircraft Facility Improvements – Stage 2
- La Verne Water Quality Laboratory Equipment Replacement
  - Continued preliminary design and procurement of laboratory equipment

Upcoming Activities

Upcoming work for the next quarter will include:

- Continue construction for the following projects:
  - Diamond Valley Lake Floating Wave Attenuator System Improvements – Stage 2
  - La Verne Shops Upgrades – Building Completion – Stage 5
- Advertise construction contract for the following project:
  - Lake Mathews Aboveground Storage Tank Replacement
- Continue final design for the following projects:
  - Diamond Valley Lake East Marina Utilities
  - Diamond Valley Lake Floating Restroom Replacement
  - Diamond Valley Lake to Lake Skinner Trail
  - Eagle Rock Security Upgrade – Stage 1
- Complete preliminary design for the following project:
  - La Verne Quality Laboratory Building Upgrades
- Continue preliminary design for the following projects:
  - Apprentice Training Center Facility
  - CRA Aircraft Facility Improvements – Stage 1
  - Desert Housing and Property Improvements
  - Headquarters Building Automation System Upgrades
  - Headquarters HVAC System Rehabilitation
  - La Verne Shops Upgrades – Stage 6
- Continue study for the following project:
  - CRA Aircraft Facility Improvements – Stage 2
- Headquarters Fire Alarm/Smoke Control Upgrades
  - Obtain final sign-off by fire department
- La Verne Water Quality Laboratory Equipment Replacement
  - Continue preliminary design and procurement of laboratory equipment

Desert Housing and Property Improvements

Total Project Estimate:
$210.0 million

Total Project Cost to Date:
$12.3 million

This project will replace single-family housing and construct new kitchen and lodge facilities, and upgraded village amenities at the CRA pumping plants.

Phase	Preliminary Design
% Complete for Current Phase	5%
Current Phase Authorized	November 2024
Estimated Completion Date of Current Phase	December 2025

The Board authorized an amendment to a consulting agreement for Stage 1 improvements in November 2024. Stage 1 will include eight townhomes at each of the three pumping plants (Eagle Mountain, Iron Mountain, and Gene) for a total of twenty-four. In addition to the townhomes, new kitchen and lodge facilities will be constructed at Eagle Mountain and Iron Mountain pumping plants with upgraded amenities packages at four villages except Intake Pumping Plant. A new lodge at Gene Pumping Plant and four small units at Hinds Pumping Plant for on-call staff will also be constructed as part of the improvements project. In the upcoming quarter, preliminary design for Stage 1 improvements will continue.

Existing village site of future improvements – Eagle Mountain Pumping Plant

Climate Adaptation Program

Actual Biennium Expenditures (Jul. 2024 through Dec. 2024) $9.89 million

Program Information: The Climate Adaptation Program is composed of projects to replace, refurbish, upgrade, or construct new facilities to prepare Metropolitan to adjust to current and projected climate change impacts on its operation and its mission to provide its service area with adequate and reliable supplies of high-quality water in an environmentally and economically responsible way.

Program Highlights (2nd Quarter)

Accomplishments

- Advanced Water Treatment Demonstration Facility
  - Continued tertiary membrane bioreactor (MBR) optimization testing to support the planning and design of a full-scale advanced purification facility
  - Initiated preparation of improvement plans to address long-term site security
- Battery Energy Storage Systems (BESS) at Jensen, Weymouth, and Skinner Plants
  - Continued construction at all three facilities
- Direct Potable Reuse Demonstration (DPR) Facility
  - Continued development of site improvement plans to support DPR pilot testing
  - Initiated preparation of procurement packages for DPR pilot testing equipment
- Zero Emission Vehicle (ZEV) Infrastructure Upgrade projects:
  - Districtwide Zero Emission Fleet Infrastructure
    - Continued development of the enhanced programmatic planning and study document
  - Headquarters Building Zero Emission Vehicle Infrastructure Upgrades – Stage 1
    - Began final design
  - Zero Emission Fleet Pilot Infrastructure – Stage 1
    - Completed installation of two pilot charging stations at the Headquarters Building
  - Zero Emission Fleet Pilot Infrastructure – Stage 2, Phase 1
    - Began design of a total of five Level 2/2+ charging stations at Lake Mathews, Weymouth plant, Jensen plant, and Skinner plant
    - Began design of a total of three Level 3 fast charging stations at Mills plant, Weymouth plant, and Gene pumping plant

Upcoming Activities

Upcoming work for the next quarter will include:

- Advanced Water Treatment Demonstration Facility
  - Continue preparation of improvement plans to address long-term site security
  - Continue tertiary MBR optimization testing to support the planning and design of a full-scale advanced water purification facility
- Battery Energy Storage Systems at Jensen, Weymouth, and Skinner Plants
  - Execute commissioning BESS at the Weymouth plant and continue construction at the Jensen and Skinner plants

- Direct Potable Reuse Demonstration Facility
  - Continue preparation of procurement packages for DPR pilot testing equipment
  - Continue site improvement planning effort to support DPR pilot testing
  - Initiate preparation of a conceptual design report for DPR pilot system
- Zero Emission Vehicle (ZEV) Infrastructure Upgrade projects:
  - Districtwide Zero Emission Fleet Infrastructure
    - Begin coordination with the utility service providers
    - Complete the enhanced programmatic planning and study document
  - Headquarters Building Zero Emission Vehicle Infrastructure Upgrades – Stage 1
    - Complete 60% final design and begin review
  - Zero Emission Fleet Pilot Infrastructure – Stage 1
    - Complete testing, commissioning, and integration of pilot chargers installed at the Headquarters Building and Weymouth plant
  - Zero Emission Fleet Pilot Infrastructure – Stage 2, Phase 1
    - Complete design of eight charging stations at six of the seven sites and begin hazmat survey and installation

Battery Energy Storage Systems

Total Project Estimate:
$28.4 million

Total Project Cost to Date:
$24.6 million

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

Phase	Construction
% Complete for Construction at Jensen and Skinner % Complete for Construction at Weymouth	85% 89%
Contract Awarded for Jensen and Skinner Contract Awarded for Weymouth	September 2021 June 2022
Estimated Construction Completion Date for Jensen and Skinner Estimated Construction Completion Date for Weymouth	September 2025 February 2025
Contract Number for Jensen and Skinner Contract Number for Weymouth	1998 2014

The contractor completed installation of electrical cabinets at the Jensen unit substation and continued labeling the 480V conductors and installing conduits for various panels at the Jensen and the Skinner plants. The contractor completed the installation of sound wall footing and continued start-up and commissioning at the northeast and southwest BESS at the Weymouth plant. In the upcoming quarter, installation of the fiber optic cables from the BESS equipment to the MWD network patch panel at the Jensen and the Skinner plants will begin, and commissioning and start-up at the Weymouth plant will be completed.

Battery Energy Storage System (BESS) enclosures at Skinner Plant

Colorado River Aqueduct (CRA) Program

Actual Biennium Expenditures (Jul. 2024 through Dec. 2024) $26.34 million

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

Program Highlights (2nd Quarter)

Accomplishments

- Completed construction for the following project:
  - Gene Communication System Upgrades
- Continued construction activities for the following projects:
  - CRA Conveyance System Flow Level Sensor Installation
  - CRA Domestic Water Treatment System Upgrades at all five pumping plants
  - Gene Pumping Plant Pilot Security Improvements
  - Hinds, Eagle Mountain, and Iron Mountain Pumping Plants Storage Buildings
- Continued equipment procurement of the following projects:
  - Gene Pumping Plant Unit No. 1 Brushless Motor Exciter System
  - Intake and Gene Pumping Plants Transformer Bushings and Pressure Device Replacements
- Completed final design and advertised a bid package for the following project:
  - Copper Basin Sodium Hypochlorite Tank Replacement
- Continued final design of the following projects:
  - Black Metal Mountain 2.4 kV Electrical Power Upgrades
  - Cabazon Radial Gates Facility Improvements
  - Copper Basin Reservoir Discharge Valve Structure Rehabilitation
  - CRA Conduit Erosion Control Improvements
  - CRA Desert Region Security Improvements – Stage 1
  - CRA Pumping Plant Sump System Rehabilitation
  - CRA Pumping Plant Village Utility Replacement
  - CRA Pumping Plants Main Pump Access Improvements
  - Iron Mountain Station Light & Power Electrical Improvements
- Continued preliminary design of the following projects:
  - CRA 230kV Transmission Tower Barrier Improvements
  - CRA Desert Region Security Improvements – Stage 2
  - CRA Pumping Plant Delivery Lines Rehabilitation
  - Hinds Pumping Plant Discharge Valve Platform Replacement
  - Iron Mountain Tunnel Rehabilitation
- CRA 230 kV Transmission Line Rehabilitation and Improvements
  - Continued study of east transmission line
- CRA Main Pump Motor Rehabilitation
  - Continued study to assess rehabilitation options for pump units and their ancillary support systems for all five pumping plants

Upcoming Activities

Upcoming work for the next quarter will include:

- Continue construction activities planned for the following projects:
  - CRA Conveyance System Flow Level Sensor Installation
  - CRA Domestic Water Treatment System Upgrades at all five CRA pumping plants
  - Gene Pumping Plant Pilot Security Improvements
  - Hinds, Eagle Mountain, and Iron Mountain Pumping Plants Storage Buildings
- Award procurement contract for the following project:
  - Copper Basin Sodium Hypochlorite Tank Replacement
- Continue procurement of the following projects:
  - Gene Pumping Plant Unit No. 1 Brushless Motor Exciter System
  - Intake and Gene Pumping Plant Transformer Bushings and Pressure Device Replacements
- Continue final design of the following projects:
  - Black Metal Mountain 2.4 kV Electrical Power Upgrades
  - Cabazon Radial Gates Facility Improvements
  - Copper Basin Reservoir Discharge Valve Structure Rehabilitation
  - CRA Conduit Erosion Control Improvements
  - CRA Desert Region Security Improvements – Stage 1
  - CRA Pumping Plant Sump System Rehabilitation
  - CRA Pumping Plant Village Utility Replacement
  - CRA Pumping Plants Main Pump Access Improvements
  - Iron Mountain Station Light & Power Electrical Improvements
- Continue preliminary design of the following projects:
  - CRA 230kV Transmission Tower Barrier Improvements
  - CRA Desert Region Security Improvements – Stage 2
  - CRA Pumping Plant Delivery Lines Rehabilitation
  - Hinds Pumping Plant Discharge Valve Platform Replacement
  - Iron Mountain Tunnel Rehabilitation
- CRA 230 kV Transmission Line Rehabilitation and Improvements:
  - Continue study of east transmission line
- CRA Main Pump Motor Rehabilitation:
  - Continue study to assess rehabilitation options for pump units and their ancillary support systems for all five pumping plants
- Intake Transformer Bank Protection Relays Replacement:
  - Initiate design and procurement

Hinds, Eagle Mountain, and Iron Mountain Pumping Plants Storage Buildings

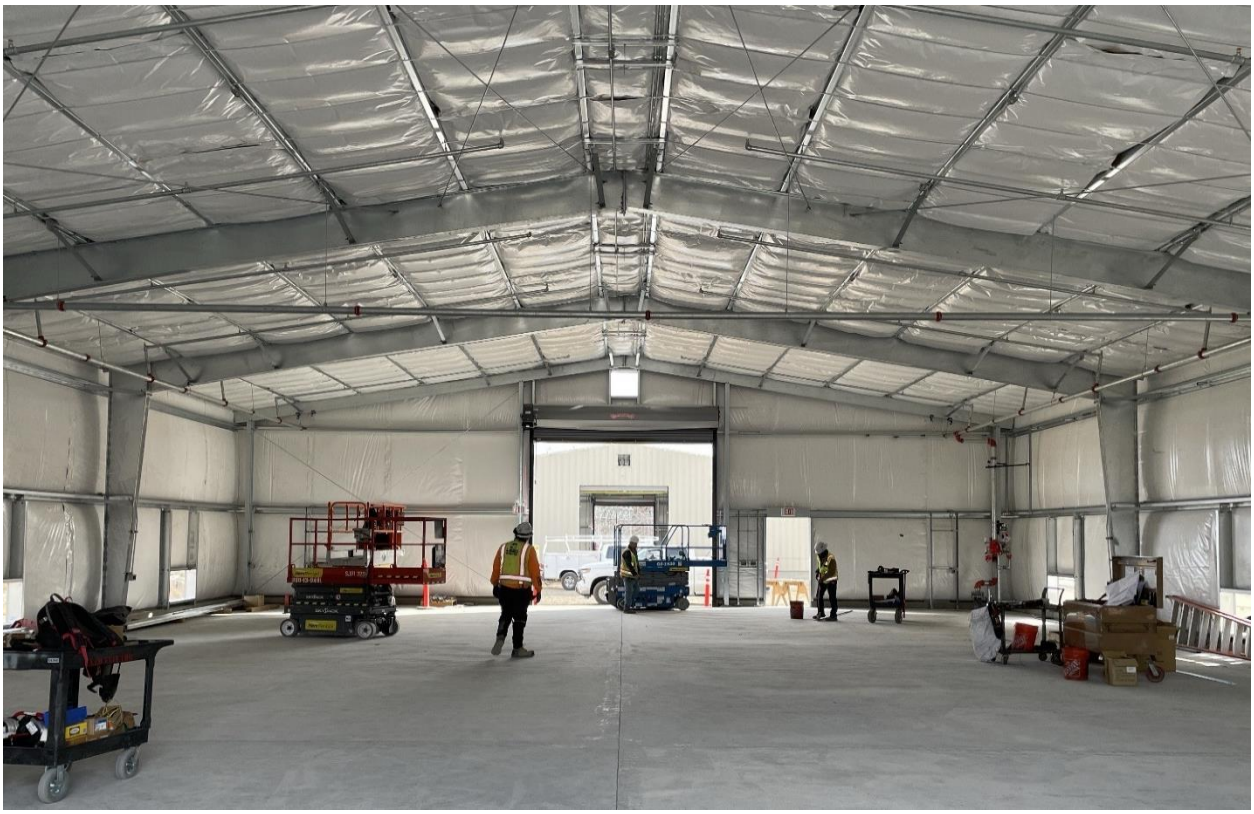
Total Project Estimate:
$21.8 million

Total Project Cost to Date:
$13.1 million

This project will furnish and install pre-engineered steel metal storage buildings at Hinds, Eagle Mountain, and Iron Mountain pumping plants and construct associated site improvements.

Phase	Construction
% Complete for Construction	59%
Construction Contract Award Date	July 2023
Estimated Construction Completion Date	April 2026
Contract Number	2000

The contractor completed erection of the structural steel for the pre-engineered storage buildings and installed the wall insulation and electrical cabinets at Eagle Mountain Pumping Plant. Sitework was completed, and the pre-engineered storage buildings' structural steel and panels were delivered to Hinds Pumping Plant. The contractor poured the concrete foundation for the buildings at Iron Mountain Pumping Plant. In the upcoming quarter, the contractor will complete the roof insulation panels and fire sprinkler system installation, and begin installing the overhead doors at the Eagle Mountain Pumping Plant. Installation of the pre-engineered storage buildings will begin at Hinds Pumping Plant. At Iron Mountain Pumping Plant, the contractor plans to complete edgework along the boarders of the building foundation.



Interior of a storage building at Eagle Mountain Pumping Plant

Dams and Reservoirs Program

Actual Biennium Expenditures (Jul. 2024 through Dec. 2024) $5.04 million

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

Program Highlights (2nd Quarter)

Accomplishments

- Diamond Valley Lake Dam Monitoring System Upgrades
  - Authorized procurement of the new monitoring equipment
- Garvey Reservoir Dam Monitoring System Upgrades
  - Completed new system testing and commissioning
- Garvey Reservoir Rehabilitation
  - Certified the Environmental Impact Report (EIR)
  - Completed 60% design plans and specifications
- Lake Skinner Dam Drainage System Improvements
  - Awarded construction contract
- Lake Skinner Outlet Tower Butterfly Valve Replacement
  - Continued valve fabrication
- Lake Skinner Outlet Tower Seismic Upgrade
  - Continued detailed seismic evaluation of the outlet tower

Upcoming Activities

Upcoming work for the next quarter will include:

- Diamond Valley Lake Dam Monitoring System Upgrades
  - Procure instruments and automated data acquisition equipment
- Garvey Reservoir Dam Monitoring System Upgrades
  - Develop O&M manual
- Garvey Reservoir Rehabilitation
  - Continue final design
- Lake Skinner Dam Drainage System Improvements
  - Issue Notice to Proceed to the contractor
- Lake Skinner Outlet Tower Butterfly Valve Replacement
  - Continue valve fabrication
- Lake Skinner Outlet Tower Seismic Upgrade
  - Continue detailed seismic evaluation of the outlet tower

Diamond Valley Lake Dam Monitoring System Upgrades - Stage 3

Total Project Estimate:
$2.5 million

Total Project Cost to Date:
$0.1 million

This project will replace the obsolete, increasingly unreliable, dam monitoring systems at Diamond Valley Lake (DVL).

Phase	Procurement
% Complete for Current Phase	10%
Current Phase Authorized	Dec 2024
Estimated Completion Date of Current Phase	March 2025

The design consultant submitted the final design package. The final design package review was completed and equipment procurement was authorized. In the upcoming quarter, the procurement of the instruments and automated data acquisition equipment will continue in preparation for installation.

Existing remote monitoring unit and seismic accelerograph in the west crest of DVL dam

Distribution System Program

Actual Biennium Expenditures (Jul. 2024 through Dec. 2024) $31.71 million

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

Program Highlights (2nd Quarter)

Accomplishments

- Continued construction for the following projects:
  - Foothill Hydroelectric Power Plant Seismic Upgrade
  - OC-88 Pump Station Chiller Replacement
  - Perris Valley Pipeline I-215 Tunnel Crossing
  - Rialto Pipeline Rehabilitation at Station 2986+30 and Rehabilitation of Service Connection CB-11
  - Santa Monica Feeder Cathodic Protection
- Continued procurement for the following projects:
  - East Lake Skinner Bypass Slide Gates Replacement
  - Foothill Feeder Blowoff Valve Replacement
  - Lakeview Pipeline Relining – Stage 2
  - Orange County Area Pressure Control Structure Glove Valve Replacement
  - Rialto Pipeline Rehabilitation at Station 2986+30 and Rehabilitation of Service Connection CB-11
  - San Jacinto Diversion Structure Slide Gates V-01, V-02, V-03, and V-04 Rehabilitation
- Awarded the following construction contract:
  - San Diego Canal Concrete Liner Replacement – Site 236
- Awarded a procurement contract for the following project:
  - Auld Valley and Red Mountain Pressure Control Structure Upgrades – a 42-inch stainless steel sleeve valve for the Red Mountain Pressure Control Structure
- Completed preliminary design of the following projects:
  - Eagle Rock Security Upgrades
  - Eastern Region Security Infrastructure Upgrades
  - Santa Monica Feeder Hollywood Tunnel North Portal Upgrades
  - Service Connection A-02 Rehabilitation
  - Western Region Security Infrastructure Upgrades

Upcoming Activities

Upcoming work for the next quarter will include:

- Complete construction of the following projects:
  - Foothill Hydroelectric Power Plant Seismic Upgrade
  - OC-88 Pump Station Chiller Replacement
- Continue construction activities planned for the following projects:
  - Perris Valley Pipeline I-215 Tunnel Crossing – Shutdown and perform tie-in to existing facility
  - Rialto Pipeline Rehabilitation at Station 2986+30 and Rehabilitation of Service Connection CB-11
  - San Diego Canal Concrete Liner Replacement – Site 236
  - Santa Monica Feeder Cathodic Protection

- Continue procurement for the following projects:
  - Auld Valley and Red Mountain Pressure Control Structure Upgrades – a 42-inch stainless steel sleeve valve for the Red Mountain Pressure Control Structure
  - East Lake Skinner Bypass Slide Gates Replacement
  - Foothill Feeder Blowoff Valve Replacement
  - Lakeview Pipeline Relining – Stage 2
  - Orange County Area Pressure Control Structure Glove Valve Replacement
  - Rialto Pipeline Rehabilitation at Station 2986+30 and Rehabilitation of Service Connection CB-11
  - San Jacinto Diversion Structure Slide Gates V-01, V-02, V-03, and V-04 Rehabilitation
- Award contracts for the following project:
  - Santa Monica Feeder Hollywood Tunnel North Portal Valve Procurement
- Continue final design for the following projects:
  - Auld Valley and Red Mountain Pressure Control Structures Upgrades
  - Hollywood Tunnel North Portal Equipment Upgrades
  - Los Angeles County Region Right of Way Infrastructure Protection – Stage 1
- Initiate final design for the following projects:
  - Eagle Rock Security Upgrades
  - Eastern Region Security Infrastructure Upgrades
  - Santa Monica Feeder Hollywood Tunnel North Portal Upgrades
  - Service Connection A-02 Rehabilitation
  - Western Region Security Infrastructure Upgrades
- Continue preliminary design for the following project:
  - Riverside and San Diego County Region Right of Way Infrastructure Protection – Stage 1

Perris Valley Pipeline I-215 Tunnel Crossing

Total Project Estimate:
$79.3 million

Total Project Cost to Date:
$74.4 million

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

Phase	Construction
% Complete for Construction	94%
Construction Contract Award Date	January 2023
Estimated Construction Completion Date	June 2025
Contract Number	1928

The contractor performed site restoration activities at the southern and intermediate tunnel shafts. The contractor completed sheet piling installation and grouting at the tie-in point to the northern reach of Perris Valley Pipeline. In the upcoming quarter, the contractor will complete the connection to the northern reach of the Perris Valley Pipeline.

Sheet piling installation at the northern tie-in to Perris Valley Pipeline

Drought Mitigation - SWP Dependent Areas Program

Actual Biennium Expenditures (Jul. 2024 through Dec. 2024) $15.22 million

Program Information: The Drought Mitigation – SWP Dependent Areas Program is comprised of projects to replace, refurbish, upgrade, or construct new facilities, which are identified to mitigate the vulnerability experienced by specific member agencies that are impacted during shortages on the State Water Project supplies.

Program Highlights (2nd Quarter)

Accomplishments

- Badlands Tunnel Surge Protection Facility
  - Completed concrete placement for valve vault structure walls and surge tank foundation
  - Installed welded steel pipe and an 84-inch diameter isolation valve
- Inland Feeder/Rialto Pipeline Intertie
  - Completed concrete placement for valve vault structure walls
  - Installed welded steel pipe and an 84-inch diameter isolation valve
- Inland Feeder/San Bernardino Valley Municipal Water District (SBVMWD) Foothill Pump Station Intertie
  - Continued final design and right-of-way acquisition
  - Continued procurement of two 54-inch and one 132-inch diameter butterfly valves
- Sepulveda Feeder Pump Stations
  - Continued early procurement of authorized long-lead equipment
  - Continued Phase 1 design under a progressive design-build services agreement
- Wadsworth Pumping Plant Bypass Pipeline
  - Continued site work and installation of electrical components

Upcoming Activities

Upcoming work for the next quarter will include:

- Continue progress on four individual projects to allow the delivery of water from Diamond Valley Lake to the Rialto Pipeline
  - Badlands Tunnel Surge Protection Facility: Complete tie-in of new piping during planned shutdown
  - Inland Feeder/Rialto Pipeline Intertie: Complete tie-in of new piping during planned shutdown
  - Inland Feeder/San Bernardino Valley Municipal Water District (SBVMWD) Foothill Pump Station Intertie: Continue NEPA document preparation, environmental permitting, right-of-way acquisition, and valve procurement
  - Wadsworth Pumping Plant Bypass Pipeline: Continue sitework, installation of electrical components, and begin installation of an 84-inch diameter isolation valve
- Sepulveda Feeder Pump Stations
  - Complete Phase 1 progressive design-build and continue negotiation of a Guaranteed Maximum Price (GMP) to complete Phase 2
  - Continue procurement of long-lead equipment

Sepulveda Feeder Pump Stations

Total Project Estimate:
$115.0 million

Total Project Cost to Date:
$10.8 million

This project will install new pump stations at the existing Venice and Sepulveda Canyon pressure control facilities, providing the ability to reverse flow in the Sepulveda Feeder and delivering 30 cubic feet per second (cfs) from the Central Pool to portions of the Jensen plant exclusive area. This project utilizes a progressive design-build (PDB) project delivery method.

Phase	Progressive Design-Build (PDB) - Phase 1
% Complete for PDB	85%
PDB Contract Award Date	September 2023
Estimated PDB Phase 1 Completion Date	April 2025
PDB Contract Number	2060

The Design-Build Entity (DBE) issued purchase orders for authorized long-lead equipment, including pumps, large valves, and electrical switchgear and transformers. The 70% design package has been submitted by the DBE for staff review. In the upcoming quarter, the DBE and Metropolitan will continue to negotiate a Guaranteed Maximum Price (GMP), and staff will present the GMP to the Board the following quarter for authorization of Phase 2 final design and construction.

Rendering of the future Sepulveda Feeder Pump Station at the Sepulveda Canyon Pressure Control Facility

Information Technology and Control Systems Program

Actual Biennium Expenditures (Jul. 2024 through Dec. 2024) $7.83 million

Program Information: The Information Technology and Control Systems Program is comprised of projects to replace, upgrade, or provide new facilities, software applications, or technology that will enhance cyber security, reliability, flexibility, and capability of information, communication, and control systems.

Program Highlights (2nd Quarter)

Accomplishments

- Control System Upgrade – Phase 4
  - Completed potholing for spare conduit ductbanks
  - Continued design of spare conduit ductbanks and control room modifications
- Desert Microwave Site Tower Upgrades
  - Advertised construction bid package for equipment installation
- Enterprise Content Management Phase II
  - Continued design
- Enterprise Data Analytics
  - Executed an agreement with a selected vendor for define and design phases
- Headquarters Network Switch Replacement
  - Continued equipment installation
- MWD IntraMet Upgrade
  - Advertised Request for Proposal (RFP)
- Oracle Database Upgrade
  - Continued execution of the database migration plan
- Real Property Group Business System Replacement
  - Completed accounts receivable portion of financial integration testing
- Security Operations Center MWD Cyber Security Upgrade – Stage 1
  - Continued testing of monitoring capabilities
- WiFi Implementation
  - Awarded a construction contract under GM authority for Headquarters Building Courtyard and Parking Garage
  - Reviewed and approved initial design for San Bernardino Region sites
- WINS Water Billing System Upgrade
  - Continued system upgrade

Upcoming Activities

Upcoming work for the next quarter will include:

- Control System Upgrade – Phase 4
  - Continue design of conduit ductbanks
- Desert Microwave Site Tower Upgrades
  - Award construction contract for equipment installation and procurement contracts for network equipment

- Emergency Radio Communications Systems Upgrade
  - Continue preparation of RFP
- Enterprise Content Management Phase II
  - Continue design
- Enterprise Data Analytics
  - Continue developing requirements and design
- Headquarters Network Switch Replacement
  - Continue equipment installation
- MWD IntraMet Upgrade
  - Receive and evaluate proposals
- Oracle Database Upgrade
  - Continue database migration
- Real Property Group Business System Replacement
  - Conduct user acceptance testing
- Security Operations Center MWD Cyber Security Upgrade – Stage 1
  - Continue go live with additional functionalities
- WiFi Implementation
  - Advertise a construction bid package and host pre-bid job walk for LA Region
- WINS Water Billing System Upgrade
  - Continue system upgrade

Real Property Group Business System Replacement

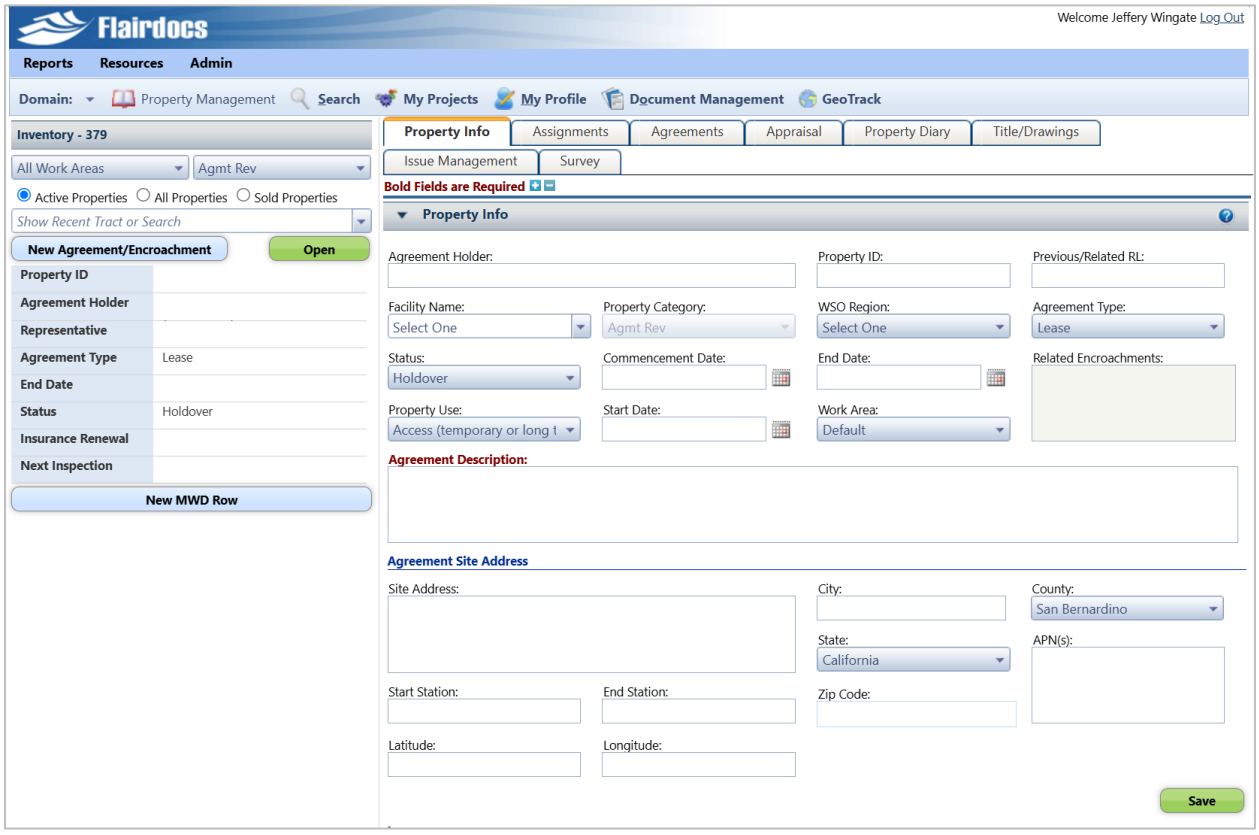
Total Project Estimate:
$1.6 million

Total Project Cost to Date:
$1.5 million

This project will replace an existing Real Property application for lease management with a new application covering both acquisitions and property management.

Phase	Deployment
% Complete for Current Phase	95%
Current Phase Authorized	September 2020
Estimated Completion Date of Current Phase	January 2025

The consultant completed reports and application changes. In the upcoming quarter, the consultant will complete the Oracle E-Business Suite integration.



New real property business management system

Prestressed Concrete Cylinder Pipe (PCCP) Program

Actual Biennium Expenditures (Jul. 2024 through Dec. 2024) $48.70 million

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

Program Highlights (2nd Quarter)

Accomplishments

- Second Lower Feeder
  - Reach 3B – During this quarter, the contractor relocated interfering utilities, installed temporary traffic controls, excavated access portals, removed three 44-inch diameter sectionalizing valves slated for replacement, and started pipe relining associated with the second of two shutdowns. The second shutdown began December 9, 2024 and is scheduled to end in April 2025. The total scope of the project is to reline approximately 3.6 miles of Second Lower Feeder PCCP pipeline from the intertie with Sepulveda Feeder south to Oak Street PCS; through the cities of Torrance, Los Angeles, and Lomita; and replace three 48-inch diameter sectionalizing valves at the intertie with Sepulveda Feeder. To date, approximately 2.4 miles have been relined.
  - Isolation Valve Procurement – As of December 20, 2024, procurement and delivery of thirteen large-diameter conical plug valves and actuators are complete. The thirteen valves include three 48-inch diameter and ten 54-inch diameter valves.
- Sepulveda Feeder
  - Reach 1 – Continued final design to rehabilitate approximately 4.7 miles of Sepulveda Feeder PCCP pipeline, from just north of the Inglewood Lateral south to the West Coast Feeder, through the cities of Inglewood and Hawthorne, and unincorporated Los Angeles County.
  - Reach 2 – Continued final design and permitting to rehabilitate approximately 3.8 miles of Sepulveda Feeder PCCP pipeline, from the Dominguez Gap Channel south to the intertie with Second Lower Feeder, through the cities of Torrance and Los Angeles.
  - Reach 9 – Continued final design of Reach 9, the first construction package of the North Reach, which is necessary to support the operation of Stage 2 of the Sepulveda Feeder Pump Stations project.
  - North Reach – Continued preliminary design of the northern 20-mile portion of the Sepulveda Feeder, including both steel and PCCP portions of the pipeline and appurtenances.

- Allen-McColloch Pipeline Urgent Relining
  - Stage 1 – Performed site restoration activities
  - Stage 2 – Completed all pipeline relining and mortar lining work and began site restorations

Upcoming Activities

Upcoming work for the next quarter will include:

- Second Lower Feeder
  - Reach 3B – Continue work related to the second shutdown including pipe relining work and replacement of valves.
- Sepulveda Feeder
  - Reach 1 – Continue final design
  - Reach 2 – Continue final design
  - Reach 9 – Continue final design to rehabilitate 3.8 miles of PCCP
  - North Reach – Continue preliminary design
- Allen-McColloch Pipeline Urgent Relining
  - Stage 1 – Complete site restoration work at one excavation site
  - Stage 2 – Complete removal of a temporary bulkhead that isolates the portion of the AMP south of the OC-88 pump station, return the entire pipeline to service, and complete restoration of disturbed areas

Allen-McColloch Pipeline PCCP Urgent Rehabilitation - Stages 1 & 2

Total Project Estimate:
$67.0 million

Total Project Cost to Date:
$50.8 million

This project performs urgent relining of approximately 3.2 miles of distressed PCCP segments of the Allen-McColloch Pipeline (AMP) that were discovered during an inspection in November 2023. Work is being performed in two stages to expedite returning the pipeline to service. Stage 1 includes carbon fiber reinforced polymer (CFRP) and steel relining of approximately 4,500 feet of PCCP pipeline, including approximately 2,200 feet upstream of the OC-88 pump station (OC-88), installation of a bulkhead just downstream of OC-88, and steel relining approximately 2,300 feet of PCCP downstream of OC-88. Stage 2 includes steel relining of approximately 12,700 feet of pipeline, including all remaining PCCP segments downstream of OC-88. Relining work for Stage 1 is being performed under two change orders to existing construction contracts. A third change order to an existing procurement contract was utilized to procure steel liner pipe for both stages of the work.

Phase	Construction
% Complete for Construction for Stage 1	95%
% Complete for Construction for Stage 2	90%
Change Order Authority Authorized for Stage 1	February 2024
Construction Contract Awarded for Stage 2	May 2024
Estimated Construction Completion Date for Stage 1	February 2025
Estimated Construction Completion Date for Stage 2	March 2025
Construction Contract Numbers for Stage 1[1]	2026, 2088
Construction Contract Number for Stage 2	2108

Pipe relining, mortar lining work, and backfill for Stage 1 were completed. For Stage 2, all relining works and backfill of all sites except one were completed. In the upcoming quarter, the contractor will backfill the last pipe access site for Stage 2. The bulkhead downstream of OC-88 will be removed and site restoration for a Stage 1 pipe access site downstream of OC-88 will be completed. For Stage 2, site cleanup, restoration, traffic control removal, paving, and road restriping will be completed. An agreement to share paving costs with El Toro Water District will be executed.

Stage 2 – concrete encasement forming and rebar installation for the pipe closure at an access site

[1] Stage 1 construction is being performed under two existing construction Contract Nos. 2026 and 2088 via change orders.

Water Treatment Plants Program

Actual Biennium Expenditures (Jul. 2024 through Dec. 2024) $35.19 million

Program Information: The Water Treatment Plants Program is comprised of projects to replace or refurbish facilities and components at Metropolitan's five water treatment plants and chlorine unloading facility to continue to reliably meet treated water demands.

Program Highlights (2nd Quarter)

Accomplishments

- Completed construction of the following project:
  - Diemer Power and Distribution Panel Upgrade
- Continued procurement and construction for the following project:
  - Diemer Helicopter Hydrant Facility
- Continued construction for the following projects:
  - Mills Electrical Upgrades – Stage 2
  - Weymouth Asphalt Pavement Rehabilitation
  - Weymouth Basins Nos. 5-8 & Filter Building No. 2 Rehabilitation
  - Weymouth Hazardous Waste Staging and Containment
- Continued final design for the following projects:
  - Diemer Filter Rehabilitation
  - Weymouth Administration Building Upgrades
- Completed preliminary design of the following projects:
  - Jensen Finished Water Reservoir Rehabilitation
  - Mills Finished Water Reservoir Rehabilitation
- Continued preliminary design of the following projects:
  - Diemer Washwater Reclamation Plant Improvements & Slope Stabilization
  - Jensen Bromate Control Upgrades
  - Jensen Modules Nos. 2 & 3 Solids Removal System Rehabilitation
  - Jensen Reservoir Bypass Gate Replacement
  - Jensen Solids Mechanical Dewatering Facility
  - Mills Basin Solids Removal System Rehabilitation
  - Mills Perimeter Security & Erosion Control Improvements

Upcoming Activities

Upcoming work for the next quarter will include:

- Complete construction of the following project:
  - Weymouth Hazardous Waste Staging and Containment
- Complete procurement for the following project:
  - Diemer Helicopter Hydrant Facility

- Continue construction of the following projects:
  - Diemer Helicopter Hydrant Facility
  - Mills Electrical Upgrades – Stage 2
  - Weymouth Asphalt Pavement Rehabilitation
  - Weymouth Basins Nos. 5-8 & Filter Building No. 2 Rehabilitation
- Continue final design for the following projects:
  - Diemer Filter Rehabilitation
  - Weymouth Administration Building Upgrade
- Continue preliminary design of the following projects:
  - Diemer Washwater Reclamation Plant Improvements & Slope Stabilization
  - Jensen Bromate Control Upgrades
  - Jensen Modules Nos. 2 & 3 Solids Removal System Rehabilitation
  - Jensen Reservoir Bypass Gate Replacement
  - Jensen Solids Mechanical Dewatering Facility
  - Mills Basin Solids Removal System Rehabilitation
  - Mills Perimeter Security & Erosion Control Improvements

Diemer Helicopter Hydrant Facility

Total Project Estimate:
$2.0 million

Total Project Cost to Date:
$1.0 million

This project will design and construct a new helicopter hydrant facility at the Diemer plant site. The project will procure and install an engineered water tank system to allow water-dropping helicopters to fill up with water while the helicopters are in the air during a fire event. This project also includes construction of a helicopter landing pad and other related infrastructure to operate the hydrant facility. The project will be partially funded by a grant previously awarded to Yorba Linda Water District by the United States Forest Service to construct the facility. Metropolitan is now a subrecipient of the grant and the grant funds will be used to defray Metropolitan's cost for the project.

Phase	Construction
% Complete for Construction	10%
Construction Initiated	November 2024
Estimated Construction Completion Date	August 2025

Metropolitan approved shop drawing submittal of pre-manufactured tank and awarded the procurement contract for bulk construction materials and reinforcing steel installation. Subgrade for the helicopter landing pad was completed, and over-excavation for the tank subgrade began. In the upcoming quarter, Construction Services Unit will continue preparation of the tank subgrade and complete the installation of concrete foundation forms for the helicopter landing pad and the tank. Installation of reinforcing steel for the helicopter landing pad and the tank foundations will be completed.

Helicopter landing pad at the Diemer plant – placing crushed aggregate for the pad subgrade

Minor Capital Projects Program

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

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

In April 2024, the Board appropriated funds for the projects identified in the CIP appendix for the current biennium, FYs 2024/25–2025/26, including the Minor Cap Program. $10 million of initial funds for this program has been allocated for the current biennium.

Minor Cap Program Historical Summary

The following table provides the overall status of the four active Minor Cap appropriations for the fiscal years 2018/19–2019/20 through fiscal years 2024/25–2025/26.

Table 4: Minor Capital Projects Program

	Fiscal Year				Totals*
	2018/19–2019/20	2020/21–2021/22	2022/23–2023/24	2024/25–2025/26	
Amount Appropriated	$15.5M	$20.0M	$14.4M	$10.0M	$59.9M
Expenditures (through December 2024)	$12.4M	$10.1M	$8.3M	$0.2M	$31.0M
Number of Projects Approved	48	48	51	8	154
Number of Projects Completed (through December 2024)	46	26	6	0	78
Number of Projects with Durations of Over 3 Years	2	12	0	0	14

* Numbers may not sum due to rounding.

Through December 2024, 78 of the 154 projects approved under the appropriations mentioned above have been completed, and 14 active projects have exceeded three years in duration, as described below.

- CRA Pumping Plant Air Conditioner System Replacement has been experiencing delays due to longer than anticipated time for equipment procurement. The project will be implemented as part of the major capital project District-wide HVAC Replacement, and the minor capital project will be canceled.
- Dominguez Channel Pressure Release Structure Rehabilitation has been experiencing delays due to longer than anticipated lead time for valve manufacturing and delivery. The project is scheduled to be completed by December 2025.
- East Valley Feeder Vaults Upgrades Project has experienced delays due to additional time required to acquire permits from an external agency. The project is scheduled to be completed by December 2025.
- Jensen Chlorine Railcar Scale experienced delays due to constructability concerns. A field evaluation determined that the sequence required to install the railcar scales would impact operations. As a result, the scales will no longer be constructed and the project is scheduled to be canceled in January 2025.
- For Lake Matthews Mobile Chlorinator Delivery Line Replacement, construction is complete and the project is scheduled to be complete by April 2025.
- Live Oak Reservoir Liner Rehabilitation has been experiencing delays due to longer than anticipated time for coordination of final inspection by the Division of Safety of Dams. The project is scheduled to be completed by April 2025.
- Pasadena Water and Power Site Microwave Tower Replacement experienced delays due to longer than anticipated time for review and approval of the lease agreement between the City of Pasadena and Metropolitan. The project is scheduled to be completed by September 2025.
- Ramona PCS Rehabilitation has been experiencing delays due to longer than anticipated lead time for motor procurement and coordination of the Middle Feeder North shutdown required for valve removal. The project is scheduled to be completed by July 2026.
- Sepulveda Feeder Stray Current Drain Station Installation & Rehabilitation has experienced delays due to longer than anticipated time for review/approval of permit applications by the City of Los Angeles and Los Angeles Department of Transportation.
- Service Connection CA-01 Isolation Gate is scheduled to be completed by November 2026.
- Service Connection CB-01 Valve Replacement has experienced delays due to longer than anticipated time for procurement of a fiberglass reinforced plastic platform. The project is scheduled to be completed by July 2025.
- Venice Pressure Control Structure Security Upgrades has experienced delays due to longer than anticipated time for procurement of automatic entrance gates. Delivery of gates is underway. The project is scheduled to be completed by April 2025.
- Wadsworth Pumping Plant Lighting Upgrades has experienced delays due to longer than anticipated time for material procurement. Additional time is required to pay vendor invoices and complete project closure documents. The project is scheduled to be completed by April 2025.
- Weymouth Rejection Overflow Structure Security Improvements has experienced delays due to additional security features added to the original project scope after trespassers were detected. The project is scheduled to be completed by April 2025.

Minor Cap Projects, 2nd Quarter

Authorized Projects

Four projects were authorized under the Minor Cap Program during the 2nd Quarter of fiscal year 2024/25 (October through December 2024). The total amount authorized for these projects was $1,000,960.

- Cloud Infrastructure Development and Improvements – This project will provide improvements to Metropolitan's current cloud environment by leveraging industry best practices throughout all environments. This project will enhance cloud configurations to prevent prolonged outages and improve disaster recovery procedures. The project budget is $363,000.
- CRA Hinds Pumping Plant Elevator Power Unit Replacement – This project will remove and replace the aging elevator hydraulic power unit equipment at the Hinds Pumping Plant, which has exceeded its useful life. The project budget is $160,000.
- Eagle Mountain Communications Room Security Upgrades – This project will install doors, card readers, cameras, and physical security features to protect Metropolitan's bulk electrical system and cyber assets at the Eagle Mountain Communications Room and comply with the North American Electrical Reliability Corporation (NERC) standards. The project budget is $87,960.
- Skinner Plant 3 Rejection Structure Improvement – This project will construct a barrier wall within Skinner Plant 3 to separate the Plant 2 effluent rejection system and the Plant 3 rejection/storm drain system. This project will also prevent wildlife intrusion. The project budget is $390,000.

Completed Projects

Four projects were completed under the Minor Cap Program during the 2nd Quarter of fiscal year 2024/25 (October through December 2024):

- Diamond Valley Lake Network Security Improvements
- Diemer Plant Warehouse Upgrades
- Metropolitan Headquarters Courtyard Improvements
- Skinner Plant Lighting Upgrades

Canceled Projects

Two projects were canceled during the 2nd Quarter of fiscal year 2024/25 (October through December 2024):

- Jensen WWRP No. 2 Flocculator Rehabilitation was originally initiated in FYs 2020/21 and 2021/22 minor cap appropriation. The project was canceled to be addressed by the major capital project Jensen WWRP No. 2 Side 3 Flocculator Rehabilitation.
- OC-88 Surge Tank Recirculation System Upgrade was originally initiated in FYs 2020/21 and 2021/22 minor cap appropriation. The project was canceled and to be addressed by the major capital project OC-88 Surge Tank Recirculation System Replacement.

Expenditures

Actual biennium expenditures to date (October 2024 through December 2024) for the Minor Capital Projects Program were $3.01 million.

Project Actions

Table 5 lists capital project actions authorized by the General Manager along with funding allocation amounts during the 2nd Quarter of FY 2024/25, through the authority delegated by the Board in April 2024. The total funding amount authorized during the 2nd Quarter is $63,593,000 through thirty-five management actions. In some cases listed below, the Total Amount Authorized may differ from the Amount Authorized for Current Biennium when the work authorized is scheduled to extend beyond the current biennium. In these cases, it is anticipated that staff will request sufficient funds to be allocated from the CIP Appropriation for the next biennium to cover the planned remaining future-year costs of the project. When the Amount Authorized for Current Biennium is equal to the Total Amount Authorized, the authorized work is planned to be completed within the current biennium. Table 5 excludes any board items heard in closed session and minor cap authorizations. Minor cap authorizations can be found in the Minor Capital Projects Program section of this report.

Table 5: Capital Projects Funded in 2nd Quarter

Project Authorized	Activity Authorized	Amount Authorized for Current Biennium	Total Amount Authorized
Auld Valley and Red Mountain Control Structures	Procurement: One 42-inch Sleeve Valve and Actuator for Red Mountain Control Structure	$771,257	$800,000
CB-18 Magnetic Flow Meter Replacement	Final Design	$32,000	$32,000
CENB-54 Meter Replacement	Procurement and Construction	$230,000	$240,000
Covina PCS Rehabilitation - Stage 1	Study	$50,000	$50,000
CRA Aircraft Facility Improvements - Stage 2	Study	$170,000	$170,000
CRA Copper Basin Sodium Hypochlorite Tank Rehabilitation	Final Design	$100,000	$100,000
CRA Eagle Lift & Eagle West Siphons Seismic Improvements	Rockfall Hazard Study	$210,000	$210,000
CRA Employee Housing Roof Replacement	Construction	$1,015,000	$1,105,000
CRA Main Motor Units Protection Relay Replacement - Stage 1	Field Investigation, Final Design, and Procurement	$1,770,500	$1,800,000
Delta Properties Infrastructure Improvements - Phase 5	Construction of Twenty-Five Flowmeters at Webb and Bouldin Islands	$382,500	$400,000
Desert Microwave Tower Site Upgrades	Procurement and Construction: One Path with Two Transmission Communication Channels	$1,203,000	$1,374,000

Project Authorized	Activity Authorized	Amount Authorized for Current Biennium	Total Amount Authorized
Diemer Finished Water Reservoir Slope Protection Improvements[2]	Additional Study	$350,000	$350,000
Diemer Helicopter Hydrant Facility[3]	Additional Procurement	$488,000	$500,000
Diemer Ozone Network Upgrade	Final Design, Procurement, and Construction	$500,000	$500,000
Districtwide Zero Emission Fleet Infrastructure[4]	Additional Study	$1,400,000	$1,500,000
Foothill Feeder PCS Butterfly Valve Structure Fall Protection Improvements	Final Design	$67,775	$67,775
Headquarters Building Zero Emission Vehicle Infrastructure Upgrades – Stage 1	Field Investigation and Final Design	$1,160,200	$1,300,000
Hinds Pumping Plant Fuel Dispenser System Improvement	Preliminary Design and Final Design	$245,000	$245,000
Jensen Security Improvements[5]	Additional Final Design	$600,000	$600,000
La Verne Water Quality Laboratory Equipment Replacement	Procurement	$1,328,550	$2,980,000
Mills Filter Valve Rehabilitation	Initial Study	$120,000	$120,000
Palos Verdes Feeder WB-06 Service Connection Fall Protection Improvements	Final Design	$50,847	$50,847
Palos Verdes Reservoir Second Outlet Structure Fall Protection Improvements	Final Design	$48,264	$48,264
Pasadena Microwave Tower Phase II	Preliminary Design and Final Design	$830,000	$996,000
Ramona PCS Rehabilitation - Stage 1	Study	$50,000	$50,000

[2] Previous project action authorized consultant selection and development of a scope of work for a comprehensive study report. The project action in this reporting quarter is for preparation of a study report that includes evaluating options for slope protection, developing design criteria, and preparing preliminary construction cost estimate.

[3] Additional procurement funds were needed to provide reinforcing steel to support the construction.

[4] Additional study funds were needed to coordinate with the local utilities and cities. The work includes plan check and identification of charger locations and space for backup power generation system for the required upgrades. The funds were also needed to complete master planning document.

[5] Additional final design funds were required to add additional security cameras to provide contiguous surveillance coverage.

Project Authorized	Activity Authorized	Amount Authorized for Current Biennium	Total Amount Authorized
Rio Hondo Pressure Control Structure Valve Replacement – Stage 1	Final Design	$125,000	$125,000
Sepulveda Feeder Pump Station	Procurement: Four Pumps, 19 valves, Electrical Switchgear, and Motor Control Centers	$40,000,000	$40,000,000
Sepulveda Feeder West Basin Feeder Interconnect Structure Fall Protection Improvements	Final Design	$50,114	$50,114
Skinner 480V Circuit Breaker Rehabilitation	Initial Study	$60,000	$60,000
Skinner Plantwide Chemical Flow Meter Replacement	Initial Study	$60,000	$60,000
Skinner Sulfuric Acid Tank Farm Pipe Rehabilitation	Initial Study	$140,000	$150,000
Santa Monica Feeder SMN-01 Flow Meter Replacement	Final Design, Procurement, and Construction	$110,000	$110,000
Wadsworth HEP Pump Rehabilitation	Study: Field Investigation (One Pump)	$109,000	$125,000
Weymouth Sedalia Property Acquisition	Property Acquisition	$1,299,000	$1,324,000
Zero Emission Fleet Pilot Infrastructure – Stage 2, Phase 1	Field Investigation, Final Design, Procurement, and Construction	$5,686,000	$6,000,000
	Total	$60,812,007	$63,593,000

Due to changes to the project implementation schedules on the following project, $9,135,300 was reallocated from the CIP Appropriation (Appropriation No. 15535) to the previously authorized project listed in Table 6 below. While the reallocation changed the biennial funded amount, the total authorized funding for the project remained the same.

Table 6: General Manager Actions to Reallocate Capital Project Funds

Project Authorized (Title)	Amount Authorized for Reallocation
Battery Energy Storage System	$8,830,000
Weymouth Improvements FY18/19 to 23/24 Remaining Budget	$305,300
Total	$9,135,300

CEQA Determinations

Table 7 lists CEQA exemption determinations made by the General Manager during the 2nd Quarter. Consistent with CEQA, the Board delegated this authority to the General Manager in April 2024. Adoption of Negative Declarations, Mitigated Negative Declarations, and certification of Environmental Impact Reports will continue to require action by Metropolitan's Board. This table excludes information on board items.

Table 7: CEQA Exemption Determinations

Projects
San Diego Canal Radial Gates V-06 and V-08 Rehabilitation

Construction and Procurement Contracts

The table below summarizes the status of all construction and procurement contracts that were awarded by the Board and active during the reporting quarter. These contracts are listed in Table 10 and Table 11. Total contract earnings for the 2nd Quarter were approximately $49.80 million.

Table 8: 2nd Quarter Contract Actions

Contract Actions during Q2 for FY 2024/2025, October 2024 through December 2024	
Contracts Awarded by Board	2 construction contracts totaling $2.42 million 2 procurement contracts totaling $1.04 million
Total Payments Authorized[6]	$49.80 million
Construction Contracts Completed	Notice of Completion was filed for 3 construction contracts (Table 9)
Procurement Contracts Completed	2 procurement contracts were completed[7]
Active Contracts at end of Q2[8]	27 construction contracts, totaling $457.18 million (Table 10) 18 procurement contracts, totaling $77.44 million (Table 11) $534.62 million total value*

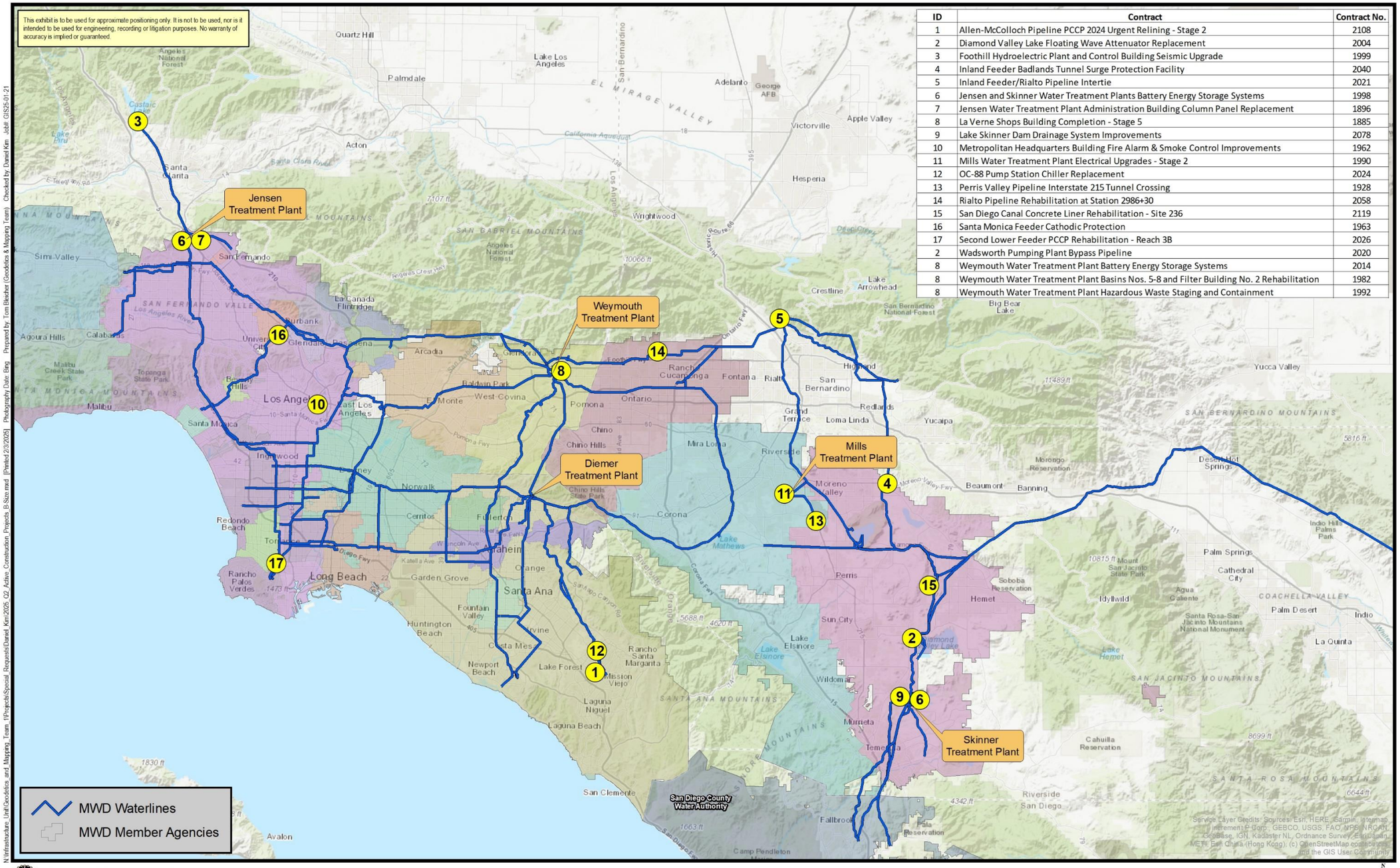
*Numbers may not sum due to rounding.

The figures on the next two pages show the locations of the twenty-seven construction contracts that were active through the end of the 2nd Quarter.

[6] Includes payments for O&M work under CIP contracts and grant-funded drought mitigation contracts.

[7] Contract 1861 for Furnishing Lubricated Plug Valves for the Second Lower Feeder PCCP Rehabilitation and Contract 1873 for Furnishing One Hydraulic Shear System for the La Verne Maintenance Shops were completed during the reporting quarter.

[8] Active contracts at the end of the 2nd Quarter are those that are ongoing at the end of December 2024 and have not filed Notice of Completion with the county where the work was performed.



ID	Contract	Contract No.
1	Allen-McColloch Pipeline PCCP 2024 Urgent Relining - Stage 2	2108
2	Diamond Valley Lake Floating Wave Attenuator Replacement	2004
3	Foothill Hydroelectric Plant and Control Building Seismic Upgrade	1999
4	Inland Feeder Badlands Tunnel Surge Protection Facility	2040
5	Inland Feeder/Rialto Pipeline Intertie	2021
6	Jensen and Skinner Water Treatment Plants Battery Energy Storage Systems	1998
7	Jensen Water Treatment Plant Administration Building Column Panel Replacement	1896
8	La Verne Shops Building Completion - Stage 5	1885
9	Lake Skinner Dam Drainage System Improvements	2078
10	Metropolitan Headquarters Building Fire Alarm & Smoke Control Improvements	1962
11	Mills Water Treatment Plant Electrical Upgrades - Stage 2	1990
12	OC-88 Pump Station Chiller Replacement	2024
13	Perris Valley Pipeline Interstate 215 Tunnel Crossing	1928
14	Rialto Pipeline Rehabilitation at Station 2986+30	2058
15	San Diego Canal Concrete Liner Rehabilitation - Site 236	2119
16	Santa Monica Feeder Cathodic Protection	1963
17	Second Lower Feeder PCCP Rehabilitation - Reach 3B	2026
2	Wadsworth Pumping Plant Bypass Pipeline	2020
8	Weymouth Water Treatment Plant Battery Energy Storage Systems	2014
8	Weymouth Water Treatment Plant Basins Nos. 5-8 and Filter Building No. 2 Rehabilitation	1982
8	Weymouth Water Treatment Plant Hazardous Waste Staging and Containment	1992

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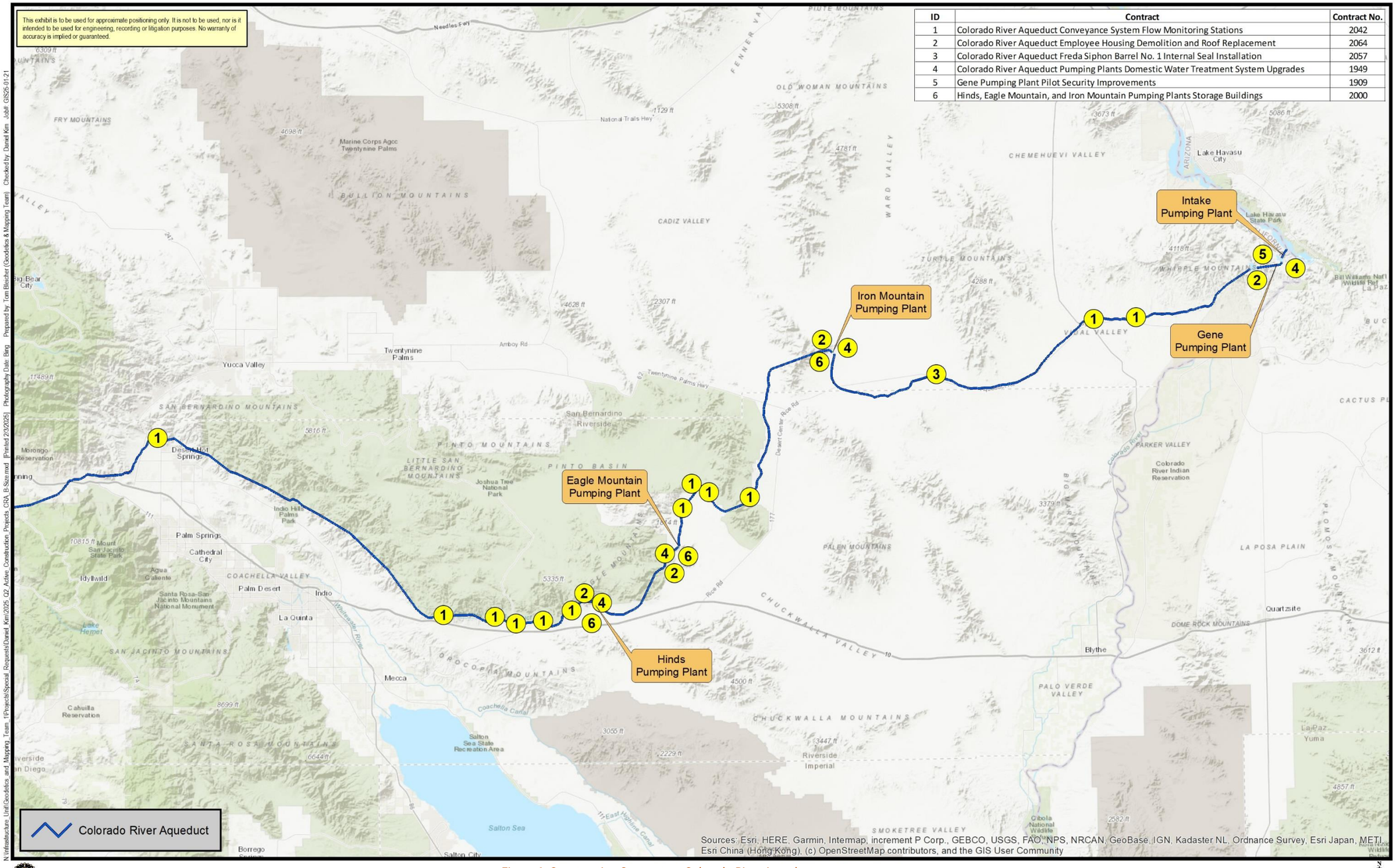
The Metropolitan Water District of Southern California
Engineering Services Group

Figure 5: Construction Contracts – Greater Los Angeles Region



ID	Contract	Contract No.
1	Colorado River Aqueduct Conveyance System Flow Monitoring Stations	2042
2	Colorado River Aqueduct Employee Housing Demolition and Roof Replacement	2064
3	Colorado River Aqueduct Freda Siphon Barrel No. 1 Internal Seal Installation	2057
4	Colorado River Aqueduct Pumping Plants Domestic Water Treatment System Upgrades	1949
5	Gene Pumping Plant Pilot Security Improvements	1909
6	Hinds, Eagle Mountain, and Iron Mountain Pumping Plants Storage Buildings	2000

The Metropolitan Water District of Southern California
Engineering Services Group

Figure 6: Construction Contracts – Colorado River Aqueduct

Metropolitan's Administrative Code authorizes the General Manager to execute change orders on construction contracts in an aggregate amount not to exceed five percent of the original amount of the contract or $250,000, whichever is greater. If changes occur on a construction contract that will exceed this total, additional authorization from the Board is required. In addition, the General Manager is authorized to execute change orders on procurement contracts in an amount not to exceed $250,000. In the 2nd Quarter, the Board did not authorize any increase to the General Manager's change order authority.

Notices of Completion during 2nd Quarter:

The following table shows the three board-awarded construction contracts for which Metropolitan accepted the contract as completed during the 2nd Quarter of FY 2024/25 and filed a Notice of Completion (NOC) with the county where the work was performed. In accordance with Section 9204 of the Civil Code of the State of California, an NOC is filed within 15 days of acceptance by Metropolitan of completion of construction by the contractor.

Table 9: Notices of Completion Filed This Quarter

Contract No.	Construction Contract	Notice of Completion	Original Bid Amount	Final Contract Costs	Change Order	Change Order %
1976	Gene Communication System Upgrade	12/5/2024	$1,244,935	$1,244,935	$0	0%
2003	Metropolitan Headquarters Exterior Physical Security Upgrades	11/15/2024	$2,165,000	*	*	*
2018	Weymouth Treatment Plant Asphalt Refurbishment	10/15/2024	$1,754,000	*	*	*
		Totals:	**$5,163,935**			

For the 2nd Quarter, the total bid amount of the completed construction contract was approximately $5.2 million.

For Contract Nos. 2003 and 2018, although NOCs were filed during the reporting quarter, the final contract cost and change order amount have not yet been finalized due to outstanding pending issues. The finalized information will be included in a future CIP quarterly report.

For Contract No. 1989 – Metropolitan Headquarters Building First Floor Video Suit Renovation, the NOC filing was reported in the CIP Quarterly Report for 1st quarter of FY2024/25. However, the final contract cost and change order amount were not reported due to outstanding pending issues. The issues were resolved, and amounts finalized during the reporting quarter. The final contract cost is $787,473, including the final change order amount of $149,953, which resulted in a change order percentage of 23.5%. The change order was necessary due to owner directed change order to accommodate changed staff working conditions, including lighting grid backing plates and changes in the room size from the construction plans.

Final contract costs shown represent actual earnings as of the end of the quarter and may be refined based on resolution of pending issues subsequent to the completion date.

The final contract costs can differ from the original bid amount due to change orders and actual costs incurred on unit price or other various bid items. The rolling average of change orders on completed construction contracts during the preceding 12-month period (January 2024 through December 2024) is 5.90 percent[9].

[9] Original amount of construction contracts completed (January 2024 through December 2024) = $ 68,008,929
Change orders for completed construction contracts (January 2024 through December 2024) = $ 4,159,462
Change order percentage (January 2024 through December 2024) = 5.90%

The rolling average of change orders includes change order work to complete Allen-McColloch Pipeline PCCP 2024 Urgent Relining - Stage 1 as part of Contract No. 2088 - Sepulveda Feeder CFRP Urgent Relining. The rolling average of change orders is 4.33 percent if Contract No. 2088 is excluded.

The table on this page lists the 27 ongoing construction contracts through the end of the 2nd Quarter. This list contains construction contracts awarded by the Board.

Table 10: Active Construction Contracts at the End of 2nd Quarter

	Cont. No.	Contract Title	Contractor	Contract Amount[10]	Earnings Through Dec. 2024[11]	Start Date	Est. Completion Date	Est. Percent Complete
1	1885	La Verne Shops Building Completion – Stage 5	Woodcliff Corporation, Inc.	$19,580,047	$18,882,147	6/10/22	3/25	96%
2	1896	Jensen Admin. Bldg. Entrance Glass Fiber Reinforced Concrete Panels Replacement[12]	MMJ Contracting, Inc.	$281,900	$105,898	7/14/23	6/25	38%
3	1909	Gene Pumping Plant Pilot Security Improvements[12]	The Kepler Group, Inc.	$295,561	$268,077	5/2/24	1/25	91%
4	1928	Perris Valley Pipeline Interstate 215 Tunnel Crossing[12, 13]	James W. Fowler, Company	$59,690,208	$56,649,699	2/13/23	6/25	95%
5	1949	Colorado River Aqueduct Pumping Plants Domestic Water Treatment System Replacement[12]	J.F. Shea Construction, Inc.	$33,346,737	$14,195,556	1/20/22	4/26	43%
6	1962	MWD HQ Building Fire Alarm & Smoke Control Improvements[12]	Bernards Bros. Inc.	$14,355,588	$13,202,588	9/24/20	2/25	92%
7	1963	Santa Monica Feeder Cathodic Protection	Exaro Technologies Corporation	$897,469	$0	7/10/24	3/25	0%

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

[11] Earnings reported in this table are the total contract earnings as they are known to be at the end of the reporting quarter.

[12] Granting of additional working days to complete construction is being considered.

[13] Indication of Project Labor Agreement (PLA) project awarded by the Board.

	Cont. No.	Contract Title	Contractor	Contract Amount[10]	Earnings Through Dec. 2024[11]	Start Date	Est. Completion Date	Est. Percent Complete
8	1982	Weymouth Water Treatment Plant Basins Nos. 5-8 & Filter Building No. 2 Rehabilitation	J.F. Shea Construction, Inc.	$95,448,573	$86,836,851	6/10/22	7/25	91%
9	1990	Henry J. Mills Water Treatment Plant Electrical Upgrades, Stage 2	CSI Electrical Contractors, Inc.	$9,529,862	$7,427,947	12/13/21	3/25	78%
10	1992	Weymouth Water Treatment Plant Hazardous Waste Staging and Containment[12]	J.F. Shea Construction, Inc.	$2,375,700	$1,537,008	3/12/24	7/25	65%
11	1998	Jensen and Skinner Water Treatment Plants Battery Energy Storage Systems	Ameresco, Inc.	$11,604,521	$9,821,326	10/7/21	9/25	85%
12	1999	Foothill Hydroelectric Power Plant Seismic Upgrade [12, 13]	West Valley Investment Group, Inc.	$6,210,962	$6,058,476	4/27/23	3/25	98%
13	2000	Hinds, Eagle Mountain, and Iron Mountain Pumping Plants Storage Buildings[13]	J. F. Shea Construction, Inc.	$16,490,000	$9,738,447	7/31/23	4/26	59%
14	2004	DVL Floating Wave Attenuator Replacement[13]	Power Engineering Construction Co.	$7,842,856	$2,815,072	3/12/24	10/25	36%
15	2014	Weymouth Plant Battery Energy Storage System[12]	Siemens Industry, Inc.	$6,476,521	$5,779,387	7/18/22	2/25	89%
16	2020	Wadsworth Pumping Plant Bypass Pipeline[13, 14]	Steve P. Rados, Inc.	$15,221,477	$14,421,451	2/2/23	7/25	95%

[14] This contract is funded by a state grant administered by DWR.

	Cont. No.	Contract Title	Contractor	Contract Amount[10]	Earnings Through Dec. 2024[11]	Start Date	Est. Completion Date	Est. Percent Complete
17	2021	Inland Feeder/Rialto Pipeline Intertie[13, 14]	Steve P. Rados, Inc.	$15,689,535	$10,960,535	10/16/23	6/25	70%
18	2024	OC-88 Pump Station Chiller Replacement[12]	Mehta Mechanical Co., Inc. dba MMC Inc.	$2,654,000	$2,272,415	6/6/22	3/25	86%
19	2026	Second Lower Feeder PCCP Rehabilitation - Reach 3B[13, 15]	J.F. Shea Construction, Inc.	$80,362,822	$63,759,332	2/13/23	9/25	79%
20	2040	Inland Feeder Badlands Tunnel Surge Protection Facility[13, 16]	Steve P. Rados, Inc.	$18,847,403	$11,064,793	12/11/23	6/25	59%
21	2042	CRA Conveyance System Solar Level Sensor Installation[12]	LEED Electric, Inc.	$5,270,257	$4,955,965	6/15/23	2/25	94%
22	2057	CRA Freda Siphon Barrel No.1 Internal Seal Installation	Miller Pipeline, LLC	$3,895,000	$2,539,992	10/9/23	6/25	65%
23	2058	Rialto Pipeline Rehabilitation at Station 2986+30	J.F. Shea Construction, Inc.	$2,197,460	$62,730	8/2/24	3/25	3%
24	2064	Colorado River Aqueduct Employee Housing Demolition and Roof Replacement	Resource Environmental, Inc.	$1,285,000	$19,000	10/2/24	5/25	1%

[15] Change order for Allen-McColloch Pipeline PCCP 2024 Urgent Relining – Stage 1 is included in the contract amount shown in this table.

[16] This contract is partially funded by a state grant administered by DWR.

	Cont. No.	Contract Title	Contractor	Contract Amount[10]	Earnings Through Dec. 2024[11]	Start Date	Est. Completion Date	Est. Percent Complete
25	2078	Lake Skinner Dam Perimeter Drainage Improvements	Heed Engineering	$588,000	$0	1/10/25	9/25	0%
26	2108	Allen-McColloch Pipeline PCCP 2024 Urgent Relining[13]	J.F. Shea Construction, Inc.	$24,912,000	$24,282,750	5/30/24	2/25	97%
27	2119	San Diego Canal Rehabilitation – Site 236	Power Engineering Construction Co	$1,833,650	$36,673	11/4/24	5/25	2%
		Total contract value for active construction contracts:		**$457,183,109**				

The following table lists the 18 ongoing procurement contracts at the end of the 2nd Quarter.

Table 11: Active Procurement Contracts at the End of 2nd Quarter

	Cont. No.	Contract	Contractor	Contract Amount[17]	Earnings Through Dec. 2024[18]	Start Date	Est. Delivery Completion Date	Est. Percent Complete[19]
1	1867	Furnishing Butterfly Valves for the Weymouth Water Treatment Plant – Schedule 1[20]	Crispin Valve, LLC	$5,066,975	$3,769,482	12/18/17	7/25	74%
2	1912	Furnishing Large-Diameter Conical Plug Valves	Ebara Corporation	$23,750,060	$19,585,112	12/24/18	D[21]	82%
3	1922	Furnishing One Double Column Vertical Machining Center for the La Verne Maintenance Shops	Gosiger Machine Tools, LLC (Gosiger West)	$2,319,600	$2,273,100	9/17/18	D[21]	99%
4	1955	Furnishing Membrane Filtration Systems for the CRA Domestic Water Treatment Systems	Wigen Water Technologies	$1,380,556	$1,238,807	5/28/20	7/25	90%
5	1965	Furnishing Equipment for the Jensen Ozone Power Supply Units Upgrades	Suez Treatment Solutions, Inc.	$4,141,194	$3,616,396	3/30/20	D[21]	87%
6	2002	Furnishing Steel Liner for Lakeview Pipeline[15, 22]	Northwest Pipe Company	$23,565,941	$7,958,731	12/14/23	5/25	34%
7	2022	Furnishing Butterfly Valves for the Wadsworth Bypass Pipeline, Inland Feeder-Rialto Pipeline Intertie, and Badlands Tunnel Isolation Surge Tanks	Sojitz Machinery Corp. of America	$5,647,405	$5,613,918	10/3/22	D[21]	99%
8	2028	Furnishing Slide Gates for the San Jacinto Diversion Structure[22]	Whipps, Inc.	$820,853	$0	12/8/22	6/25	0%

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

[18] Earnings reported in this table are the total contract earnings as they are known to be at the end of the reporting quarter.

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

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

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

[22] Granting of additional working days to complete procurement is being considered.

	Cont. No.	Contract	Contractor	Contract Amount[17]	Earnings Through Dec. 2024[18]	Start Date	Est. Delivery Completion Date	Est. Percent Complete[19]
9	2029	Furnishing Slide Gates for East Lake Skinner Bypass Channel	Whipps, Inc	$892,552	$0	4/10/24	11/25	0%
10	2048	Furnishing Butterfly Valves for the Inland Feeder/SBVMWD Foothill Pump Station Intertie - Schedule 1	Sojitz Machinery Corp. of America	$2,601,437	$0	6/15/23	7/25	0%
11	2056	Furnishing a Brushless Motor Exciter System for Gene Pumping Plant Unit No. 1	WEG Electric	$544,501	$0	5/27/24	6/25	0%
12	2096	Furnishing a 132-inch Butterfly Valve for the Foothill Pump Station Intertie	Vogt Valves, Inc.	$1,779,174	$0	6/3/24	6/26	0%
13	2098	Furnishing a 42-Inch Stainless Steel Sleeve Valve for Red Mountain Control Structure	Vogt Valves, Inc.	$589,957	$0	12/5/24	9/26	0%
14	2142	Furnishing Construction Materials and Installing Reinforcing Steel at Diemer Plant	Heed Engineering	$448,000	$112,470	11/4/24	8/25	25%
15	PO 214904	Furnishing Two Butterfly Valves for the Lake Skinner Outlet Tower Valve Replacement	B&K Valves and Equipment, Inc.	$1,174,475	$0	6/13/23	6/25	0%
16	PO 214941	Furnishing Air Release and Vacuum Valves for San Diego Pipeline Nos. 3 and 5[22]	B&K Valves and Equipment, Inc.	$1,466,665	$0	6/13/23	2/25	0%
17	PO 219501	Furnishing of Five Globe Valves to be Installed at Four Pressure Control Structures in the Orange County Region	B&K Valves and Equipment, Inc.	$698,000	$0	12/5/23	8/25	0%
18	PO 219516	Furnishing Plug Valves for the Foothill Feeder and Rialto Pipeline[22]	Caasi Flow Control	$549,592	$0	2/15/24	2/25	0%
		Total contract value for active procurement contracts:		**$77,436,937**				

Performance Metrics

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

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

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

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

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

No projects with construction costs over $3 million were awarded or completed in the reporting quarter. Once a project phase is complete, either final design or construction, staff's performance against these metrics is then calculated and compared to the target metrics. Table 12 on the following page summarize the comparison between the target metrics and the actual performance metrics for each project category for the current reporting period. In cases where the actual performance exceeded the target metric, explanations for the variance are provided. Actual performances are reported for the Board awarded construction contract projects.

Table 12: Performance Metric Actuals, Construction Costs < $3 Million

Project [23]	Metric	Actual Cost of Metric	Construction Cost	Target Range	Actual %
Lake Skinner Dam Drainage System Improvements	Final Design	$85,397	$588,000	9% to 15%	14.5%
San Diego Canal Concrete Liner Rehabilitation – Site No. 236	Final Design	$112,189	$1,928,650	9% to 15%	5.8%
Gene Communication System Upgrade	Inspection	$141,343	$1,363,161	9% to 15%	10.4%
Average	**Final Design**				7.9%
	Inspection				10.4%

[23] Although an NOC was filed for the Headquarters Building Physical Security Improvements – Stage 3 construction contract, the final contract cost and change order amounts had not yet been finalized due to outstanding pending issues. The actual inspection was determined to be approximately 13.4% of the construction costs using the best information available at the end of the reporting quarter which is within the target range.

Although an NOC was filed for the Weymouth Area Asphalt Pavement Rehabilitation construction contract, the final contract cost and change order amounts had not yet been finalized due to outstanding pending issues. The actual inspection was determined to be approximately 7.9% of the construction costs using the best information available at the end of the reporting quarter which is within the target range.

Service Connections and Relocations

Service Connections

No new agreements for service connections were approved by the General Manager pursuant to Sections 4700-4708 during the reporting period (October through December 2024).

Relocations

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

Projects Expensed to Overhead

There are no expensed projects to report during the 2nd Quarter of FY 2024/25 (October through December 2024).

Program Status

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

Table 13: Program Fund vs. Cost and Planned Expenditures vs. Actuals

Capital Programs	Total to Date		Biennium to Date	
	Funded Amount ($1,000's)	Costs thru December 2024 ($1,000's)	Biennium to Date Planned Expenditures ($1,000's)	Biennium Actual Expenditures ($1,000's)
Additional Facilities and Systems	$333,756	$299,756	$10,520	$10,511
Climate Adaptation	$262,888	$231,617	$5,330	$10,027
Colorado River Aqueduct	$607,646	$524,057	$27,060	$26,348
Dams & Reservoirs	$154,373	$131,987	$14,710	$5,059
Distribution System	$910,592	$810,601	$34,630	$31,785
Drought Mitigation - SWP Dependent Areas	$134,144	$80,623	$14,470	$15,223
Information Technology & Control Systems	$275,458	$242,165	$10,240	$7,832
Minor Capital Projects	$108,583	$87,255	$4,250	$3,013
Prestressed Concrete Cylinder Pipe	$535,761	$446,860	$5,570	$48,702
Water Treatment Plants	$2,526,295	$2,442,277	$34,720	$35,199
Total CIP	**$5,849,497**	**$5,297,197**	**$161,500**	**$193,697**

Notes on the above table:

- Numbers may not sum due to rounding.
- Numbers are based on the general ledger information downloaded on 1/15/2025.
- $0 under Planned Expenditures indicates that while no expenditures are planned during the reporting period, expenditures may be planned during upcoming periods.
- Negative actual expenditures indicate the result of cost transfers, write-offs, or credits greater than actual costs for this biennium through the reporting quarter.

List of Tables

List of Figures

Engineering, Operations, & Technology Committee

Capital Investment Plan Quarterly Report for Period Ending December 2024

Item 6a

March 10, 2025

Item 6a
Capital Investment Plan Quarterly Report for Period Ending December 2024

Subject

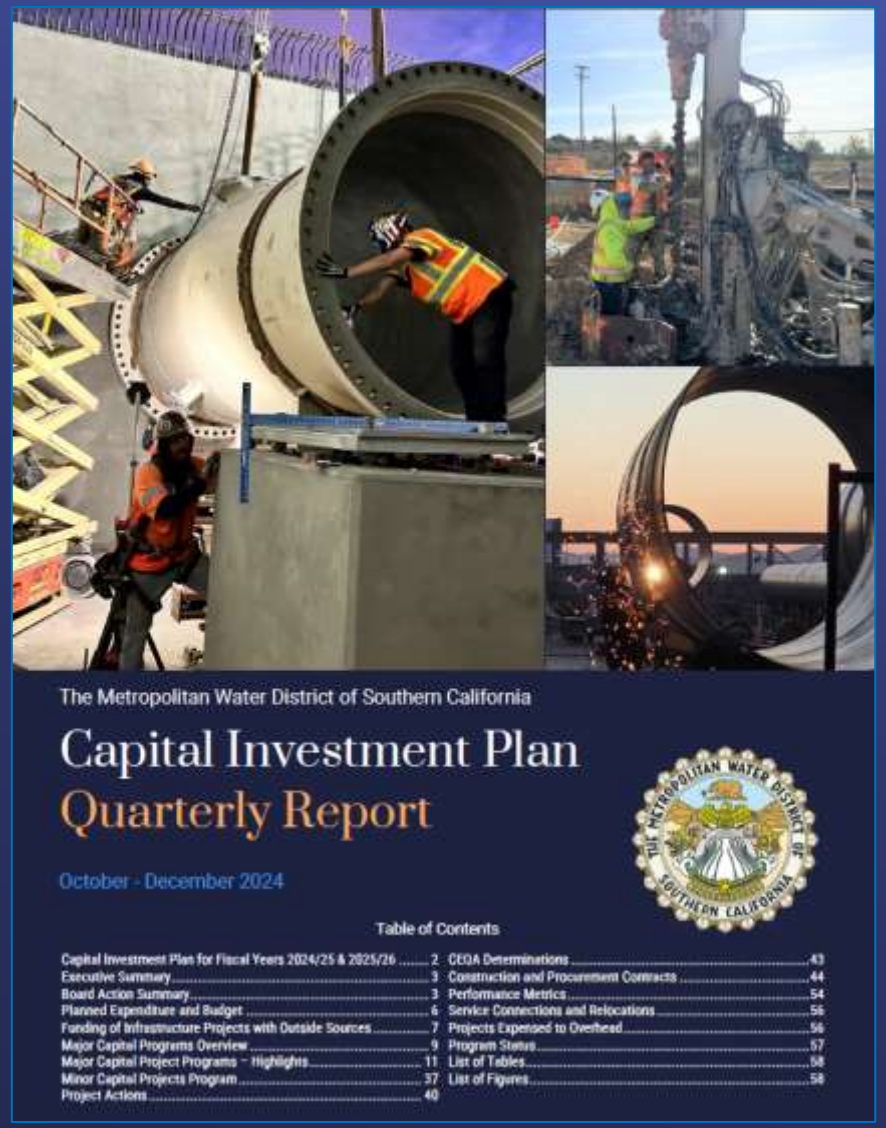
Capital Investment Plan Quarterly Report for the Second Quarter of FY 2024/25 which covers October 2024 through December 2024

Purpose

Informational summary of report that was provided in the board packet

CIP Quarterly Report

- Executive Summary
- Board Action Summary
- Actuals vs. Planned Expenditures
- Outside Funding Sources
- Program & Key Project Updates
- Project Funding & Authorization Actions
- Status of Construction & Procurement Contracts
- Performance Metrics
- Program Level Funding & Expenditure Status



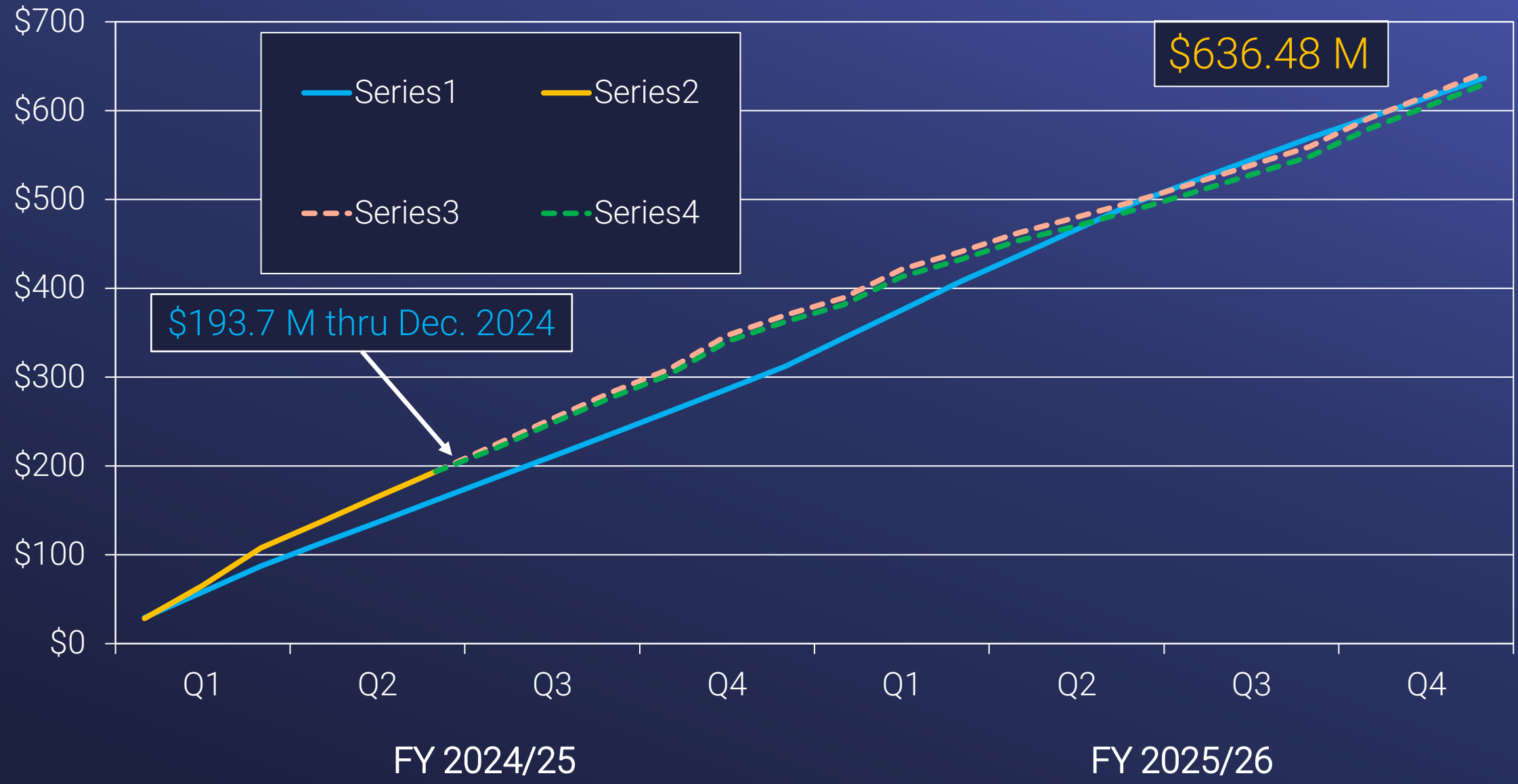
Capital Investment Plan Quarterly Report

Period Ending December 2024

2nd Quarter Summary for Fiscal Year 2024/25

- Board awarded contracts – $3.5 M
  - 2 Construction
  - 2 Procurement
- Contracts currently underway – $534.6 M
  - 27 Construction
  - 18 Procurement

CIP Expenditure Performance – Fiscal Years 2024/25 & 2025/26



Perris Valley Pipeline I-215 Tunnel Crossing

Compaction of Backfill in Southern Tunnel Shaft

Paving Asphalt at Van Buren Blvd. City of Riverside

- Contract awarded in January 2023
  - Performed site restoration activities at the southern & intermediate tunnel shafts
  - Completed sheet piling installation & grouting at the northern tie-in point
- Projected construction completion in June 2025
- Total Project Estimate: $79.3 M
- Total Project Cost thru Dec 2024: $74.4 M

Diemer Helicopter Hydrant Facility

Demonstration of Helicopter Pulling Water from a Hydrant Facility

Aerial Photo of Site Work Including Concrete Placement of Helicopter Landing Pad

- Construction Initiated in November 2024
  - Subgrade for the helicopter landing pad completed
  - Over-excavation for the tank subgrade initiated
  - Projected construction completion in June 2025
- Total Project Estimate: $2.0 M
- Total Project Cost thru Dec 2024: $1.0 M

Construction Contract Completion & Change Orders

Contract	Original Contract Amount	Contract Change Order Amount
Gene Communication System Upgrade	$1,244,935	$0
Metropolitan Headquarters Exterior Physical Security Upgrades	$2,165,000	$183,436
Weymouth Treatment Plant Asphalt Refurbishment	$1,754,000	$148,653
Total	$5,163,935	

Performance Metrics – 2nd Quarter of FY 2024/25

Projects w/ Construction Costs Less Than $3 Million

	Final Design % of Construction	Inspection % of Construction
Target Performance Range	9% to 15%	9% to 15%
Actual Performance	7.9%	10.4%

Minor Capital Projects

Fiscal Year Appropriation	2018/19 2019/20	2020/21 2021/22	2022/23 2023/24	2024/25 2025/26
Amount Appropriated	$15.5 M	$20.0 M	$14.4 M	$10.0 M
Amount Allocated	$13.6 M	$16.5 M	$14.0 M	$2.5 M
Expenditures Through December 2024	$12.4 M	$10.1 M	$8.3 M	$0.2 M
% of Work Complete	98%	80%	51%	2%


THE METROPOLITAN WATER DISTRICT OF
SOUTHERN CALIFORNIA

Engineering, Operations, & Technology Committee

Asset Management Program Update

Item 6b

March 10, 2025

Item 6b
Asset Management Program Update

Subject

Annual update of Asset Management Program

Purpose

Provide annual update of progress on the Asset Management (AM) accomplishments and an initial overview of the AM tools being developed to refine long-term planning

Next Steps

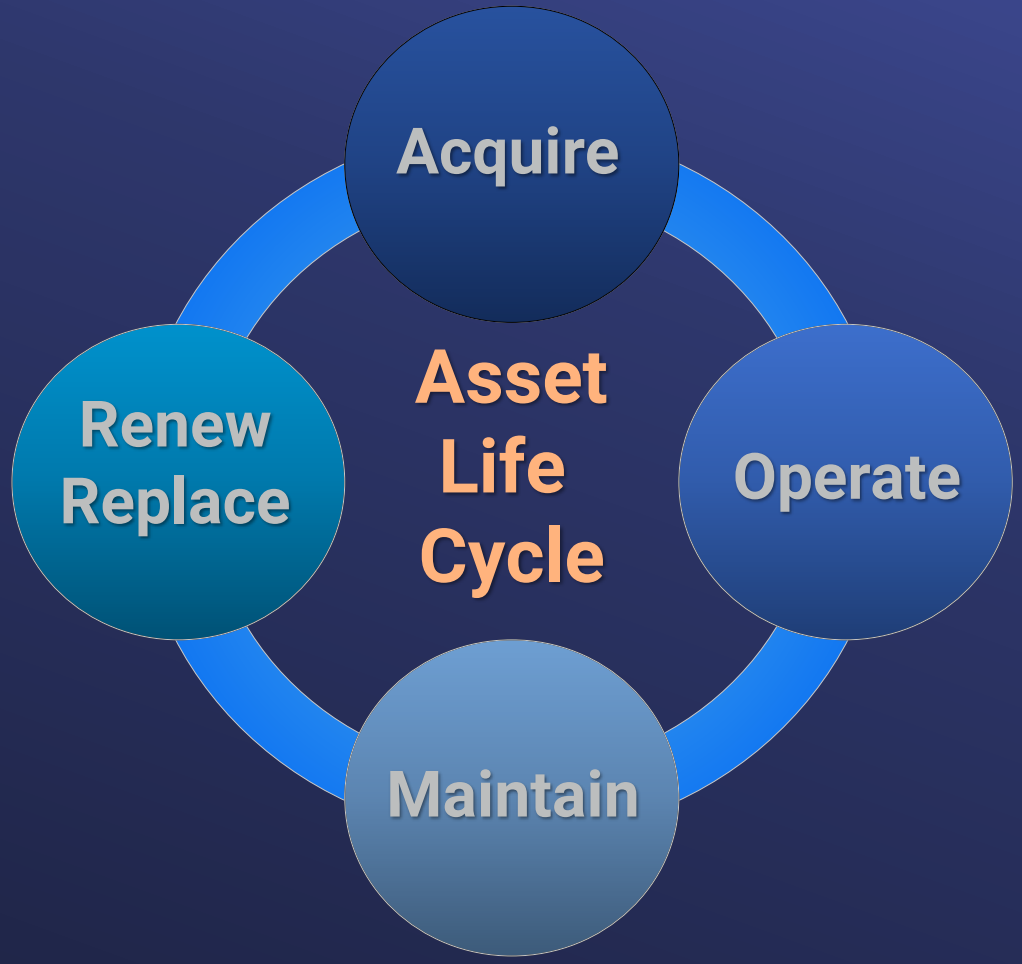
Update the Strategic AM Plan

Continue to advance AM initiatives to close maturity gaps

Provide additional details on Asset Management in a subsequent update

Asset Management (AM)

"The *coordinated* activity of an organization to create *value* from its *assets*" –*ISO 55000*



Metropolitan's Comprehensive Reliability Approach

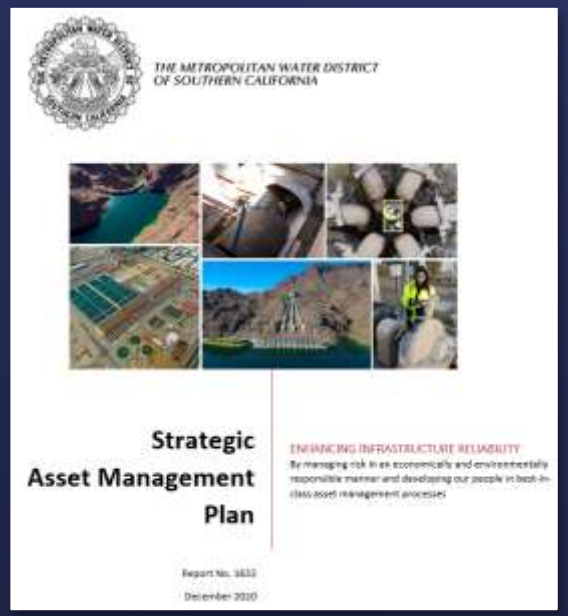
System Reliability

- **Water Supply**
- **System Capacity**
- **Infrastructure Reliability**
- **System Flexibility**
- **Emergency Response**

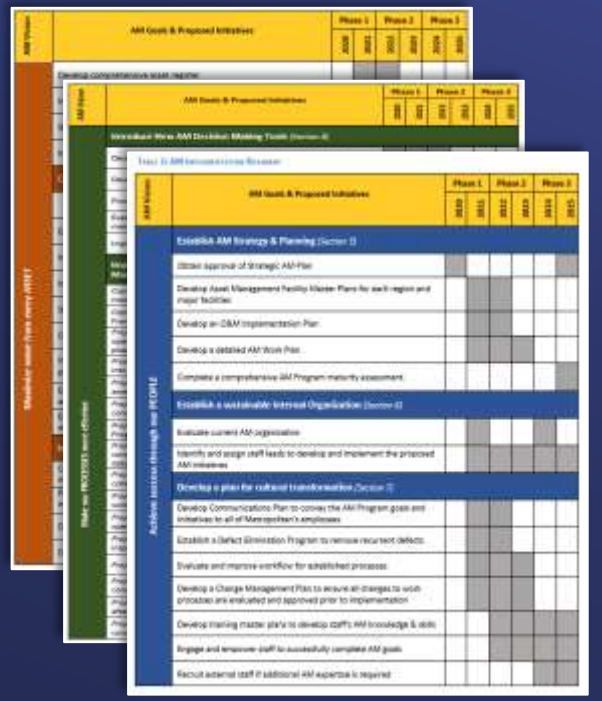
AM Strategy

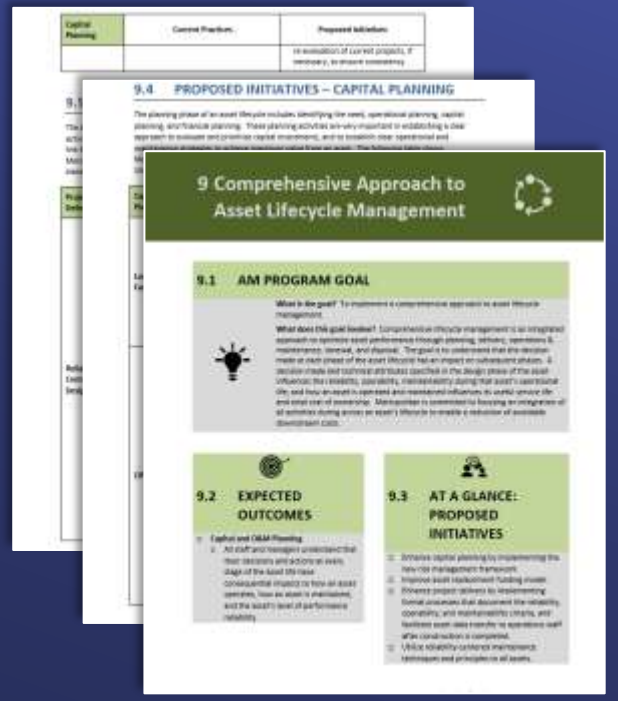
Maintenance Management ↔ **AM Strategy** ↔ **CIP** ↔ **Infrastructure Projects & Plans**

AM Program
Strategic AM Plan



- Establish AM strategy & planning
- Establish sustainable AM governance
- Develop a plan for cultural transformation
- Introduce new AM decision making tools
- Implement a comprehensive lifecycle approach
- Formalize AM reporting & quality assurance
- Standardize asset knowledge management
- Coordinate condition & performance monitoring
- Implement Tactical AM Plans (TAMPs)





Strategy & "Policy" → Goals → Roadmap → Details

Metropolitan's Infrastructure

$31B
Repl. Cost New

Adjusted for inflation Only

$46B
Est. Repl. Cost

Adjusted for code & environ. costs

5 Water Treatment Plants

12 Hydroelectric Facilities

6 Pumping Plants

24 Dams & Reservoirs

G.F. Napolitano Pure Water Demo Plant

830 mi. of Distribution Pipelines

79 mi. of Canals

218 mi. of Tunnels, Siphons, Conduits

450 Chemical/Auxiliary Storage Tanks

11,500 Water Regulating Valves (2 in. to 21 ft dia)

5,000 Motors & Pumps

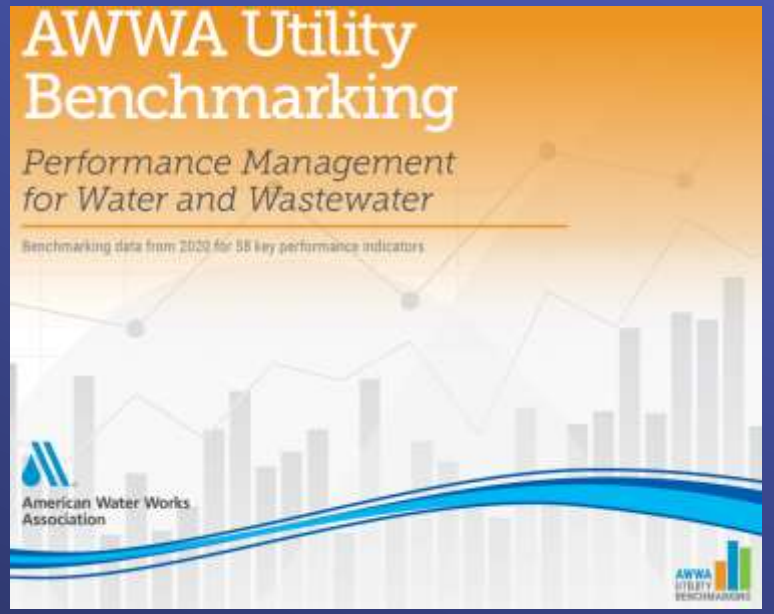
308 mi. of Power Transmission Lines + 1,200 High Voltage Towers

500 Buildings, Shops, & Other Structures

1,000 mi. of Unpaved Road

Industry Benchmarks
System R&R Rates

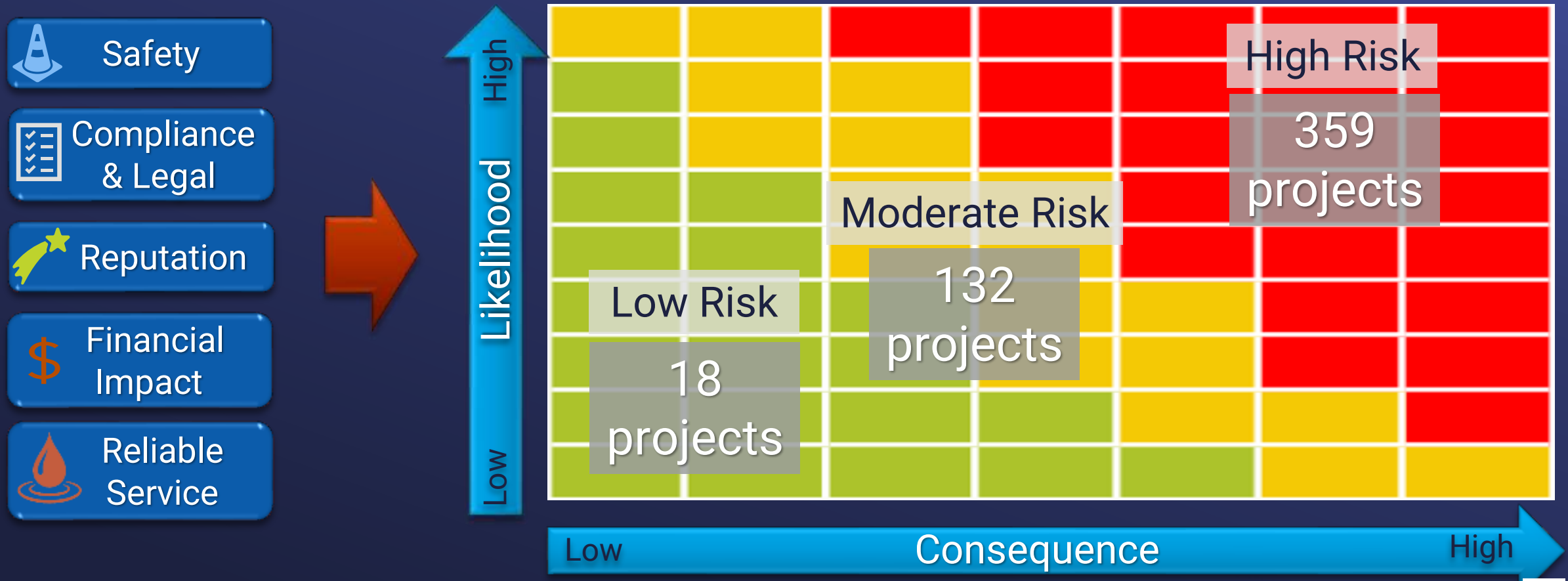
- 2020 survey for water transm. & distr. pipe networks serving > 0.5M people
- Values are for R&R only
- ERC = Estimated replacement cost



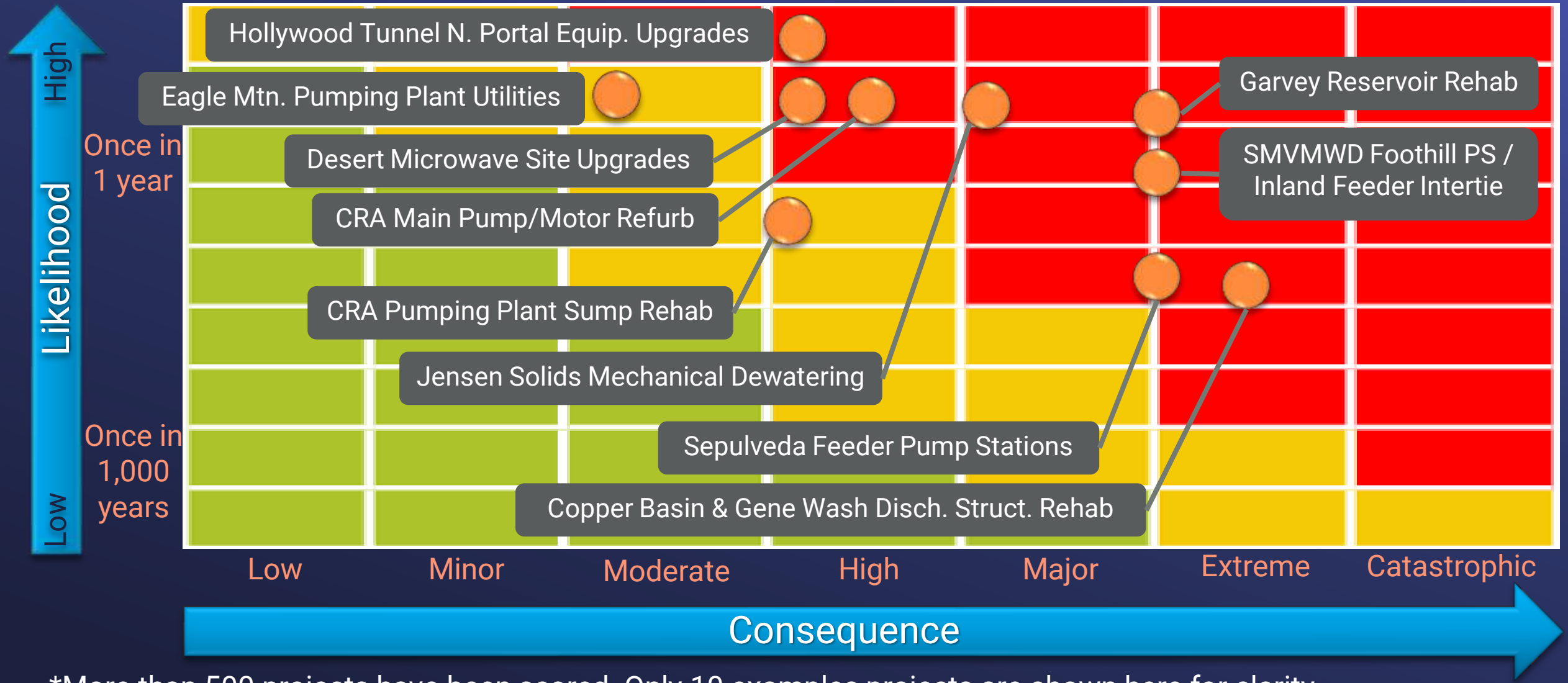
Percentile of Respondents	25th	Median	75th
R&R Spend as % of ERC	0.70%	1.1%	2.0%
Equivalent Metropolitan Spend Based on $46B ERC	$322M	$506M	$920M

AM Program
CIP Risk Heatmap

- Data collected from +500 capital project proposals
- Considers impact of hazards to Metropolitan's mission



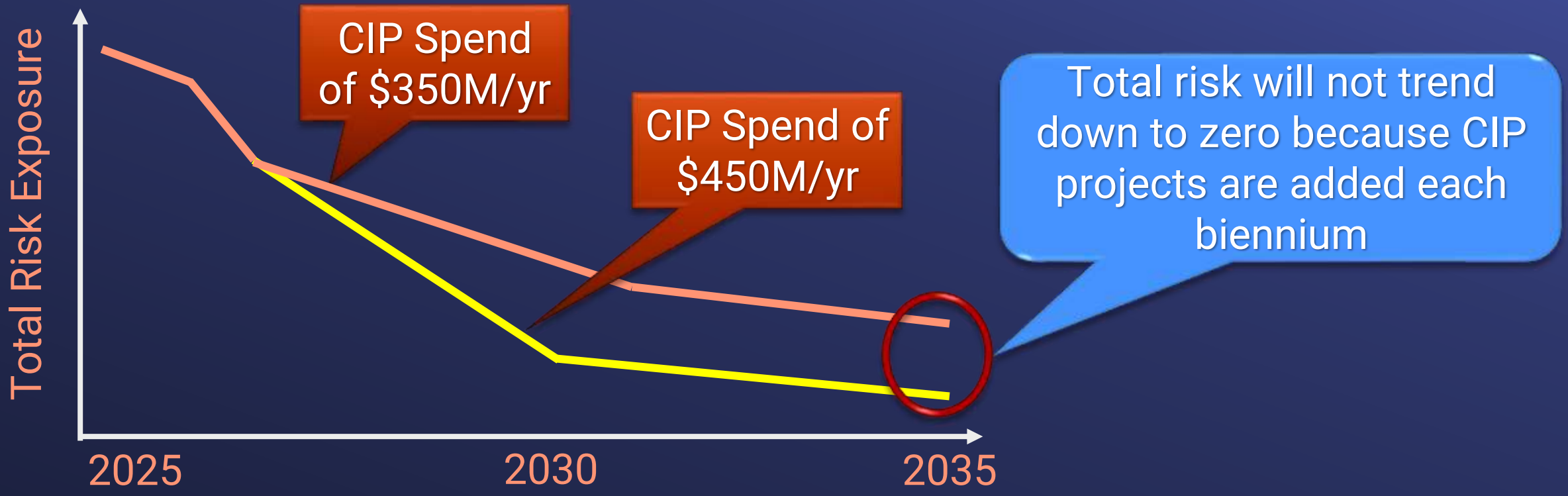
Sample* of Projects w/ Pre-Mitigation Risk



*More than 500 projects have been scored. Only 10 examples projects are shown here for clarity.

AM Program
CIP Risk Optimization Model (proof-of-concept)

- Optimize sequencing of known projects based on risk reduction
- Model cannot account for future CIPs that will be submitted

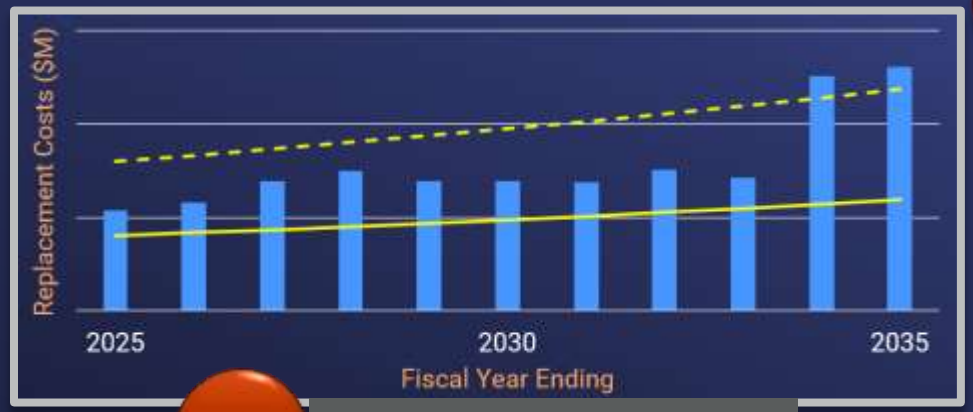


Comprehensive Asset Management
Conceptual Example: Whole Portfolio

1 Condition Data

Condition	Low Criticality	Moderate Criticality	High Criticality
Very Poor	$	$$$	$
Poor	$$	$$$	$$$
Good	-	$	$$

2 Risk



3 Long-Term Forecast

AM Program
Range of AM Maturity

- Extend AM approach to other assets (e.g., meters, pipelines, valves, etc.)

A Service Connection Inspections

B PCCP Inspections & Prioritization

Next Steps

- Update SAMP in 2025
  - AM maturity assessment consistent with ISO 55000
  - Benchmark AM practices with comparable agencies
- Initiate capital project to collect critical asset condition data
- Refine asset renewal forecast models
  - Summarize findings during upcoming workshops
  - Provide insight into staffing and resource needs
- Continue discussion on AM efforts to enhance long-term planning


THE METROPOLITAN WATER DISTRICT OF
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Engineering, Operations, & Technology Committee

Risk Management in Capital Project Planning and Delivery

Item 6c

March 10, 2025

Item 6c
Risk Management in Capital Project Planning and Delivery

Subject

Risk Management in Capital Project Planning and Delivery

Purpose

Provide an update on Metropolitan's approach to managing risk associated with capital projects

Next Steps

Continue enhancing Metropolitan's risk management approach

Risk Management - Project Level

Overview

- Projects initiated largely to reduce operational risks
- Metropolitan Engineering manages risk throughout the project delivery cycle through:
  - Rigorous planning and design
  - Continuous reviews
  - Effective construction management

Risk Management – Planning Phase

Rigorous Facility Studies/Evaluations

- Infrastructure Resilience
  - Drought
  - Earthquake
  - Wildfire
  - Flood
  - Climate change
- Infrastructure Reliability
  - Condition assessment
  - System vulnerability assessment
  - System flexibility assessment
- CAMP4W

Capital Project Risk Management – Design Phase

Metropolitan Standard Detail Book

Risk Management Tools and Processes

- Value Engineering – Project analysis routinely includes development of a risk register
- Constructability Review – Team process for evaluating construction docs for potential risks
  - Review of risk register
- Design Standards may exceed national standards based on lessons learned and risk avoidance/mitigation

Risk Management – Construction Phase

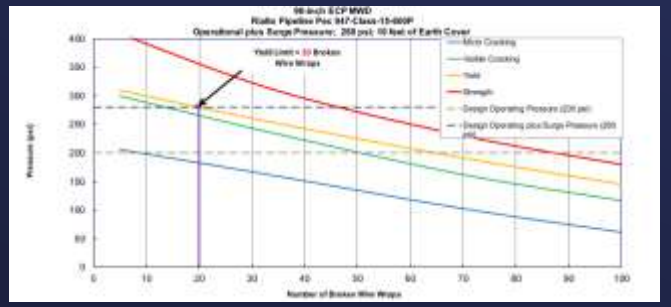
Construction Risks

- Safety
- Differing site conditions
- Coordination with operations
- Equipment delivery
- Shutdown/outage planning
- Managing public relations

Perris Valley Pipeline Construction

Risk Management Example

PCCP Rehab. Program



Risk Curves

Short-term Programmatic Risk Management

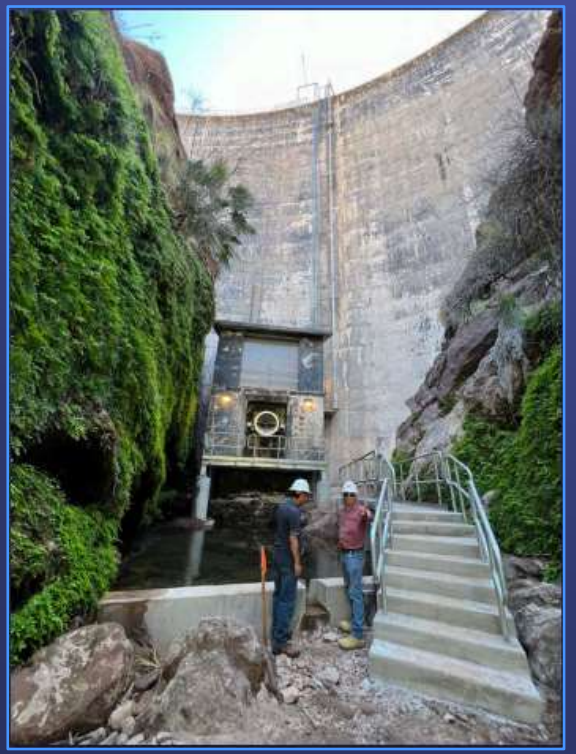
- Comprehensive monitoring and inspection program includes:
  - Visual and electromagnetic inspections
  - Monitoring and addressing local stray currents
  - Identify distressed segments
  - New data - elevated risk caused reprioritization of repair of the Allen-McColloch Pipeline

Electromagnetic Inspection

Risk Management Example
Gene Wash Valve Replacement

Construction-related Risks

- Discharge isolation device leaked and oddly configured
- Work in steep canyon with complex geology
- Unknown facility condition
- Protect facilities and allow access
- Environmentally sensitive area
- Valve had to stay continuously operational



Gene Wash
Dam Discharge Facility

Risk Management Example
Gene Wash Valve Replacement

Risk Register

Risks Considered and Mitigated

VE Workshop

- Rock fall from nearby slopes; address controls; safety improvements; access improvements

CR Workshop

- Revisited register
- More geologic data needed; slide gate condition may be worse than expected; isolation device installation; leakage management; equipment and access issues

Valve Test Workshop

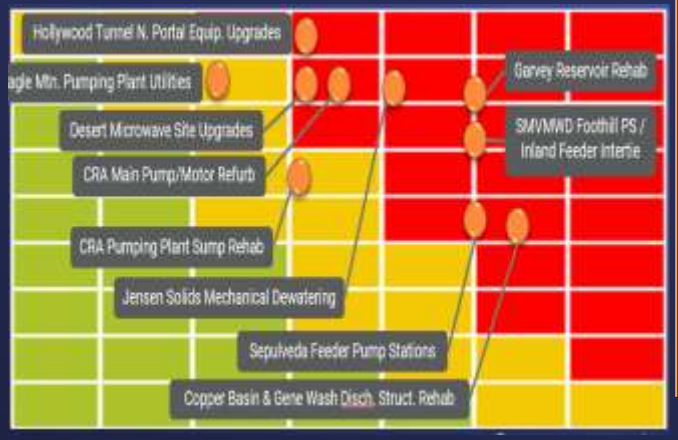
- Mechanical/electrical failure of both the new fixed cone valve and the refurbished slide gate; reservoir debris lodged in the new discharge line; dam structural damage

Result: Successful construction and testing

CIP Planning – Risk Incorporation

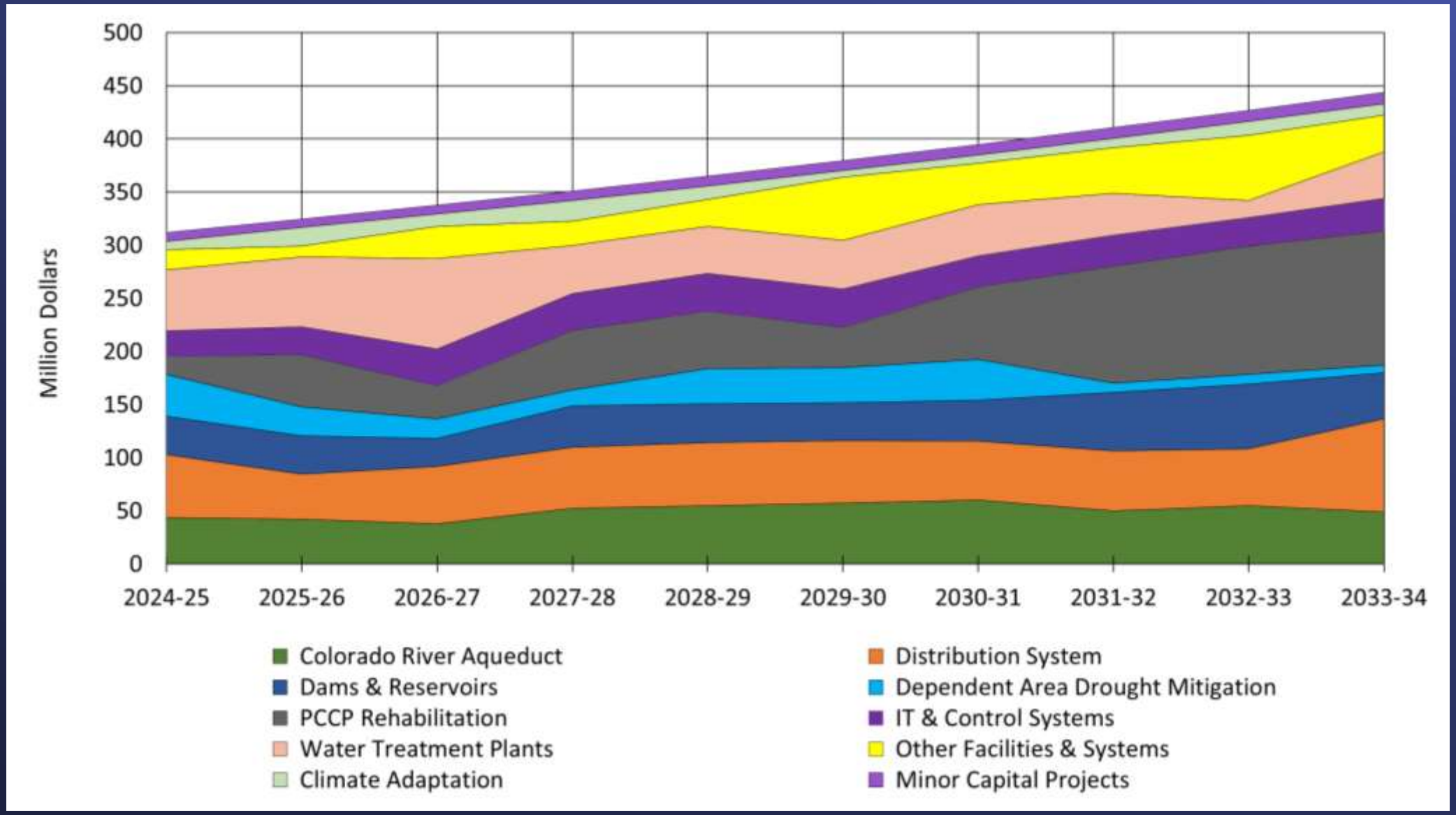
- Next biennial CIP budget process to start this month
- Rigorous system to assess projects
  - All projects not fully funded have proposals solicited from staff and reviewed by management
    - Mostly R&R
  - All projects reviewed with risk framework
  - CIP Evaluation Committee reviews and scores
  - Risk is predominant scoring influencer

Biennial CIP Budget Process



Risk Evaluation

Planned CIP Expenditures by Program – Layered and Leveled



Risk Management and CIP Planning

Next Steps

- Start the CIP budget process for next biennium
- Continue developing CIP management tools and asset management information
- Continue communicating with the Board
  - Discuss CIP process & project prioritization approach
  - Financial investments to maintain reliability and reduce risk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Board Report

Engineering Services Group

- **Engineering Services Monthly Activities Report for February 2025**

Summary

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

- Colorado River Aqueduct (CRA) Program
- Dams & 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
- ESG Management Mentoring Program
- American Society of Civil Engineers (ASCE) Engineers Week – Girl Day

Purpose

Informational

Attachments

Attachment 1: Detailed Report - Engineering Services Group's Monthly Activities for February 2025

Date of Report: March 10, 2025

Engineering Services Group's Monthly Activities for February 2025

Engineering Services manages and executes projects within the Capital Investment Plan (CIP) to maintain infrastructure resiliency, ensure regulatory compliance, enhance sustainability, and provide flexibility in system operations to address uncertain water supply conditions. 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 is composed of CIP projects to replace or refurbish facilities and components of the CRA system to reliably convey water from the Colorado River to Southern California.

- CRA Domestic Water Treatment System — This project upgrades the domestic water treatment systems at all five CRA pumping plants, including the replacement of the water treatment units. The contractor has installed the temporary treatment skid system at Intake Pumping Plant and water quality testing is underway. The temporary skid will remain in operation until installation, testing, and commissioning of the new system is complete. Demolition of the existing system will start in February 2026. Construction is 43 percent complete and is scheduled to be completed in March 2026.
- CRA Storage Buildings — This project furnishes and installs pre-engineered storage buildings at Hinds, Eagle Mountain, and Iron Mountain pumping plants and constructs associated site improvements. The contractor is currently completing the interior work on the new storage buildings at Eagle Mountain Pumping Plant, constructing the building at Hinds Pumping Plant, and receiving the building structural components at Iron Mountain Pumping Plant. Construction is 60 percent complete and is scheduled to be completed in April 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 5 percent complete and is scheduled to be completed in September 2027.
- Hinds Discharge Valve Platform — This project will replace corroded steel members, such as ladders and floor grates at all nine discharge valve pits at the Hinds Pumping Plant. Preliminary design is completed and consultants are being solicited to develop the final design.

CRA Domestic Water Treatment System — Installing underground ductbank and precast accessways at Hinds

Eagle Mtn. Storage Building — Contractor Installation of Roof Paneling on New Building

Dams & Reservoirs Program

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

- Garvey Reservoir Rehabilitation — This project will replace the aging reservoir floating cover and liner, structurally strengthen the outlet tower, upgrade the on-site water quality laboratory building, rehabilitate the junction structure, and replace the existing standby generator and a portion of the security perimeter fence. Final design is approximately 65 percent complete and is scheduled to be complete in November 2025.

Distribution System Program

The Distribution System Program is composed of CIP projects to replace, upgrade, or refurbish existing facilities within Metropolitan's distribution system, including pressure control structures, hydroelectric power plants, and pipelines, to reliably meet water demands.

- Perris Valley Pipeline Tunnels — This project will complete construction of the Perris Valley Pipeline and provide service connections to Eastern and Western Municipal Water Districts. This project installs 3,000 linear feet of tunnel that crosses the Interstate 215 freeway. The Contractor has completed all tunneling and is preparing to make the final connection during a planned April 2025 shutdown. Overall construction is 95 percent complete and is scheduled to be complete in mid-2025.
- Foothill Hydroelectric Plant and Control Building Seismic Upgrade — This project strengthens the Foothill Hydroelectric Plant and Control Building to withstand a significant earthquake by removing and replacing the roofing system, adding encasements to enlarge and strengthen concrete columns, and reinforcing shallow foundations. The contractor has completed the work on the building's roof and the concrete columns and will continue installing the walkway on the south side of the hydroelectric building. Construction is approximately 95 percent complete and is scheduled to be completed in March 2025.
- Auld Valley PCS Valve Replacement — This project will rehabilitate a 42-inch sleeve valve and procure a 42-inch sleeve valve for the Red Mountain Pressure Control Structure and rehabilitate two 42-inch sleeve valves for the Auld Valley Pressure Control Structure. One valve at the Auld Valley PCS has been rehabilitated and the second one is currently at the Metropolitan shop being rehabilitated. The valve will be installed during an April 2025 shutdown. Metropolitan is currently reviewing the submittals provided by the vendor to procure the new 42-inch sleeve valve for Red Mountain.
- Santa Monica Feeder Cathodic Protection — This project will install cathodic protection for a steel portion of the Santa Monica Feeder to address corrosion detected during a 2018 inspection of the pipeline. This project will install two 400-foot-deep anode wells along with rectifiers and remote monitoring equipment along the feeder. The Contractor is securing all necessary permits and plans to mobilize onsite in February 2025. Construction is scheduled to be completed by June 2025.
- Yorba Linda PCS Valve Replacement — This project will rehabilitate five 54-inch sleeve valves and five 54-inch butterfly valves in the pressure control structure. Prior to rehabilitation of the sleeve valves, the project will also rehabilitate five 54-inch butterfly valves needed for isolation of the sleeve valves. The

shutdown for the butterfly valve rehabilitation has been scheduled for April 2025. Currently, materials for the shutdown are being procured.

- Hollywood Tunnel North Portal Valve Replacement — The project will replace two 24-inch sleeve valves operated by electric actuators for pressure control and two 24-inch bonneted knife gate valves for flow isolation at the Hollywood Tunnel North Portal along the Santa Monica Feeder. The valve procurement contract is scheduled to be awarded at the March 2025 board. Final design for the valve installation is 30 percent complete and scheduled to be completed by December 2025.

Perris Valley Pipeline Tunnels — Open Cut Excavation at Shaft 1;
Lowering Mini Excavator into Trench

Additional Facilities and Systems Program

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

- La Verne Shops Improvements — This project improves the La Verne Shops building and installs Metropolitan-furnished shop equipment. The contractor continued installing electrical conduits for

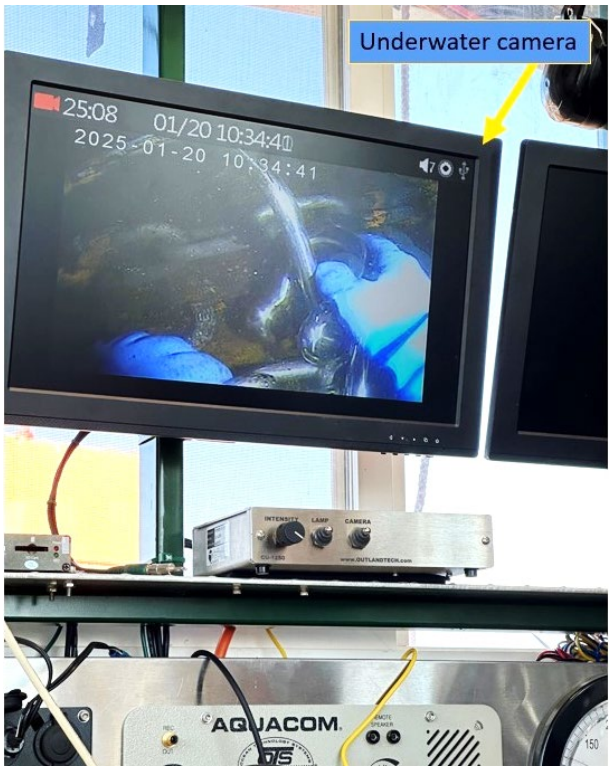
branch circuits, began installing reinforcing steel for the new blast booth foundation, continued installing maintenance holes for the new electrical ductbank, began installing concrete formwork for the blast booth pit walls, and are installing new underground natural gas lines. Construction is approximately 96 percent complete and is scheduled to be completed in April 2025

- Diamond Valley Lake Wave Attenuator Replacement – This project adds a second attenuator to the existing wave attenuating system at the East Marina in Diamond Valley Lake. The second attenuator will protect the boats and launch ramp from excessive wave action. As part of the improvements, the existing wave attenuator will be relocated to a new location and the new attenuator will be installed in its place. Additional anchors will be placed on the bottom of the reservoir to provide anchorage for the new longer attenuator. The contractor is installing the concrete anchors on the North side, has begun removal of existing anchor cables and chains, and has begun installation of interconnecting chains for tying the existing anchor blocks to the new anchor blocks for the new wave attenuator. The project is 45 percent complete and construction is scheduled to be complete in May 2026.
- Colorado River Aqueduct Kitchens and Lodging Replacement — 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 is 10 percent complete and is scheduled to be completed in July 2025.

La Verne Shops Improvements — New Unit Substation Transformer Installation

Diamond Valley Lake Wave Attenuator Replacement — Hoisting Anchor Blocks into Water

Diamond Valley Lake Wave Attenuator Replacement — Diver Entering Water for Block Installation



Diamond Valley Lake Wave Attenuator Replacement — Images of Diver Installing Anchor Chains

Prestressed Concrete Cylinder Pipe (PCCP) Program

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

- Second Lower Feeder Reach 3B — This project installs 3.7 miles of steel lining and three conical plug valves along a portion of the Second Lower Feeder (Feeder) that traverses the cities of Lomita, Los Angeles, and Torrance. The second shutdown to complete the relining and replace the three 42-inch valves with three 48-inch valves commenced on December 2, 2024. The Reach 3B portion of the Feeder and the bypass line serving two service connections at Palos Verdes Reservoir are out of service. The interiors of the three sectionalizing structures have been demolished, the three existing 42-inch valves have been removed, and two pipe access portals have been completed. Installation of the new 48-inch valves and the steel liner and construction activities for the rehabilitation of this portion of the Feeder is underway. Construction is 81 percent complete and is scheduled to be completed in September 2025.
- Allen-McColloch Pipeline (AMP) Urgent Relining — This project will perform urgent relining of approximately three miles of distressed PCCP segments of the Allen-McColloch Pipeline (AMP) that were discovered during an inspection in 2023. The urgent relining of the AMP is being performed in stages. Stage 1 includes carbon fiber reinforced polymer (CFRP) lining of four segments and steel relining of approximately 4,500 feet of pipeline. Stage 1 upstream of OC-88 is complete. Downstream of OC-88, pipe installation and backfill is complete and site restoration will be complete in February 2025. Stage 2 work consists of 12,600 feet of steel liner installation and appurtenant work. Pipe

installation at all sites is complete. Backfill of the last site was completed in January 2025. The Stage 2 work is approximately 95 percent complete. Bulkhead removal, disinfection, installation of flanges, and rewatering of the pipeline downstream of OC-88 were completed in January 2025. Site restoration, paving, and striping are expected to be completed in March 2025.

- Sepulveda Feeder Reach 9 —This project will rehabilitate approximately 19,400 linear feet of 120-inch to 96-inch diameter PCCP with a combination of solid steel and coiled steel liner systems. Reach 9 is located on Havenhurst Avenue from about State Route 118 to just north of the Van Nuys Airport in the city of Los Angeles. Additionally, a new 54-inch sectionalizing valve and valve structure will be installed on the Sepulveda Feeder at approximately station 220 near the intersection of Havenhurst and Chatsworth Street. Final design for Reach 9 is 50 percent complete and is scheduled to be completed in December 2025.

Second Lower Feeder Reach 3B— Contractor Installing Steel Liner in Portal

Second Lower Feeder Reach 3B— Removing Old Valve from Vault

Water Treatment Plants Program

The Water Treatment Plants Program is composed of CIP projects to replace or refurbish facilities and components at Metropolitan's five water treatment plants and the chemical unloading facility 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 and walls, launders, inlet gates, and outlet drop gates. Rehabilitation work also includes seismic upgrades of basin walls and inlet channel, hazardous material abatement, and replacement of filter valves and actuators in Filter Building No. 2. The contractor completed all rehabilitation work in Basins 7 and 8 and continued construction activities including structural wall modifications, mechanical piping, and equipment installation in Basins 5 and 6 and Filter Building No. 2. Construction is approximately 90 percent complete and is scheduled to be complete in September 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 as well as 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 approximately 95 percent complete and is scheduled to be completed in May 2025.

- 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 97 percent complete and is scheduled to be complete in April 2025.
- Mills Electrical Upgrades, Stage 2 — This project upgrades the electrical system with dual-power feeds to key process equipment to comply with current codes and industry practice, improve plant reliability, and enhance worker safety. Stage 1 construction is complete. Stage 2 improvements will add a second incoming 12 kV service from Riverside Public Utilities, reconfigure the existing 4.16 kV switchgear, and replace the standby generator switchgear and the emergency generator programmable logic controller. Riverside Public Utilities energized the second incoming service to the plant. The contractor completed the SGN-1B switchgear upgrades inside the Ozone Switchgear Building and is preparing to upgrade the SGE emergency switchgear inside the Standby Generator building. Construction is approximately 80 percent complete and is scheduled to be completed in August 2025.

Weymouth Basins 5–8 and Filter Building No. 2 Rehabilitation — Basin 5 Clarifier Testing

Adapt to changing climate and water resources

Pure Water Southern California

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

- Environmental Planning — The environmental planning phase began in 2020. Technical studies have been completed to support the effort. The draft EIR is currently scheduled for publication in May 2025, with board certification of the document in early 2026.
- Program Management — PWSC program management efforts lead the planning for the PWSC Program, including project controls, scheduling, budget development, risk management, coordination with program partners and stakeholders, grants and funding, and preparation of various plans and studies.
    - In December 2024, the Board authorized entering into an agreement with USBR to accept up to $125,472,855 in funding under the U.S. Bureau of Reclamation (USBR) Large-Scale Water Recycling Program (LSWRP) grant. The agreement was executed on January 10, 2025.
    - Program internal governance and program plans are currently being developed. The first workshop was held on October 29. Technical studies are underway to support planning of DPR implementation, EIR analysis on per- and polyfluoroalkyl substances compounds, and development of program phasing options, including treated water augmentation.
    - Metropolitan and LACSD are developing a work plan and gathering information to pursue certification for PWSC under State Senate Bill 149. This certification makes critical projects, which are necessary for the State to meet its climate and clean energy goals, eligible for expedited judicial review. A meeting with the State on January 23, 2025, further identified the next steps to pursue the certification.
    - In January 2025, staff presented potential Program staging options to the Subcommittee on Pure Water Southern California and Regional Conveyance and information on regional benefits.
- Advanced Water Purification Facility — The AWPF will purify treated wastewater from LACSD's A.K. Warren Water Resource Facility using membrane bioreactors (MBRs), reverse osmosis, and ultraviolet/advanced oxidation. With its expertise in biological wastewater treatment, LACSD will assume the responsibility of implementing the AWPF pretreatment, including the MBR facilities.
    - A draft conceptual facilities plan has been prepared to document key assumptions of AWPF components. The final draft plan is currently being prepared.

- Southern California Edison has completed the Method of Services (MOS) study to identify infrastructure needed to meet AWPF power requirements.
- Staff is preparing a Request for Qualification document for the procurement of a Progressive Design Build (PDB) entity to progress the design of the AWPF.

- Direct Potable Reuse (DPR) — The California Division of Drinking Water (DDW) published the final DPR regulations in December 2023. On August 6, 2024, the California Office of Administrative Law approved these DPR regulations, which took effect on October 1, 2024. Metropolitan has completed bench-scale testing to screen the potential DPR treatment processes that could be used for the program. Planning of pilot-scale and demonstration-scale testing is in progress. Key testing equipment will be procured in early 2025 to facilitate design of pilot/demonstration system.
- Conveyance Pipeline System — The PWSC conveyance system consists of the backbone pipeline, which extends over 40 miles from the AWPF in the city of Carson to as far north as the city of Azusa; repurposing an existing pipeline owned by the San Gabriel Valley Municipal Water District; and a new DPR pipeline to convey water from the backbone eastward for raw water augmentation at Metropolitan's Weymouth plant in the city of La Verne. It also includes several pump stations, service connections, isolation valves, and other pipeline appurtenances. As part of the current environmental planning phase efforts, the project team is preparing the Conveyance Facilities Conceptual Design Report to support the environmental studies and permitting processes required by CEQA. The final report is anticipated to be complete in March. In addition, preliminary design of the first two pipeline reaches is currently underway and is anticipated to be complete by the end of the year. Staff is also preparing a market-sounding brief for conveyance projects in March, with plans to advertise for Construction Management / General Contractor (CM/GC) alternative delivery pre-construction services for Reaches 1 and 2 as early as July 2025.

  In January, the Southern California Edison (SCE) executive council authorized their staff to move forward with drafting a lease agreement for Metropolitan's usage of SCE right-of-way, effectively allowing us to co-locate our pure water backbone pipeline within their transmission corridor along the San Gabriel River. This, in turn, minimizes the overall impact on cities and communities along the backbone alignment. Additional progress updates are provided below.

  - Reach 1 — This reach is approximately 6.3 miles long, primarily within public rights of way in the city of Carson, with service connections for LADWP and West Basin MWD. Current work includes utility field investigation and geotechnical work, incorporating value engineering comments and designing for more tunneling to minimize project risks. Additional investigations and staging coordination for additional tunneling will advance in the first half of 2025.
  - Reach 2 — This reach is approximately 7.5 miles long, primarily within public rights of way in the cities of Long Beach and Lakewood, with a service connection for Long Beach Utilities. Current work includes utility field investigation and geotechnical work, development of preliminary design report and drawings, as well as coordination with City of Long Beach, Long Beach Utilities, Caltrans, and other permitting entities for the major tunnel crossing of the I-710 and Los Angeles River.

Drought Mitigation—State Water Project Dependent Areas

The Drought Mitigation—State Water Project Dependent Areas Program is composed of 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.

- Foothill Pump Station – This project will connect Metropolitan's Inland Feeder to San Bernardino Valley Municipal Water District's (SBVMWD) 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 Rialto Pipeline. The project will install supply and discharge bypass pipelines, isolation valves, and their vault, and a surge protection system. Final design for the project is 60 percent complete and is scheduled to be complete by early 2025. The project requires permits from CA Fish and Wildlife and the U.S. Fish and Wildlife Service to address impacts on endangered species found at the project site; permit acquisition is underway.
- 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 Jensen Plant exclusive area. This project uses a progressive design-build (PDB) project delivery method. The Board awarded a Phase 1 PDB agreement in September 2023. Phase 1 includes preliminary design and development of a Guaranteed Maximum Price (GMP) for completion. The contractor has submitted the 70 percent cost estimate. Staff is currently negotiating terms and conditions. Authorization of Phase 2 final design and construction is anticipated in spring 2025.

Empower the workforce and promote diversity, equity, and inclusion

ESG Management Mentoring Program

As a part of Metropolitan's workforce development initiative, Engineering rolled out a series of modules for Engineering's Management Mentoring Program that focused on providing additional guidance and tools to new team managers as they navigate the complexities of management. The Engineering Management Mentoring Program seeks to provide increased support for these highly motivated leaders. With 13 employees promoted to team managers, the program seeks to channel the diverse backgrounds and areas of expertise of these individuals to collaboratively develop solutions to their common challenges. While the conclusion of the series was completed in February 2025, Engineering will continue its support of these managers with regular, targeted discussions and meetings as they develop their leadership skills. Engineering plans to continue management mentoring as new managers come on board each year.

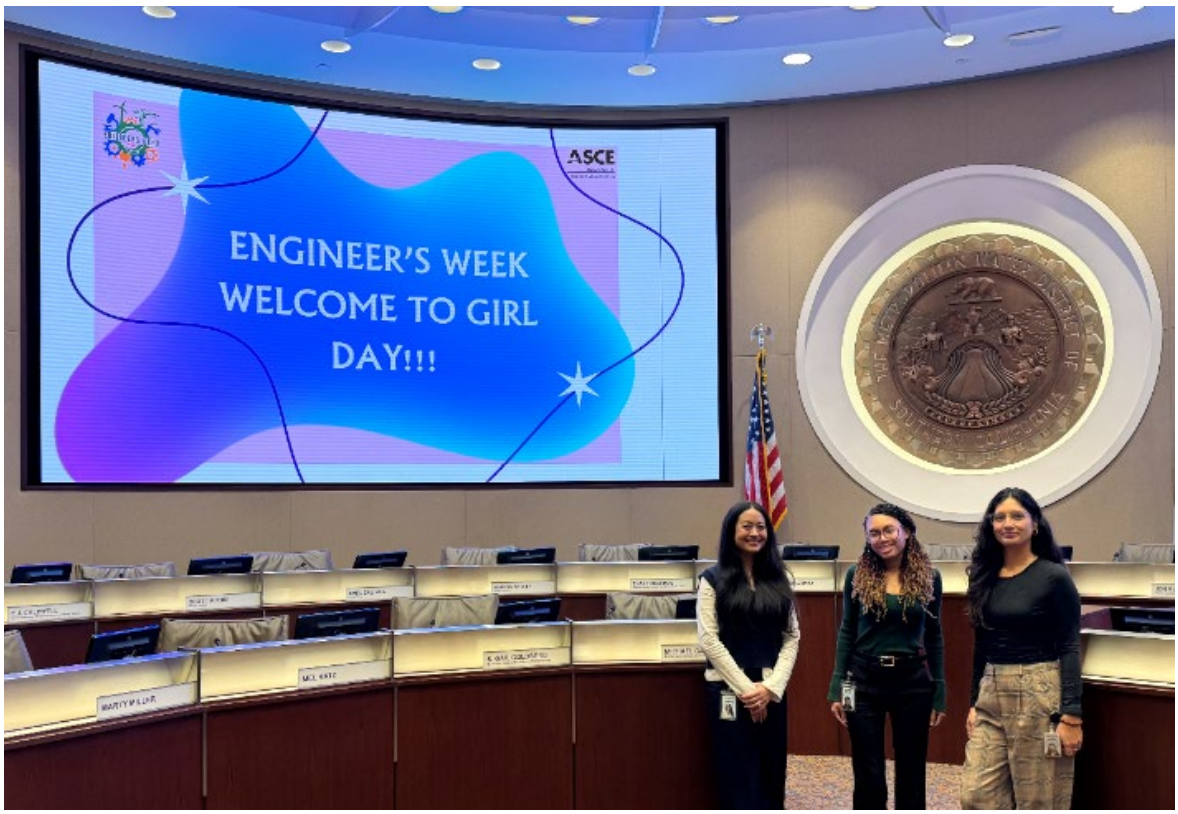
Management Mentees and Mentors at Culmination Meeting

Management Mentees and Mentors Engaging in Discussions

Partner with interested parties and the communities we serve

American Society of Civil Engineers (ASCE) Engineers Week – Girl Day

Staff participated in the 12th Annual ASCE Engineers Week – Girl Day event at Metropolitan's Headquarters Building on February 20, 2025. This event represents one of several events that ASCE rolls out each year to strive to inspire future generations of female engineers from disadvantaged and underrepresented backgrounds. These events help provide opportunities for 6th graders through 12th graders to learn about science, technology, engineering, and mathematics through professional panels and various engineering craft activities to explore the world of engineering together. With the overarching theme this year - "Design Your Future," interim Chief Engineer Mai Hattar welcomed the next generation of students along with engineering staff (Jennifer Thompson and Marylin Duarte) and a college student intern (Avianah Butler) who shared their academic and career paths, including their motivations and challenges. They also spoke about their role and contributions to significant projects that included the Badlands Tunnel Surge Protection Facility and Water Quality Lab Seismic Retrofit and Expansion. Other activities included students engaging in a hands-on activity to design and build a structure, scholarship opportunities, and a special presentation by the City of Los Angeles Bureau of Engineering.



Presenters from left to right:
Jennifer Thompson (Engineer), Avianah Butler (College Student Intern), and Marylin Duarte (Engineer)

Girl Day Event Group Photo

Operations Groups

- **March Operations Groups Monthly Activity Report**

Summary

This monthly report for the Operations Groups provides a summary of activities for February 2025 in the following key areas:

- Enhance Workforce Safety
- Develop Workforce and Prepare Employees for New Opportunities
- Manage Business Operations, Budget, and Staffing
- Develop New Solutions to Enhance Operational and Business Processes
- Provide Reliable Water Deliveries and Manage Storage
- Manage Power Resources and Energy Use in a Sustainable Manner
- Protect Source Waters and Ensure Water Quality Compliance
- Optimize Water Treatment and Distribution
- Protect Infrastructure and Optimize Maintenance
- Enhance Emergency Preparedness and Response
- Prepare for Future Legislation and Regulations
- 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 for the month of February 2025.

Attachments

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

Date of Report: March 11, 2025

Operations Groups

Core Business Objectives

Enhance Workforce Safety

Asbestos O&M Worker and Asbestos Cement Pipe Worker training classes were held at Iron Mountain pumping plant. This training provides staff with the information to identify and safely work with asbestos-containing materials.

Asbestos training at Iron Mountain pumping plant

Develop Workforce and Prepare Employees for New Opportunities

Business Management Team staff took part in a professional team-building exercise geared towards exploring individual strengths and cohesive teams. As the team is relatively new due to retirement and recent recruitments, it continues to be a priority to foster and reinforce a strong workplace culture and a sense of workplace fulfillment as the team continues to build momentum.

Manage Business Operations, Budget, and Staffing

The Business Management Team's focus for February has been centered around evaluating existing processes and efficiencies in monthly financial reporting, requiring working sessions with internal and external stakeholders. In particular, delving into period-end workflows across teams, with the goal of accelerating prior period reporting to the Operations Group's leadership to improve visibility into operational requirements and financial trends.

Operations

Develop New Solutions to Enhance Operational and Business Processes

Staff continued baseline monitoring for tertiary membrane bioreactor nitrification-denitrification testing, following a diurnal flow pattern, at the Pure Water Southern California Napolitano Innovation Center demonstration plant. Additionally, staff provided ongoing support for the Los Angeles County Sanitation District's reverse osmosis concentrate testing. Staff is also continuing to work with Los Angeles County Sanitation Districts to prepare for the procurement and installation of invasive snail mitigation and prevention measures at the demonstration plant. On February 3, staff participated in a meeting with the program's Independent Science Advisory Panel to provide updates and seek feedback on the planned DPR pilot testing approach.

Staff installing a membrane bioreactor filtrate sampling tap at the Napolitano Innovation Center demonstration plant

Provide Reliable Water Deliveries and Manage Storage

Metropolitan member agency water deliveries were 70,100 acre-feet (AF) for February with an average of 2,500 AF per day, which was about 200 AF per day lower than in January. Metropolitan had suspended delivering water to the Cyclic and Conjunctive Use Programs in 2025 with the low initial State Water Project (SWP) allocation. Treated water deliveries were 21,300 AF lower than in January for a total of 35,900 AF, or 51 percent of total deliveries for the month. The Colorado River Aqueduct (CRA) pumped a total of 51,000 AF in February. SWP imports averaged 1,090 AF per day, totaling about 30,400 AF for the month. The target SWP blend is 0% for Skinner, Weymouth, and Diemer.

Metropolitan has sufficient SWP, Colorado River supplies, and storage to meet demands in 2025. Water continues to be managed according to Water Surplus and Drought Management (WSDM) principles and operational objectives with an emphasis on positioning SWP supplies to meet future demands in the SWP-dependent area. The California Department of Water Resources has increased the SWP Allocation to 20% in late January. Metropolitan is continuing to minimize the use of Table A supplies to preserve supplies for the SWP-dependent area. At the same time, Metropolitan is also preparing to shift operations to manage surplus supplies should SWP supplies improve. One proactive action that has been taken is to restart deliveries to Diamond Valley Lake to preserve SWP supplies should Article 21 conditions develop later this year.

Operations

Manage Power Resources and Energy Use in a Sustainable Manner

Metropolitan has received multiple requests for system impact studies for external third-party generation developers to assess the impact of their proposed projects on Metropolitan's energy and water operations. Metropolitan has also received a formal request for a third-party generation project to connect directly to the CRA transmission system. Staff is working with external technical resources to perform the technical assessments and ensure any negative impacts are mitigated.

Protect Source Waters and Ensure Water Quality Compliance

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

On February 12 and 13, staff participated in an annual stakeholder meeting for perchlorate cleanup at the Nevada Environmental Response Trust (Trust) site in Henderson, Nevada. The Trust and the Nevada Division of Environmental Protection provided updates on the remediation progress, groundwater extraction and treatment system, completion of field investigations for Operable Unit 3, and risk assessment findings showing the extent of perchlorate and chlorate plumes. The meeting included a site tour, the nearby Unit 4 source area, the groundwater treatment system, and Las Vegas Wash discharge areas. Perchlorate remediation efforts in Henderson are critical to ensure continued protection of Colorado River water supplies. Metropolitan routinely monitors perchlorate levels at the Las Vegas Wash and its Colorado River Aqueduct intake. Levels at the CRA intake typically remain below 2 ppb, well below California's perchlorate maximum contaminant level of 6 ppb.

Site visit to Athens Drainage Channel, which impacts perchlorate loading into Las Vegas Wash

Operations

Optimize Water Treatment and Distribution

The SWP target blend entering the Weymouth and Diemer plants stayed at zero percent in February. The SWP blend entering Lake Skinner remained at zero percent. Flow-weighted running annual averages for total dissolved solids from December 2023 through November 2024 for Metropolitan's treatment plants capable of receiving a blend of supplies from the SWP and the CRA were 557, 571, and 548 mg/L for the Weymouth, Diemer, and Skinner plants, respectively.

Jensen plant staff pilot-tested a mechanical dewatering centrifuge as part of a proposed capital improvement project (CIP) to optimize solids handling operations. The onsite demonstration unit helped determine an appropriate polymer type and dosage, while exploring increased percent solids concentration. Staff also gained hands-on experience with the equipment, providing valuable knowledge for future implementation.

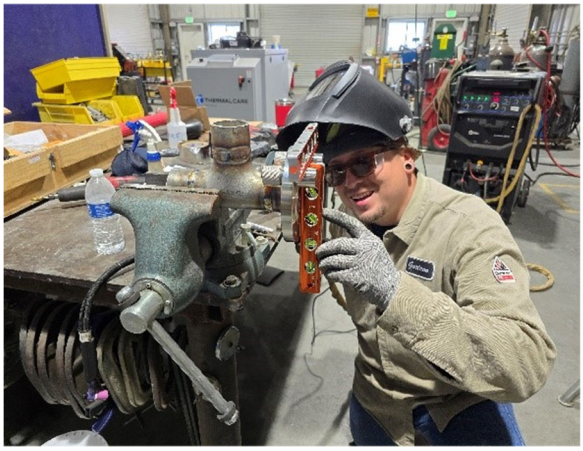
Staff dewatering centrifuge demonstration unit at Jensen plant

Operations

Skinner plant staff completed the installation and testing of equipment for measuring, monitoring, and recording the flow for a new service connection on the Eastside Pipeline. As part of this project, the team installed a new Programmable Logic Controller and communications cabinet to provide real-time monitoring to Operations staff. The cabinet integrates a Human Machine Interface and indicator lights, designed for safety measures and vandalism deterrents, given its proximity to the roadway.

Staff performing final setup of new PLC (left) and new service connection flow meter, monitoring, and power cabinets after final installation (right)

Staff continued the construction of the Eagle Mountain Village domestic water loop chiller system. The piping, controls, and components are being fabricated and pre-assembled at the Lake Mathews facility in preparation for being installed at the Eagle Mountain pumping plant. At the site, staff installed the conduit, transfer switch, power distribution center, and power and control cabling.



Fabricating and welding a new pipe tee (left) and installing a new transfer switch (right)

Operations

Staff removed a 25-mile section of the Rialto Pipeline from service from DWR's Devil Canyon facility to the Indian Hill sectionalizing valve and the entire Etiwanda Pipeline. The primary purpose of this shutdown was to perform an internal inspection of the Rialto Pipeline and approximately one mile of the 120-inch Etiwanda Pipeline from the Etiwanda Wye. Contractors replaced a corroded 35-foot section of the 120-inch welded steel Rialto Pipeline in the city of Upland, replaced a 24-inch ball valve at service connection CB-11, and installed a tee to connect the Inland Feeder to the Rialto Pipeline at DWR's Devil Canyon facility. This tee is a critical component of the drought projects being completed to allow conveyance of water from Diamond Valley Lake to the Rialto Pipeline. Staff also replaced several faulty valves throughout the shutdown zone, and inspected valves and flow meters at service connections CB-12 and CB-16.

Dewatering at a blowoff (left) and staff performing inspection of welded steel pipe (right) for the Rialto Pipeline

Contractor replacing a 35-foot section of 120-inch welded steel pipe (left) and installing the interconnection tee for the Rialto Pipeline to the Inland Feeder (right)

Protect Infrastructure and Optimize Maintenance

Weymouth plant staff made significant progress in minimizing leakage from the ozone contactor effluent channel. Staff discussed the best approaches for both temporary and permanent solutions. As a temporary measure, an inflatable seal was inserted in the expansion joint to a depth of 15 feet and expanded, significantly reducing flow at the primary leak location and eliminating flow at auxiliary locations. A capital project is in development to recommend and implement permanent repairs.

High leak flow (left) and reduced leak flow (right) in Weymouth ozone contactor effluent channel

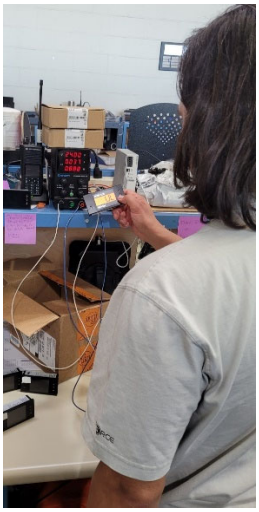
Sealing air supply (left) and installed inflatable seal (right)

Operations

During routine preventative maintenance, Mills plant staff discovered an open loop cooling water pump with a high motor bearing temperature. Plant staff coordinated with the Maintenance Engineering Team to conduct a vibration analysis to determine any additional abnormalities. Staff have placed the pump out of service, awaiting repairs. Conditioned-based maintenance approaches such as vibration analysis provide useful information to inform operational status prior to equipment failure.

Staff observing vibration readings for a cooling water pump at the Mills plant

Diemer plant staff replaced filter console display screens. The old LCD screens were removed and replaced with new digital displays. The new digital displays are color-coordinated to the valve status. The new displays have higher resolution than the old LCD screens and can be seen from different angles, enhancing operational use.



Control panel with new digital displays (left) and staff programming filter console display screens (right)

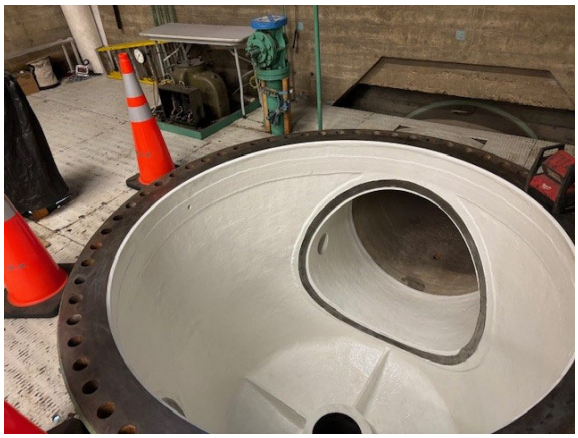
Operations

To maintain the Desert main pump transformers, Gene pumping plant staff operate an oil purification system. The system uses a multi-step approach of heat, filtration, and vacuum relief to purify the transformer oil. When the system is placed into operation, teams are required to be on-site 24 hours per day until oil sample testing meets specifications and the system can be decommissioned.

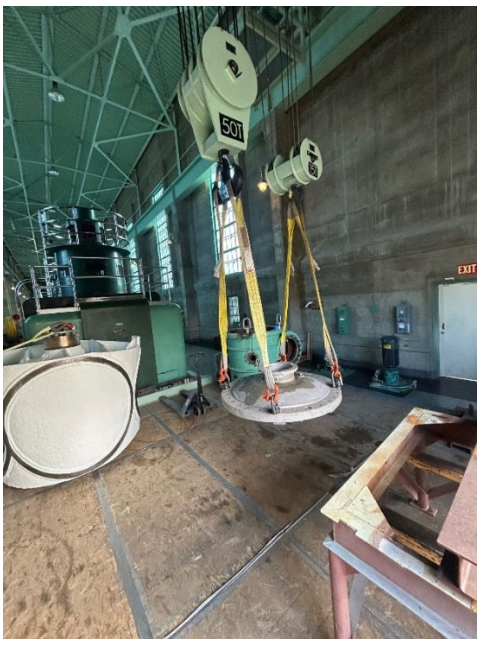
Staff operating a mobile oil purification unit to maintain transformers at the Gene pumping plant

Operations

Rehabilitation work on the Gene Unit 1 discharge valve continues. The valve body and plug have been blasted and coated. Machine work continues with the head cover and associated components.



Gene Unit 1 discharge valve body after blasting and coating



Gene Unit 1 discharge valve plug and headcover being transported for machine work

Operations

Staff fabricated new pipe sections for the Iron Mountain 230kV transformers. The manifold will be installed during the 2025 CRA shutdown. Fabricating the pipe in advance of the shutdown ensures staff can maximize work efficiency within the limited shutdown window.

Staff fabricating pipe sections (left) and completed pipe sections for Iron Mountain transformers (right)

Staff performed cleaning of the inlet area (canal side) of the Eagle Mountain sand trap. Over time, this area accumulates silt as designed. Cleaning it before the scheduled CRA shutdown helps prevent silt from drifting toward the pumping plant during dewatering. Debris is removed using a crane with a clam bucket, a process commonly known as “clamming”.

Canal sand trap cleaning at Eagle Mountain pumping plant

Operations

Staff removed trash racks from the San Diego Canal East Bypass structure to sandblast the stainless steel, a preventative measure to protect against corrosion. The trash racks prevent debris and large items from traveling downstream and are installed where the system transitions from an open canal to a closed pipeline in the Skinner service area.

Staff preparing a section of stainless-steel grating for removal by crane (left) and lifting the section of grating from the bypass structure (right) to be sandblasted in a safe area

A section of stainless-steel grating after removal from the bypass structure

Operations

In preparation for the CRA shutdown, staff began routine maintenance of the patrol roads from the San Jacinto Tunnel East Portal heading east along the CRA. This consists of grading the patrol road from windrow to windrow, repairing erosion, and removing vegetation. The CRA shutdown is scheduled for March 2025, and the patrol road maintenance will ensure safe access for all staff during the shutdown.

Motor grader performing routine maintenance along the CRA

Operations

Enhance Emergency Preparedness and Response

Staff mobilized to support the Las Flores Water Company and provide a temporary solution to restore water service to its customers in the wake of the fire damage to its Lake Reservoir facility in Altadena. The scope of work includes constructing an interconnection with pressure-reducing valves to supply the pipeline previously fed from the reservoir. Staff potholed the existing lines and backfilled the feed line to the interconnection piping assembly, then constructed an open vault for the assembly. Work will continue into March 2025 before this temporary system is completed.

Staff operating vac truck to locate lines (left) and excavating for new interconnection feed line (right) at the Lake Reservoir site

Staff performing coating abatement at the Lake Reservoir site

Operations

Staff continued construction of the Diemer Helicopter Hydrant facility. The helicopter hydrant consists of an open-top tank and supporting infrastructure, allowing helicopters to quickly collect water for firefighting. Metropolitan collaborated with Yorba Linda Water District to develop a project benefitting both agencies. Yorba Linda Water District will provide up to $500,000 in grant funding, technical support during design and construction, and coordination with the California Department of Forestry and Fire Protection and Orange County Fire Authority to ensure both agencies' design and operational conditions are acceptable. Metropolitan will own and operate the facility upon its completion this summer.

Staff placing concrete for the helicopter pad at the Diemer plant site

Operations

Prepare for Future Legislation and Regulations

On February 7, the D.C. Circuit Court granted the Environmental Protection Agency (EPA) a 60-day stay on legal challenges to review the April 2024 PFAS maximum contaminant level (MCL) rule. This rule sets MCLs at 4.0 parts per trillion (ppt) for PFOA and PFOS, and 10 ppt for PFNA, PFHxS, and GenX chemicals, along with a unitless Hazard Index for certain PFAS mixtures. Various industry groups (e.g., American Water Works Association) have challenged EPA's cost-benefit analysis and methodology. The court will determine if the EPA acted improperly in setting the PFAS rule, which remains in effect until any changes are made that take into consideration the Safe Drinking Water Act's "anti-backsliding" provision.

On February 12, H.R. 1267--the Water Systems PFAS Liability Protection Act was introduced. This bill is in response to EPA's designation of two of the most common PFAS (PFOA and PFOS) as hazardous substances under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). The bill would provide statutory liability protections under CERCLA for water utilities when they lawfully treat and dispose of PFAS from upstream sources. Staff have worked with lawmakers and industry groups seeking this protection and will continue to support the bill as it moves forward.

On February 19, the State Water Resources Control Board adopted the Division of Drinking Water's (DDW) 2025 regulatory priorities. DDW is proposing to work on MCLs for PFAS, disinfection byproducts, arsenic, N-nitrosodimethylamine (NDMA), styrene, cadmium, and mercury. Other priorities include implementing EPA's Lead and Copper Rule and Revisions, revising Detection Limits for Purposes of Reporting (DLRs) closer to the contaminant's Public Health Goal (PHG), and reassessing Notification and Response Levels for PFAS, manganese, and cyanotoxins. Staff will monitor and engage in each of these regulatory priorities as they move forward.

Advance Education and Outreach Initiatives

On February 20, the Water Quality Laboratory hosted an event to recognize the legacy of former Director of Water Quality, Dr. Michael J. McGuire, by renaming the laboratory in his honor.

Dr. Michael J. McGuire Water Quality Laboratory renaming ceremony

Operations

Engage with Member Agencies and Other Stakeholders on Technical Matters

On February 25, Metropolitan participated in a Municipal Water District of Orange County (MWDOC) Water Quality and Operations Management meeting. The focus of the meeting was chlorine boosting stations and how Metropolitan, MWDOC, and MWDOC's subagencies can coordinate their locations and design for improved management and control of nitrification in distribution systems.

Engineering, Operations, & Technology Committee

Management Announcements and Highlights

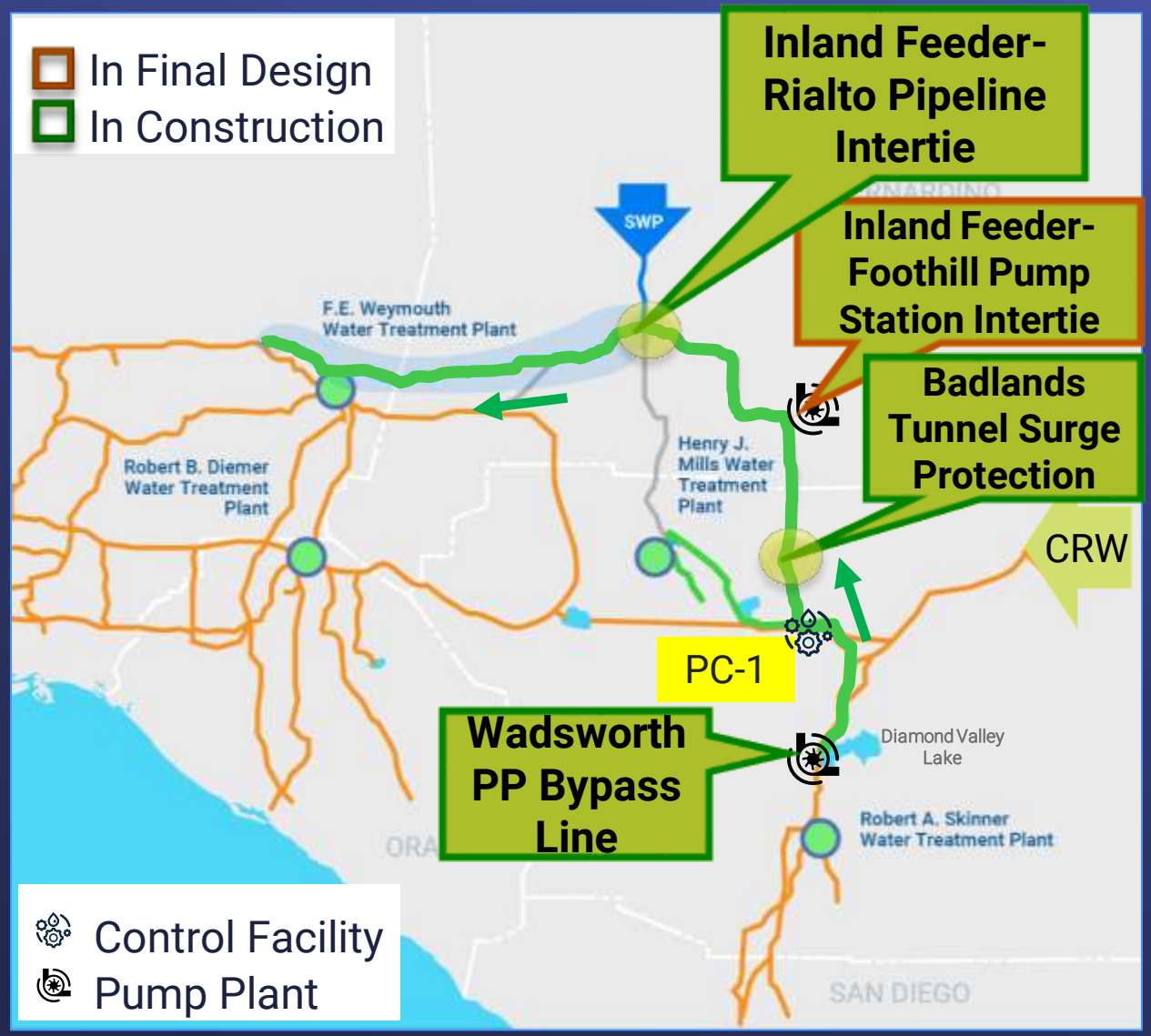
Item 7a

March 10, 2025

Engineering Services

DVL Storage to Rialto Pipeline Delivery

- Summary of program scope
  - Deliver DVL storage to RP during SWP supply shortages
  - Four inter-related projects
  - Maximizes use of existing infrastructure
  - Up to 120 CFS with full build-out
- Program status
  - Three projects in construction
  - One in final design & permitting
  - Estimated completion in late 2027
  - $50M State grant
  - $5M Federal grant



Construction Update

- Wadsworth Pump Plant Bypass Line
  - $15M contract
  - 95% complete
  - Completion in summer 2025

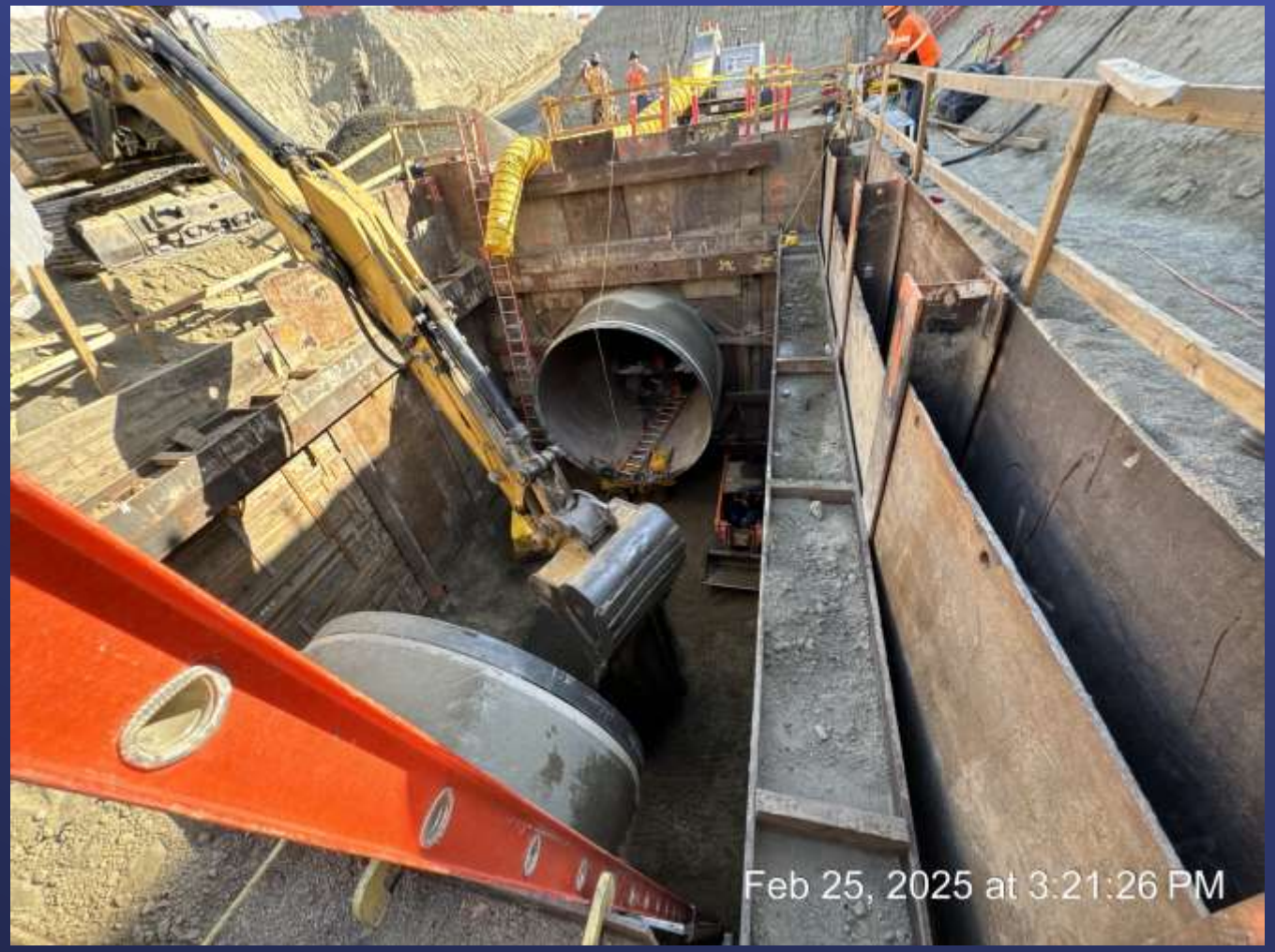
Pipe Fitting Placement

New Vault Structure at Wadsworth Power Plant

Construction Update

- Badlands Tunnel Surge Protection
  - Surge tank and isolation valves
  - $19M contract — 70% complete
  - Tie-in during Feb/Mar shutdown
  - Completion in summer 2025

Valve Vault Pipe Installation



Tie-in of Inland Feeder & Surge Tank

Construction Update

- Inland Feeder/Rialto Pipeline Intertie
  - $16M contract – 80% complete
  - Tie-in during Feb/Mar shutdown
  - Completion in summer 2025

Pipelines Tie-in

Installation of 96” Diameter Tee

Water System Operations

Strategic Operations for Maximum Reliability

2025 Annual Operating Plan

- Review of operations and challenges overcome in 2024
- Plans for a full range of conditions in 2025
- Communicates expected future operations to member agencies and partners

Managing State Water Project Supplies

Current Operational Conditions

California Aqueduct in Central California

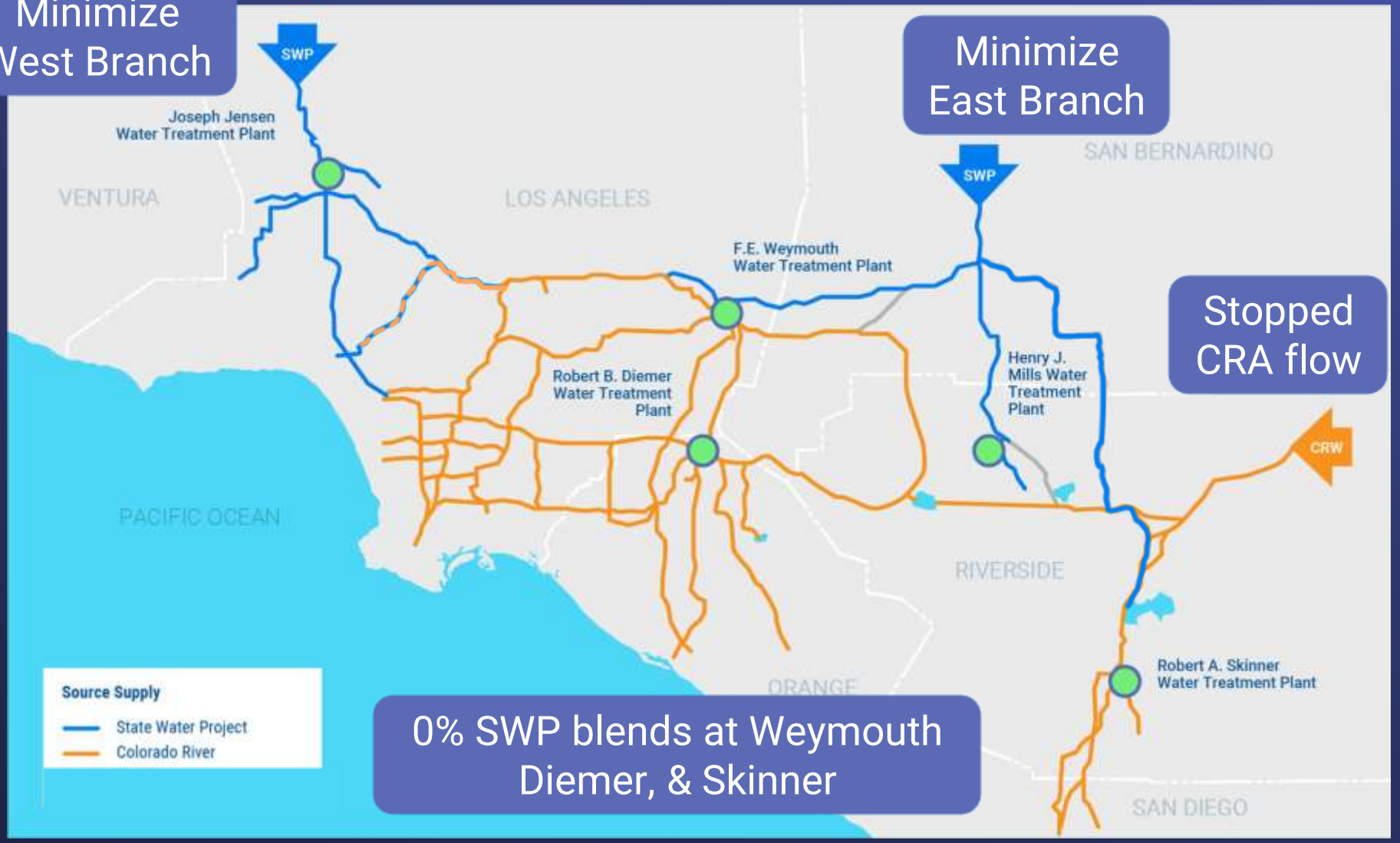
- 2025 SWP Allocation at 35%
- CRA at 0-pump flow with CRA shutdown underway
- Deliveries to DWCV at 0 cfs
- Plan to start CUP and Cyclic programs
- SWP blend targets are 0% at Weymouth, Diemer, and Skinner
- February 2025 deliveries are 65 TAF, which is 3 TAF higher than February 2024

Managing State Water Project Supplies

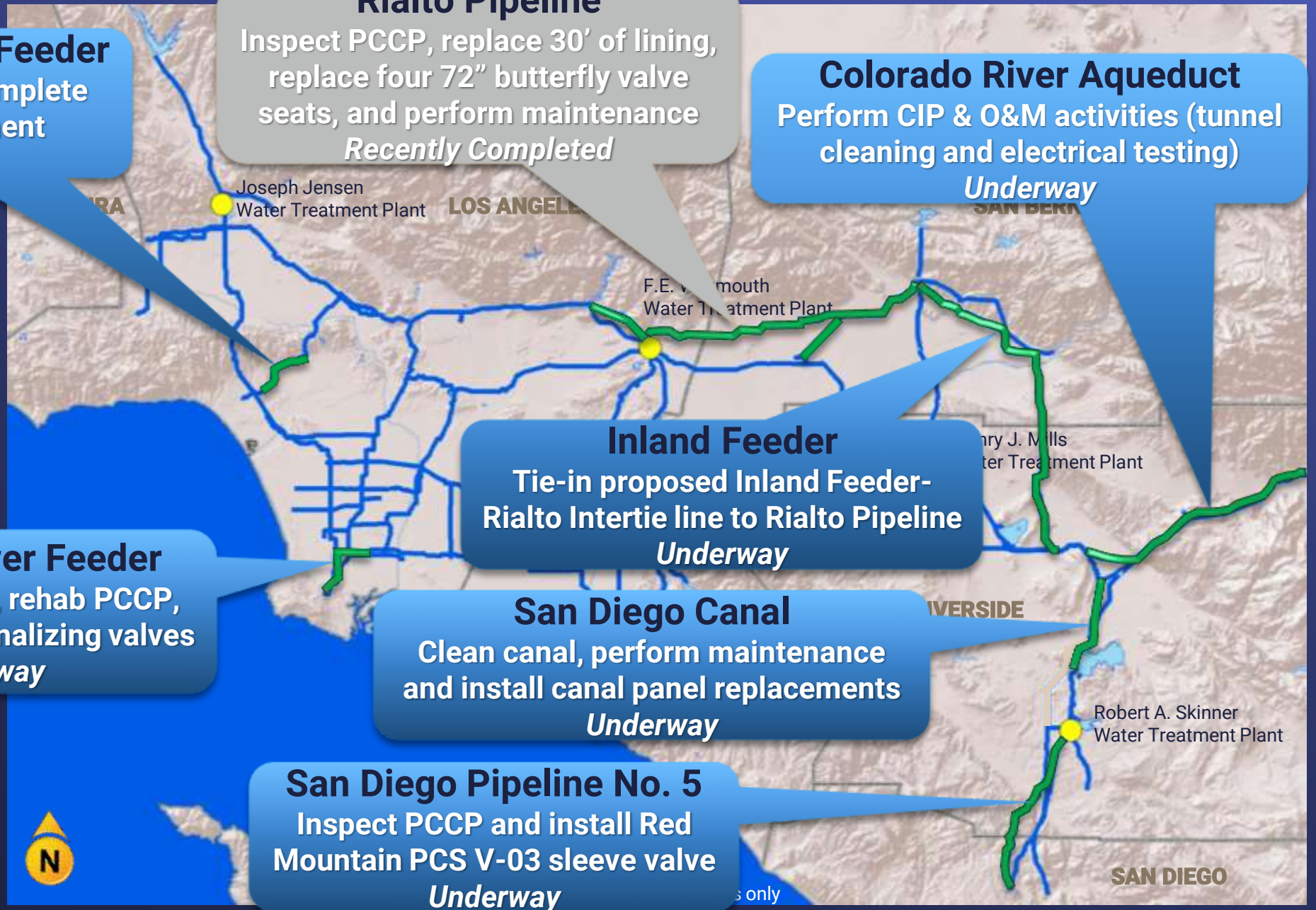
March 2025 Operations

Preparing to transition from minimizing SWP supplies with improving conditions

Dropped Pumps for CRA Shutdown (March 1-28)



Ensuring Continued System Reliability



Santa Monica Feeder
Contractor to complete pipe realignment
Underway

Rialto Pipeline
Inspect PCCP, replace 30' of lining, replace four 72" butterfly valve seats, and perform maintenance
Recently Completed

Colorado River Aqueduct
Perform CIP & O&M activities (tunnel cleaning and electrical testing)
Underway

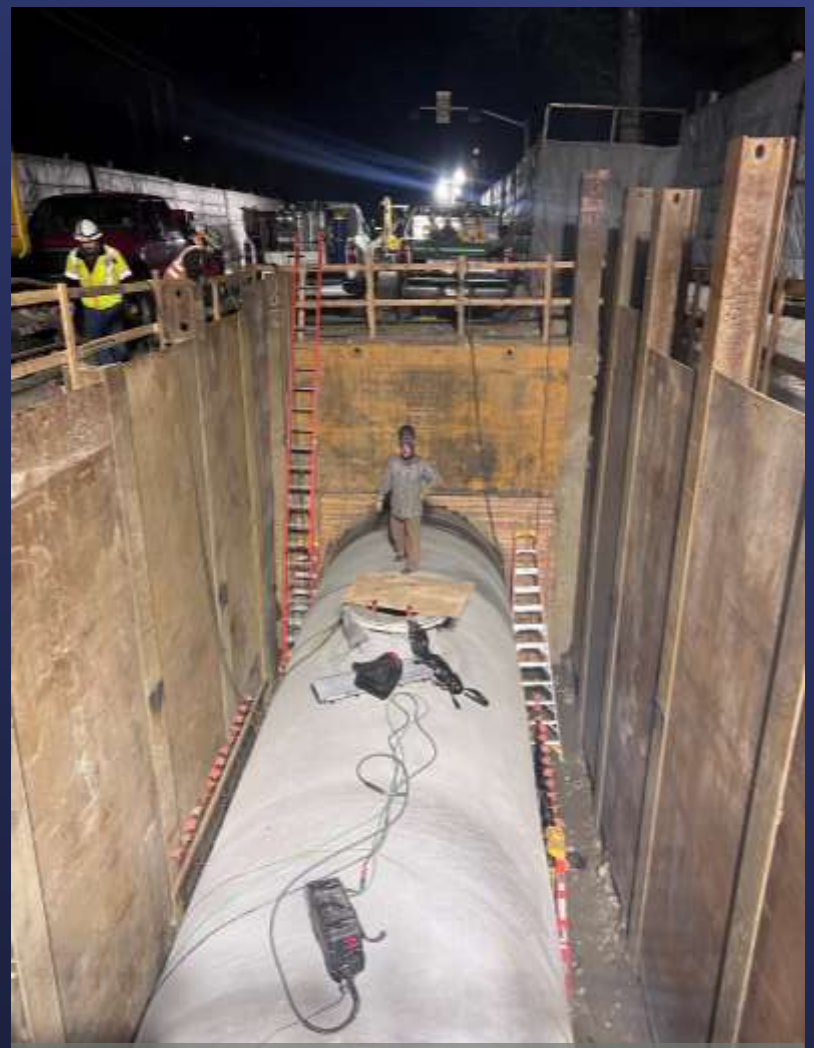
Inland Feeder
Tie-in proposed Inland Feeder-Rialto Intertie line to Rialto Pipeline
Underway

Second Lower Feeder
Install bulkhead, rehab PCCP, and install sectionalizing valves
Underway

San Diego Canal
Clean canal, perform maintenance and install canal panel replacements
Underway

San Diego Pipeline No. 5
Inspect PCCP and install Red Mountain PCS V-03 sleeve valve
Underway

Rialto Pipeline Shutdown

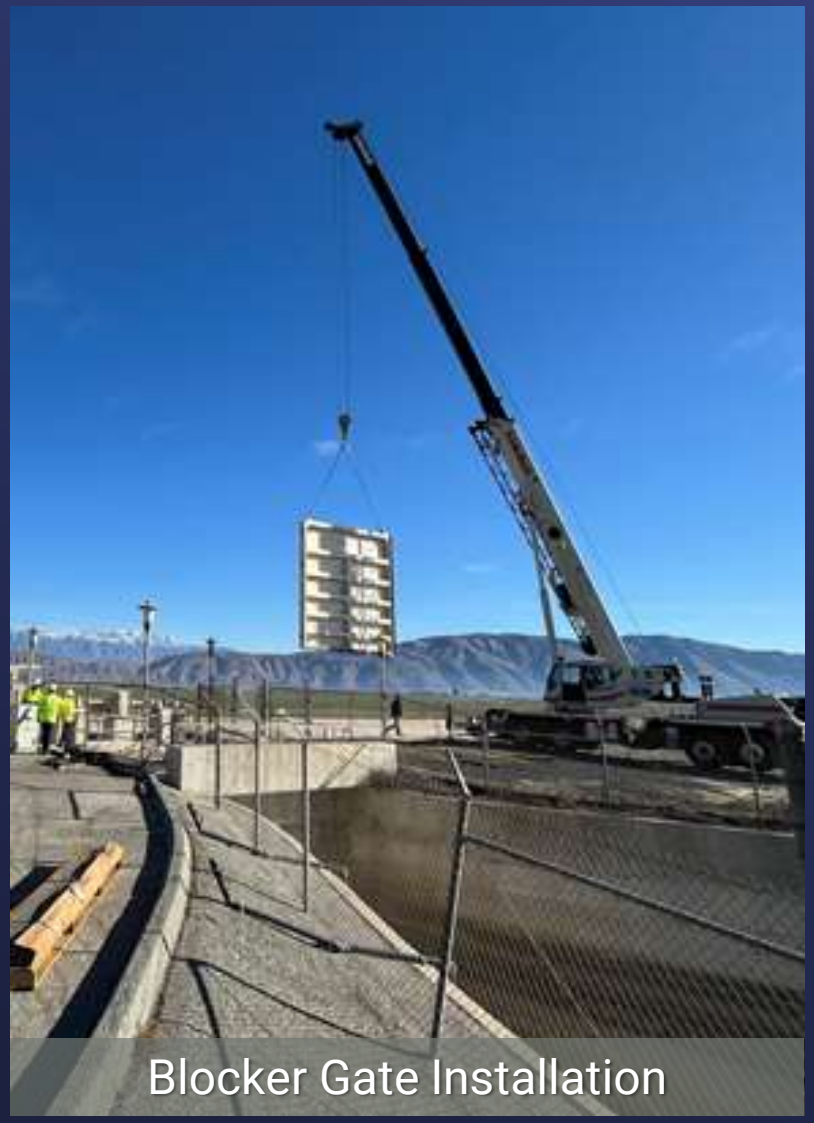


35-foot Pipe Replacement

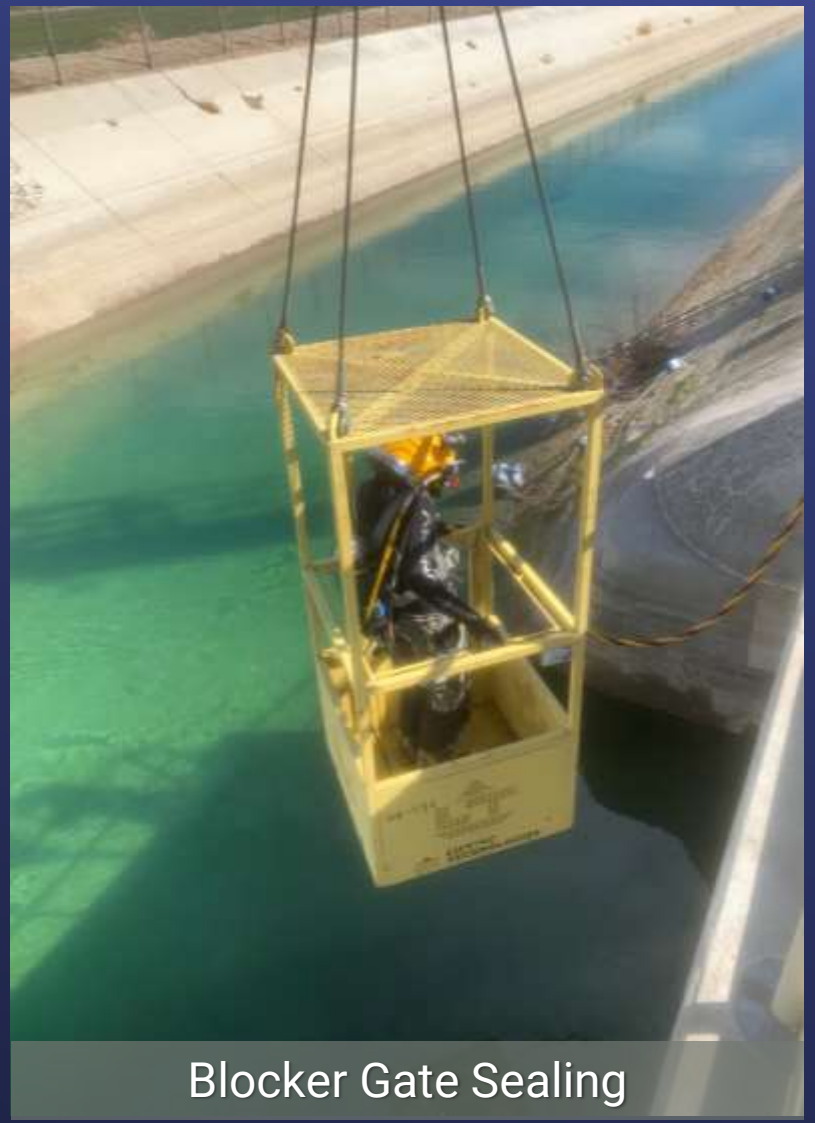
PCCP Inspection

Tee Installation

San Diego Canal Shutdown



Blocker Gate Installation



Blocker Gate Sealing

Demolition of Existing Panels

Information Technology

No update for this period


THE METROPOLITAN WATER DISTRICT OF
SOUTHERN CALIFORNIA
1928