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
M. Camacho, Vice Chair
D. Alvarez
G. Bryant
J. Crawford
B. Dennstedt
S. Faessel
L. Fong-Sakai
R. Lefevre
J. McMillan
C. Miller
J. Morris
M. Petersen
K. Seckel
T. Smith

Engineering, Operations, and Technology Committee

Meeting with Board of Directors *

December 9, 2024

9:00 a.m.

Monday, December 9, 2024 Meeting Schedule
09:00 a.m. EOT
11:00 a.m. LEGAL
01:30 p.m. Break
02:00 p.m. OWS

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:
525 Via La Selva • Redondo Beach, CA 90277
Bluffton Library • 120 Palmetto Way • Bluffton, SC 29910
8700 Beverly Boulevard, Room 342 • Los Angeles, CA 90048
3008 W. 82nd Place • Inglewood, CA 90305
Conference Room 2nd Floor • 1545 Victory Blvd 2nd FL • Glendale CA 91505

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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))

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

2. CONSENT CALENDAR OTHER ITEMS - ACTION

A. Approval of the Minutes of the Special Engineering, Operations, and Technology Committee for November 18, 2024 (Copies have been submitted to each Director, any additions, corrections, or omissions) **21-4020**

Attachments: 12092024 EOT 2A (11182024) Minutes

3. CONSENT CALENDAR ITEMS - ACTION

7-2 Award a $588,000 contract to Heed Engineering for construction of new drainage control improvements at the Lake Skinner dam; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA **21-4021**

Attachments: 12102024 EOT 7-2 B-L
12092024 EOT 7-2 Presentation

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

4. OTHER BOARD ITEMS - ACTION

8-1 Approve additional funding, in an amount not to exceed $35 million over the next two years (Fiscal Years 2024/2025 and 2025/2026), to support the Zero-Emission Vehicle Transition Program at Metropolitan and partially mitigate high operational risk; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA **21-4023**

Attachments: 12102024 EOT 8-1 B-L
12092024 EOT 8-1 Presentation

8-2 Authorize entering into one or more agreements to accept up to $125,472,855 in grant funding from the United States Bureau of Reclamation through the WaterSMART Large-Scale Water Recycling Program for Pure Water Southern California; the General Manager has determined that the proposed actions are exempt or otherwise not subject to CEQA **21-4072**

Attachments: 12102024 EOT 8-2 B-L
12092024 EOT 8-2 Presentation

5. BOARD INFORMATION ITEMS

NONE

6. COMMITTEE ITEMS

a. Capital Investment Plan Quarterly Report for period ending September 2024 **21-4022**

Attachments: 12092024 EOT 6a Report
12092024 EOT 6a Presentation

7. MANAGEMENT ANNOUNCEMENTS AND HIGHLIGHTS

a. Engineering Services activities **21-4024**
Information Technology activities
Water System Operations activities

Attachments: 12092024 EOT 7a Engineering Services Activities
12102024 EOT 7a Information Technology Activities
12092024 EOT 7a Water System Operations Activities
12092024 EOT 7a Presentation

8. SUBCOMMITTEE REPORTS AND DISCUSSION

a. Discuss and provide direction to Subcommittee on Pure Water Southern California and Regional Conveyance **21-4025**

9. FOLLOW-UP ITEMS

NONE

10. FUTURE AGENDA ITEMS

11. 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

November 18, 2024

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

Members present: Directors Alvarez, Bryant, Dennstedt, Erdman, Faessel, Fong-Sakai, Lefevre (teleconference posted location), McMillan, Miller (entered after roll call), Morris, Seckel (AB 2449 "just cause"), and Smith.

Director Seckel indicated he is participating under AB 2449 "just cause" due to illness. Director Seckel appeared by audio and on camera.

Members absent: Directors Camacho, Crawford, and Petersen.

Other board members present: Chair Ortega, Directors Ackerman (AB 2449 "just cause"), Armstrong, Goldberg, Gray (teleconference location posted), Lewitt.

Director Ackerman indicated she is participating under AB 2449 "just cause" due to recovery from a medical procedure. Director Ackerman appeared by audio and on camera.

Committee staff present: Bednarski, Chapman, Eckstrom, Hattar, Nobriga, Parsons, Saito, Upadhyay, and Wheeler.

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

1. Tom Love – General Manager, Upper San Gabriel Valley Water District – In support of Item 8-2

CONSENT CALENDAR ITEMS – ACTION

2. CONSENT CALENDAR OTHER ITEMS ACTION

A. Approval of the Minutes of the Engineering, Operations, and Technology Committee for October 7, 2024.

3. CONSENT CALENDAR OTHER ITEMS – ACTION

Chair Erdman announced that consent item 7-2 would be heard first.

7-2 Subject: Certify the Final Environmental Impact Report for the Garvey Reservoir Rehabilitation Project and take related CEQA actions (EOT).

Presented by: No presentation requested

Motion: Certify that the Final EIR for the Garvey Reservoir Rehabilitation Project has been completed in compliance with CEQA and the State CEQA Guidelines, certify that the Board has reviewed and considered the information presented in the Final EIR, certify that the Final EIR reflects Metropolitan's independent judgment and analysis, and adopt the Findings and the Mitigation Monitoring and Reporting Program.

Director Faessel made a motion, seconded by Director Bryant, to approve item 2A and item 7-2.

The vote was:

Ayes:	Directors Alvarez, Bryant, Dennstedt, Erdman, Faessel, Fong-Sakai, Lefevre, McMillan, Morris, Seckel, and Smith.
Noes:	None
Abstentions:	None
Absent:	Directors Camacho, Crawford, Miller, and Petersen

The motion for Items 2A and 7-2 passed by a vote of 11 ayes, 0 noes, 0 abstention, and 4 absent.

Director Seckel stated that he was alone in the room whilst casting his vote.

No Directors provided comments or asked questions.

Director Miller entered the meeting.

7-1 Subject: Amend an agreement with Roesling Nakamura Terada Architects to provide design and architectural services for Stage 1 improvements of the District Housing and Property Improvements Program; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA (EOT)

Presented by: Ish Singh, Team Manager, Program Management Section, Engineering Services Group responded to director questions.

Motion: Authorize an amendment to an agreement with Roesling Nakamura Terada Architects to provide design and architectural services for Stage 1 improvements at Metropolitan's desert facilities.

The following Directors provided comments or asked questions.

1. Miller
2. Smith
3. Dennstedt
4. Morris
5. Fong-Sakai
6. Faessel

Staff responded to Directors' questions and comments.
After completion of the presentation, Director Bryant made a motion, seconded by Director Morris, to approve item 7-1.

The vote was:

Ayes:	Directors Alvarez, Bryant, Dennstedt, Erdman, Faessel, Fong-Sakai, Lefevre, McMillan, Miller, Morris, Seckel, and Smith.
Noes:	None
Abstentions:	None
Absent:	Directors Camacho, Crawford, and Petersen

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

Director Seckel stated that he was alone in the room whilst casting his vote.

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

4. OTHER BOARD ITEMS – ACTION

8-1 Subject: Authorize the General Manager to amend the Project Labor Agreement to add four new projects and approve the amended Project Labor Agreement's use as a bid condition for the newly added projects; and report on Project Labor Agreement activities over the past year; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA (EOT).

Presented by: Doaa Aboul-Hosn, Team Manager Construction Contracts, Engineering Services Group

Motion: Authorize the General Manager to amend the Project Labor Agreement to add four new projects and approve the amended Project Labor Agreement's use as a bid condition for the newly added projects.

The following Directors provided comments or asked questions.

1. Miller
2. Erdman
3. Smith

Staff responded to Directors' questions and comments.
After completion of the presentation, Director Morris made a motion, seconded by Director Faessel, to approve Item 8-1.

The vote was:

Ayes:	Directors Alvarez, Bryant, Dennstedt, Erdman, Faessel, Fong-Sakai, Lefevre, McMillan, Miller, Morris, Seckel, and Smith.
Noes:	None
Abstentions:	None
Recusals:	None
Absent:	Director Camacho, Crawford, and Petersen

The motion for Item 8-1 passed by a vote of 12 ayes, 0 noes, 0 abstention, 0 recusal, and 3 absent.

Director Seckel stated that he was alone in the room whilst casting his vote.

8-2 Subject: Adopt a resolution in support of the application for funding under the WaterSMART Large-Scale Water Recycling Program for planning of the Pure Water Southern California Program; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA.

Presented by: Raymond Jay, Principal Resource Specialist, Water Resource Management Group/Resource Implementation Section.

Motion: Adopt the proposed resolution, verifying that the Board reviewed and supports the grant application, that subject to board approval of a grant agreement, the General Manager or his/her designee will have the legal authority to enter into that agreement, and that the General Manager or his/her designee will work with the United States Bureau of Reclamation to meet established deadlines for entering into a grant agreement.

At the committee meeting, staff indicated that the Bureau intends to award Metropolitan an additional $26.3 million grant, and the consensus of the committee was that this award be included in the current action. The Board will adopt another similarly worded resolution to accept the additional amount.

The following Directors provided comments or asked questions.

1. Miller
2. Smith
3. Alvarez

Staff responded to Directors' questions and comments.
After completion of the presentation, Director Morris made a motion, seconded by Director Bryant, to approve Item 8-2.

The vote was:

Ayes:	Directors Alvarez, Bryant, Dennstedt, Erdman, Faessel, Fong-Sakai, Lefevre, McMillan, Miller, Morris, Seckel, and Smith.
Noes:	None
Abstentions:	None
Recusals:	None
Absent:	Director Camacho, Crawford, and Petersen

The motion for Item 8-2 passed by a vote of 12 ayes, 0 noes, 0 abstention, 0 recusal, and 3 absent.

Director Seckel stated that he was alone in the room whilst casting his vote.

5. BOARD INFORMATION ITEMS

None

6. COMMITTEE ITEMS

a. Subject: Pure Water Southern California – Partnership Development Update

Presented by: Jon Rubin, Executive Advisor: Water Resources and Capital Improvements, responded to director questions.

Mr. Rubin reported on the following:

- Update on efforts to develop partnerships for Pure Water Southern California and seek input on policy items including cost, supply and funding implications.

The following Directors provided comments or asked questions.

1. Faessel
2. Smith
3. Morris
4. Ackerman
5. Miller
6. Alvarez

Staff responded to the Directors' questions and comments.

Chair Erdman deferred items 6b and 6c.

b. Subject: Asset Management Update

Presented by: Deferred

c. Subject: Risk Management in Capital Project Planning and Delivery

Presented by: Deferred

d. Subject: Update on Fluoridation

Presented by: Paul Rochelle, Water Quality Section Manager, Treatment and Water Quality Group

Mr. Rochelle reported on the following:

- Background on community water fluoridation and Metropolitan's fluoridation practice
- Recent Federal district court ruling on drinking water fluoridation.
- Next steps to track responses from regulatory authorities and provides updates as needed

The following Directors provided comments or asked questions.

1. Armstrong
2. McMillan

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 and Shane Chapman, Assistant General Manager

Mr. Bednarski reported on the following:

- Brief recap on EO&T Committee Annual Field Inspection Trip

Mr. Chapman reported on the following:

- Golden mussels have been detected in three areas of the Delta; monitoring program has been expanded. An update will be given to the Board.

- Celebration of 50th Anniversary of Safe Drinking Water Act and the establishment of the Water Quality Section.
- Charlie Eckstrom announced that Jake Margolis was a recent winner of the Top Global Chief Information Security Officer Award.

8. SUBCOMMITTEE REPORTS AND DISCUSSION

a. Discuss and provide direction to Subcommittee on Pure Water Southern California and Regional Conveyance

No report.

9. FOLLOW-UP ITEMS

None

10. FUTURE AGENDA ITEMS

The 2 committee items that were deferred in the interest of time, will be brought back to the next meeting.

11. ADJOURNMENT

The next meeting will be held on December 9, 2024.

Meeting adjourned at 11:17 a.m.

Dennis Erdman
Chair

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

12/10/2024 Board Meeting

7-2

Subject

Award a $588,000 contract to Heed Engineering for construction of new drainage control improvements at the Lake Skinner dam; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA

Executive Summary

Proper drainage of stormwater runoff is vital to preventing embankment erosion along Metropolitan's dams. The existing concrete drainage control structures at the Lake Skinner dam show signs of deterioration at several locations. This project will improve stormwater collection and runoff, provide long-term protection against erosion, reduce maintenance costs, allow access to the dam monitoring system equipment, and maintain regulatory compliance.

This action awards a $588,000 contract to Heed Engineering for construction of new drainage control improvements at Lake Skinner dam. 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 $588,000 contract to Heed Engineering for construction of drainage control improvements at the Lake Skinner dam.

Fiscal Impact: Expenditure of $800,000 in capital funds. All costs will be incurred in the Fiscal Years 2024/2025 and 2025/2026 and have been previously authorized.
Business Analysis: This option will ensure regulatory compliance, protect Metropolitan's assets, enhance delivery reliability to member agencies, and reduce the risk of costly urgent repairs.

Option #2

Do not proceed with the project at this time.
Fiscal Impact: None
Business Analysis: Under this option, staff would continue to monitor the condition of the drainage system at the Lake Skinner Dam and make as-needed repairs.

Alternatives Considered

Staff considered repairing and replacing only the portions of the Lake Skinner dam drainage system with significant damage. However, based on Metropolitan staff inspections, the damage to the drainage system is significant, and spot repairs may not have long-term durability. It was determined that the concrete drainage system at the dam was well past its design life and needed to be replaced. The selected option will replace the

existing drainage structure at the Lake Skinner dam. This alternative is more cost-effective and maintains compliance with regulatory requirements.

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 the action consists of the operation, repair, maintenance, permitting, leasing, licensing, or minor alteration of existing public or private structures, facilities, mechanical equipment, or topographical features involving negligible or no expansion of existing or former use and no possibility of significantly impacting the physical environment. In addition, the proposed action is exempt from CEQA because it consists of the replacement or reconstruction of existing structures and facilities where the new structure will be located on the same site as the structure replaced and will have substantially the same purpose and capacity as the structure replaced. Finally, the proposed action consists of minor public or private alterations in the condition of land, water, and/or vegetation, which do not involve the removal of healthy, mature, scenic trees except for forestry or agricultural purposes. (State CEQA Guidelines Sections 15301, 15302, and 15304).

CEQA determination for Option #2:

None required

Details and Background

Background

Lake Skinner was constructed in the 1970s and is located north of the City of Temecula in Riverside County. Its maximum storage capacity is 44,000 acre-feet. The reservoir receives Colorado River Aqueduct and State Water Project supplies via the San Diego Canal. Untreated water from the lake can be delivered to the Robert A. Skinner Water Treatment Plant or to the San Diego area. The reservoir has an earth-filled dam embankment with a maximum height of 109 feet and a crest length of 5,150 feet. The Lake Skinner dam falls under the jurisdiction of the California Department of Water Resources, Division of Safety of Dams (DSOD).

The dam's original construction incorporated unreinforced concrete v-ditches to collect and divert stormwater away from the face of the dam to a local storm drain. In particular, the toe of the dam includes a 4,800-foot-long, 3-foot-wide unreinforced concrete v-ditch that prevents erosion of the dam embankment and controls the flow of storm runoff along the dam. If these drainage structures do not perform as designed, then the dam is subject to erosion that could, over time, compromise the overall stability of the dam.

A recent DSOD annual report noted the poor condition of the v-ditch system along the toe of the dam. The concrete v-ditch has been degraded by erosion caused by storm runoff, creating voids on the underside of the concrete lining. In some locations, the concrete lining has cracked and has displaced sufficiently to impede the flow of the storm runoff. In addition, the adjacent unpaved roadway has potholes and shows signs of erosion and rutting, which produces uneven stormwater runoff and contributes to the degradation of the drainage system. The existing v-ditch system will be replaced with a new 4-foot-wide reinforced concrete trapezoidal drainage channel with a larger capacity to divert stormwater from the dam face. Also, the project will regrade the unpaved 15-foot-wide access road directly adjacent to the v-ditch system to improve drainage from the road into the v-ditch and provide a road that performs well in all weather conditions.

Final design for the Lake Skinner Dam Drainage System Improvements project is complete. Staff recommends proceeding with construction of the new drainage control structures at this time. These drainage control structures will improve stormwater diversion, have a significantly longer service life, and comply with DSOD requirements.

Lake Skinner Dam Drainage System Improvements – Construction

The scope of the contract consists of demolition of the existing v-ditch system at the toe of the dam, clearing and grubbing of the construction area, construction of a 4,800 linear-foot long and 4-foot-wide reinforced concrete trapezoidal drainage channel, and grading of the adjacent unpaved 15-feet wide adjacent roadway.

A total of $800,000 is allocated for this work. In addition to the amount of the construction contract described below, allocated funds for Metropolitan staff include: $86,000 for construction management and inspection; $53,000 for submittal review and preparation of record drawings; $41,000 for contract administration, environmental support, and project management; and $32,000 for the remaining budget. **Attachment 1** provides the allocation of the required funds. The total cost to complete the drainage system replacement, including the amount appropriated to date and funds allocated for the work described in this action, is approximately $1.0 million.

Award of Construction Contract (Heed Engineering)

Specifications No. 2078 for Lake Skinner Dam Drainage System Improvements was advertised for bids on Thursday, August 29, 2024. As shown in **Attachment 2**, five bids were received and opened on October 24, 2024. The low bid from Heed Engineering, in the amount of $588,000, complies with the requirements of the specifications. The other bids ranged from $766,000 to $1,086,226, while the engineer's estimate for this project was $999,000. Staff investigated the difference between the low bid and the engineer's estimate and attributed the difference to lower-than-expected costs for demolition, grading and profit markup, which reflects the contractor's intent to self-perform the majority of the work. For this contract, Metropolitan established a Small Business Enterprise (SBE) participation level of at least 25 percent. Heed Engineering is a certified SBE firm and thus achieves 100 percent SBE participation.

Metropolitan staff will perform construction management and inspection. Engineering Services' performance metric target range for construction management and inspection of projects with construction less than $3 million is 9 to 15 percent. For this project, the performance metric goal for inspection is 14.6 percent of the total construction cost. The total cost of construction for this project is $800,000.

Project Milestone

September 2025 – Completion of construction

11/19/2024
Mai M. Hattar *Date*
Interim Chief Engineer
Engineering Services

11/27/2024
Deven Upadhyay *Date*
Interim General Manager

Attachment 1 – Allocation of Funds

Attachment 2 – Abstract of Bids

Attachment 3 – Location Map

Ref# es12699654

Allocation of Funds for Lake Skinner Dam Drainage System Improvements

	Current Board Action (Dec. 2024)
Labor	
Studies & Investigations	$ -
Final Design	-
Owner Costs (Program mgmt., envir. monitoring)	41,000
Submittals Review & Record Drwgs.	53,000
Construction Inspection & Support	86,000
Metropolitan Force Construction	-
Materials & Supplies	-
Incidental Expenses	-
Professional/Technical Services	-
Right-of-Way	-
Equipment Use	-
Contracts	-
Heed Engineering	588,000
Remaining Budget	32,000
Total	**$ 800,000**

The total amount expended to date is approximately $237,000. The total estimated cost to complete the drainage system improvements, including the amount appropriated to date, is $1.04 million.

The Metropolitan Water District of Southern California

Abstract of Bids Received on October 24, 2024, at 2:00 P.M.

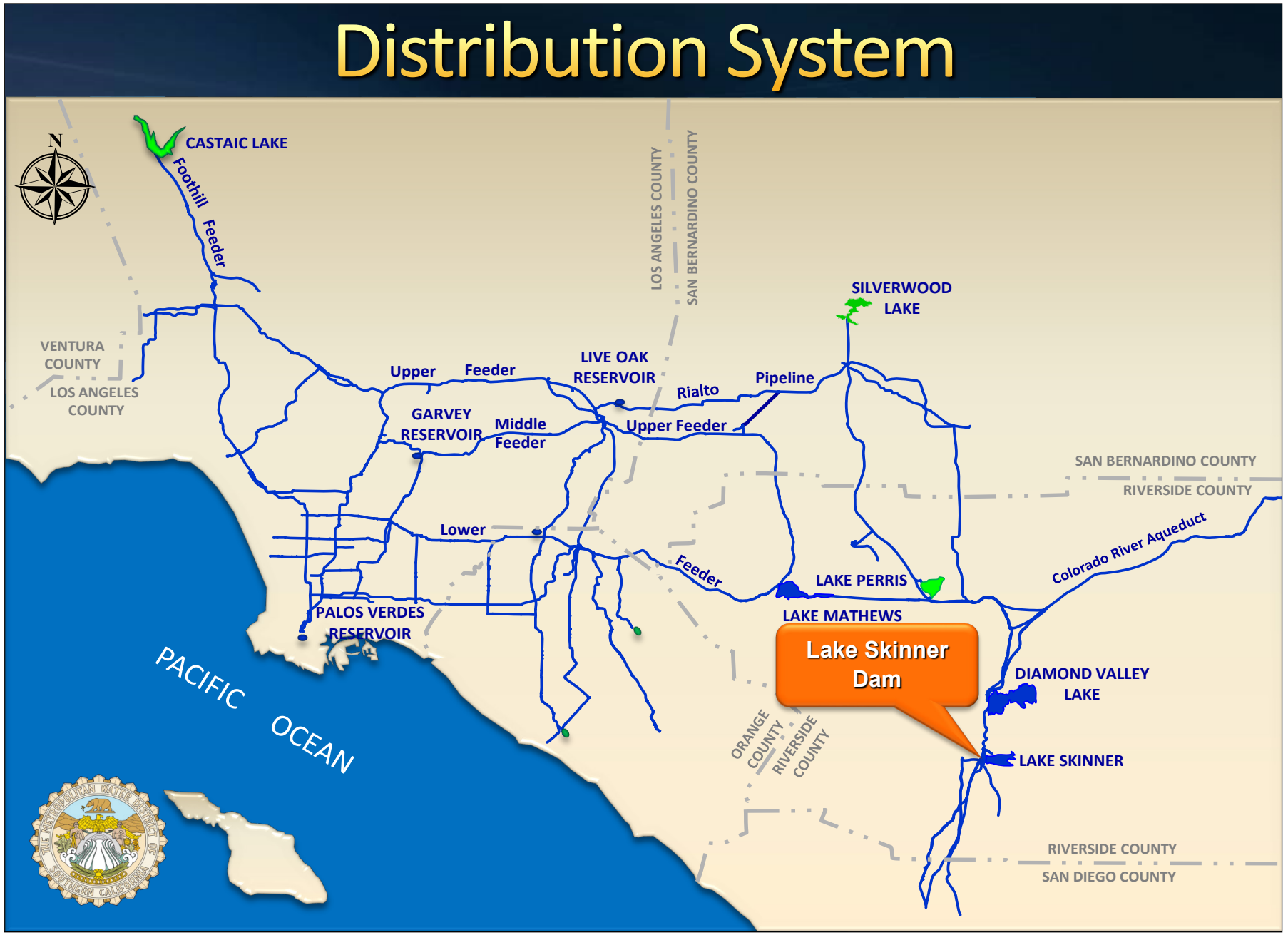
Specifications No. 2078
Lake Skinner Dam Drainage System Improvements

The work consists of replacing approximately 4,800 linear feet of an existing gunite channel with a reinforced concrete channel and grading of adjacent roadway.

Engineer's Estimate: $999,000

Bidder and Location	Total	SBE $	SBE %	Met SBE[1]
Heed Engineering Foothill Ranch, CA	**$588,000**	**$588,000**	**100%**	**Yes**
NMN Construction Inc. Walnut, CA	$766,000	-	-	-
Crimson Marie Company Phelan, CA	$813,269	-	-	-
IO Environmental and Infrastructure Inc. San Diego, CA	$854,373	-	-	-
Bosco Constructors Inc. Chatsworth, CA	$1,086,226	-	-	-

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


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

Engineering, Operations, & Technology Committee

Lake Skinner Dam Drainage Control Improvements

Item 7-2

December 9, 2024

Item 7-2
Lake Skinner Drainage Control Improvements

Subject

Award a $588,000 contract to Heed Engineering for the construction of drainage control improvements at the Lake Skinner Dam

Purpose

Improves the drainage around the base of the dam in compliance with California Division of Safety of Dams (DSOD) requirements

Recommendation and Fiscal Impact

Award a construction contract for drainage improvements

Fiscal impact of $800,000 in capital funds

Budgeted

Location Map

Background


Lake Skinner
Lake Skinner Dam
3-ft-wide, 4,800-ft-long Drainage Channel

Lake Skinner Drainage Control Improvements

Background

- Drainage control system is damaged & in need of rehabilitation
  - Constructed in May 1970
  - V-ditch concrete is cracked & displaced at several locations along toe of dam
  - Adjacent access road exhibits signs of erosion
- Final design complete

Existing
Drainage Control Ditch

Lake Skinner
Drainage Control
Improvements

Alternatives Considered

- Alternative – Perform spot repairs
  - Damage is significant & spot repairs do not provide long-term durability
- Selected Alternative – Replace the entire drainage control system at toe of dam
  - Drainage system is past its design life
  - A new drainage system with reinforced concrete will improve stormwater flow

Lake Skinner Drainage Control Improvements

Scope of Work

- Contractor
  - Demolition of the existing drainage system
  - Clearing & grubbing
  - Construction of a 4-foot-wide by 4,800-foot-long drainage channel
  - Grading of adjacent access road
- Metropolitan
  - Construction management & inspection
  - Submittal review & preparation of record drawings
  - Contract administration, environmental support & project management

Bid Results
Specifications No. 2078

Bids Received	October 24, 2024
No. of Bidders	5
Lowest Responsible Bidder	Heed Engineering
Low Bid	$588,000
Range of Other Bids	$766,000 to $1,086,226
Engineer's Estimate	$999,000
SBE Participation*	100%

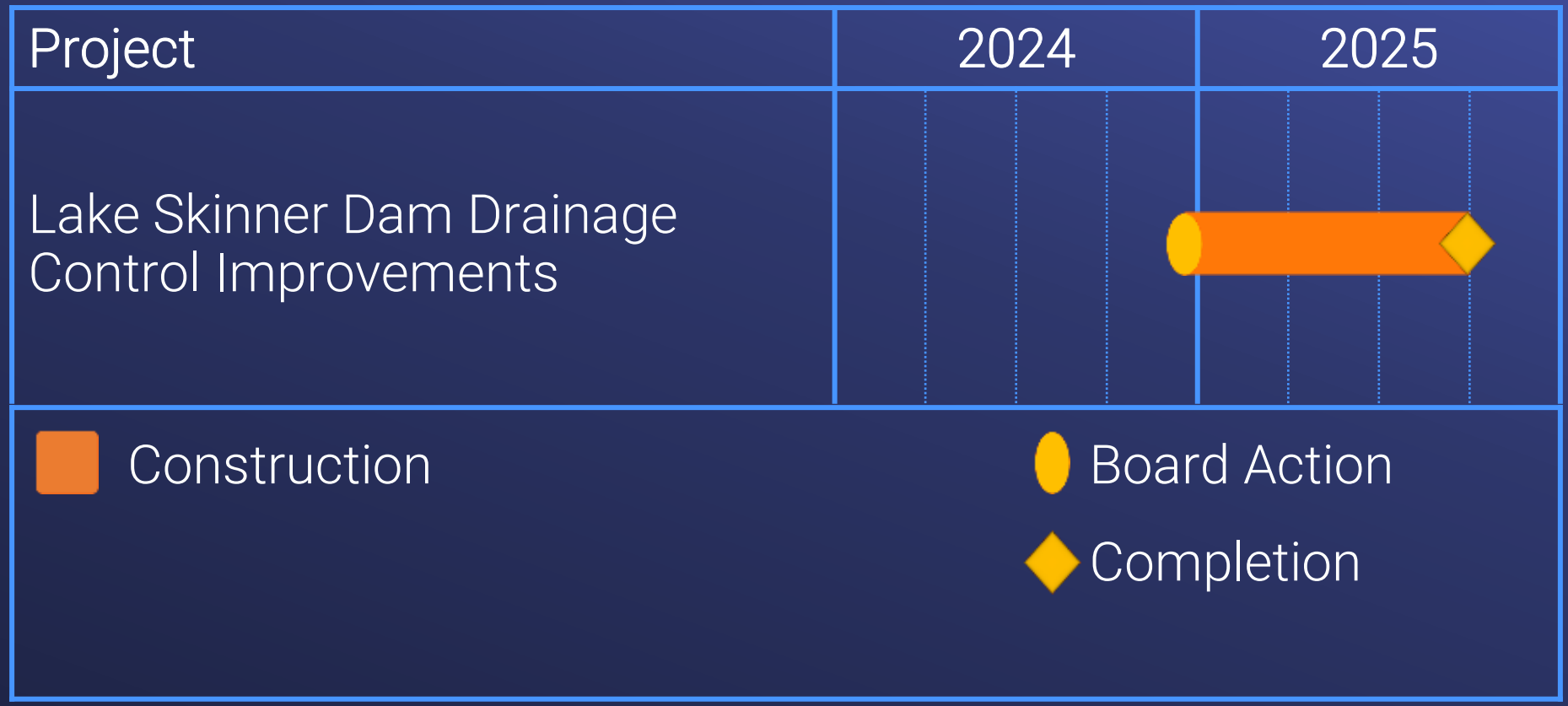
*SBE (Small Business Enterprise) minimum participation level set at 25%

Allocation of Funds

Lake Skinner Drainage Control Improvements

Metropolitan Labor		
Owner Costs (Proj. Mgmt., Contract Admin., Envir. Support)	$	41,000
Construction Inspection & Support		86,000
Submittals Review, Tech. Support, Record Dwgs.		53,000
Contracts		
Heed Engineering		588,000
Remaining Budget		32,000
Total	$	800,000

Project Schedule



Board Options

- Option #1

  Award a $588,000 contract to Heed Engineering for construction of drainage control improvements at the Lake Skinner dam.

- Option #2

  Do not proceed with the project at this time.

Staff Recommendation

- Option #1


THE METROPOLITAN WATER DISTRICT OF
SOUTHERN CALIFORNIA

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

12/10/2024 Board Meeting

8-1

Subject

Approve additional funding, in an amount not to exceed $35 million over the next two years (Fiscal Years 2024/2025 and 2025/2026), to support the Zero-Emission Vehicle Transition Program at Metropolitan and partially mitigate high operational risk; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA

Executive Summary

Metropolitan manages a large and diverse fleet with an estimated asset replacement value of $180 million, consisting of over 1,000 vehicles and motorized equipment. Fleet assets ensure the operational reliability of Metropolitan's system and the ability to effectively respond to emergencies and urgent repairs. Metropolitan's fleet is strategically distributed at 18 locations for daily operational activities and emergency response. Over the years, to help manage budgets and water rate pressures, Metropolitan has deferred the timely replacement of many fleet assets, which has resulted in a backlog of aged and worn vehicles and equipment.

Recent regulations adopted by the California Air Resources Board require Metropolitan's medium- and heavy-duty on-road vehicles to transition to zero-emission vehicles (ZEVs) and its off-road vehicles to transition to cleaner-burning engines over the next few years. Therefore, while regulations allow, there is an urgent need to replace some of Metropolitan's critical fleet with newer, cleaner-burning internal combustion engine (ICE) vehicles while also purchasing new ZEVs where technologies are available to meet Metropolitan's operational needs. In addition, Metropolitan has established a series of goals in its Climate Action Plan (CAP) to reduce carbon emissions, including the transition of its fleet to ZEVs when operationally feasible.

Staff has developed a ZEV Transition Program that includes a 25-year replacement forecast to estimate the funding needed to meet CAP goals and comply with regulations. Metropolitan's approved operating equipment budget for vehicles in the current biennium (Fiscal Years 2024/25 and 2025/26) is not sufficient to fund this transition program. The use of additional funding in the near term to supplement the approved operating equipment budget for critical ICE vehicle purchases provides financial flexibility to address critical vehicle needs, comply with regulatory requirements, minimize operational risk, and support CAP goals. Staff will return to the Board prior to the next biennium budget to present long-term funding solutions for ZEVs.

This letter recommends the Board approve additional funding, in an amount not to exceed $35 million over the next two years (Fiscal Years 2024/2025 and 2025/2026), to support the replacement of critical vehicles and comply with ZEV regulations for Metropolitan's fleet. See **Attachment 1** for the Allocation of Funds, and **Attachment 2** for the Abstract of Purchases.

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

Staff Recommendation: Option #1

Option #1

Approve additional funding, in an amount not to exceed $35 million over the next two years (Fiscal Years 2024/2025 and 2025/2026), to support the Zero-Emission Vehicle Transition Program at Metropolitan and partially mitigate high operational risk.

Fiscal Impact There is no fiscal impact on the current biennial budget, as the $2 million required for FY 2025/26 debt service is already available in the vehicle operating budget. However, future biennial budgets will need to include appropriations for ongoing debt service if the $35 million is debt financed. If the committee approves the item, staff will schedule it for review by the Finance and Asset Management Committee to approve the issuance of debt to fund the $35 million. Staff will identify the most suitable financing method and seek Board authorization, if required, for the selected form of financing.
Business Analysis: Additional funding to supplement the approved operating equipment budget for vehicles provides financial flexibility and an efficient means for Metropolitan to expedite fleet vehicle purchases needed to minimize risk to operational reliability, support Metropolitan's CAP goal, and comply with all local, state, and federal regulations. This option addresses replacement needs for high-criticality vehicles in very poor condition.

Option #2

Do not authorize additional funding at this time.
Fiscal Impact: Unknown at this time.
Business Analysis: This option will delay Metropolitan's required transition to ZEVs and negatively impact the ability to purchase critical vehicles due to the timing of regulatory and market conditions. This option continues to defer the renewal of critical vehicles by up to 10 years. This option would result in an approximate asset renewal replacement rate of 5 percent for Metropolitan, which is almost 50 percent less than other similar-sized agencies. Deferring high and moderate criticality vehicle purchases will increase Metropolitan's risk to operational reliability and emergency response capabilities as a result of a worn and aging fleet.

Alternatives Considered

Staff considered several alternatives as part of the ZEV Transition Program including deferring select high-criticality vehicles and proposing increases to the approved operating equipment budget for the current biennium. Deferring additional critical vehicles would result in high operational risk. Increases to the current approved operating equipment budget for vehicles would result in an adverse impact on Metropolitan's rates and/or financial reserves for the current biennium.

Additionally, staff considered recommending additional program funding, in an amount not to exceed $78 million over the next two years (Fiscal Years 2024/2025 and 2025/2026), to support the zero-emission vehicle transition at Metropolitan. This alternative would fully mitigate high operational risk by addressing replacement needs for moderate and high-criticality vehicles in poor condition. However, if the additional funding for this alternative were debt financed, it would increase the cost of debt financing for Fiscal Year 2025/26 to approximately $5 million, while the future costs would be paid from subsequent biennial budgets. Due to the current financial conditions, staff decided to not propose this option because the cost of debt financing for subsequent biennial budgets would have exceeded the planned operating equipment budget for vehicles.

Applicable Policy

Metropolitan Water District Administrative Code Section 11104: Delegation of Responsibilities

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

By Minute Item 53596, dated April 9, 2024, the Board appropriated $3,453.2 million for Metropolitan Operations and Maintenance and operating equipment, approved appropriations and funding of capital expenditures, and approved a Ten-Year Financial Forecast for Fiscal Years 2024/25 and 2025/26.

By Minute Item 53316, dated July 11, 2023, the Board adopted Ordinance No. 152 determining that the interests of the District require the use of revenue bonds in the aggregate principal amount of $500,000,000 to finance a portion of capital expenditures.

By Minute Item 52823, dated May 10, 2022, the Board adopted the Climate Action Plan.

By Minute Item 52579, dated November 9, 2021, the Board adopted legislative policy principles on climate changes and the environment to help California reach its climate goals while adapting to a rapidly changing environmental landscape. The Board also expressed its support for policies and funding that encourage sustainable practices and environmental compliance, reduce greenhouse gas emissions, and improve energy sustainability.

By Minute Item 50409, dated March 8, 2016, the Board adopted Resolution 9201 authorizing the sale and issuance from time to time of up to $400 million of short-term certificates.

Summary of Outreach Completed

Metropolitan actively participates in multiple professional organizations, including the California Council for Environmental and Economic Balance, California Municipal Utilities Association, and Association of California Water Agencies in an effort to smooth the ZEV transition and provide key input to both ZEV regulations and legislation. In addition, staff regularly participates in one-on-one meetings with regulators to provide feedback regarding current and proposed regulations, compliance dates, and mitigate enforcement actions. In the development of Metropolitan's ZEV Transition Program, staff met with other public agencies to gain valuable lessons learned from their ZEV transition, and staff is assessing the actual field performance of ZEVs prior to purchasing.

California Environmental Quality Act (CEQA)

CEQA determination for Option #1:

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

CEQA determination for Option #2:

None required

Details and Background

Background

Metropolitan manages a modern fleet, critical to the effective operation and maintenance of the distribution system, with an estimated asset replacement value of $180 million. Metropolitan's existing fleet consists of 1,039 vehicles and motorized equipment, which include 379 light-duty vehicles, 356 medium-duty vehicles, 195 heavy-duty vehicles, and 109 off-road vehicles. These vehicles are strategically domiciled in 18 locations across Metropolitan's service area for daily operational activities and emergency response.

Metropolitan has assessed the criticality of the various types of vehicles within its fleet based on operational uses. Many of these vehicles are equipped with specialized equipment such as cranes, weld machines, compressors, and other critical equipment to sustain Metropolitan's operations. Approximately 62 percent of Metropolitan's vehicles are classified as high or moderate criticality and are crucial for system reliability. High and moderate

criticality vehicles are required to meet Metropolitan's mission of water delivery and provide emergency response capabilities for a two-pipeline break scenario or other emergency event.

To help manage Metropolitan's budgets and rates over the past decade, Metropolitan has prioritized replacement of only the highest criticality vehicles and deferred others, which has resulted in a backlog of aged and worn vehicles. Currently, more than 50 percent of Metropolitan's overall fleet has a high condition index, indicating that these vehicles have reached the end of their useful life due to excessive mileage, increased maintenance, or poor physical condition. Almost 60 percent of Metropolitan's high-criticality vehicles also have a high condition index, which poses an elevated risk to Metropolitan's operations. To mitigate this risk, Metropolitan has increased maintenance and repairs of aging vehicles to ensure their availability for daily activities and emergency response. However, these efforts are not sustainable, and Metropolitan must replace these critical vehicles to ensure operational safety and reliability.

While addressing the challenge of an aging fleet, Metropolitan has also been transitioning from a fossil-fueled fleet to a zero-emission fleet in accordance with California's new fleet regulations. The California Air Resources Board (CARB) adopted the Advanced Clean Fleets (ACF) Rule which has set milestones for replacing medium- and heavy-duty vehicles with ZEVs. CARB regulations also require Metropolitan to phase out its existing off-road vehicles to cleaner-burning engines. Fines and penalties may be imposed for non-compliance with CARB regulations. In addition, Metropolitan's CAP set forth goals to reduce carbon emissions by specific measures related to: (1) transitioning Metropolitan's existing medium and heavy-duty vehicles to ZEVs when technological, operational, or cost-effectiveness parameters are met and (2) replacing Metropolitan's fossil-fuel passenger fleet vehicles with operationally-feasible passenger ZEVs.

ZEV Transition Program

Staff developed a ZEV Transition Program to take a practical and fiscally prudent approach to carefully balancing operational reliability and adaptability to the changing regulatory landscape.

For light-duty on-road vehicles (i.e., those weighing 8,500 lbs. or less), Metropolitan has adopted an initial approach, in support of the CAP goals, to replace these vehicles with ZEVs where technologically and operationally feasible and cost-effective. Currently, there appears to be suitable ZEV replacements for Metropolitan's light-duty vehicles where fewer miles are traveled, or towing is not required.

For medium- and heavy-duty on-road vehicles (i.e., those weighing more than 8,500 lbs.), Metropolitan is meeting the ACF regulations by ensuring that, starting in 2024, 50 percent of its fleet purchases are ZEVs. However, after January 1, 2027, the regulations require 100 percent of new on-road medium- and heavy-duty fleet vehicle purchases to be ZEVs. For those types of vehicles where the ZEV market is not yet mature, Metropolitan must replace critical medium- and heavy-duty vehicles with cleaner-burning ICE vehicles to ensure our fleet remains resilient and reliable. After the 2027 regulatory milestone, Metropolitan may not be able to replace existing medium- or heavy-duty vehicles until suitable ZEV replacements are available on the market or regulatory exemptions are granted. In the meantime, Metropolitan would continue operating these aged and worn vehicles beyond their expected life, leading to increased maintenance costs and potentially a reduced ability to respond to emergencies, timely completion of shutdowns, and perform other urgent repairs and maintenance. Some industry sources indicate that suitable ZEV replacements for Metropolitan's medium- and heavy-duty fleet may not be available until 2030 or later.

For off-road vehicles (i.e., construction equipment, forklifts, etc.), Metropolitan is complying with CARB regulations which require all existing fleet and new purchases to have cleaner-burning engines by January 1, 2028, or be limited in operational use which may increase risks to certain operational activities.

Near-Term Funding Approach for the ZEV Transition Program

Staff developed a 25-year forecast of vehicle replacements to estimate the funding needed to support the ZEV Transition Program. This funding will allow Metropolitan to replace critical vehicles that will minimize operational risks to reliability and ensure emergency response. The funding required to replace these critical vehicles exceeds the increases in the planned operating equipment budget for vehicle purchases over the next several years, as assumed in the 10-Year Financial Forecast.

In April 2024, Metropolitan's Board approved an annual operating equipment budget of $6.7 million and $7.1 million for vehicle purchases for Fiscal Years 2024/25 and 2025/26, respectively. Staff recommends additional funding to support the ZEV Transition Program and management of Metropolitan's vehicle fleet operational risk without impacting the current biennial budget. If approved, and if debt financed, the repayment term for each debt financing will match the expected useful life of the financed assets, subject to review by transaction bond counsel. Consequently, any debt costs beyond Fiscal Year 2025/26 will need to be considered when establishing future vehicle budget needs programmatically. Staff will return to the Board, through the Finance and Asset Management Committee, if Board approval is required for the form of financing that is best suited for this additional budget.

Additional near-term funding provides a higher degree of flexibility to respond to annual vehicle replacement needs, allows staff to quickly adapt to regulatory compliance requirements, and lowers operational risk. Any use of debt financing for this additional funding of vehicle purchases will, however, result in higher vehicle costs over time and solely is not expected to be a long-term solution to managing Metropolitan's vehicle replacement program. Metropolitan will continue to pursue grants and incentives, where applicable, to help defray the cost of the transition to ZEVs.

This action would approve additional funding for vehicle purchases for Fiscal Years 2024/2025 and 2025/2026. Staff will seek the best financing method available to fund the budget increase and will seek Board authorization, if required, for the form of financing selected. Staff will also return to the Board when developing the next biennial budget for Fiscal Years 2026/27 and 2027/28 and will propose a vehicle operating equipment budget that supports Metropolitan's ZEV Transition Program and a long-term funding strategy.

Keith Nobriga 11/26/2024

Keith Nobriga *Date*
Group Manager
Integrated Operations Planning, and
Support Services

12/3/2024

Deven Upadhyay *Date*
Interim General Manager

Attachment 1 – Allocation of Funds

Attachment 2 – Abstract of Purchases

Ref# wso12695826

Allocation of Funds for Zero Emission Vehicle Transition Program

	Funding / Expense
Approved Operating Equipment Budget for Vehicle Purchases FY24/25 & 25/26	$ (13,800,000)
Proposed ZEV Transition Program (Current Board Action)	
Vehicle Purchases FY 24/25 & 25/26	44,000,000
Estimated Debt Service for FY25/26	1,900,000
Remaining/Contingency Budget	2,900,000
Total Additional Proposed Program Funding	**$ 35,000,000**

The total amount expended to date for FY2024/25 Vehicle Purchases is approximately $4 million. The total estimated cost for the Zero Emission Vehicle Transition for FY 2024/25 and 2025/26, including the amount spent to date, funds allocated for the work described in this action, is $44 million.

The Metropolitan Water District of Southern California

Abstract of Purchases for Zero Emission Vehicle Transition Program

The summary estimate below includes the purchase of vehicles to address replacement needs for Fiscal Years 2024/2025 and 2025/2026.

Estimated Vehicle Purchases[1]: $44,000,000

Vehicle Type	Est. Count	Est. Total
Light Duty	5	$1,000,000
Medium Duty	45	$6,000,000
Heavy Duty	49	$24,000,000
Off-Road	42	$13,000,000
Total	**141**	**$44,000,000**

[1] The actual vehicle count and purchase costs may vary to comply with California Air Resource Board regulation requirements, exemptions granted, available electric charging infrastructure at Metropolitan facilities, market availability vehicles, and market costs at time of purchase.

Engineering, Operations, & Technology Committee

Zero-Emission Vehicles – Transition and Funding Program

Item 8-1

December 9, 2024

Item 8-1

Zero- Emission Vehicle Transition & Funding Program

Subject

Approve additional funding, in an amount not to exceed $35 million over the next two years (Fiscal Years 2024/2025 and 2025/2026), to support the Zero-Emission Vehicle Transition Program at Metropolitan and partially mitigate high operational risk

Purpose

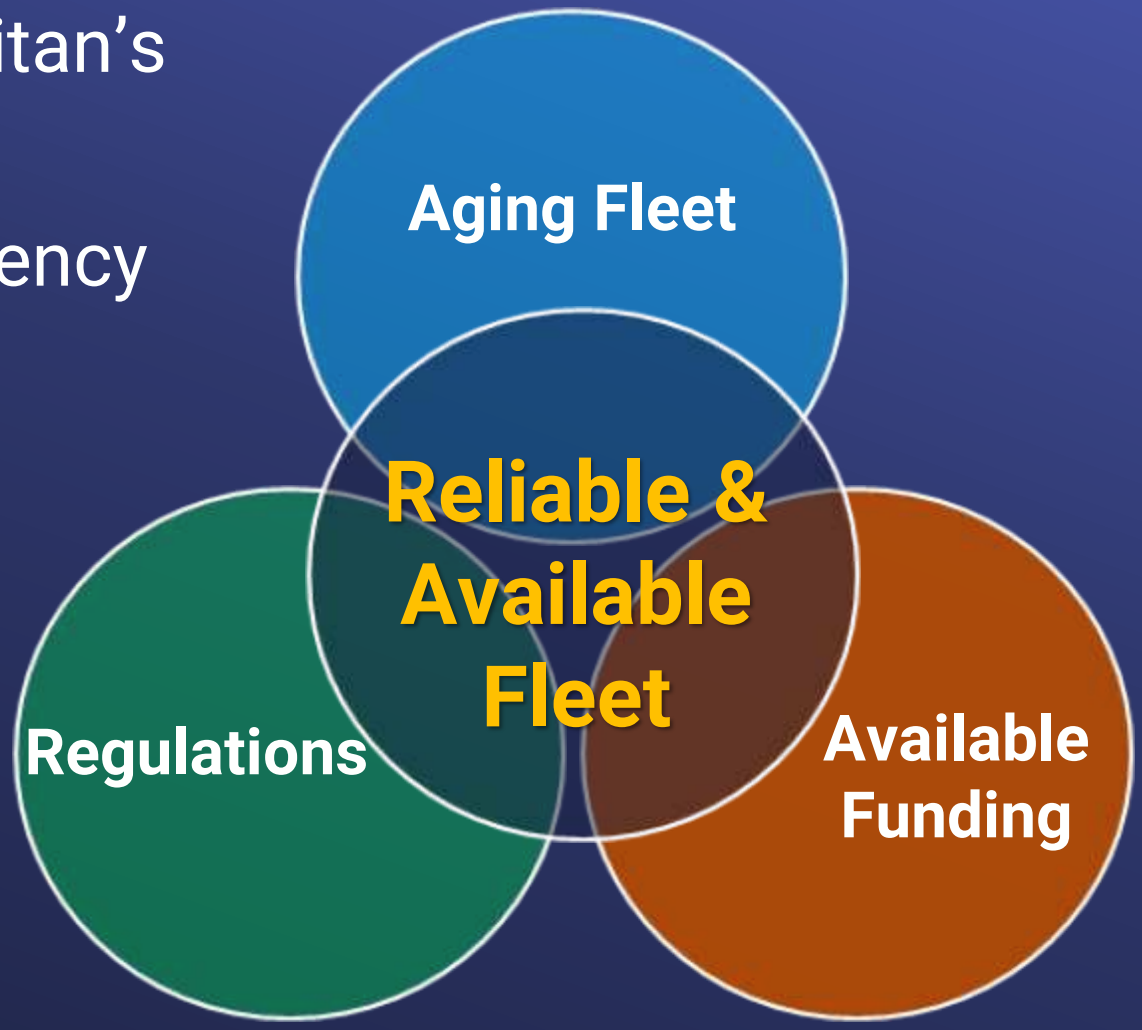
Utilize additional funding to provide financial flexibility to address critical vehicle needs and minimize risk to availability and reliability in an emergency.

Fiscal Impact

No Fiscal Impact for FYs 24/25 and 25/26

Challenges for Metropolitan's Fleet

- Reliable Fleet is central to Metropolitan's ability to be resilient
- Fleet must be available in an emergency
- Three competing components to managing fleet
  - Backlog of aging fleet
  - ZEV regulatory requirements
  - Limited funding available

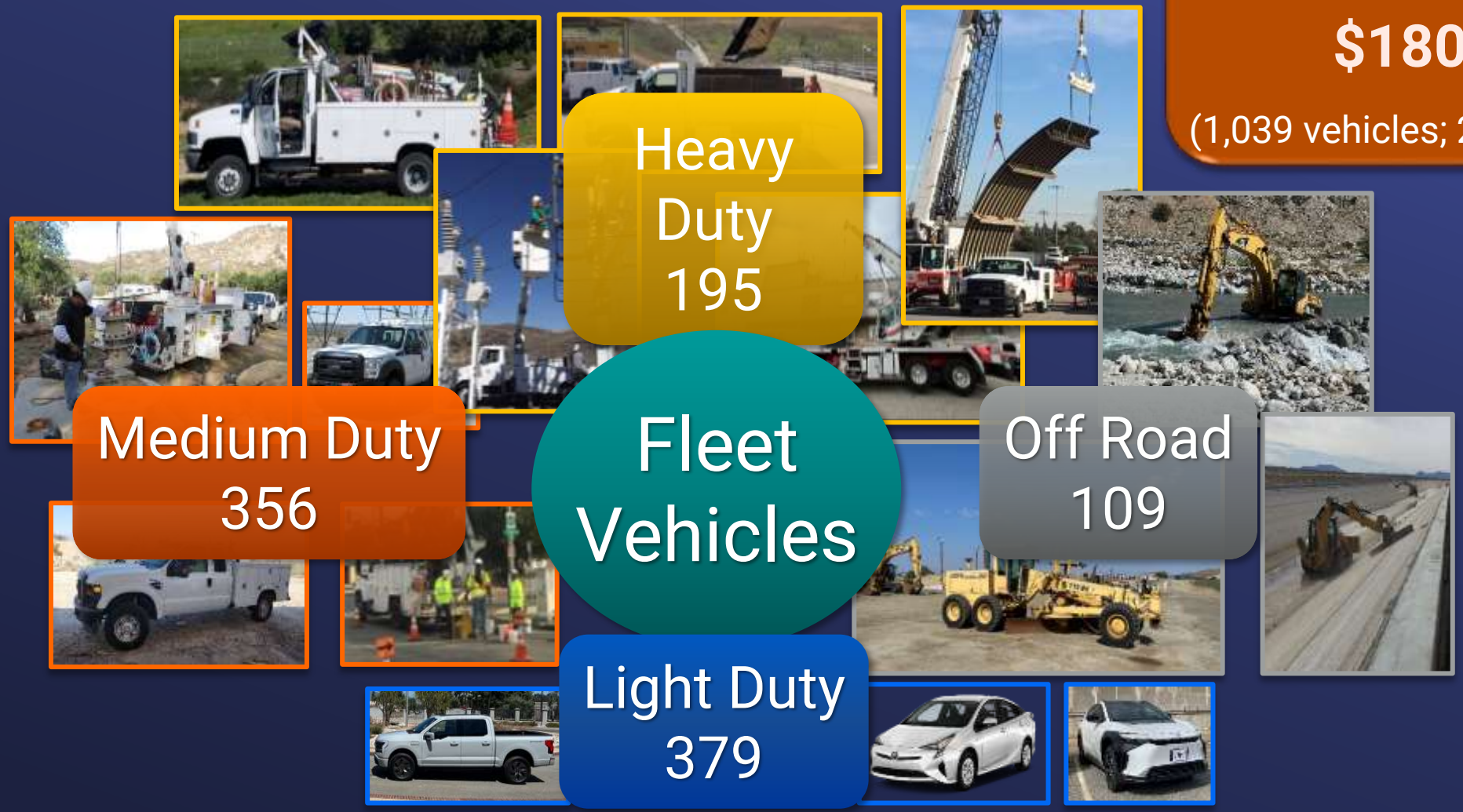


Metropolitan's Diverse Pool of Fleet Assets

Estimated Asset Replacement Value

$180 M

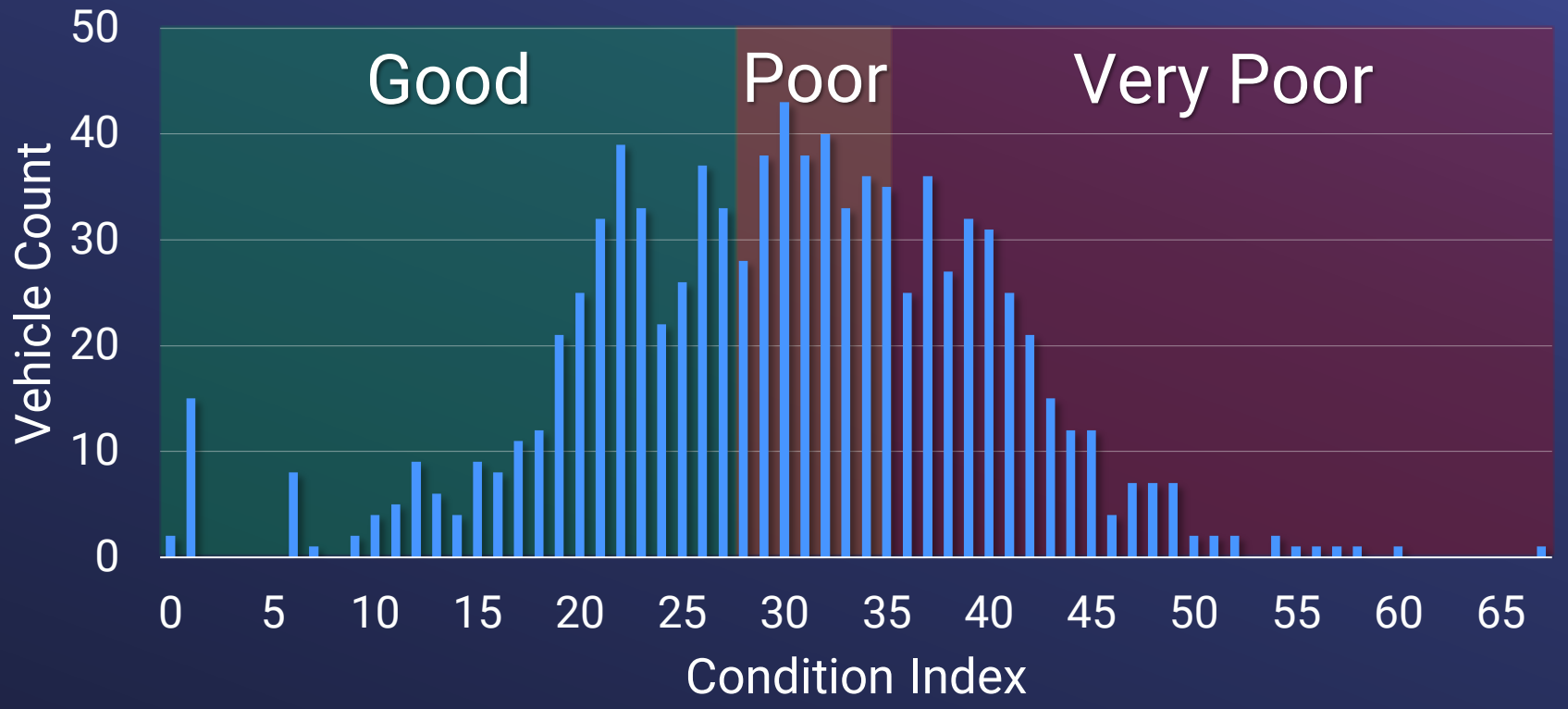
(1,039 vehicles; 2024 dollars)



Impact of Deferred Replacement Needs

Over 50% of Fleet vehicles are in poor/very poor condition

- Staff have performed more frequent repairs
- High priority work delayed due to unreliable vehicles



Examples of High Condition Index

Condition Index = 59

33-year-old dump truck with 103,000 miles used by Metropolitan Forces

Condition Index = 42

5-year-old Line-truck with 186,000 miles operating in remote desert conditions

Fleet Risk Mitigation Costs

- Costs to mitigate high risk is approx. $85 million (red zone)

Low Criticality

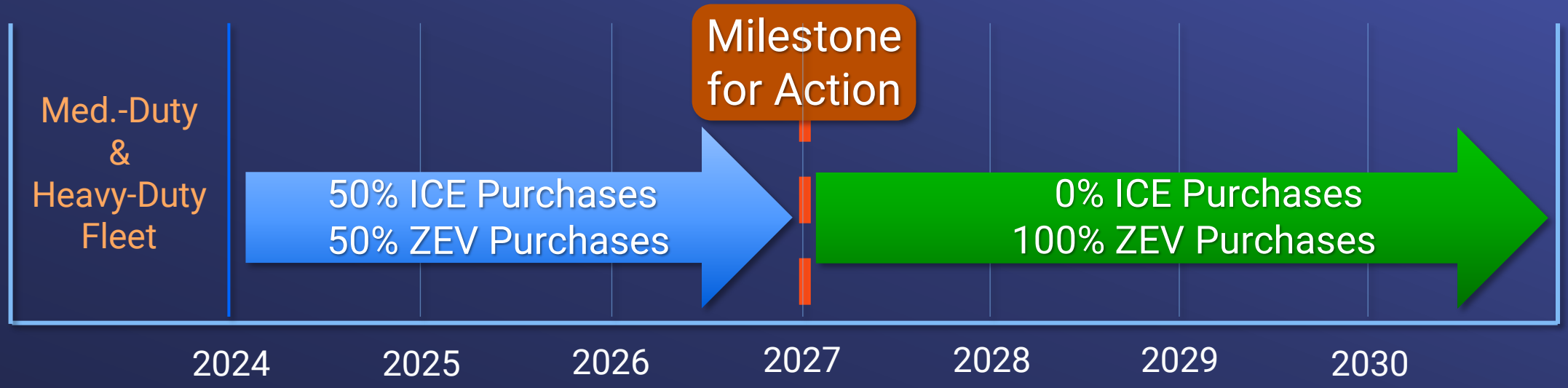
Moderate Criticality

High Criticality

Condition			
Very Poor	$13M	$11M	$44M
Poor	$11M	$9M	$30M
Good	$13M	$18M	$32M

Note: Amounts shown are in 2024 dollars

Advanced Clean Fleet (ACF) Regulation



- Milestone for action
  - Replace aged high criticality vehicles with cleaner burning ICE to ensure reliability for the next 5 to 10 years
  - After 2027, a suitable ZEV replacement may not be available

Advanced Clean Fleet Rulemaking

Metropolitan's active engagement with CARB

- Testimony at CARB Board hearings
- Formal comment letters
- 1:1 meetings with CARB regulators
- Advocacy efforts with partner agencies and associations
- 5 of 6 bills were vetoed or failed to move forward

Advanced Clean Fleet Exemptions

Exemptions are difficult to obtain

- 7 available exemptions
- Metropolitan is focused on two exemptions related to vehicle availability & usage
  - A GM-approved vehicle replacement plan may be needed
- Only 3 out of 34 exemption requests granted

Comprehensive Reliability Approach

Key activities

- Focus replacing high-risk ICE vehicles with cleaner burning modern ICE
- After 2027, continue using aged ICE vehicles if not available as a ZEV
- Pursue exemptions, grants, and innovative funding approaches
- Continue advocacy efforts with CARB

Alternatives Considered

- Limit vehicle purchases to approved budget only
  - Increases operational risk

$15M	$13M	$44M
$11M	$9M	$30M
$13M	$18M	$32M

- Fully mitigate high operational risk
  - Additional funding of $78M needed

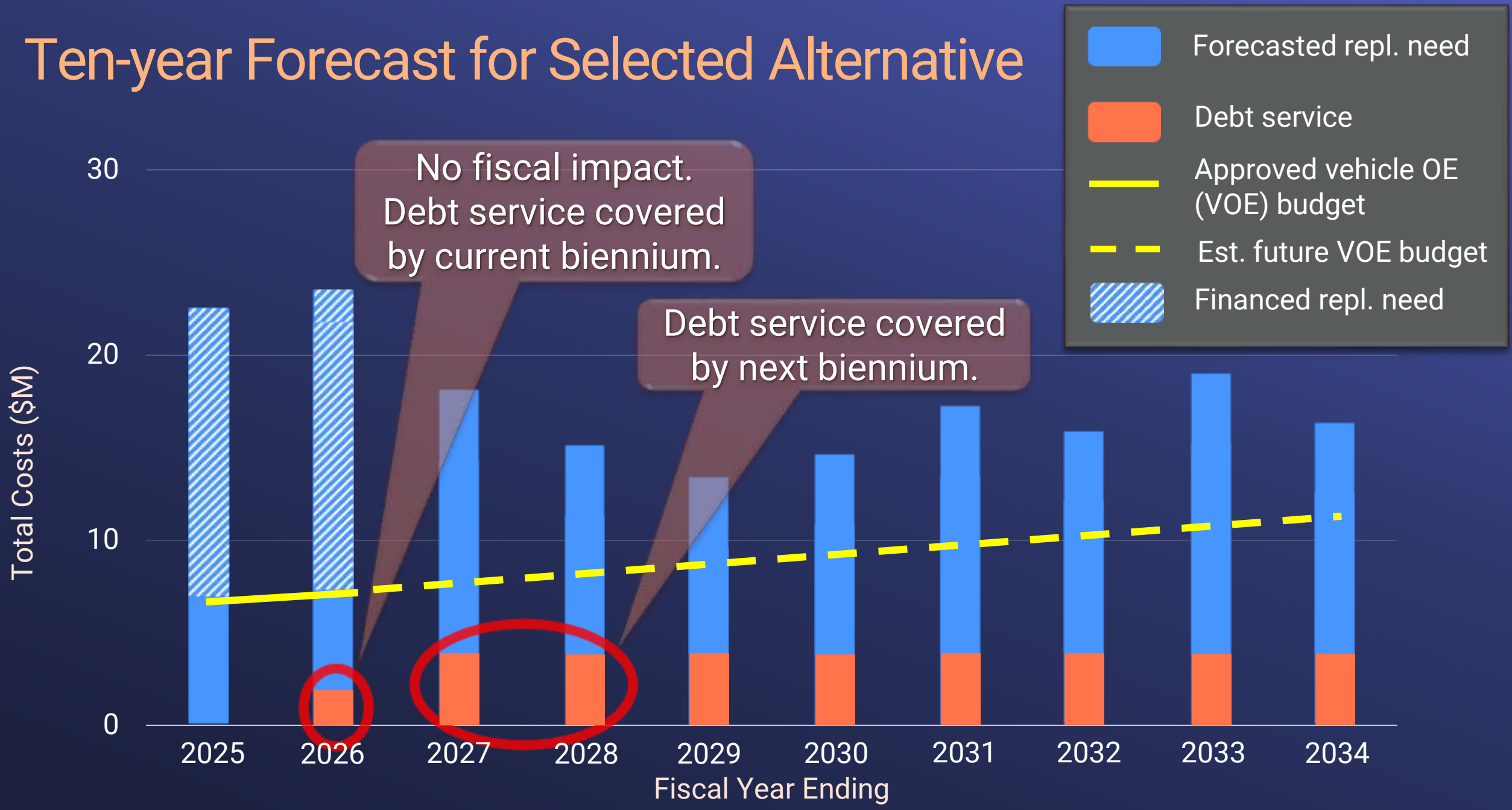
$15M	$13M	$44M
$11M	$9M	$30M
$13M	$18M	$32M

Selected Alternative

- Partially mitigate high operational risk
  - Replace high criticality vehicles in very poor condition with cleaner burning modern ICE
  - Purchase ZEVs, where feasible, to comply with ACF

$15M	$13M	$44M
$11M	$9M	$30M
$13M	$18M	$32M

Ten-year Forecast for Selected Alternative



Summary of Planned Purchases [1]

Vehicle Type	Estimated Count	Estimated Total
Light Duty	5	$ 400,000
Medium Duty	45	$ 6,000,000
Heavy Duty	49	$ 24,000,000
Off-Road	42	$ 13,600,000
TOTAL	141	$ 44,000,000

1. The actual vehicle count and purchase costs may vary to comply with California Air Resources Board regulation requirements, exemptions granted, available electric charging infrastructure at Metropolitan facilities, market availability of vehicles, and market costs at time of purchase.

Allocation of Funds

Approved Operating Equipment Budget	
Vehicle Purchases FYs 24/25 & 25/26 [1]	$(13,800,000)
Additional Financing (Current Board Action)	
Vehicle Replacement Needs	44,000,000
Debt Service for FY 25/26 [2]	1,900,000
Remaining/Contingency Budget	2,900,000
Total	$35,000,000

1. Portion of Approved Operating Budget for Vehicle Purchases only.
2. Assumes that additional funding is debt financed.

Board Options

- Option #1

  Approve additional funding, in an amount not to exceed $35 million over the next two years (Fiscal Years 2024/2025 and 2025/2026), to support the Zero-Emission Vehicle Transition Program at Metropolitan and partially mitigate high operational risk.

- Option #2

  Do not authorize additional funding at this time.

Staff Recommendation

- Option #1


THE METROPOLITAN WATER DISTRICT OF
SOUTHERN CALIFORNIA
1928

THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

Board Action

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

12/10/2024 Board Meeting

8-2

Subject

Authorize entering into one or more agreements to accept up to $125,472,855 in grant funding from the United States Bureau of Reclamation through the WaterSMART Large-Scale Water Recycling Program for Pure Water Southern California; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA

Executive Summary

Metropolitan worked with its congressional delegation to create a new federal grant program to help advance large-scale, regional recycled water projects. The Large-Scale Water Recycling Program (LSWRP) was included in the Bipartisan Infrastructure Law (P.L. 117-58, § 40905) enacted on November 15, 2021. Under that law, the U.S. Bureau of Reclamation (Reclamation) is authorized to issue grants that provide 25 percent in federal cost-sharing towards the planning, design, and construction of large-scale water recycling projects to develop local, drought-resistant water supplies.

In November 2023, Metropolitan and the Los Angeles County Sanitation District applied for a $125 million LSWRP grant to help fund planning and design activities for the Pure Water Southern California Program (PWSC). Although permissible under the LSWRP guidelines, Metropolitan's grant application did not request, and the award does not provide LSWRP funds for the core capital construction costs of PWSC. In May 2024, Reclamation notified Metropolitan of Reclamation's intent to award Metropolitan up to $99,199,096. In May 2024, Metropolitan applied for another LSWRP grant, this time for approximately $26 million, the amount not awarded based on Metropolitan's initial application. On November 15, 2024, Reclamation notified Metropolitan that it intends to award Metropolitan the additional requested funds. After receiving input from the Board, staff has worked with Reclamation to develop the terms for the agreement required for Metropolitan to receive the awarded federal funds.

Staff recommends that the Board authorizes the General Manager to enter into an agreement with Reclamation and accepts up to $125,472,855 in LSWRP grant funding,

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

Staff Recommendation: Option #1

Option #1

Authorize entering into one or more agreements with the United States Bureau of Reclamation to accept up to $125,472,855 in grant funding through the WaterSMART Large-Scale Water Recycling Program.

Fiscal Impact: Reimbursable expenditure of up to $125,472,855 in LSWRP grant, including up to approximately $22 million allocated for County Sanitation District No. 2 of Los Angeles County for their portion of the work during the Large-Scale Water Recycling Program grant period.
Business Analysis: This option would allow Pure Water Southern California to advance the delivery of new water sources in Southern California to augment regional supplies within Metropolitan's service area and enhance the region's operational resilience and reliability.

Option #2

Do not enter into an agreement with the United States Bureau of Reclamation to accept the grant funding.
Fiscal Impact: None. However, additional funds would be required to advance Pure Water Southern California.
Business Analysis: This option would forgo the use of the Large-Scale Water Recycling Program grant funds to advance Pure Water Southern California, jeopardize receipt of future federal funds, and delay the development of a new source of water in Southern California.

Alternatives Considered

Staff considered an alternative that would have Metropolitan defer the acceptance of the federal grant funding until board approval of PWSC. However, deferring the use of federal grant funds is not recommended for several reasons and is likely not feasible as Reclamation is unlikely to allow deferral. The PWSC is anticipated to be approved in the first quarter of 2026 upon completion of the environmental documentation. If grant acceptance is deferred to that date, this would likely significantly reduce the amount of planning and design work that could be funded during the grant period, resulting in under-utilization of the grant funds. As the federal grant funding process is highly competitive, Metropolitan may risk prospects of getting additional federal grant funds by forfeiting or deferring this current funding opportunity. It is also not guaranteed, and is unlikely, that Reclamation would allow Metropolitan to defer grant acceptance. Reclamation may require Metropolitan to forgo acceptance and re-apply later if any grant funds remain.

Staff initially considered an alternative that would have Metropolitan accept less grant funding, thus requiring a lower cost-share obligation. Instead, Metropolitan collaborated with Reclamation to develop proposed terms that allow Reclamation to obligate the full grant amount to Metropolitan, and Metropolitan can start drawing on the grant based on Metropolitan's available matching funds while allowing Metropolitan to access the full grant amount if additional matching funds are secured in the future.

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

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

By Minute Item 52181, dated November 10, 2020, the Board authorized an amendment to an existing agreement with County Sanitation District No. 2 of Los Angeles County and a new agreement with Southern Nevada Water Authority to support continued evaluation and development of the Regional Recycled Water Program.

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

By Minute Item 53052, dated December 13, 2022, the Board authorized the General Manager to use $80 million in grant funding from the State Water Resources Control Board and to commence activities related to the initiation of the Pure Water Southern California Program.

By Minute Item 53099, dated January 10, 2023, the Board authorized the General Manager an agreement with the joint venture of AECOM Technical Services, Inc. and Brown and Caldwell in an amount not to exceed $25 million for program management services to support the Pure Water Southern California Program.

By Minute Item 53177, dated March 14, 2023, the Board authorized an agreement with Black & Veatch Corporation, Inc. in an amount not to exceed $8 million for the preliminary design of conveyance Reach 1 of the Pure Water Southern California Program; and an agreement with HDR Engineering, Inc. in an amount not to exceed $9 million for preliminary design of conveyance Reach 2 of the Pure Water Southern California Program; and adopt a resolution to support a grant application to the U.S. Bureau of Reclamation for water recycling and desalination planning and authorize the General Manager or a designated representative to accept the grant if awarded.

By Minute Item 53570, dated March 12, 2024, the Board authorized an increase of $1.3 million to an existing agreement with Helix Environmental Planning Inc. for a new not-to-exceed amount of $4.1 million to continue preparing environmental documentation for the Pure Water Southern California Program.

By Minute Item 53598, dated April 9, 2024, the Board appropriated a total of $636.5 million for projects identified in the Capital Investment Plan for Fiscal Years 2024/25 and 2025/26.

By Minute Item 53792, dated September 10, 2024, the Board authorized an amended and restated agreement with the County Sanitation District No. 2 of Los Angeles County for shared implementation of the advanced water purification facility for Pure Water Southern California.

By item dated November 19, 2024, the Board adopted federal grant resolutions verifying that the Board reviewed and supports the grant application with the U.S. Bureau of Reclamation for the Pure Water Southern California Program.

California Environmental Quality Act (CEQA)

CEQA determination for Option #1:

The proposed action is not defined as a project under CEQA because it involves the creation of government funding mechanisms or other government fiscal activities that do not involve any commitment to any specific project that may result in a potentially significant physical impact on the environment. (State CEQA Guidelines Section 15378(b)(4)). In addition, the proposed action is exempt from CEQA because it involves minor alteration of existing public topographical features, involving negligible or no expansion of existing or former use, and no possibility of significantly impacting the physical environment. (State CEQA Guidelines Section 15301.) Furthermore, the proposed action is exempt from CEQA because it consists of minor public or private alterations in the condition of land, water, and/or vegetation that do not involve removal of healthy, mature, scenic trees except for forestry or agricultural purposes. (State CEQA Guidelines Section 15304.) Additionally, the proposed action is exempt from CEQA because it consists of basic data collection, research, experimental management, and resource evaluation activities that do not result in a serious or major disturbance to an environmental resource. These may be strictly for information-gathering purposes or as part of a study leading to an action that a public agency has not yet approved, adopted, or funded. (State CEQA Guidelines Section 15306.) Finally, 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

PWSC would reuse treated wastewater currently being discharged to the Pacific Ocean from the Los Angeles County Sanitation District's (Sanitation District) A.K. Warren Water Resource Facility (Warren Facility) in the City of Carson. Treated wastewater would be further purified at a new advanced water purification facility (AWPF) located at the Warren Facility to produce up to 150 million gallons per day (mgd) at full build-out. Purified water would recharge regional groundwater basins through spreading facilities and injection wells, satisfy non-potable demands currently relying on imported water, and augment existing water supplies. In addition to the treatment facilities, a new backbone conveyance system would extend over 40 miles from the City

of Carson to as far north as the City of Azusa, with a portion of the flow potentially conveyed over 10 miles east to the City of La Verne to connect with Metropolitan's existing water treatment and distribution facilities for raw water augmentation. A new direct potable reuse (DPR) facility would also be constructed at Metropolitan's F.E. Weymouth Water Treatment Plant for further treatment before blending with other raw water sources. Staff is also evaluating potential alternative phasing options that would reduce initial costs and address purified water demands for initial customer connections, including possible opportunities to incorporate treated water augmentation.

In November 2015, Metropolitan's Board authorized an agreement with the Sanitation District to implement a demonstration project and establish the framework of terms and conditions for developing a Regional Recycled Water Program, including the pursuit of grant and loan funding. This agreement was amended and restated agreement in September 2024 to define roles and responsibilities for the shared implementation of the AWPF. The Sanitation District will be responsible for the design of pretreatment and nitrogen management facilities. Metropolitan will primarily be responsible for designing advanced treatment and ancillary facilities. Metropolitan and the Sanitation District would share responsibilities for regulatory permitting, public engagement, program management, and other related work. The amended and restated agreement defines each agency's role and responsibilities during the early design phase of the AWPF covered by the LSWRP funding period.

In November 2020, Metropolitan's Board authorized the initiation of the environmental planning phase of the PWSC, which included technical studies and conceptual engineering for the AWPF and conveyance system facilities to prepare a comprehensive Program Environmental Impact Report in accordance with the CEQA Guidelines. Various technical studies and analyses were conducted to define the key PWSC components, including the treatment and conveyance facilities, and identify their associated environmental impacts.

In December 2022, Metropolitan's Board authorized the acceptance of $80 million in state funds to initiate PWSC activities, including program management, continued demonstration testing, continued AWPF planning, and preliminary design of the first two pipeline reaches. In January 2023, Metropolitan's Board awarded a program management support consulting agreement to assist Metropolitan in developing PWSC implementation strategies; evaluating opportunities for alternative project delivery; performing cost, schedule, and budget reporting functions; identifying program and project-level risks and potential mitigation; and provide other as-needed program management support.

In March 2023, Metropolitan's Board awarded two new consulting agreements for preliminary design of the first two pipeline reaches. In that action, the Board also authorized staff to pursue and accept $5 million in federal grant funding from Reclamation to advance the PWSC, which Reclamation awarded to Metropolitan.

LSWRP Grant Funding for Pure Water Southern California

In November 2023, Metropolitan submitted a grant application to Reclamation's LSWRP federal grant program, which will fund up to $180 million to plan, design, and construct large-scale water recycling projects to develop local drought-resistant water supplies. Through this grant, Reclamation would provide up to 25 percent federal cost-sharing of the expected total project cost, with the remaining 75 percent cost-share required to be met by each grant recipient. Metropolitan submitted a proposal for $125,472,855 in LSWRP grant funding for planning and design activities, along with the required Feasibility Study Report for the funding application.

In May 2024, Reclamation approved Metropolitan's Feasibility Study Report and notified Metropolitan of its intent to award Metropolitan up to $99,199,096 in LSWRP federal grant funding for planning and design activities. In that same month, Metropolitan submitted a second grant application to Reclamation for approximately $26 million, the difference between the amount requested in the initial application and the amount initially awarded. On November 15, 2024, Reclamation notified Metropolitan of its intent to award Metropolitan an additional $26,273,759 in grant funds. As a result, if accepted, Metropolitan would have access to $125,472,855 of LSWRP grant funds.

In November 2024, Metropolitan's Board adopted two resolutions required by Reclamation prior to accepting the LSWRP grant funding to verify that, for Metropolitan's November 2023 and May 2024 applications: (1) the Board reviewed and supported the application; (2) subject to board approval of a grant agreement, the General Manager or his/her designee had the legal authority to enter into that agreement; and (3) the General Manager or

his/her designee will work with the United States Bureau of Reclamation to meet established deadlines for entering into a grant agreement.

As a consequence of the initial notice by Reclamation of its intent to award Metropolitan federal funds, Metropolitan and Reclamation staff have been working since May to address potential grant agreement-related concerns raised by the Board. Those potential concerns are identified below, along with the manner in which they were resolved.

Material Terms and Conditions

The following "standard" terms and conditions are provided for in the proposed agreement with Reclamation:

- **Period of Performance**: The proposed agreement establishes a period of performance that commences on April 6, 2020, which was the date Reclamation approved the feasibility study Metropolitan prepared for the Title VXI WIIN Reclamation and Reuse grant and continues until three years from the effective date of the agreement, unless prior to that date Reclamation agrees to an extension.
- **Scope of Work and Budget**: The proposed agreement includes descriptions of the proposed work, major tasks, and project milestones, as well as related budgets. Metropolitan and the Sanitation District will use the full award grant and associated matching funds to (1) procure a progressive design-build entity to initiate the AWPF design; (2) continue design and initiate pre-construction alternative delivery services for pipeline reaches; (3) pursue potential property acquisition for PWSC facilities; (4) continue design of the centrate treatment facilities; (5) advance ongoing regulatory permitting and public engagement; and (6) continue professional services for program management and other related work.
- **Ability to Acquire Real Property**: The proposed agreement authorizes the use of federal funds for the acquisition of real property, provided the real property is identified in the scope of work.

Reclamation agreed to include a special term that addresses the existing available funding:

- **No Obligation to Use the Full Award Amount**: Through the special term, Reclamation: (1) awards and obligates the full grant award of $125,472,855 for the identified scope of work; (2) authorizes an initial grant award of funds based on existing, secured matching funds for defined tasks within the scope of work; and (3) will make available the remaining grant award if and as Metropolitan demonstrates to Reclamation that Metropolitan has secured additional matching funds.

  The existing, secured matching funds include: (1) approximately $30 million in operations and maintenance (O&M) funds to support environmental phase activities previously authorized by the Board and expended by Metropolitan since April 2020 for fiscal years 2020/21 through 2025/26; (2) approximately $54 million of the state funds previously authorized by Metropolitan's Board in December 2022[1]; (3) approximately $19.5 million in capital funds for design and construction of the DPR pilot/demonstration testing facility previously authorized by Metropolitan's Board in April 2024 for fiscal years 2024/25 through 2025/26; and (4) approximately $28.1 million in other Metropolitan group O&M funds that were/are committed to PWSC planning activities and previously authorized by Metropolitan Board for fiscal years 2020/21 through 2025/26. The Sanitation District will provide approximately $88.4 million in matching funds for the planning and design of pretreatment facilities design for the AWPF. As a result, a total of approximately $131.6 million in Metropolitan board-approved funds and up to $88.4 million contribution by the Sanitation District is expected to be available to support Reclamation's 25 percent reimbursement, which results in approximately $55 million of federal grant

[1] The State provided approximately $80 million. However, approximately $15 million of the $80 million have been designated by Metropolitan as matching funds for the $5 million WaterSMART Water Recycling and Desalination Planning grant previously awarded to Metropolitan in 2023; and approximately $11 million of $80 million will be allocated to the Sanitation District to plan and develop pre-treatment and nitrogen management facilities for the AWPF. As a result, the remaining $54 million of the state funds are available for the LSWRP cost-share match.

funding. The scope of work and corresponding budget are based on federal funds received being reinvested in the planning and design of PWSC.

Although not in the proposed agreement, Reclamation's contracting officer assigned to this grant provided Metropolitan with the following important assurances in writing:

- Confirmed Metropolitan will not have to pay Reclamation back for any of the federal funding, whether used by Metropolitan or any of its consultants or sub-recipients, if at any time the Metropolitan Board decides not to approve the project.
- Understood that Metropolitan intended to use the federal funding to support activities provided for in contracts let through any one of the methods (alternative project delivery) authorized by California Public Contract Code section 20928 et seq.
- Indicated that it is standard practice, if requested by a grant recipient, for Reclamation to extend the period of performance and that denial of such requests is rare.

These assurances are not necessarily binding on Reclamation until they are affirmed after the grant agreement becomes effective, which the contracting officer said she will do. However, staff believes the risk is relatively low since the positions are consistent with the applicable state and federal law, and, as to the proposed extension, common Reclamation practice.

Staff recommends that the Board authorize the General Manager to enter into an agreement with Reclamation to accept the LSWRP grant funds. Staff plans to return to the Board to appropriate federal funds received.

See **Attachment 1** for the location map.

Project Milestone

January 2026 – Request for Board to certify CEQA and approve PWSC

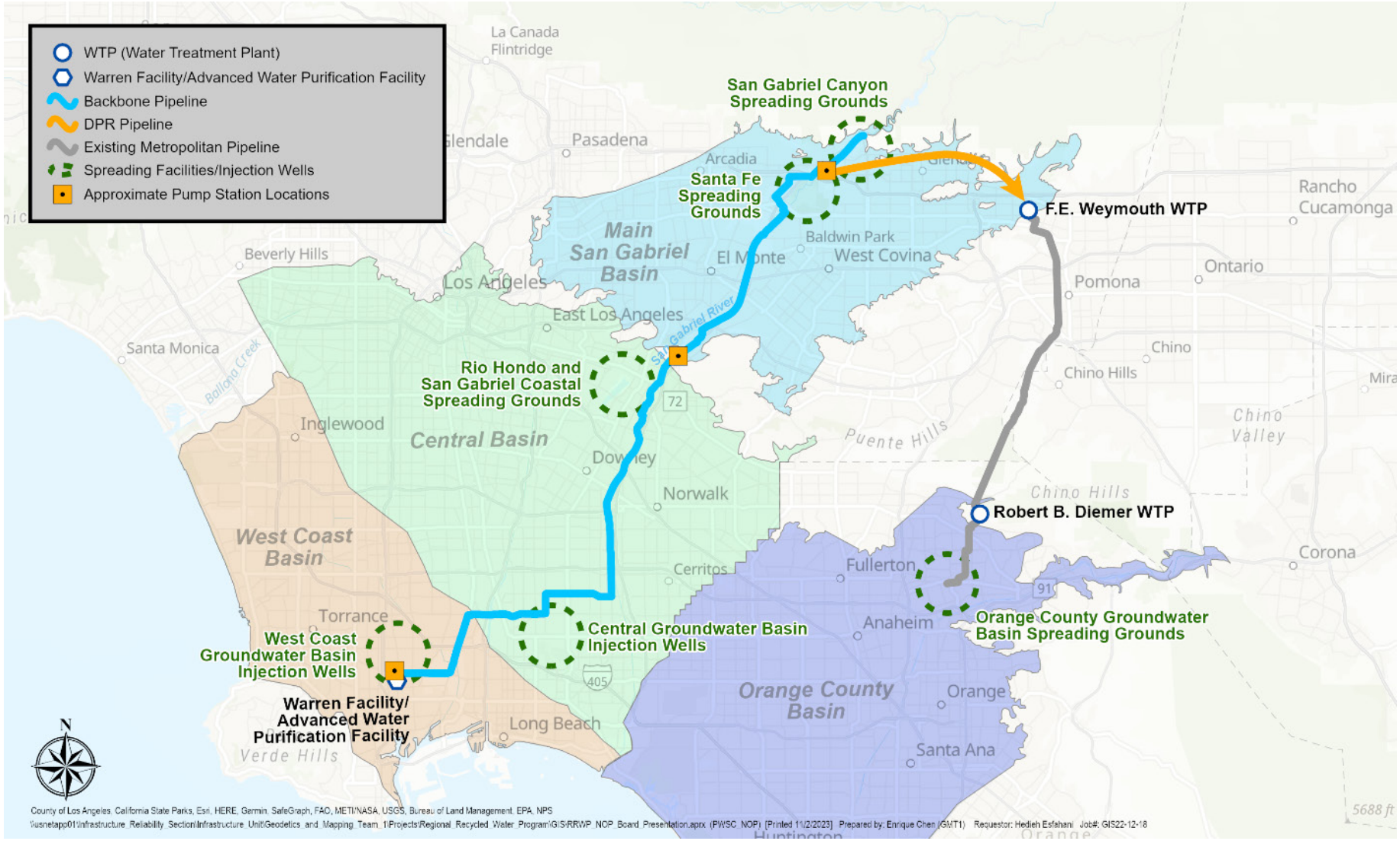
11/27/2024
Mai M. Hattar *Date*
Interim Chief Engineer
Engineering Services

12/3/2024
Deven Upadhyay *Date*
Interim General Manager

Attachment 1 – Location Map

Ref# es12696813

Pure Water Southern California – Preliminary Configuration



Engineering, Operations, & Technology Committee

Federal grant funding agreement with the U.S. Bureau of Reclamation to advance the Pure Water Southern California Program

Item 8-2

December 9, 2024

Item 8-2
PWSC
LSWRP
Grant Funding

Subject

Authorize entering into one or more agreements to accept grant funding from the U.S. Bureau of Reclamation (Reclamation) through Large Scale Water Recycling Program (LSWRP) for Pure Water Southern California Program (PWSC)

Purpose

To advance anticipated planning and design activities for PWSC

Recommendation and Fiscal Impact

Authorize entering into one or more agreements with the United States Bureau of Reclamation

Reimbursable expenditure: up to $125 M

Budgeted

No budget impact at this time

Pure Water Southern California Overview

PWSC
LSWRP
Grant Funding

Grant Funding Opportunity

- Bipartisan Infrastructure Law (P.L. 117-58, § 40905)
  - Enacted November 15, 2021
  - $450 M in funding available in LSWRP
- November 2023 – Applied for LSWRP $125.4 M grant for planning & design
- May 2024 – Reclamation approved Metropolitan's Feasibility Study & issued Notice of Intent to award $99.2 M
- November 2024
  - Reclamation issued Notice of Intent to award $26.2 M in additional funding
  - Board adopted the LSWRP grant resolutions

PWSC
LSWRP
Grant Funding

Agreement Terms and Conditions

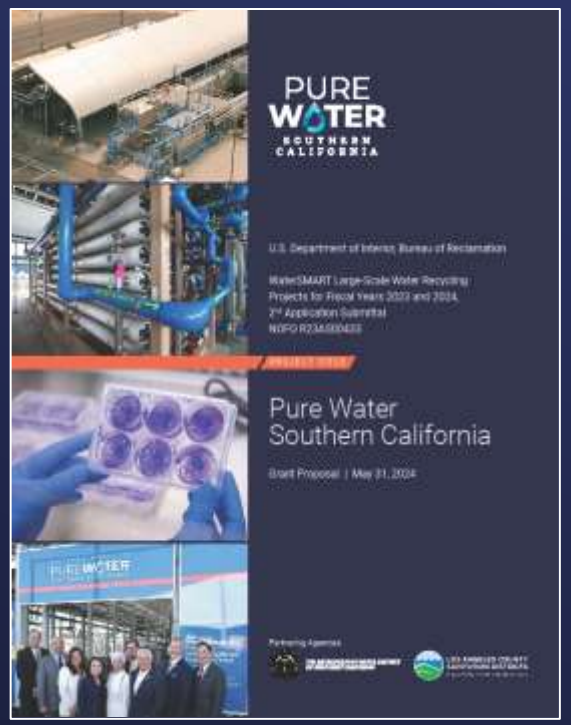
- Coverage period for costs and expenditures
  - Pre-award match - from April 2020
  - End date - three years from agreement execution
- Defined scope of work & budget
- Ability to acquire real property
- Single Reclamation agreement planned for entire $125.4 M award with 3-1 non-federal cost share
- Agreement includes Special Condition
  - Reclamation to award & obligate full amount
  - Initial grant award based on spent & secured matching funds
  - Remaining grant award available with additional future matching funds consistent with program plan
  - No obligation to use full award amount

PWSC
LSWRP
Grant Funding

Practices Consistent with Federal/State Law & Reclamation Common Practices

- Reclamation will not seek “repayment” of grant funding if Metropolitan does not approve PWSC
- Federal funding allowed for alternative delivery methods authorized by California Public Contract Code
- Denial of requests for extensions are rare

PWSC
Scope of Work



Planning & Design Activities

- Procure Membrane BioReactor (MBR) & Advanced Water Treatment (AWT) progressive design-build entities to start AWPF & Workforce Training Center designs
- Continue Sanitation District's design of centrate pre-treatment process
- Perform design of required pipeline reaches
- Procure alternative delivery entities for conveyance
- Evaluate treated water augmentation (TWA) opportunities
- Continue program management & outreach
- Continue demonstration testing & research

PWSC
Grant Funding Sources

Current Funding Sources

- Metropolitan approximate cost-share funds
  - Environmental planning phase - $30 M
  - State funds - $54 M remaining after planning grant
  - DPR Demo Plant capital project - $19.5 M
  - Board approved O&M - $28.1 M
- Sanitation District funds - $88.4 M
- Total available funds - $220 M
- Federal grant funding - $55 M

- To receive remaining grant amount, Metropolitan must secure additional approx. $155 M in cost-share funds

Alternatives Considered

- Defer agreement until after Board approves PWSC
  - Impacts cost, schedule & use of federal grants
- Accept less grant funding
- Selected Alternative – Authorize agreement to accept LSWRP grant funds to accomplish proposed scope-of-work
  - Pursue additional non-federal matching fund opportunities
  - Return to Board in the future to authorize:
    - Appropriations to allow additional expenditures concurrent with the receipt of new matching funds
    - Remaining scope & cost match after approval of EIR & program capitalization

Program Schedule during LSWRP Grant Funding Period

Board Options

- Option #1

  Authorize entering into one or more agreements with the United States Bureau of Reclamation to accept up to $125,472,855 in grant funding through the WaterSMART Large-Scale Water Recycling Program.

- Option #2

  Do not enter into an agreement with the United States Bureau of Reclamation to accept the grant funding.

Staff Recommendation

- Option #1


THE METROPOLITAN WATER DISTRICT OF
SOUTHERN CALIFORNIA

Engineering Services Group

- **Capital Investment Plan Quarterly Report for period ending September 2024**

Summary

The attached report provides a summary of actions and accomplishments on the Capital Investment Plan (CIP) during the first 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 July to September 2024, the first quarter of fiscal year 2024/25, and the first quarter of the fiscal years 2024/25 and 2025/26 biennium.

Beginning the first quarter of the fiscal year 2024/25, the summary data table, which provided the budget vs. cost information by Program and Appropriation, will no longer contain data at the Appropriation level. With the regrouping of the Programs from thirteen Programs to ten Programs for more clarity and efficient administration and reporting of the CIP, reporting at the Appropriation level no longer provides relevant information.

Purpose

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

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

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

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

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

Attachments

Capital Investment Plan quarterly report for period ending September 2024

Date of Report: December 9, 2024

The Metropolitan Water District of Southern California

Capital Investment Plan
Quarterly Report

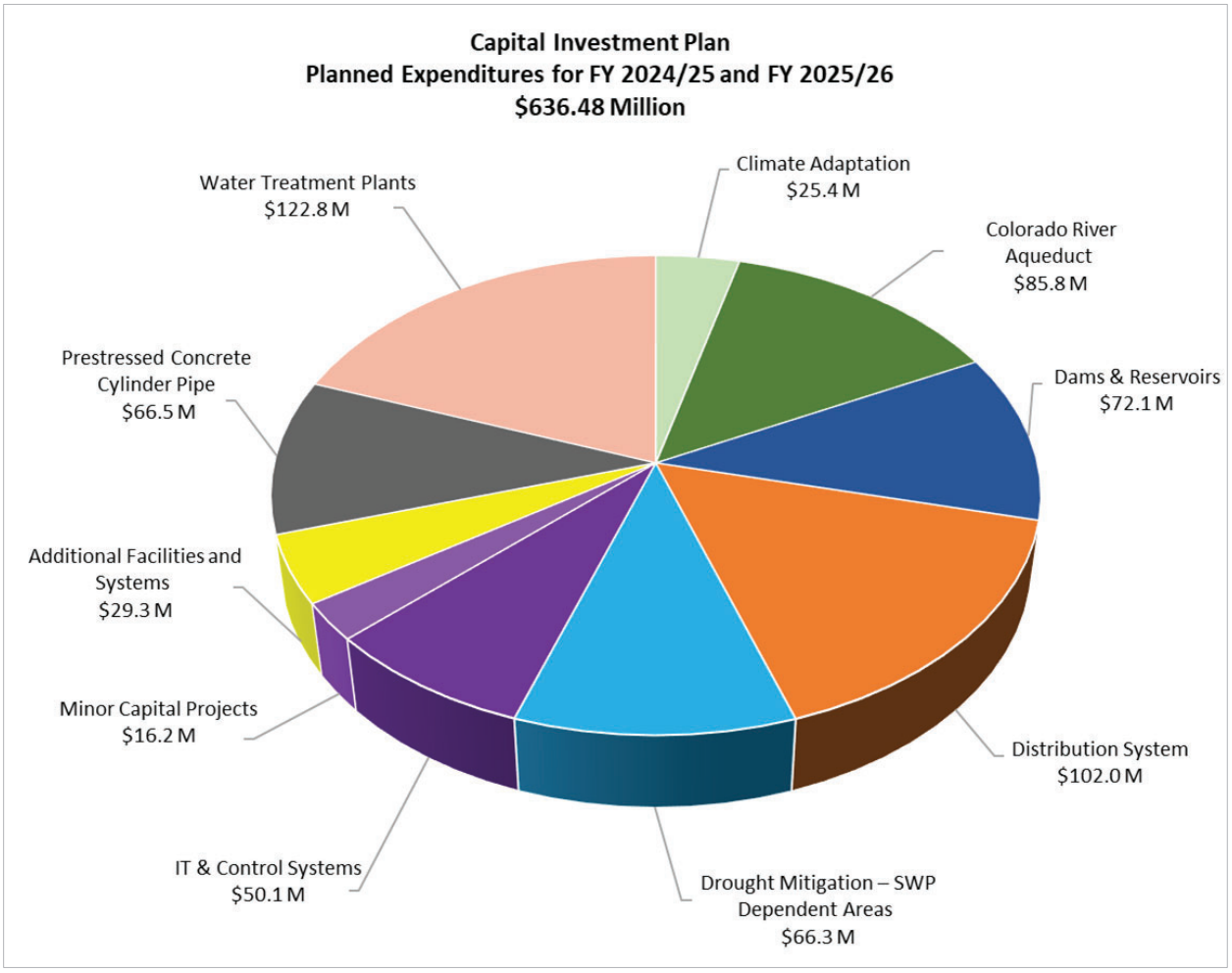
July - September 2024

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* – Placement of surge tank column concrete; *Perris Valley Pipeline I-215 Tunnel Crossing* – Preparation of casing pipe and utilities for boring operations; La Verne Shops Building Completion - Stage 5 – Installation of the new perimeter enclosure for the existing horizontal boring spindle at La Verne Fabrication Shop]

Executive Summary

This report provides a summary of the Capital Investment Plan (CIP) activities and accomplishments during the 1st Quarter of Fiscal Year (FY) 2024/25, which ended in September 2024. CIP expenditures through the 1st Quarter totaled approximately $107.7 million with 47 active procurement and construction contract 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 $384.0 million, leaving approximately $252.5 million available to be allocated during the remainder of the current biennium. Approximately $291.5 million of the $384.0 million was allocated for ongoing work, which was authorized prior to the start of the current biennium.

During the quarter, eleven project-specific board actions were heard in open sessions. Two construction 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 $65.0 million in contract payments were authorized, reflecting construction progress on projects such as Allen-McColloch Pipeline PCCP Urgent Relining – Stage 2, Inland Feeder Badlands Tunnel Surge Protection Facility, Perris Valley Pipeline Interstate 215 Tunnel Crossing, Second Lower Feeder PCCP Rehabilitation – Reach 3, and Weymouth Basins 5-8 & Filter Building No. 2 Rehabilitation.

Staff continues to manage over 500 CIP projects and project spending in this and future budget cycles. Major construction projects that could potentially be started in the next three years include Phase 2 Design Build of the Sepulveda Feeder Pump Station, Lakeview Pipeline Relining – Stage 2, Sepulveda Feeder PCCP Rehabilitation – Reaches 2 and 9, Lake Matthew's 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 1st Quarter, board actions heard in open session included eleven project-specific actions summarized in Table 1 below. These actions awarded two contracts totaling approximately $3.5 million, authorized seven new professional/technical services agreements (including On-Call Agreement) for an amount not-to-exceed approximately $9.2 million, authorized an increase to one existing professional/technical services agreement for an amount not-to-exceed approximately $0.2 million, authorized an increase in change order authority to one existing contract for an amount not-to-exceed approximately $0.8 million, and authorized increases to an existing progressive design-build services agreement for an amount not-to-exceed $40.6 million. The table below excludes information on board items heard in closed session.

Table 1: 1st Quarter Board Actions

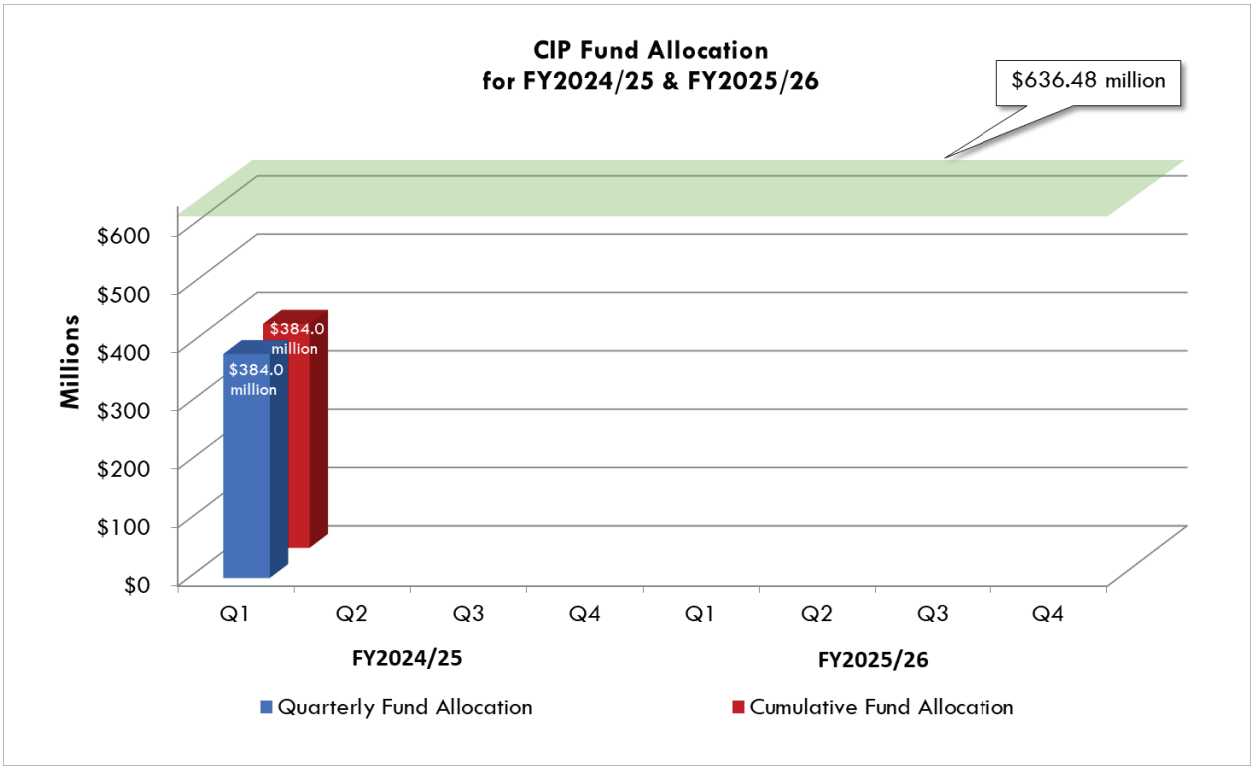
Month	Board Letter Item No.	Project	Action Taken
July	7-1	Rialto Pipeline Rehabilitation at Station 2986+30 and Rehabilitation of Service Connection CB-11	Awarded a $2,197,460 construction contract and authorized an increase of $150,000 to an existing agreement
July	7-2	Enterprise Data Analytics	Authorized an agreement not-to-exceed $1,525,000
July	8-1	Sepulveda Feeder Pump Stations	Authorized an increase of $600,000 to an existing progressive design-build services agreement for purchase of long-lead equipment

Month	Board Letter Item No.	Project	Action Taken
August	7-1	On-call Agreements for Engineering Services	Authorized four on-call agreements not-to-exceed $1,500,000 each
August	7-2	Lake Mathews Pressure Control Structure and Electrical System Upgrades	Authorized an agreement not-to-exceed $1,300,000
August	7-3	Wadsworth Pump Plant Bypass Pipeline	Authorized an increase of $840,000 in change order authority to an existing construction contract
August	7-4	Inland Feeder-Foothill Pump Station Intertie	Adopted a Mitigated Negative Declaration and a resolution to accept $5,000,000 in funding from U.S. Bureau of Reclamation's WaterSMART Drought Response Program
September	7-1	Headquarters HVAC System Rehabilitation	Authorized an agreement not-to-exceed $400,000
September	7-2	West Valley Feeder No. 1 – Stage 3 Improvements	Adopted a Mitigated Negative Declaration
September	7-3	CRA Employee Housing Demolition and Roof Replacement	Awarded a $1,285,000 construction contract
September	8-1	Sepulveda Feeder Pump Stations – Phase 1	Authorized an increase of $40,000,000 to an existing progressive design-build services agreement for purchase of long-lead equipment

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 which are not already identified in the CIP Appendix, require a separate board authorization. During the 1st 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 total for the current biennium through the quarter, which is approximately $384.0 million, leaving approximately $252.5 million to be allocated during the remainder of the current biennium. This amount includes allocation of $10 million to the Minor Capital Projects Program. During the 1st quarter, approximately $80.6 million was allocated for new work authorized, approximately $1.8 million was reallocated for work previously authorized, and approximately $291.5 million was allocated for the ongoing work, which was authorized prior to the start of the current biennium. 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 1st Quarter of FY 2024/25 is presented in the **Construction and Procurement Contracts** section of this report. Progress payments for these contracts in the 1st Quarter totaled approximately $65.0 million and primarily reflect construction progress on Allen-McColloch Pipeline PCCP Urgent Relining – Stage 2, Colorado River Aqueduct (CRA) Conveyance System Level Sensor Installation, Foothill Hydroelectric Power Plant Seismic Upgrade, Hinds, Eagle Mountain, and Iron Mountain Pumping Plants Storage Buildings, Inland Feeder Badlands Tunnel Surge Protection Facility, Inland Feeder/Rialto Pipeline Intertie, Jensen and Skinner Water Treatment Plants Battery Energy Storage Systems, Perris Valley Pipeline Interstate 215 Tunnel Crossing, Second Lower Feeder PCCP Rehabilitation – Reach 3B, Wadsworth Pumping Plant Bypass Pipeline, Weymouth Water Treatment Plant Asphalt Pavement Rehabilitation, and Weymouth Basins 5-8 & Filter Building No. 2 Rehabilitation.

Planned Expenditure and Budget

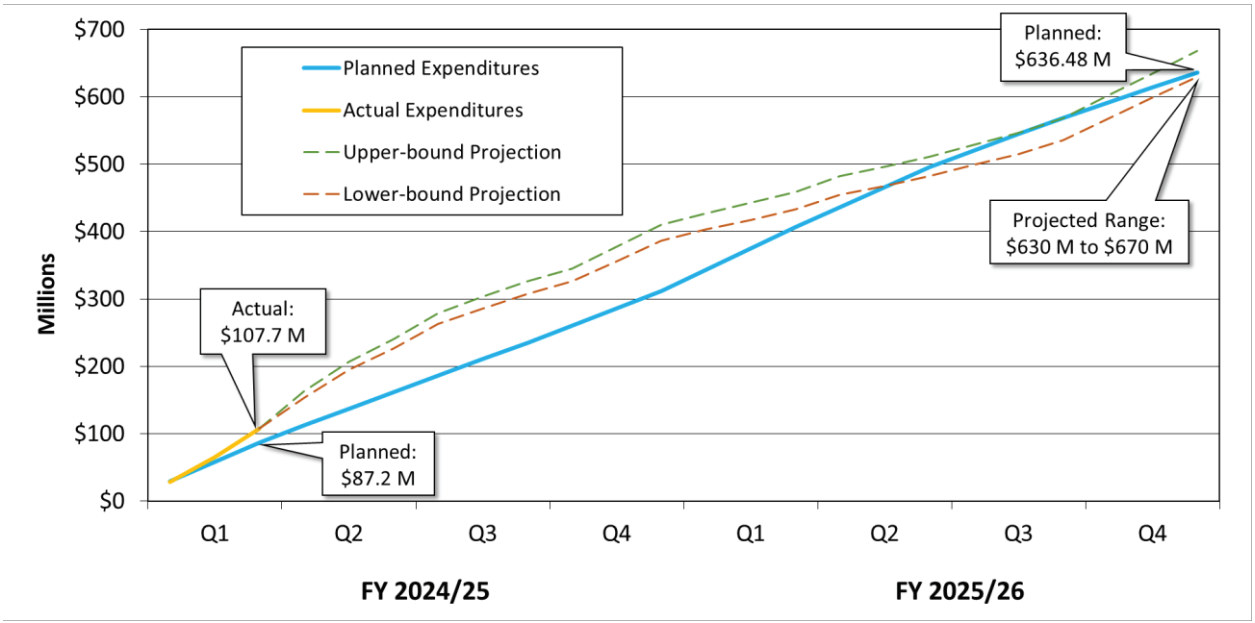
Table 2 and Figure 3 below show planned and actual expenditures for the biennium through the end of the 1st Quarter of FY 2024/25, and the forecast of expenditures through the end of the current biennium, against planned expenditures for the same time interval. Actual expenditures through the 1st Quarter of FY 2024/25 were 123.5% 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
Totals*	**$87.2**	**$107.7**

* Numbers may not sum due to rounding.

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 $670 million with the actual expenditures 23.5% higher than the planned expenditures during the 1st 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 has 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 considered 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, Los Angeles County Sanitation Districts (LACSD), Southern Nevada Water Authority (SNWA), and planning to discuss with the Arizona Department of Water Resources to determine their potential contributions to the program. LACSD has agreed to be responsible for the implementation of the pretreatment and nitrogen management facilities which includes the membrane bioreactor (MBR).

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. Metropolitan would share the LSWRP grant with LACSD who would provide their share of the matching funds. Authorization to accept the grant award and approval of the LACSD agreement amendment will be brought to the Board later this year.

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 so that it will be more resilient and flexible to respond to fluctuating water supplies from each of its imported water sources and to enhance the ability to convey water throughout all its service area. Under this grant, staff will be required to submit invoices to DWR in order to receive reimbursement of expenditures that comply with the grant requirements. To date, three projects on the east side of Metropolitan's system are covered under this grant, and each of the three projects is in construction as part of an overall plan to connect Diamond Valley Lake (DVL) supplies to the Rialto Pipeline. During the reporting quarter, a progress report and invoices through June 2024 were submitted and approved by DWR for $5.6 million. As of September 2024, a total of $17.2 million 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 that are 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 is compiling information to prepare a National Environmental Policy Act (NEPA) document prior to initiating permit consultation process and is 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 $10.3 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 $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. Unlike the funds received for Pure Water discussed above, under this grant, staff will be required to submit invoices to Delta Conservancy to receive reimbursement of expenditures that comply with the grant requirements. During the reporting quarter, the RFP solicitation to find a farming partner to convert the existing agricultural lands to rice farming closed. Staff is currently in negotiations with a farming partner. Metropolitan Board action to award a farming lease agreement is expected in the winter of 2024. Wetland design is ongoing with preliminary design expected to be completed during the next quarter. Final design and permitting of the wetlands are estimated to be completed in the summer of 2025, and construction is estimated to start at the end of the same year.

Major Capital Programs Overview

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

- Program
- Project Group/Appropriation
- Project

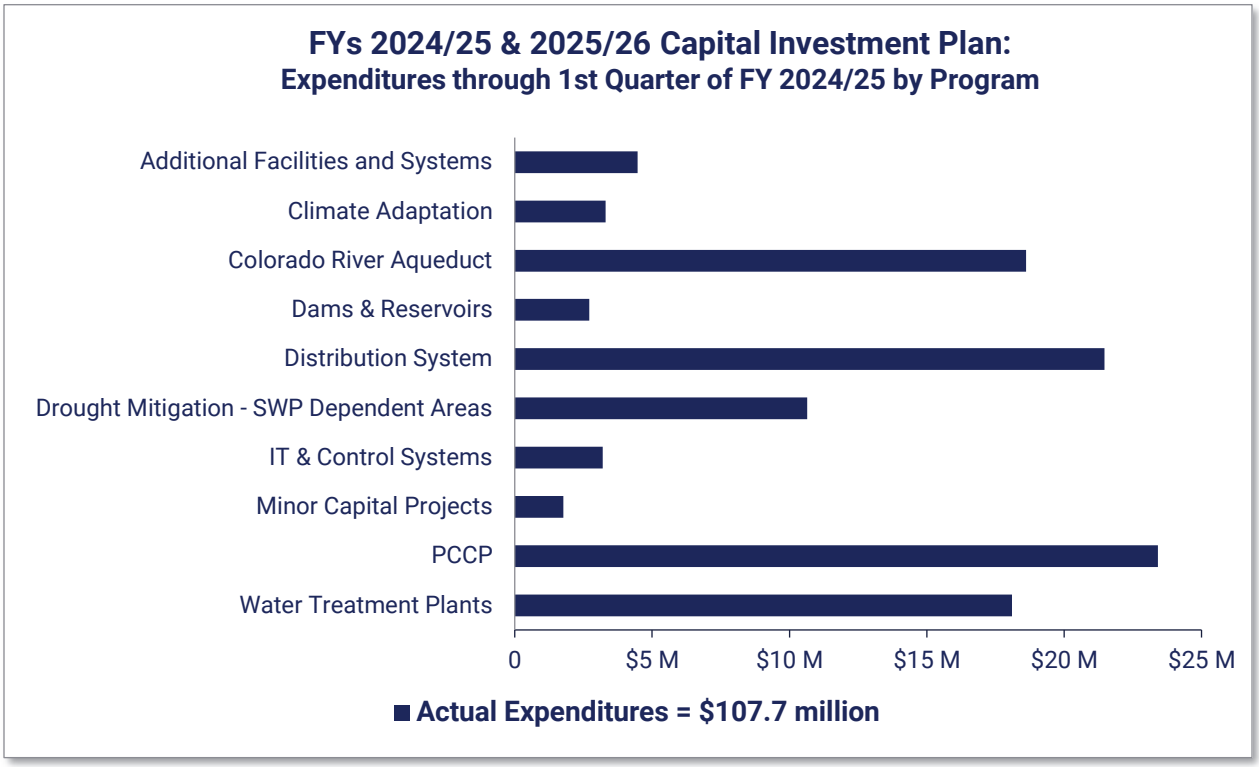
Metropolitan's CIP is comprised of 10 programs, which capture all projects within the CIP. The 10 capital programs are listed below in alphabetical order. Programs are comprised of one or more project groups/appropriations, and project group/appropriations are comprised of one or more projects. The status of each of the programs is provided later in this section of the report. A comparison of the program budget and actual costs to date for each of the programs is provided in Table 15 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 1st Quarter of FY 2024/25.

Figure 4: Biennium-to-date Actual Expenditures through 1st Quarter FY 2024/25



Major Capital Project Programs – Highlights

This section provides 1st 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 1st 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	Headquarters Building Physical Security Improvements - Stage 3
Climate Adaptation	Zero Emission Fleet Pilot Infrastructure – Stage 1
Colorado River Aqueduct (CRA)	CRA Domestic Water Treatment System Replacement
Dams & Reservoirs	Garvey Reservoir Rehabilitation – Stage 1
Distribution System	Perris Valley Pipeline I-215 Tunnel Crossing
Drought Mitigation - SWP Dependent Areas	Badlands Tunnel Surge Protection Facility
Information Technology (IT) & Control Systems	Asset Monitoring and Management System
Prestressed Concrete Cylinder Pipe (PCCP)	Allen-McColloch Pipeline PCCP Urgent Relining – Stages 1 & 2
Water Treatment Plants	Weymouth Basins Nos. 5-8 and Filter Building No. 2 Rehabilitation

Additional Facilities and Systems Program

Actual Biennium Expenditures (Jul. 2024 through Sep. 2024) $4.48 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 (1st Quarter)

Accomplishments

- Completed construction for the following project:
  - Headquarters Video Room Upgrades
- Continued construction for the following contracts:
  - Diamond Valley Lake Floating Wave Attenuator System Improvements – Stage 2
  - Headquarters Building Physical Security Improvements – Stage 3
  - La Verne Shops Upgrades – Building Completion – Stage 5
- Continued final design for the following project:
  - 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
- Continued preliminary design for the following projects:
  - CRA Kitchen and Lodging Improvements
  - Employee Village Enhancements
- Initiated preliminary design for the following project:
  - CRA Aircraft Facility Improvements – Stage 1
- Completed planning study for the following projects:
  - Desert Housing Improvements
  - La Verne Shops Upgrades – Stage 6
- La Verne Water Quality Laboratory Building Upgrades
  - Continued preliminary design and procurement of laboratory equipment

Upcoming Activities

Upcoming work for the next quarter will include:

- Complete construction contract for the following project:
  - Headquarters Building Physical Security Improvements – Stage 3
- Continue construction for the following projects:

  - Headquarters Fire Alarm & Smoke Control Upgrades
  - Diamond Valley Lake Floating Wave Attenuator System Improvements – Stage 2
  - La Verne Shops Upgrades – Building Completion – Stage 5
- 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
- Continue preliminary design for the following project:
  - CRA Aircraft Facility Improvements – Stage 1
- CRA Kitchen and Lodging Improvements, Desert Housing Improvements, and Employee Village Enhancements
  - Board action to update the scope of the consulting agreement
- Headquarters Fire Alarm/Smoke Control Upgrades
  - Obtain final sign-off by fire department
- La Verne Water Quality Laboratory Building Upgrades
  - Continue preliminary design and procurement of laboratory equipment

Headquarters Building Physical Security Improvements – Stage 3

Total Project Estimate:
$5.1 million

Total Project Cost to Date:
$3.9 million

This project will enhance perimeter security along the exterior of the Headquarters building and courtyard. The work consists of installing security fencing and gates, bollards, paving, security cameras, and speaker horns. The security equipment will be integrated with the existing security software.

Phase	Construction
% Complete for Construction	90%
Construction Contract Award Date	December 2022
Estimated Construction Contract Completion Date	December 2024
Contract Number	2003

The contractor completed slurry seal and striping on New Avila Street and installation of fences, gates, and bollards. In the upcoming quarter, the contractor will complete warranty and punch-list items.

Completed courtyard fencing at Headquarters Building

Climate Adaptation Program

Actual Biennium Expenditures (Jul. 2024 through Sep. 2024) $3.31 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 (1st 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
- Battery Energy Storage Systems at Jensen, Weymouth, and Skinner Plants
  - Continued construction at all three facilities
- Direct Potable Reuse Demonstration Facility
  - Continued development of site improvement plans to support DPR testing
- Zero Emission Vehicle (ZEV) Infrastructure Upgrade projects:
  - Districtwide Zero Emission Fleet Infrastructure
    - Completed headquarters building ZEV utility coordination, infrastructure upgrades study report, and establishing maximum EV loads for the remaining sites
  - Zero Emission Fleet Pilot Infrastructure – Stage 1
    - Completed installation of 2 pilot charging stations at the Weymouth plant

Upcoming Activities

Upcoming work for the next quarter will include:

- Advanced Water Treatment Demonstration Facility
  - Continue tertiary MBR optimization testing to support the planning and design of a full-scale advanced water purification facility
  - Initiate preparation of improvement plans to address long-term site security
- Battery Energy Storage Systems at Jensen, Weymouth, and Skinner Plants
  - Continue construction at all three facilities
- Direct Potable Reuse Demonstration Facility
  - Initiate preparation of procurement packages for DPR pilot testing equipment
  - Initiate preparation of a conceptual design report for DPR pilot system
  - Continue with site improvement planning effort to support DPR pilot testing
- Zero Emission Vehicle (ZEV) Infrastructure Upgrade projects:
  - Districtwide Zero Emission Fleet Infrastructure
    - Complete the enhanced programmatic planning and study document
  - Headquarters Building Zero Emission Vehicle Infrastructure Upgrades – Stage 1
    - Initiate final design

- Zero Emission Fleet Pilot Infrastructure – Stage 1
  - Continue pilot charging station installation at the headquarters building
  - Begin testing, commissioning, and integration of pilot chargers installed at the headquarters building and Weymouth plant
- Zero Emission Fleet Pilot Infrastructure – Stage 2
  - Initiate design and installation of initial batch of charging stations at 14 sites

Zero Emission Fleet Pilot Infrastructure - Stage 1

Total Project Estimate:
$0.2 million

Total Project Cost to Date:
$0.1 million

This project will design and install four pilot chargers at two district facilities to test the chargers and obtain user feedback to develop an efficient plan to deploy chargers across the district. Activities include testing software to meet mandated Zero Emission (ZE) and Near-Zero Emission (NZE) state and local regulations and comply with California Environmental Quality Act (CEQA) Greenhouse Gas (GHG) reductions identified in Metropolitan's Climate Action Plan (CAP).

Phase	Design and MetForce Construction
% Complete for Current Phase	50%
Current Phase Authorized	November 2023
Estimated Project Completion Date	December 2024

Completed procurement of electric vehicle (EV) chargers, continued design of the charger installation drawings, and continued working with the local cities to obtain permits. In the upcoming quarter, EV charger installation, inspection, and commissioning will be performed by Metropolitan Forces.

Level 3 EV charger (left) and Level 2 EV chargers (right) at Weymouth Water Treatment Plant

Colorado River Aqueduct (CRA) Program

Actual Biennium Expenditures (Jul. 2024 through Sep. 2024) $18.62 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 (1st Quarter)

Accomplishments

- Completed construction for the following projects:
  - CRA Conduit Structural Protection
- Continued construction activities for the following contracts:
  - CRA Conveyance System Flow Level Sensor Installation
  - CRA Domestic Water Treatment System Upgrades at all five pumping plants
  - Gene Communication System Upgrades
  - Gene Pumping Plant Pilot Security Improvements
  - Hinds, Eagle Mountain, and Iron Mountain Pumping Plants Storage Buildings
- Continued equipment procurement of the following project:
  - Gene Pumping Plant Unit No. 1 Brushless Motor Exciter System
- Initiated procurement of the following project:
  - Intake and Gene Pumping Plants Transformer Bushings and Pressure Device Replacements
- 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
- Initiated final design of the following project:
  - Copper Basin Sodium Hypochlorite Tank Replacement
- Continued preliminary design of the following projects:
  - CRA Desert Region Security Improvements – Stage 2
  - Hinds Pumping Plant Discharge Valve Platform Replacement
  - Iron Mountain Tunnel Rehabilitation
- Initiated preliminary design of the following projects:
  - CRA 230kV Transmission Tower Barrier Improvements
  - CRA Pumping Plant Delivery Lines Rehabilitation
- CRA 230 kV Transmission Line Rehabilitation and Improvements
  - Initiated 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 contracts:
  - CRA Conveyance System Flow Level Sensor Installation
  - CRA Domestic Water Treatment System Upgrades at all five CRA pumping plants
  - Gene Communication Reliability Upgrades
  - Gene Pumping Plant Pilot Security Improvements
  - Hinds, Eagle Mountain, and Iron Mountain Pumping Plants Storage Buildings
- 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
  - Copper Basin Sodium Hypochlorite Tank Replacement
  - 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

CRA Domestic Water Treatment System Replacement

Total Project Estimate:
$52.6 million

Total Project Cost to Date:
$24.6 million

This project will upgrade the domestic water treatment systems at the five Colorado River Aqueduct pumping plants.

Phase	Construction
% Complete for Construction	42%
Construction Contract Award Date	December 2021
Estimated Construction Completion Date	March 2025
Contract Number	1949

Spare unit water treatment skid was fabricated and delivered to Intake Pumping Plant. The contractor continued installation of electrical conduits and pull boxes at Eagle Mountain Pumping Plant. In the upcoming quarter, the contractor will complete installation and commissioning of a spare unit water treatment skid at Intake Pumping Plant. The contractor will continue installation of electrical conduits and pull boxes at Hinds Pumping Plant.

Spare unit water treatment skid at Intake Pumping Plant

Dams and Reservoirs Program

Actual Biennium Expenditures (Jul. 2024 through Sep. 2024) $2.71 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 (1st Quarter)

Accomplishments

- Diamond Valley Lake Dam Monitoring System Upgrades
  - Completed final design of the new system
- Garvey Reservoir Dam Monitoring System Upgrades
  - Continued new system testing and commissioning
- Garvey Reservoir Rehabilitation
  - Concluded public review of Draft Environmental Impact Report (EIR) and completed final EIR
  - Continued final design
- Lake Skinner Outlet Tower Butterfly Valve Replacement
  - Continued valve fabrication
- Lake Skinner Outlet Tower Seismic Upgrade
  - Continued detailed seismic evaluation of the outlet tower
- Lake Skinner Dam V-Ditch Replacement
  - Completed final design and advertised construction contract

Upcoming Activities

Upcoming work for the next quarter will include:

- Garvey Reservoir Dam Monitoring System Upgrades
  - Complete testing of the new system and develop an O&M manual
- Garvey Reservoir Rehabilitation
  - Certify the final EIR
  - Continue final design
- Lake Skinner Outlet Tower Butterfly Valve Replacement
  - Continue valve fabrication
- Lake Skinner Outlet Tower Seismic Upgrade
  - Continue detailed seismic evaluation of the outlet tower
- Lake Skinner Dam V-Ditch Replacement
  - Award construction contract

Garvey Reservoir Rehabilitation – Stage 1

Total Project Estimate:
$75.0 million

Total Project Cost to Date:
$6.2 million

This project will replace the aging reservoir floating cover and liner and refurbish the inlet/outlet tower at the Garvey Reservoir site.

Phase	Final Design
% Complete for Current Phase	48%
Current Phase Authorized	May 2023
Estimated Completion Date of Current Phase	September 2025

The final EIR was completed. In the upcoming quarter, it will be presented to the Board for certification. The design consultant will continue preparing the final design package and submit it for review.

View of the existing Garvey Reservoir floating cover

Distribution System Program

Actual Biennium Expenditures (Jul. 2024 through Sep. 2024) $21.47 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 (1st Quarter)

Accomplishments

- Continued construction for the following construction contracts:
  - Foothill Hydroelectric Power Plant Seismic Upgrade
  - OC-88 Pump Station Chiller Replacement
  - Perris Valley Pipeline I-215 Tunnel Crossing – completed the final tunnel segment
  - Santa Monica Feeder Cathodic Protection
- Awarded the following construction contract:
  - Rialto Pipeline Rehabilitation at Station 2986+30
- Completed design of the following projects:
  - Auld Valley and Red Mountain Pressure Control Structures Upgrades – Red Mountain Sleeve Valve Procurement
  - San Diego Canal Concrete Liner Replacement – Site 236

Upcoming Activities

Upcoming work for the next quarter will include:

- Complete construction of the following construction contract:
  - Foothill Hydroelectric Power Plant Seismic Upgrade
- Continue construction activities planned for the following projects:
  - OC-88 Pump Station Chiller Replacement
  - 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
  - Santa Monica Feeder Cathodic Protection
- Award contracts for the following projects:
  - Auld Valley and Red Mountain Pressure Control Structures Upgrades – Red Mountain Sleeve Valve Procurement
  - San Diego Canal Concrete Liner Replacement – Site 236
- Continue design for the following projects:
  - Auld Valley and Red Mountain Pressure Control Structures Upgrades
  - Hollywood Tunnel North Portal
  - Los Angeles County Region Right of Way Infrastructure Protection – Stage 1
  - Riverside and San Diego County Region Right of Way Infrastructure Protection – Stage 1
- Continue procurement for the following projects:
  - Foothill Feeder Blow Off Valves Replacement
  - Lakeview Pipeline Relining – Stage 2
  - Orange County Area Pressure Control Structure Globe Valve Replacement
  - Rialto Pipeline Rehabilitation at Station 2986+30
  - San Jacinto Diversion Structure Slide Gates V-01, V-02, V-03, and V-04 Rehabilitation

Perris Valley Pipeline I-215 Tunnel Crossing

Total Project Estimate:
$79.3 million

Total Project Cost to Date:
$70.4 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	90%
Construction Contract Award Date	January 2023
Estimated Construction Completion Date	April 2025
Contract Number	1928

The contractor completed the tunnel reach under I-215 freeway, installed the carrier pipe in the tunnel reaches, and completed the connection at Shaft No. 4 to the southern reach of Perris Valley Pipeline. In the upcoming quarter, the contractor will complete the connection to the northern reach of the Perris Valley Pipeline.

Secant pile shaft during installation of 120-inch diameter casing at Shaft No. 1 to the northern tie-in of Perris Valley Pipeline

Drought Mitigation - SWP Dependent Areas Program

Actual Biennium Expenditures (Jul. 2024 through Sep. 2024) $10.64 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 (1st Quarter)

Accomplishments

- Badlands Tunnel Surge Protection Facility
  - Continued concrete placement for valve vault structure and surge tank foundation
- Inland Feeder/Rialto Pipeline Intertie
  - Continued concrete placement for valve vault structure
- Inland Feeder/San Bernardino Valley Municipal Water District (SBVMWD) Foothill Pump Station Intertie
  - Continued final design, right-of-way acquisition, CEQA, and permitting activities
  - Continued procurement of two 54-inch diameter butterfly valves
- Sepulveda Feeder Pump Stations
  - Continued Phase 1 design under a progressive design-build services agreement
  - Received board authorization for early procurement of long-lead equipment
- 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: Continue valve vault and surge tank foundation construction
  - Inland Feeder/Rialto Pipeline Intertie: Continue valve vault construction
  - 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 installation of electrical components
- Sepulveda Feeder Pump Stations
  - Complete Phase 1 progressive design-build and start negotiation for a Guaranteed Maximum Price (GMP) to complete Phase 2
  - Continue procurement of long-lead equipment

Badlands Tunnel Surge Protection Facility

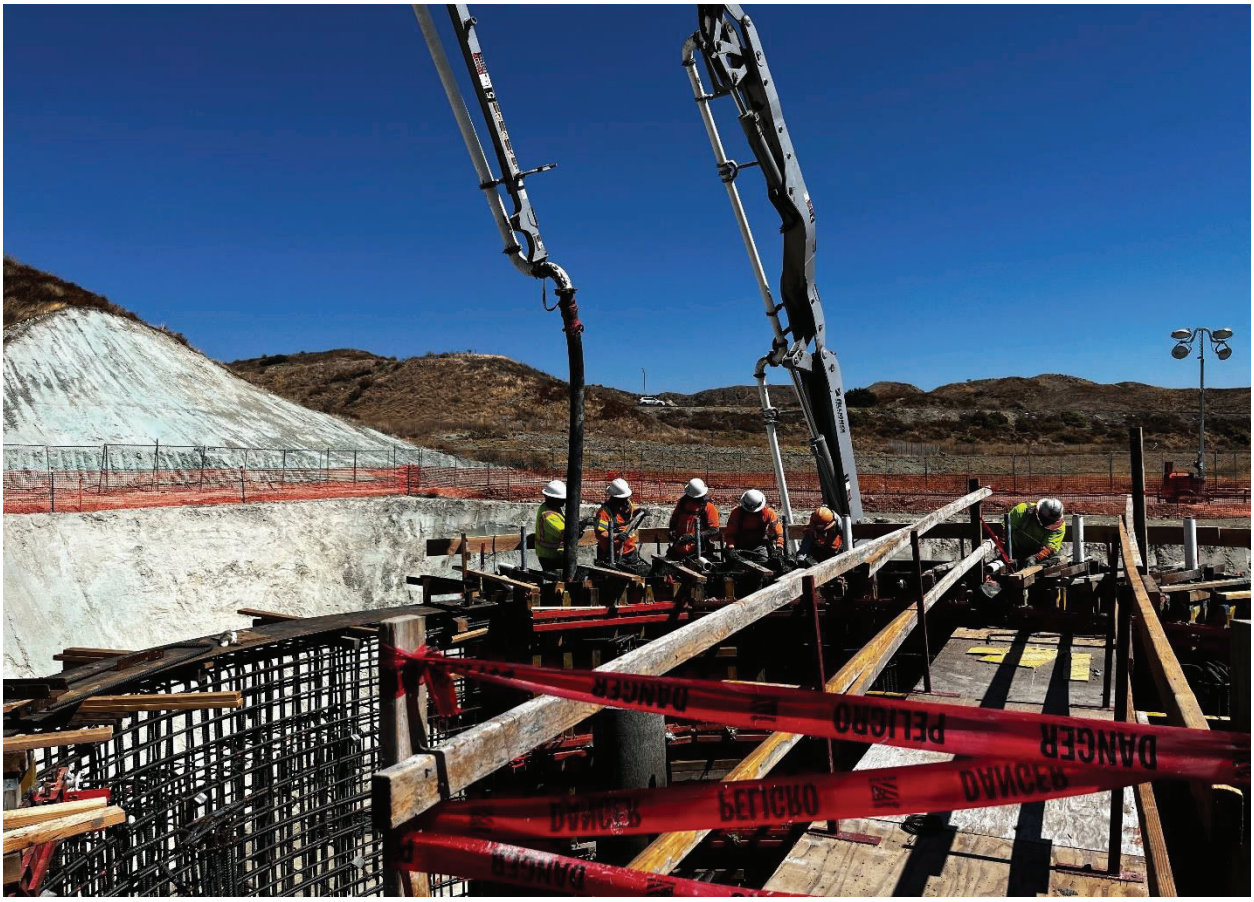
Total Project Estimate:
$23.8 million

Total Project Cost to Date:
$14.7 million

This project will construct an above-grade surge tank to protect the Badlands Tunnel on the Inland Feeder from excessive negative pressures, which could occur when the pumps at the Wadsworth Pumping Plant trip offline during Diamond Valley Lake to Inland Feeder pumping operation. This project is part of the Rialto Pipeline Water Supply Reliability Improvements, a series of drought resiliency projects.

Phase	Construction
% Complete for Construction	36%
Construction Contract Award Date	November 2023
Estimated Construction Completion Date	June 2025
Contract Number	2040

The contractor completed two out of the four wall panels of the vault structure and concrete formwork for the surge tank foundation. In the upcoming quarter, the contractor will complete the remaining vault structure, surge tank foundation, installation of an 84-inch butterfly valve, and pressure testing.



Contractor placing concrete for the surge tank wall

Information Technology and Control Systems Program

Actual Biennium Expenditures (Jul. 2024 through Sep. 2024) $3.20 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 (1st Quarter)

Accomplishments

- Control System Upgrade – Phase 4
  - Began potholing for spare conduit ductbank
- Enterprise Content Management Phase II
  - Continued design
- Headquarters Network Switch Replacement
  - Continued equipment installation
- Oracle Database Upgrade
  - Continued execution of the migration plan
- Real Property Group Business System Replacement
  - Completed Accounts Payable portion of financial integration testing
  - Completed development of several reports
- Security Operations Center MWD Cyber Security Upgrade – Stage 1
  - Tested initial monitoring capabilities
- WiFi Implementation
  - Received initial design for San Bernardino Region sites

Upcoming Activities

Upcoming work for the next quarter will include:

- Desert Microwave Site Tower Upgrades
  - Advertise an equipment installation contract
- Headquarters Network Switch Replacement
  - Continue equipment installation
- Oracle Database Upgrade
  - Continue database migration
- Enterprise Data Analytics
  - Execute an agreement with selected vendor and begin define and design phases
- Real Property Group Business System Replacement
  - Continue Accounts Receivable financial system integration testing
  - Schedule User Acceptance Testing (UAT)
- Redesign IntraMet
  - Advertise Request for Proposal (RFP)
- 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
    - Advertise a construction bid package for Headquarters
- WINS Water Billing System Upgrade
    - Continue system upgrade

Asset Monitoring and Management System

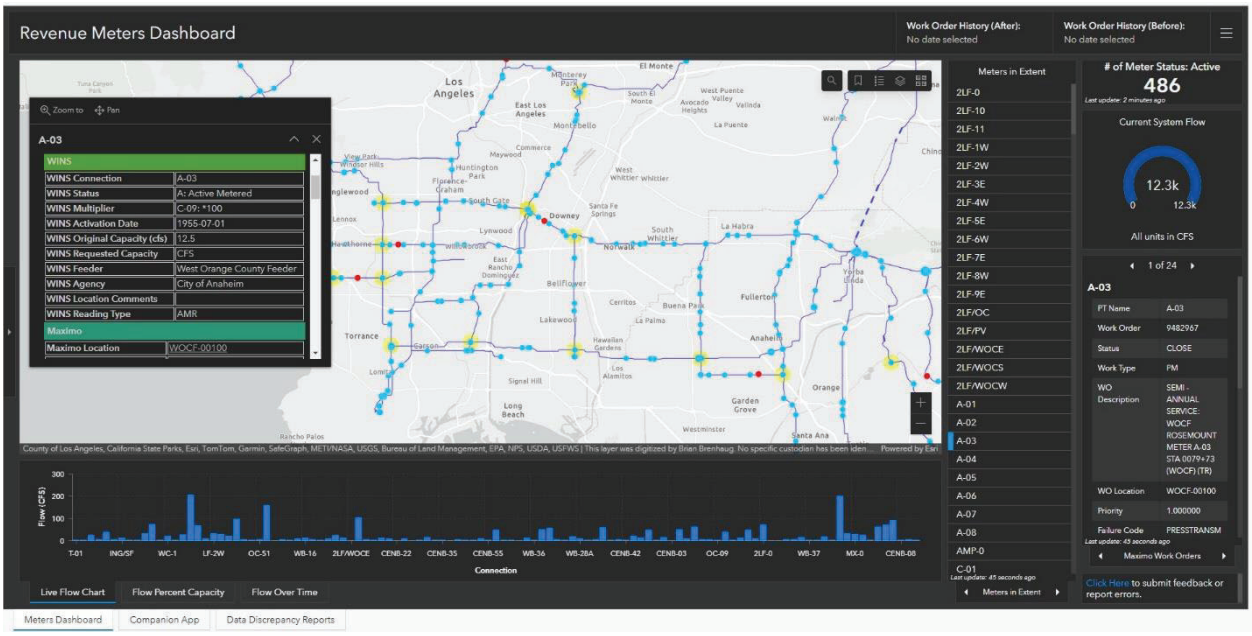
Total Project Estimate:
$0.5 million

Total Project Cost to Date:
$0.4 million

This project will establish the foundation for leveraging data already maintained by Metropolitan (under multiple different software platforms) into a common framework to efficiently conduct future infrastructure reliability projects and assessments across Metropolitan.

Phase	IT Development
% Complete for Current Phase	88%
Current Phase Authorized	March 2019
Estimated Completion Date of Current Phase	November 2024

The user acceptance test scenarios were prepared. In the upcoming quarter, user acceptance testing will begin.



Asset Monitoring and Management System Dashboard

Prestressed Concrete Cylinder Pipe (PCCP) Program

Actual Biennium Expenditures (Jul. 2024 through Sep. 2024) $23.41 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 (1st Quarter)

Accomplishments

- PCCP Rehabilitation Valve and Equipment Storage Building
  - Completed construction
- Second Lower Feeder
  - Reach 3B – Began preparation for the second of two planned shutdowns. Work completed to date includes installation of approximately 2.4 miles of steel pipe liners, rehabilitation of ten access structures, and replacement of two service connection valves. This project will 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.
  - Isolation Valve Procurement – Received two 54-inch valves and continued fabrication and inspection of one remaining 54-inch valve. To date, Metropolitan has received twelve of thirteen large-diameter conical plug valves and actuators, including three 48-inch and nine 54-inch 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.
  - 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. The west side pump stations project has prompted a re-prioritization of this northern section.
  - Reach 9 – Began 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.
- Allen-McColloch Pipeline Urgent Relining
  - Stage 1 – Completed relining a remaining 2,300 feet of PCCP with new steel liner.
  - Stage 2 – Completed relining approximately 6,800 feet of PCCP with new steel liner and began relining the remaining portion of approximately 12,700 feet of PCCP pipeline.

Upcoming Activities

Upcoming work for the next quarter will include:

- Second Lower Feeder
  - Reach 3B – Initiate work related to the second shutdown including utility relocations, installation of temporary traffic controls, excavations, and commencement of pipe relining work. The shutdown is scheduled to start in December 2024 and end in April 2025.
  - Isolation Valve Procurement – Complete fabrication of one remaining valve
- Sepulveda Feeder
  - Reach 1 – Continue final design
  - Reach 2 – Continue final design and permitting process
  - 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 installation of mortar liner for the 2,300 feet of newly installed steel liner in the previous quarter
  - Stage 2 - Complete rehabilitation of the remaining approximately 5,900 feet of PCCP

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

Total Project Estimate:
$67.0 million

Total Project Cost to Date:
$30.6 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 service connection 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 and 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	80%
% Complete for Construction for Stage 2	50%
Change Order Authority Authorized for Stage 1	February 2024
Construction Contract Awarded for Stage 2	May 2024
Estimated Construction Completion Date for Stage 1	October 2024
Estimated Construction Completion Date for Stage 2	February 2025
Construction Contract Numbers for Stage 1[1]	2026, 2088
Construction Contract Number for Stage 2	2108

Relining work for Stage 1 and 85 percent of the mortar lining work were completed. For Stage 2, the contractor mobilized and completed traffic control set-up. All residents along the alignment were notified of the construction to Los Alisos Homeowners Association (Site 1296) was delivered. Approximately 90% of steel liner installation was completed at four sites, and portal development at three sites continued. In the upcoming quarter, the contractor will continue relining and complete pipe access excavations for Stage 2. Steel liner will continue to be delivered to the construction sites and an agreement to share paving costs with El Toro Water District will be executed.

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

Welding pipe connection for AMP, Stage 1

Water Treatment Plants Program

Actual Biennium Expenditures (Jul. 2024 through Sep. 2024) $18.10 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 (1st Quarter)

Accomplishments

- Completed startup and testing of the following project:
  - Jensen Ozone PSU Replacement – Stage 1
- Continued construction for the following projects:
  - Diemer Power and Distribution Panel Upgrade
  - 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 project:
  - Diemer Filter Rehabilitation
  - Weymouth Administration Building Upgrades
- Continued preliminary design of the following projects:
  - Diemer Washwater Reclamation Plant Improvements & Slope Stabilization
  - Jensen Bromate Control Upgrades
  - Jensen Finished Water Reservoir Rehabilitation
  - 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 Finished Water Reservoir Rehabilitation
  - Mills Perimeter Security & Erosion Control Improvements
  -

Upcoming Activities

Upcoming work for the next quarter will include:

- Complete construction of the following project:
  - Diemer Power and Distribution Panel Upgrades
- Continue construction of 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
- 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 Finished Water Reservoir Rehabilitation
  - 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 Finished Water Reservoir Rehabilitation
  - Mills Perimeter Security & Erosion Control Improvements

Weymouth Basins Nos. 5-8 and Filter Building No. 2 Rehabilitation

Total Project Estimate:
$117.0 million

Total Project Cost to Date:
$91.2 million

This project will rehabilitate and replace the Weymouth Water Treatment Plant's Basins 5-8 major mechanical equipment, structural components, and auxiliary systems, along with seismic upgrades to the Basins Nos. 1-8 inlet channels and needed improvements, including replacement of basin inlet gates for Basins 1-8.

Phase	Construction
% Complete for Construction	70%
Construction Contract Award Date	May 2022
Estimated Construction Completion Date	July 2025
Contract Number	1982

The contractor completed the following activities during the second quarter plant shutdown including seismic upgrades and hazardous material abatement within Basins 5 & 6 and valve installations in Filter Building No. 2. In the upcoming quarter, the contractor plans to continue activities planned for the second quarter plant shutdown No. 2 including installation of electrical and mechanical equipment in the flocculation and sedimentation basins, and Filter Building No. 2, and seismic improvements for the basin and inlet channel walls.

Setting launder blockouts at Weymouth Water Treatment Basin No. 6

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 September 2024)	$12.4M	$10.2M	$7.1M	$0.0M	$29.7M
Number of Projects Approved	48	50	51	4	153
Number of Projects Completed (through September 2024)	46	25	3	0	74
Number of Projects with Durations of Over 3 Years	2	10	0	0	12

* Numbers may not sum due to rounding.

Through September 2024, 74 of the 153 projects approved under the appropriations mentioned above have been completed, and 12 active projects have exceeded three years in duration, as described below.

- 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 November 2024.
- Jensen WWRP No. 2 Flocculator Rehabilitation experienced delays due to a comprehensive revision of scope. As a result, the rehabilitation work will proceed as part of major capital project recently approved for the current biennium. The project is scheduled to be canceled in November 2024.
- 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 November 2024.
- OC-88 Surge Tank Recirculation System Upgrade has been experiencing delays due to longer than anticipated lead time for pump procurement. As a result, the upgrades will be implemented as part of major capital project in the future. The project is scheduled to be canceled in November 2024.
- 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. The project is scheduled to be completed by April 2025.
- 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 November 2024.

Minor Cap Projects, 1st Quarter

Authorized Projects

Four projects were authorized under the Minor Cap Program during the 1st Quarter of fiscal year 2024/25 (July through September 2024). The total amount authorized for these projects was $1,469,300.

- Implement Maximo Datasplice and Oracle AP Imaging SSO – This project will upgrade both Maximo Datasplice and Oracle AP Imaging applications to support Single Sign-On (SSO). This project will enhance Metropolitan cybersecurity and streamline the sign-on process. The project budget is $349,300.
- Mills Chlorine Scrubber System Exhaust Improvements – This project will improve chlorine scrubber exhaust system at the Mills Water Treatment Plant to mitigate formation and discharge of caustic residue dust. The project budget is $390,000.
- Questica System Upgrade – This project will upgrade Metropolitan Budgetary System to the latest version to capture all the needed security updates and new features offered by the original system provider (OSP). The project budget is $340,000.
- Skinner Interior lighting Upgrades – This project will replace all obsolete or non-LED interior lights and fixtures located inside buildings at Skinner plant with new LED lights and fixtures. The project budget is $390,000.

Completed Projects

Five projects were completed under the Minor Cap Program during the 1st Quarter of fiscal year 2024/25 (July through September 2024):

- Diamond Valley Lake (DVL) Inlet/Outlet Tower UPS Replacement
- District UVC and Air Disinfection HVAC Upgrade
- MSU Shops Lighting Upgrades
- Red Mountain Pressure Control Structure UPS Replacement
- WB-06B Meter Replacement

Canceled Projects

One project was canceled during the 1st Quarter of fiscal year 2024/25 (July through September 2024):

Jensen Administration Building GFRC Panel Replacement 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 Administration Building GFRC Panel Replacement.

Expenditures

Actual biennium expenditures to date (July 2024 through September 2024) for the Minor Capital Projects Program were $1.77 million.

Project Actions

Table 5 lists capital project actions authorized by the General Manager along with funding allocation amounts during the 1st Quarter of FY 2024/25, through the authority delegated by the Board in April 2024. The total funding amount authorized during the 1st Quarter is $82,454,500 through thirty-one management actions. In some case listed below, the Total Amount Authorized may differ from the Amount Authorized for Current Biennium when the work authorized is scheduled to extend beyond the current biennium. In these cases, it is anticipated that staff will request sufficient funds to be allocated from the CIP Appropriation for the next biennium to cover the planned remaining future-year costs of the project. When the Amount Authorized for Current Biennium is equal to the Total Amount Authorized, the authorized work is planned to be completed within the current biennium. Table 5 excludes any board items heard in closed session and minor cap authorizations. Minor cap authorizations can be found in the Minor Capital Projects Program section of this report.

Table 5: Capital Projects Funded in 1st Quarter

Project Authorized	Activity Authorized	Amount Authorized for Current Biennium	Total Amount Authorized
Allen-McColloch Pipeline PCCP Urgent Rehabilitation – Stage 2	Construction	$31,367,000	$31,900,000
CRA Aircraft Facility Improvements – Stage 1	Preliminary Design	$775,000	$800,000
CRA Pumping Plant Delivery Lines Rehabilitation	Site Investigations and Preliminary Design for Delivery Lines at Gene Pumping Plant	$2,889,000	$2,940,000
CRA 230 kV Transmission Tower Barrier Improvements	Preliminary Design	$212,000	$230,000
CRA 230 kV Transmission Line Rehabilitation and Improvements	Study of East Transmission Line	$242,000	$245,000
CRA 6.9kV Power Cables Replacement[2]	Additional Legal Services	$870,000	$870,000
Diemer Slope Erosion Rehabilitation[3]	Additional Study	$1,110,000	$1,150,000
Diemer Turbidimeter Replacements	Final Design	$145,000	$145,000
Distribution System Online Analyzers Replacement	Procurement and Construction	$950,000	$1,050,000

[2] Additional funds were required for legal services authorized per July 2024 Board Letter Item 8-3 heard in closed session.

[3] Additional study funds were required to conduct additional field investigation for the crest of the slope near Basin No. 8 per the California Division of Safety of Dams (DSOD) requirement.

Project Authorized	Activity Authorized	Amount Authorized for Current Biennium	Total Amount Authorized
Eagle Rock Security Upgrade - Stage 1[4]	Additional Final Design	$507,000	$525,000
Holland Road Drainage Modification	Final Design	$247,000	$247,000
Inglewood Lateral Improvements	Study	$770,000	$900,000
Inland Feeder/SBVMWD Foothill Pump Station Intertie[5]	Additional Final Design; Procurement: One 132-inch Butterfly Valve	$2,837,174	$2,950,000
Intake and Gene Pumping Plant Transformer Bushing and Pressure Device Replacement	Procurement: Materials for three Transformers at Intake	$175,000	$175,000
Intake Transformer Bank Protection Relay Replacement	Investigations, Design, and Procurement	$871,000	$890,000
Iron Mountain Fuel Dispenser System Improvements	Preliminary Design and Final Design	$240,000	$240,000
Iron Mountain Station Light & Power Electrical Improvements	Final Design	$4,000,000	$4,200,000
Data Storage Infrastructure Refresh	IT Define	$50,000	$50,000
Jensen Bromate Control Upgrades	Preliminary Design	$3,800,000	$3,800,000
Jensen WWRP No. 2 Side 3 Flocculator Rehabilitation	Final Design	$300,000	$300,000
La Verne Shops Upgrade - Stage 6	Study	$57,500	$57,500
Lake Mathews Pressure Control Structure and Electrical Upgrades	Study & Owner's Advisor Services	$2,800,000	$2,800,000
Lakeview Pipeline Relining – Stage 2	Pipe Procurement	$17,214,500	$17,500,000
PC-1 Pressure Control Structure Rehabilitation	Final Design and MetForce Construction	$2,600,000	$2,600,000
Rialto Pipeline Rehabilitation at Station 2986+30	Construction	$3,405,460	$3,600,000

[4] Additional final design funds were required to incorporate additional servers and consolidation of security systems at Eagle Rock from other facilities.

[5] Additional final design funds were required to modify construction bid package to minimize environmental impact and expedite project schedule after permitting agency determined the entire project area requires a federal permit due to the presence of federally listed endangered species habitat.

Project Authorized	Activity Authorized	Amount Authorized for Current Biennium	Total Amount Authorized
Santa Monica Feeder Cathodic Protection	Construction	$1,156,469	$1,250,000
Sepulveda Feeder Pump Stations	Procurement: Two Electrical Transformers	$690,000	$690,000
Service Connection EM-14 Flowmeter Replacement	Construction	$65,000	$65,000
Service Connection EM-21 Flowmeter Replacement	Construction	$65,000	$65,000
Skinner Plant 1 and Ozone Lab Turbidity Meter Upgrade	Final Design	$145,000	$145,000
Upper Feeder and Lower Feeder RWIP Improvements - UF 42+06, UF 90+08, and LF 919+54	Study	$75,000	$75,000
Total		$80,631,103	$82,454,500

Due to changes to the project implementation schedules on the following project, $1,841,500 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
Badlands Tunnel Surge Protection Facility	$1,841,500
Total	$1,841,500

Table 7 lists capital projects which were authorized during the previous biennium with an unfunded portion of authorized work remaining to be funded at the end of the biennium, as the work authorized was scheduled to extend beyond the biennium. The unfunded portion of these projects were funded from Appropriation 15535 at the start of the current biennium.

Table 7: Previously Authorized Capital Projects Funded from Appropriation No.15535

Project Authorized (Title)	Amount Authorized for Current Biennium
Allen-McColloch Pipeline PCCP Urgent Rehabilitation - Stage 1	$11,772,000
Allen-McColloch Pipeline PCCP Urgent Rehabilitation - Stage 2	$8,651,000
Applications-Servers Upgrade from Old Windows OS	$1,600,000

Project Authorized (Title)	Amount Authorized for Current Biennium
Arc Flash Model Development	$4,000,000
Badlands Tunnel Surge Protection Facility	$3,299,000
Black Metal Mountain 2.4 kV Electrical Power Upgrade	$1,790,000
Calabasas Feeder PCCP Rehabilitation	$947,000
Casa Loma Siphon Barrel No. 1 and San Jacinto Pipeline Protection	$557,000
CRA Pumping Plants Lower Guide Access Improvements	$660,000
CRA Conduit Erosion Control Improvements	$4,093,000
CRA Conduit Structural Protection	$2,026,568
CRA Conveyance System Level Sensor Installation	$1,756,000
CRA Domestic Water Treatment System Replacement	$28,800,000
CRA Iron Mountain Tunnel Rehabilitation	$256,200
CRA Pump Plant Sump System Rehabilitation	$5,000,000
CRA Pumping Plant Storage Buildings at Hinds, Eagle Mountain, and Iron Mountain	$14,476,000
Datacenter Backup Infrastructure Upgrade	$625,520
Diamond Valley Lake Domestic Water System Improvements	$94,610
Diamond Valley Lake Floating Wave Attenuator System Improvements – Stage 2	$9,072,856
Diamond Valley Lake Secondary Inlet Sleeve Valve Refurbishment	$1,664,000
Diemer Basin 8 Slope Toe Improvement	$922,000
Diemer Filter Rehabilitation	$2,069,000
East Lake Skinner Bypass and Bypass No. 2 Screening Structure Upgrade	$1,792,552
Eastern Region Security Camera System Upgrade Area 1	$1,308,667
Eastern Region Security Camera System Upgrade Area 2	$876,271
Electromagnetic Inspections of PCCP Lines - Fifth Cycle	$5,857,000
Enterprise Content Management Phase II	$2,200,000
Foothill Feeder Valve Replacement	$361,630
Foothill Hydroelectric Plant Rehabilitation	$3,000,000

Project Authorized (Title)	Amount Authorized for Current Biennium
Foothill Hydroelectric Plant and Control Building Seismic Upgrade	$1,569,000
Garvey Reservoir Rehabilitation	$7,374,000
Gene Communications System Upgrade	$856,935
Gene Pumping Plant Pilot Security Improvements	$304,562
Gene Transformer Bank Protection Relay Replacement	$553,000
Gene Wash Discharge Valve Replacement	$120,000
Hollywood Tunnel, North Portal, Equipment Upgrades	$21,000
Inland Feeder/SBVMWD Foothill Pump Station Intertie	$1,596,437
Inland Feeder/Rialto Pipeline Intertie	$2,752,000
Iron Mountain and Gene Pumping Plant Utility Replacement	$900,000
Iron Mountain Transformer Bank Projection Relays Replacement	$123,000
Jensen Flocculator System Upgrades	$388,000
Jensen Module 2 & 3 Traveling Bridge and Basin Rehabilitation	$652,000
Jensen Solids Mechanical Dewatering Facility	$935,000
La Verne Shops - Stage 5 Buildings Completion & Equipment Procurement	$782,000
La Verne Water Quality Laboratory Building Improvements	$3,200,000
LA-17A and LA-C Venturi Flowmeter Replacement	$288,000
Lake Mathews Dam Erosion Control	$517,500
Lake Mathews Outlet Tower No. 2 Valve Rehabilitation	$90,000
Lake Skinner Outlet Tower Butterfly Valve Replacement	$1,596,475
Mills Plant Control System Upgrade	$2,000,000
Mills Electrical Upgrades – Stage 2	$5,000,000
Mills Solids Removal Improvement	$652,000
Oracle Database Upgrade	$628,000
Orange County and Riverside/San Diego County Operating Regions Valve Replacement	$370,000
Payroll & Timekeeping System Upgrade	$200,000
Perris Valley Pipeline Interstate 215 Tunnel Crossing	$27,028,720

Project Authorized (Title)	Amount Authorized for Current Biennium
Rialto Pipeline Rehabilitation at Station 2986+30	$295,962
San Diego Canal Concrete Liner Replacement at Three Sites	$546,000
San Diego Canal Concrete Liner Replacement – Site 236	$398,000
Second Lower Feeder PCCP Rehabilitation - Reach 3B	$38,260,000
Security Operations Center Upgrade Phase 2	$558,800
Sepulveda Canyon Control Facility Water Storage Tanks Seismic Upgrades	$445,000
Sepulveda Feeder PCCP Rehabilitation - Reach 9	$4,398,000
Sepulveda Feeder Pump Stations	$7,664,000
Sepulveda Hydroelectric Plant Rehabilitation	$4,520,000
Service Connection EM-04B Meter Replacement	$229,000
Services Procurement Implementation	$948,000
Skinner Chemical Storage Tank Replacement	$490,000
Upper Feeder Blowoff Valve Replacement - Stage 1	$1,072,000
B-01 Venturi Flowmeter Replacement	$384,000
Wadsworth Pumping Plant Bypass Pipeline	$197,000
Water Information System	$1,175,000
Webb Tract Delta Island Flooded Wetlands and Rice Field System	$4,184,000
Western Region Security Camera System Upgrade - Area	$1,045,667
Western Region Security Camera System Upgrade - Area 2	$941,347
Western Region Security Camera System Upgrade - Area 4	$636,381
Western Region Security Camera System Upgrade - Area 8	$1,114,667
Weymouth Asphalt Pavement Rehabilitation	$1,863,000
Weymouth Bonita Avenue Railroad Track Replacement	$195,000
Weymouth Hazardous Waste Staging and Containment	$2,644,700
Weymouth Treatment Basins Nos. 5-8 and Filter Building No. 2 Rehabilitation	$36,100,000
Weymouth Water Treatment Plant - Remaining Budget	$5,000
Yorba Linda PCS Rehabilitation	$1,050,000

Project Authorized (Title)	Amount Authorized for Current Biennium
Yorba Linda Power Plant Emergency and Control System Improvements	$75,000
Zero Emissions Fleet Pilot Infrastructure – Stage 1	$52,000
Total	**$291,513,027**

CEQA Determinations

Table 8 lists CEQA exemption determinations made by the General Manager during the 1st Quarter. Consistent with CEQA, the Board delegated this authority to the General Manager in April 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 8: CEQA Exemption Determinations

Projects
Delta Properties Infrastructure Improvements - Phase 5
Desert Microwave Tower Site Upgrades
Diemer Helicopter Hydrant Facility
Hinds Pumping Plant Elevator Hydraulic Power Unit Replacement

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 11 and Table 12. Total contract earnings for the 1st Quarter were approximately $64.99 million.

Table 9: 1st Quarter Contract Actions

Contract Actions during Q1 for FY 2024/2025, July 2024 through September 2024	
Contracts Awarded by Board	2 construction contracts totaling $3.48 million
Total Payments Authorized[6]	$64.99 million
Construction Contracts Completed	Notice of Completion was filed for 5 construction contracts (Table 10)
Procurement Contracts Delivery Completed	Delivery of all items completed for 3 procurement contracts[7]
Active Contracts at end of Q1[8]	28 construction contracts, totaling $458.43 million (Table 11) 19 procurement contracts, totaling $79.34 million (Table 12) $537.77 million total value*

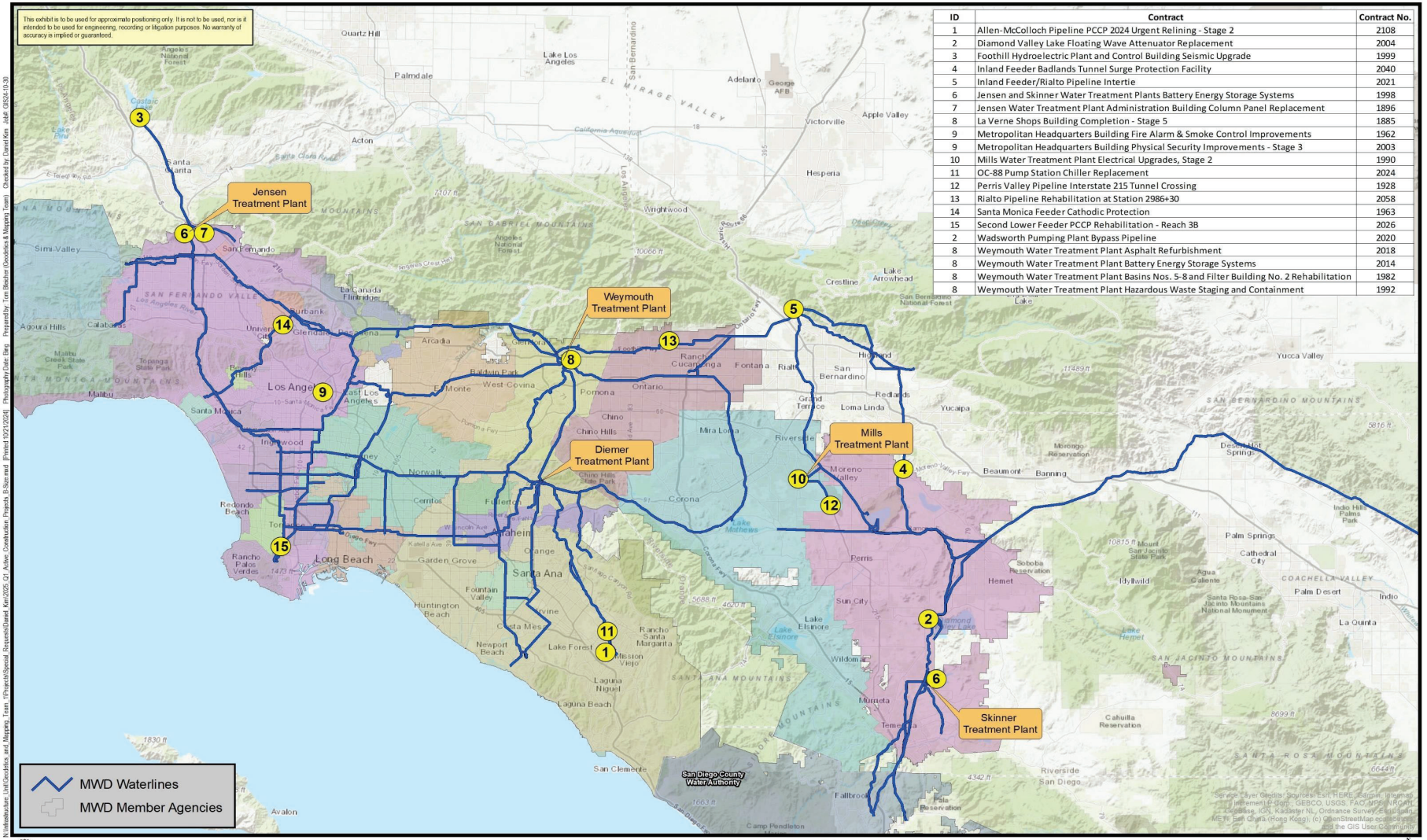
*Numbers may not sum due to rounding.

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

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

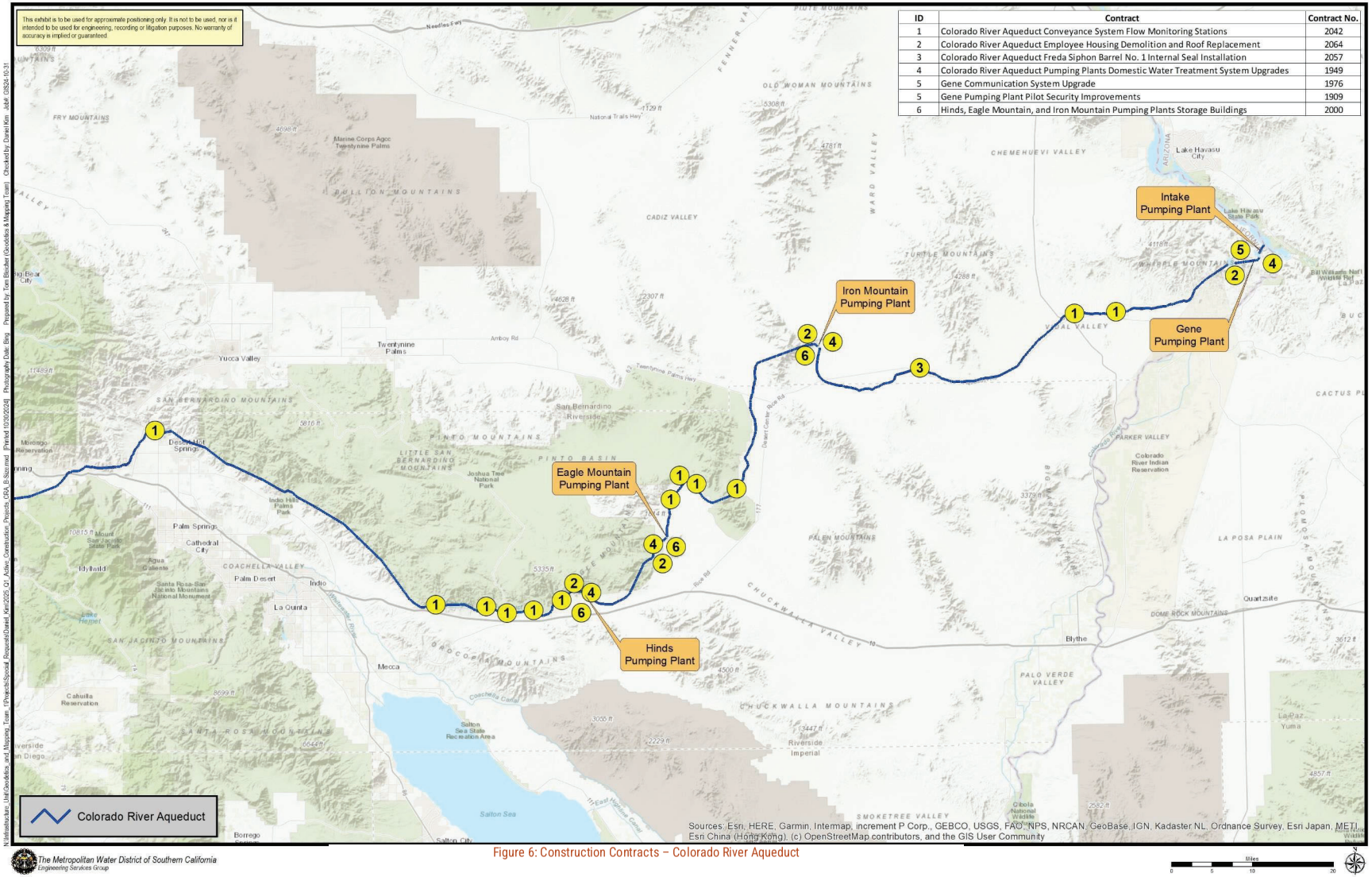
[7] Contract 1948 for Refurbishing Valve Actuators for the Diemer Water Treatment Plant, Contract 2022 for Furnishing Butterfly Valves for the Wadsworth Bypass Pipeline, Inland Feeder-Rialto Pipeline Intertie, and Badlands Tunnel Isolation Surge Tanks, and Contract 2046 for Furnishing a 20-inch Triple Offset Ball Valve for Service Connection CB-11 were completed during the reporting quarter.

[8] Active contracts at the end of the 1st Quarter are those that are ongoing at the end of September 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	Metropolitan Headquarters Building Fire Alarm & Smoke Control Improvements	1962
9	Metropolitan Headquarters Building Physical Security Improvements - Stage 3	2003
10	Mills Water Treatment Plant Electrical Upgrades, Stage 2	1990
11	OC-88 Pump Station Chiller Replacement	2024
12	Perris Valley Pipeline Interstate 215 Tunnel Crossing	1928
13	Rialto Pipeline Rehabilitation at Station 2986+30	2058
14	Santa Monica Feeder Cathodic Protection	1963
15	Second Lower Feeder PCCP Rehabilitation - Reach 3B	2026
2	Wadsworth Pumping Plant Bypass Pipeline	2020
8	Weymouth Water Treatment Plant Asphalt Refurbishment	2018
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

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 Communication System Upgrade	1976
5	Gene Pumping Plant Pilot Security Improvements	1909
6	Hinds, Eagle Mountain, and Iron Mountain Pumping Plants Storage Buildings	2000

Figure 6: Construction Contracts – Colorado River Aqueduct

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

In the 1st Quarter, the Board authorized an increase of $840,000 in change order authority for construction Contract No. 2020 with Steve P. Rados for the installation of an isolation valve for the Wadsworth Pump Plant Bypass Pipeline.

Notices of Completion during 1st Quarter:

The following table shows the five board-awarded construction contracts for which Metropolitan accepted the contract as completed during the 1st 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 10: Notices of Completion Filed This Quarter

Contract No.	Construction Contract	Notice of Completion	Original Bid Amount	Final Contract Costs	Change Order	Change Order %
1895	Colorado River Aqueduct Conduit Structural Protection	7/30/2024	$8,656,568	$8,707,804	$51,236	0.6%
1898	Metropolitan Headquarters Courtyard Improvements	8/20/2024	$250,974	$279,598	$28,624	11.4%
1989	Metropolitan Headquarters Building First Floor Video Suite Renovation	9/17/2024	$637,520	*	*	*
2001	Jensen Water Treatment Plant Ozone Power Supply Units Replacement	7/2/2024	$2,257,897	$2,257,897	$0	0%
2013	Lake Mathews Reservoir PCCP Rehabilitation Valve Storage Building	7/2/2024	$4,759,000	$4,982,022	$223,022	4.7%
		Totals:	**$16,561,959**			

For the 1st Quarter, the total bid amount of the completed construction contract was approximately $16.6 million.

For Contract No.1989, although an NOC was 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.

Final contact 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 (October 2023 through September 2024) is 5.94 percent[9].

[9] Original amount of construction contracts completed (October 2023 through September 2024) = $ 65,009,994
Change orders for completed construction contracts (October 2023 through September 2024) = $ 3,860,946
Change order percentage (October 2023 through September 2024) = 5.94%

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 4.17 percent if Contract No. 2088 is excluded.

The table on this page lists the 28 ongoing construction contracts through the end of the 1st Quarter. This list contains construction contracts awarded by the Board.

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

	Cont. No.	Contract Title	Contractor	Contract Amount[10]	Earnings Through Sep. 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	$18,414,447	6/10/22	3/25	94%
2	1896	Jensen Admin. Bldg. Entrance Glass Fiber Reinforced Concrete Panels Replacement	MMJ Contracting, Inc.	$281,900	$105,898	7/14/23	1/25	38%
3	1909	Gene Pumping Plant Pilot Security Improvements	The Kepler Group, Inc.	$295,561	$90,547	5/2/24	11/24	31%
4	1928	Perris Valley Pipeline Interstate 215 Tunnel Crossing	James W. Fowler, Company	$59,685,928	$55,073,966	2/13/23	4/25	92%
5	1949	Colorado River Aqueduct Pumping Plants Domestic Water Treatment System Replacement	J.F. Shea Construction, Inc.	$32,869,737	$13,667,181	1/20/22	3/25	42%
6	1962	MWD HQ Building Fire Alarm & Smoke Control Improvements[12]	Bernards Bros. Inc.	$14,355,588	$13,159,228	9/24/20	11/24	92%
7	1963	Santa Monica Feeder Cathodic Protection	Exaro Technologies Corporation	$897,469	$0	7/10/24	3/25	0%
8	1976	Gene Communication System Upgrade	HP Communications, Inc.	$1,244,935	$963,397	12/14/23	11/24	77%
9	1982	Weymouth Water Treatment Plant Basins Nos. 5-8 & Filter Building No. 2 Rehabilitation	J.F. Shea Construction, Inc.	$95,208,451	$78,457,256	6/10/22	7/25	82%

[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.

	Cont. No.	Contract Title	Contractor	Contract Amount[10]	Earnings Through Sep. 2024[11]	Start Date	Est. Completion Date	Est. Percent Complete
10	1990	Henry J. Mills Water Treatment Plant Electrical Upgrades, Stage 2	CSI Electrical Contractors, Inc.	$9,429,862	$6,513,572	12/13/21	3/25	69%
11	1992	Weymouth Water Treatment Plant Hazardous Waste Staging and Containment	J.F. Shea Construction, Inc.	$2,375,700	$673,588	3/12/24	4/25	28%
12	1998	Jensen and Skinner Water Treatment Plants Battery Energy Storage Systems	Ameresco, Inc.	$11,604,521	$7,738,898	10/7/21	9/25	67%
13	1999	Foothill Hydroelectric Power Plant Seismic Upgrade	West Valley Investment Group, Inc.	$6,174,000	$5,461,224	4/27/23	12/24	88%
14	2000	Hinds, Eagle Mountain, and Iron Mountain Pumping Plants Storage Buildings	J. F. Shea Construction, Inc.	$16,490,000	$8,205,679	7/31/23	4/26	50%
15	2003	Metropolitan Headquarters Building Exterior Physical Security Improvements	Caltec, Corp.	$2,241,019	$2,208,922	1/12/23	12/24	99%
16	2004	DVL Floating Wave Attenuator Replacement	Power Engineering Construction Co.	$7,842,856	$388,586	3/12/24	10/25	5%
17	2014	Weymouth Plant Battery Energy Storage System[12]	Siemens Industry, Inc.	$6,476,521	$5,560,887	7/18/22	11/24	81%
18	2018	Weymouth Water Treatment Plant Asphalt Pavement Rehabilitation	Granite Construction Company	$1,754,000	$1,693,925	4/10/24	10/24	97%
19	2020	Wadsworth Pumping Plant Bypass Pipeline[13]	Steve P. Rados, Inc.	$15,183,755	$14,177,672	2/2/23	7/25	93%
20	2021	Inland Feeder/Rialto Pipeline Intertie[13]	Steve P. Rados, Inc.	$15,689,535	$3,522,335	10/16/23	6/25	22%

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

	Cont. No.	Contract Title	Contractor	Contract Amount[10]	Earnings Through Sep. 2024[11]	Start Date	Est. Completion Date	Est. Percent Complete
21	2024	OC-88 Pump Station Chiller Replacement[12]	Mehta Mechanical Co., Inc. dba MMC Inc.	$2,654,000	$1,920,500	6/6/22	12/24	72%
22	2026	Second Lower Feeder PCCP Rehabilitation - Reach 3B[14]	J.F. Shea Construction, Inc.	$79,700,514	$58,641,534	2/13/23	9/25	74%
23	2040	Inland Feeder Badlands Tunnel Surge Protection Facility[15]	Steve P. Rados, Inc.	$18,840,000	$5,905,350	12/11/23	6/25	31%
24	2042	CRA Conveyance System Solar Level Sensor Installation	LEED Electric, Inc.	$5,266,000	$4,906,374	6/15/23	12/24	93%
25	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%
26	2058	Rialto Pipeline Rehabilitation at Station 2986+30	J.F. Shea Construction, Inc.	$2,197,460	$0	8/2/24	3/25	0%
27	2064	Colorado River Aqueduct Employee Housing Demolition and Roof Replacement	Resource Environmental, Inc.	$1,285,000	$0	10/2/24	5/25	0%
28	2108	Allen-McColloch Pipeline PCCP 2024 Urgent Relining	J.F. Shea Construction, Inc.	$24,912,000	$13,412,840	5/30/24	2/25	54%
Total contract value for active construction contracts:				**$458,431,358**				

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

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

The following table lists the 19 ongoing procurement contracts at the end of the 1st Quarter.

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

	Cont. No.	Contract	Contractor	Contract Amount[16]	Earnings Through Sep. 2024[17]	Start Date	Est. Delivery Completion Date	Est. Percent Complete[18]
1	1861	Furnishing Lubricated Plug Valves for Second Lower Feeder	Southwest Valve & Equipment, Inc.	$2,380,909	$2,362,968	9/11/17	D[19]	99%
2	1867[20]	Furnishing Butterfly Valves for the Weymouth Water Treatment Plant – Schedule 1	Crispin Valve, LLC	$5,066,975	$3,769,482	12/18/17	7/25	74%
3	1873	Furnishing One Hydraulic Shear System for the La Verne Maintenance Shops	Landmark Solutions, LLC	$151,870	$146,970	3/21/18	D[19]	97%
4	1912	Furnishing Large-Diameter Conical Plug Valves	Ebara Corporation	$23,750,060	$19,585,112	12/24/18	1/25	82%
5	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[19]	99%
6	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%

[16] 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.

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

[18] 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.

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

	Cont. No.	Contract	Contractor	Contract Amount[16]	Earnings Through Sep. 2024[17]	Start Date	Est. Delivery Completion Date	Est. Percent Complete[18]
7	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[19]	87%
8	2002	Furnishing Steel Liner for Lakeview Pipeline[14]	Northwest Pipe Company	$23,565,941	$7,958,731	12/14/23	12/24	34%
9	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[19]	99%
10	2028	Furnishing Slide Gates for the San Jacinto Diversion Structure[21]	Whipps, Inc.	$820,853	$0	12/8/22	6/25	0%
11	2029	Furnishing Slide Gates for East Lake Skinner Bypass Channel	Whipps, Inc	$892,552	$0	4/10/24	11/25	0%
12	2046	Furnishing a 20-inch Triple Offset Ball Valve for Service Connection CB-11	Cascade Consultants, LLC	$407,800	$372,400	3/8/23	D[19]	91%
13	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%
14	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%
15	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%

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

	Cont. No.	Contract	Contractor	Contract Amount[16]	Earnings Through Sep. 2024[17]	Start Date	Est. Delivery Completion Date	Est. Percent Complete[18]
16	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%
17	PO 214941	Furnishing Air Release and Vacuum Valves for San Diego Pipeline Nos. 3 and 5	B&K Valves and Equipment, Inc.	$1,466,665	$0	6/13/23	12/24	0%
18	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	1/25	0%
19	PO 219516	Furnishing Plug Valves for the Foothill Feeder and Rialto Pipeline	Caasi Flow Control	$549,592	$0	2/15/24	12/24	0%
Total contract value for active procurement contracts:				**$79,339,559**				

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.

Once a project phase is complete, either final design or construction, staff's performance against these metrics is then calculated and compared to the target metrics. Table 13 and Table 14 on the following page summarize the comparison between the target metrics and the actual performance metrics for each project category for the current reporting period. In cases where the actual performance exceeded the target metric, explanations for the variance are provided. Actual performances are reported for the Board awarded construction contract projects.

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

Project	Metric	Actual Cost of Metric	Construction Cost	Target Range	Actual %
CRA Conduit Structural Protection	Inspection	$776,337	$8,722,211	9% to 12%	8.9%
Jensen Ozone Critical Components Upgrade - Stage 1	Inspection	$558,769	$7,136,653	9% to 12%	7.8%
Lake Mathews PCCP Rehabilitation Valve Storage Building[22]	Inspection	$753,477	$5,005,245	9% to 12%	15.1%
Rialto Pipeline Rehabilitation at Station 2986+30	Final Design	$399,024	$3,382,460	9% to 12%	11.8%
Average	**Final Design**				11.8%
	Inspection				10.0%

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

Project[23]	Metric	Actual Cost of Metric	Construction Cost	Target Range	Actual %
CRA Employee Housing Demolition and Roof Replacement	Final Design	$52,895	$1,285,000	9% to 15%	4.1%
Metropolitan Headquarters Courtyard Improvements	Inspection	$2,815	$282,413	9% to 15%	1.0%
Average	**Final Design**				4.1%
	Inspection				1.0%

[22] Inspection costs for the Lake Mathews PCCP Rehabilitation Valve Storage Building were higher than the target range due to longer than anticipated time to obtain a fire department permit for fire water line, which extended construction completion.

[23] Although an NOC was filed for the Headquarters Video Room Upgrades 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 20.9% of the construction costs using the best information available at the end of the reporting quarter which is higher than the target range due to an extension of the contract duration to obtain long lead items required to complete owner directed change order work.

Service Connections and Relocations

Service Connections

No new agreements for service connections were approved by the General Manager pursuant to Sections 4700-4708 during the reporting period (July through September 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 1st Quarter of FY 2024/25 (July through September 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 15: Program Fund vs. Cost and Planned Expenditures vs. Actuals

Capital Programs	Total to Date		Biennium to Date	
	Funded Amount ($1,000's)	Costs thru September 2024 ($1,000's)	Biennium to Date Planned Expenditures ($1,000's)	Biennium Actual Expenditures ($1,000's)
Additional Facilities and Systems	$316,965	$293,721	$5,710	$4,476
Climate Adaptation	$246,080	$224,896	$2,900	$3,306
Colorado River Aqueduct	$605,280	$516,324	$14,590	$18,616
Dams & Reservoirs	$154,295	$129,637	$7,230	$2,709
Distribution System	$868,783	$800,283	$20,010	$21,467
Drought Mitigation - SWP Dependent Areas	$76,803	$76,043	$6,200	$10,643
Information Technology & Control Systems	$258,833	$237,534	$5,360	$3,201
Minor Capital Projects	$108,154	$86,014	$2,125	$1,771
Prestressed Concrete Cylinder Pipe	$535,761	$421,569	$2,770	$23,411
Water Treatment Plants	$2,514,503	$2,340,613	$20,310	$18,097
Total CIP	**$5,685,456**	**$5,126,635**	**$87,205**	**$107,697**

Notes on the above table:

- Numbers may not sum due to rounding.
- Numbers are based on the general ledger information downloaded on 10/10/2024.
- $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 September 2024

Item 6a

December 9, 2024

Item 6a

Capital Investment Plan Quarterly Report for Period Ending September 2024

Subject

Capital Investment Plan Quarterly Report for the First Quarter of FY 2024/25 which covers July 2024 through September 2024

Purpose

Informational summary of report that was provided in the board packet

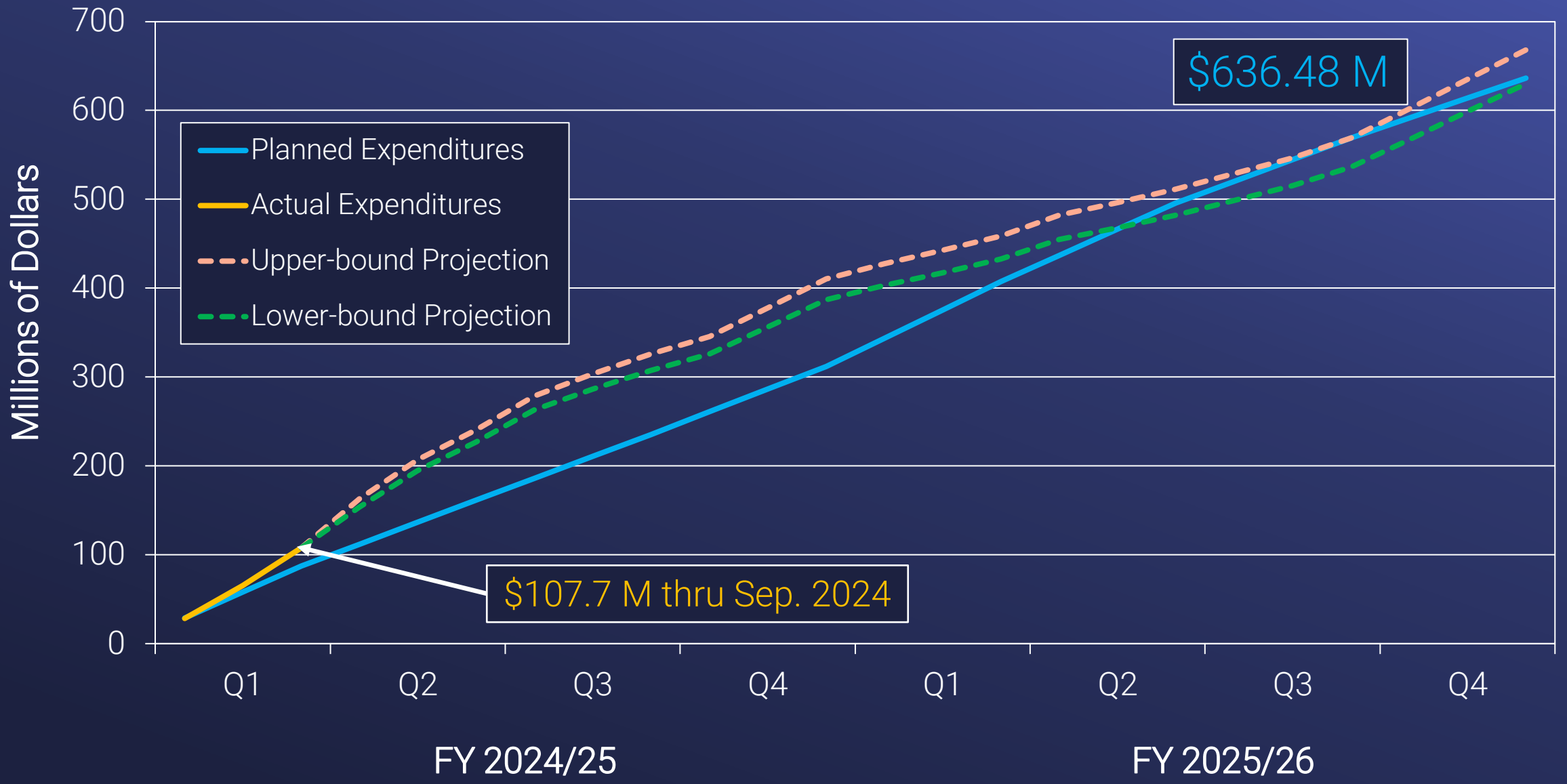
Capital Investment Plan Quarterly Report

Period Ending September 2024

1st Quarter Summary for Fiscal Year 2024/25

- Board awarded contracts – $3.5 M
  - 2 Construction contracts awarded
- Contracts currently underway – $537.8 M
  - 28 Construction
  - 19 Procurement

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



Badlands Tunnel Surge Protection Facility

- Contract awarded Nov. 2023
  - Completed two out of the four wall panels of the vault structure & concrete formwork for the surge tank foundation
  - Projected construction completion in Jun. 2025
- Total project estimate: $23.8 M
- Total project cost thru Sep.: $14.7 M

Contractor Placing Concrete for Surge Tank Footings

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

Pipeline Access Site for Stage 1

- Stage 1 - Change order authority authorized in Feb. 2024
  - All relining work completed
  - 85% of mortar lining work complete
- Stage 2 - Contract awarded in May 2024
  - Contractor mobilized & completed traffic control
- Total project estimate: $67.0 M
- Total project cost thru Sep.: $30.6 M

Construction Contract Completion and Change Orders

Contract	Original Contract Amount	Contract Change Orders
Colorado River Aqueduct Conduit Structural Protection	$8,656,568	0.6%
Jensen Water Treatment Plant Ozone Power Supply Units Replacement	$2,257,897	0%
Lake Mathews Reservoir PCCP Rehabilitation Valve Storage Building	$4,759,000	4.7%
Metropolitan Headquarters Building First Floor Video Suite Renovation	$637,520	*
Metropolitan Headquarters Courtyard Improvements	$250,974	11.4%
Total	$16,561,959	

Performance Metrics – 1st Quarter of FY 2024/25

Projects w/ Construction Costs Greater Than $3 Million

	Final Design % of Construction	Inspection % of Construction
Target Performance Range	9% to 12%	9% to 12%
Actual Performance	11.8%	10.0%

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	4.1%	1.0%

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	$16.4 M	$14.0 M	$0.2 M
Expenditures Through Sep. 2024	$12.4 M	$10.2 M	$7.1 M	$0.0 M
% of Work Complete	98%	75%	49%	1%


THE METROPOLITAN WATER DISTRICT OF
SOUTHERN CALIFORNIA
1928

THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

Board Report

Engineering Services Group

- **Engineering Services Monthly Activities for November 2024**

Summary

This monthly report provides a summary of Engineering Services Group activities for November 2024 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
- Value Engineering Program
- Career Launch
- Plant Engineer and Field Support Engineer Summit
- Bentley Systems Tech Day
- Community Outreach

Purpose

Informational

Attachments

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

Date of Report: December 9, 2024

Engineering Services Key Activities Report for November 2024

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 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.

- Water Level Sensor Installation—This project installs 11 water level gauging stations at remote sites along the Colorado River Aqueduct and raises five accessways on Sand Hill Conduit. The contractor is preparing for the antenna pole installation. Construction is 94 percent complete and is expected to be complete in January 2025.
- Gene Communication System Upgrades—This project will construct a new fiber optic cable line from Parker Dam to Gene Pumping Plant. The new line is predominantly located within the Metropolitan fee property on new power poles with a small underground portion of the alignment within the Bureau of Reclamation's property. The pole installation has been completed. The contractor continues with underground work, fiber installation, and splicing. Construction is approximately 95 percent complete and is scheduled to be complete in December 2024.
- 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 complete in September 2026.

- Iron Mountain Switchgear Improvements—This project replaces the 2.3 kV Station Light and Power switchrack with a 4.16 kV indoor switchgear, a 2.3 kV emergency generator with a 4.16 kV generator, and upgrades the auxiliary distribution system. Preliminary design is now complete. Final design was initiated in November 2024.

Water Level Sensor Installation —
Completed installation of new level sensor enclosure on existing antenna pole

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. The final Environmental Impact Report (EIR) for this rehabilitation effort was certified by the Board in November 2024. Final design is approximately 55 percent complete and is scheduled to be complete in September 2025.

- Diamond Valley Lake (DVL) Secondary Inlet Valve Refurbishment—This project will rehabilitate the 72-inch in-line sleeve valve and inlet piping and replace the instrumentation at the DVL Reservoir secondary inlet. Metropolitan staff is currently rehabilitating the sleeve valve at the La Verne Shops and will be shipping the valve to DVL before the end of the year. Installation is scheduled to be complete in June 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.

- 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, associated rectifiers, and remote monitoring equipment along the feeder. The contractor is securing all necessary permits and plans to mobilize onsite in December 2024.
- 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 installing the building's roof and continues placing concrete around the lower half of the existing concrete columns. Construction is approximately 80 percent complete and is scheduled to be complete in January 2025.
- Rialto Pipeline Rehabilitation—This project replaces a 35-foot long, 121.5-inch diameter section of welded steel pipe on the Rialto Pipeline in the city of Upland where the mortar lining has failed and the steel has significantly corroded. This project also replaces the deteriorating pipe spool and isolation valve at the CB-11 service connection. The contractor is working on submittals to procure the 121.5-inch diameter section of steel pipe. Construction is approximately 10 percent complete and the shutdown to do the work is scheduled for February 2025.
- Wadsworth Sleeve Valve Refurbishment—This project refurbishes seven sleeve valves at the Wadsworth Pumping Plant. A total of three units have been refurbished. The project is 60 percent complete and is scheduled to be complete in December 2025.
- PC-1 Sleeve Valve Refurbishment—This project rehabilitates six stainless steel sleeve valves and the appurtenant components at the PC-1 pressure control structure. Two out of the six stainless steel sleeve valves have been rehabilitated and put back in service by Metropolitan forces. Rehabilitation of the remaining four valves will resume at the beginning of 2025 after the shutdown season. The project is 35 percent complete and is scheduled to be complete in December 2025.

Foothill Hydroelectric Plant and Control Building Seismic Upgrade—
Compaction around new building columns

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.

- Headquarters Physical Security Upgrades—This project implements comprehensive security upgrades for the Metropolitan Headquarters Building. These upgrades are consistent with federally recommended best practices for government buildings. The work has been prioritized and staged to minimize rework and impacts on day-to-day operations within the building. Stage 1 work is complete and provides enhanced security related to perimeter windows and doors. Stage 2 work is complete and provides security system upgrades inside the building with a focus on the main entry rotunda area, boardroom, executive dining lounge, and security control room. Construction of Stage 3 improvements provides security system upgrades around the perimeter of the building. Construction is 99 percent complete and is scheduled to be complete in January 2025.
- Headquarters Building Fire Alarm and Smoke Control System Upgrades—This project upgrades the Metropolitan Headquarters Building fire life safety systems, which includes replacement of the fire detection and alarm system and HVAC system improvements for smoke control. The fire alarm and smoke control systems in Metropolitan's Headquarters Building provide detection, notification, and control of building functions so that occupants and visitors can safely exit in the event of a fire. The contractor continued final testing and sign-off of the fire alarm and smoke control systems by the Los Angeles Fire Department and Los Angeles Department of Building and Safety. Construction is 99 percent complete and will be deemed complete upon final certification by these agencies.

- Colorado River Aqueduct District Housing Improvements—This project will replace aging housing after decades of use in the harsh desert environment with new townhomes, implement village enhancements and amenities, and replace kitchens and lodges at the CRA pumping plants. A community vision planning effort has been completed and presented to the Board. The District Housing Improvements will be completed in a sequential manner over four stages. A November 2024 board action amended the consulting agreement to initiate design activities for Stage 1 improvements.
- Colorado River Aqueduct Aircraft Facilities Phase 1—This project will replace the deteriorated runway surfaces and lighting at four pumping plants. The surfaces have developed cracks and deteriorated over the years because of exposure to extreme desert environments. Geotechnical investigations were recently completed. Preliminary design is approximately 10 percent completed and scheduled to be complete in May 2025.

Colorado River Aqueduct District Housing Improvements—
House Rehabilitation contractor applying first coat of Sierra tan paint

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 Valve Procurement—This project will procure 13 long-lead-time, 48-inch and 52-inch diameter lubricated plug sectionalizing valves for the Second Lower Feeder. As PCCP portions of the Second Lower Feeder are rehabilitated, aging sectionalizing valves are being replaced with valves procured under this project. To date, 12 of 13 valves have been received. The remaining valve is slated for delivery to Metropolitan's Lake Mathews facility in December 2024.

- 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 by December 2024. Stage 2 work consists of 12,600 feet of steel liner installation and appurtenant work. Pipe installation at seven sites is complete, and pipe installation at the last access site began in October 2024. The Stage 2 work is approximately 70 percent complete and is expected to be complete in February 2025.
- Electromagnetic Inspection—Regular inspections of the PCCP feeders are a critical step in evaluating the condition of each pipeline and assist staff in prioritizing the relining work on each feeder. This project conducts the fifth cycle of electromagnetic and visual inspections of Metropolitan's approximate 146.4 miles of PCCP pipelines. Inspections of the Perris Bypass Pipeline, East Lake Skinner Bypass, San Diego Pipeline No. 5, and Second Lower Feeder were completed in November 2024.

Allen-McColloch Pipeline (AMP) Urgent Relining—
Welding accessway on 48-inch access pipe

Water Treatment Plants Program

The Water Treatment Plants Program comprises 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 82 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. The project constructability review workshop was completed in July 2024. Final design is approximately 85 percent complete and is scheduled to be complete in April 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 side of the plant. Final design is approximately 95 percent complete and is scheduled to be complete in January 2025.

Weymouth Basins 5–8 and Filter Building No. 2 Rehabilitation—
Installing the perimeter water line at Basin No. 6

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. Various technical studies have been prepared and completed to support the effort. Staff is currently reviewing numerous technical studies and associated chapters for the draft EIR. The draft EIR is currently scheduled for publication in early 2025, with board certification of the document in early 2026. Biological surveys were completed, and staff continues to prepare and review individual draft technical sections.
- 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.
    - Metropolitan received notice in May 2024 that it was one of the recipients of the U.S. Bureau of Reclamation (USBR) Large-Scale Water Recycling Program (LSWRP) grant. The USBR announced that they intend to grant Metropolitan up to $99,199,096 to advance the PWSC planning and design efforts. A second grant application to the LSWR program was submitted to the USBR in May for up to $26 million dollars, or the difference between the initial grant request of $125 million and the amount awarded. On November 18, 2024, USBR announced that they intend to award Metropolitan an additional $26 million. The Board adopted resolutions in November to support the USBR grant application and development of the subsequent grant agreement(s). Following discussions with USBR on the terms and scope of the agreement, staff plans to return to the Board in December 2025 to authorize the agreement.
    - 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 (PFAS) compounds, and development of program phasing options, including treated water augmentation (TWA).
- Advanced Water Purification Facility—The AWPF will purify treated wastewater from LACSD's A.K. Warren Water Resource Facility (Warren Facility) using membrane bioreactors (MBRs), reverse osmosis (RO), and ultraviolet/advanced oxidation (UV/AOP). 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 (SCE) is performing a Method of Services (MOS) study to identify infrastructure needed to meet AWPF power requirements. The MOS investigation is anticipated to be complete later this year.
- Staff is preparing a Request for Qualification (RFQ) 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 testing is in progress. Information documented in the DPR white paper was presented at the September 2024 PWSC subcommittee.
- 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 draft report was completed in September, with the final report anticipated by early next year. In addition, Metropolitan's Board authorized two consulting agreements for preliminary design of the first two pipeline reaches in March 2023, and preliminary design of these two reaches is anticipated to be complete by mid-next year. 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 assessing the need for more tunneling to minimize project risks. Additional investigations will be conducted over the next couple of months to optimize the extent of tunneling.
  - 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 District. Current work includes utility field investigation and geotechnical work, incorporating value engineering comments, as well as coordination with Long Beach Utilities District, 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 (SWP)-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.

- Wadsworth Bypass—This project installs a bypass pipeline and an isolation valve to interconnect the Wadsworth Pumping Plant with the Eastside Pipeline. This is one of four projects needed to deliver water from Diamond Valley Lake (DVL) to the Rialto Pipeline. The contractor completed installation of all piping during the April shutdown and is currently awaiting delivery of long-lead electrical equipment. Construction is scheduled to be complete in July 2025.
- Inland Feeder Rialto-Pipeline Intertie—This project installs an interconnection pipeline and isolation valve structure between the Inland Feeder and Rialto Pipeline, so that water can be delivered from DVL to the Rialto Pipeline. The contractor has completed excavation and has constructed most of the isolation valve vault structure. Construction is 26 percent complete and is scheduled to be complete in June 2025.
- Inland Feeder-Badlands Tunnel Surge Protection—This project installs a new open-to-atmosphere surge tank at the south portal of the tunnel, which will protect the Inland Feeder from hydraulic transients when pumping water from Diamond Valley Lake to the Rialto Pipeline through the Inland Feeder. The Contractor has completed most of the valve vault structure and the surge tank foundation. Construction is 36 percent complete and is scheduled to be complete in August 2025.
- Sepulveda Feeder Pump Stations—This project installs new pump stations at the existing Venice and Sepulveda Canyon pressure control facilities, providing the ability to reverse flow in the Sepulveda Feeder and deliver 30 cubic feet per second from the Central Pool to portions of the Jensen plant exclusive area. This project utilizes 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 is proceeding with the purchase of long lead items including pumps, large valves and electrical switchgear and transformers recently authorized by the Board. Authorization of Phase 2 final design and construction is anticipated in early 2025.

Wadsworth Bypass—Wadsworth coating 96-inch pipe within valve vault

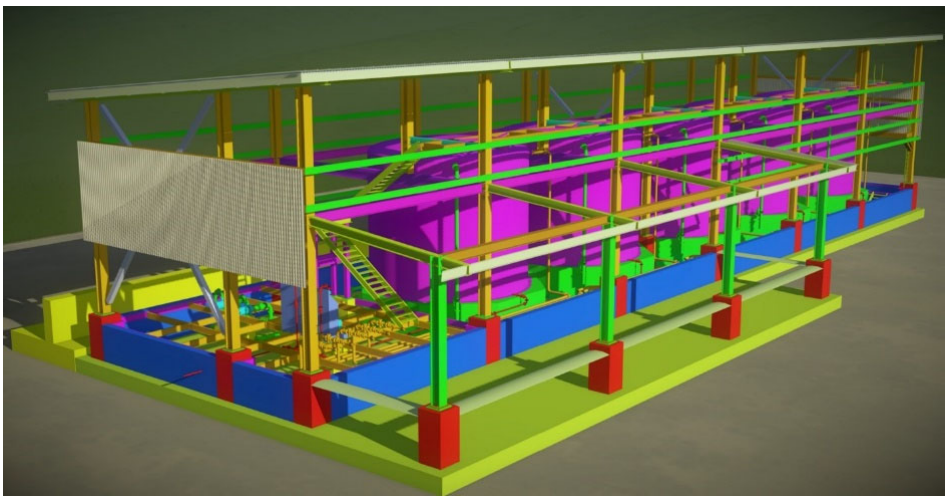
Inland Feeder-Badlands Tunnel Surge Protection—surge tank wall formwork

Sustain Metropolitan's mission with a strengthened business model

Value Engineering Program

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

- Jensen Bromate Control Upgrades VE Workshop—Engineering conducted a Value Engineering workshop for the Jensen Bromate Control Upgrades project in November. This project will implement a new bromate control process at Jensen Water Treatment Plant using chlorine and ammonia as a more cost-effective method to reduce bromate formation. The project includes implementing new ammonia and chlorine injection facilities at the plant influent, constructing a new caustic tank farm and a new polymer unloading and containment area, and refurbishing the existing carbon tank while making improvements to the industrial wastewater system. The project will also decommission and demolish the existing caustic tank farm as well as the abandoned former alum and polymer tank area. The workshop examined the scope, lessons learned from previous projects, potential impacts of other Jensen construction projects, construction sequencing, methods to mitigate impacts to ongoing O&M activities, and risk assessment and mitigation. The workshop team included Metropolitan staff from Engineering, Jensen Plant management, Water Quality, and Environmental Planning, along with consultant Subject Matter Experts in Water Treatment Processing, Environmental Remediation, and Cost Estimating.



Rendering of new Caustic Tank Farm

- San Gabriel Tower Seismic Upgrade VE Workshop—Engineering completed a Value Engineering Workshop for the San Gabriel Tower Seismic Upgrade Project in mid-November. The project includes the seismic retrofit of the tower structure, installation of three new inlet gates to replace the previously removed gates inside the tower, construction of a new stairway from the butterfly valve structure to the spillway, and improvement of slope stability above the tower. The VE workshop focused on construction work required during limited shutdowns of the Upper Feeder, and developed recommendations to mitigate O&M impacts, considering the access limitations and work constraints within the tower structure and restricted laydown area. The VE Team included Metropolitan staff from Engineering, Operations, SRI, SRT, and consultant staff.

San Gabriel Tower

Empower the workforce and promote diversity, equity, and inclusion

Career Launch

Engineering Services Group (ESG) kicked off its 13th year of Career Launch to introduce new hires to Engineering's overall organization and Metropolitan's system. This supplemental program proactively supports new employees in coming up to speed quickly and prepares them for greater long-term career success and potential progression in engineering and technical leadership positions. This session specifically included an overview of what will be covered during this six-month program, Engineering's organization, and ESG's expectations and career paths.

Career Launch technical lead Tyler Grossheim welcomed new hires at the kick-off meeting

Career Launch program coordinator Zary Lahouti facilitated new hire introductions and the icebreaker activity

Plant Engineer and Field Support Engineer Summit

Plant engineers and field support engineers meet three times a year in a summit to share experiences and challenges of their role. This summit enhances cross-training and provides an opportunity for the participants to identify key areas of needed operation support on engineering-related projects. During the last summit that took place at the Mills plant, plant engineers exchanged ideas about ways to enhance project coordination and plant safety, challenges of current Mills plant's projects, and the need to reinforce the use of master plans per area. The next summit is planned to take place in spring at the Diemer plant.

The plant engineer and field support engineer rotational program has been in place to encourage cross-training and professional development. A primary goal of this program is to provide close and coordinated support at the five water treatment plants, conveyance and distribution system facilities, and other locations, while also providing developmental opportunities for Engineering staff.

ESG Plant Engineers and Field Support Engineers at their Summit at the Mills treatment plant

Bentley Systems Tech Day

Engineering hosted a BIM—Bentley Systems Tech Day at Metropolitan Headquarters, bringing together Metropolitan staff, industry professionals, and public agency guests (e.g., LACSD). This informative workshop featured sessions on topics such as Electrical Design and Engineering, Construction Data Management Solutions, Treatment Plant OpenPlant P&ID, and 3D Modeler Designer, along with an introduction to PlantSight, OpenBuildings Designer, OpenRoads Designer for Civil and Survey, and Asset Management Integration with Maximo. Attendees were also introduced to Engineering's Building Information Modeling (BIM) initiative. The event showcased cutting-edge ideas in BIM and Digital Twin technologies, highlighting how Metropolitan is proactively engaging staff and equipping them with the tools needed to enhance their work. Through Bentley Systems applications and solutions, the workshop emphasized optimization, efficiency, and innovation.

Team Manager Javier Bautista introducing the BIM infrastructure lifecycle

Metropolitan staff and public agency visitors attending the Bentley Day workshop

Partner with interested parties and the communities we serve

Community Outreach

Johanna Clemens, Engineering Field Administration Team Manager, was recently honored with the *Latinícima – Rumbo a la Cima* Award from the Hispanic Coalition of Small Businesses (HCSB) at an event held at the Riverside Convention Center.

HCSB coined the word *Latinícima™* from the root word, Latinism, which highlights the cultural richness and diversity of Latin American and Hispanic societies and their impact on language and culture. For HCSB, the coined word *Latinícima* or *Latinícimo* signifies a strong Latina or Latino who is:

- Heading to the top .... *Rumbo a la Cima*
- Extending a hand to bring others along
- And, Reaching the Top ... The Pinnacle ... The Highest Point ... Together!

HCSB comprises a group of organizations that are committed to advancing small business communities. HCSB champions and empowers coalitions among Hispanic and diverse-owned small businesses, government, and local communities in the Greater Inland Empire region and beyond by providing resources and opportunities to ensure their success. HCSB represents more than 4,000 small business owners in the Southern California region through its network of Affiliate Member organizations.

Rick Duarte, Keegan Clemens. Johanna Becerra Clemens, Chairman Adán Ortega, Jr., Director Dennstedt, and Yvette Martinez at the *Latinícima—Rumbo a la Cima* Event

Information Technology Group

- **Information Technology Group Monthly Activities for November 2024**

Summary

This report provides a summary of activities related to the Information Technology Group for November 2024.

Purpose

Informational

Detailed Report

Metropolitan's very own Chief Information Security Officer, Jake Margolis, was a recent winner of the Top Global Chief Information Security Officer (CISO) 2024 Award presented by Cyber Defense Magazine. Competing against thousands of candidates for this prestigious award, they searched for innovative candidates with successful backgrounds in averting disasters and mitigating major risks and regulatory compliance issues and building powerful risk reduction programs for their organization. This award is a testament to the dedication in cybersecurity awareness and leadership during a time when water utilities are the target of cyber attacks being conducted by nation–-state-sponsored threat actors.

Date of Report: November 15, 2024

Operations Groups

- **Operations Monthly Activity Report**

Summary

This monthly report for the Operations Groups provides a summary of activities for November 2024 in the following key areas:

- Enhance Workplace Safety
- Develop Workforce and Prepare Employees for New Opportunities
- Manage Business Operations, Budget, and Staffing
- Provide Reliable Water Deliveries and Manage Storage
- Develop New Supplies and Optimize System Flexibility
- Protect Source Waters and Ensure Water Quality Compliance
- Optimize Water Treatment and Distribution
- Protect Infrastructure and Optimize Maintenance
- Ensure Power and Environmental Regulatory Compliance
- Enhance Emergency Preparedness and Response
- Prepare for Future Legislation and Regulations
- Advance Education and Outreach Initiatives

Purpose

Informational by the Operations Groups on a summary of key activities for the month of November 2024.

Attachments

Attachment 1: Detailed Report—Operations Groups' Monthly Activities for November 2024

Date of Report: [December 10, 2024]

Operations Groups

Core Business Objectives

Enhance Workforce Safety

Staff rebuilt an eyewash-safety shower station at the Eagle Mountain pumping plant to ensure safe use and operation. Routine monthly inspections identified the eyewash-safety shower for refurbishment because of degradation that was exacerbated by the desert environment. In addition to maintaining eyewash-safety shower stations in good working order, staff flushes the eyewash before working in the area to ensure a fresh, cool supply of water should the safety shower or eyewash station be needed.

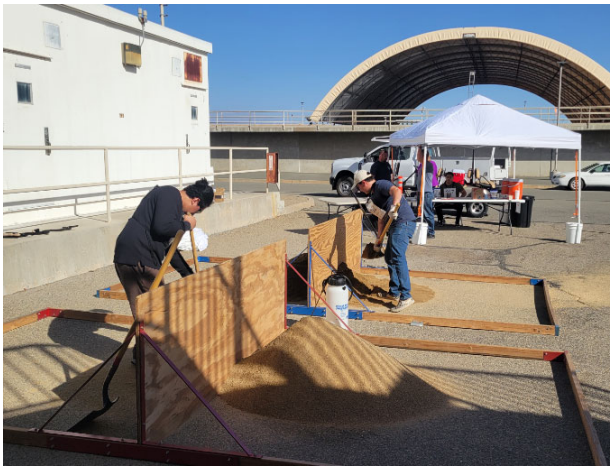
Rebuilt eyewash-safety shower station at Eagle Mountain

Pump Maintenance Team staff rebuilt an aerial work platform that was damaged. Repairs included replacing bent safety rails and applying a new coating. The platform will be inspected and certified before being placed back in operation. Staff uses the aerial work platform in combination with forklifts to safely complete work tasks at height.

Rebuilt forklift aerial work platform

Develop Workforce and Prepare Employees for New Opportunities

The Mills plant hosted the current Apprenticeship Recruitment Physical Ability Testing, a step in the apprentice recruitment process. Approximately 60 candidates worked through five different stations where they were tested on mechanical aptitude, physical strength and endurance, and color blindness. The apprenticeship class from this recruitment will be placed throughout the three operations groups for their hands-on learning.



Candidates performing 1/3 cubic yard sand removal over a 3-foot barrier (left) and candidate descending ladder from confined space testing (right)

Manage Business Operations, Budget, and Staffing

Business Management Team (BMT) welcomed its new Business Team Manager and Administrative Analyst in November. Orientation and training are well underway for both positions. The focus of November's monthly Accounts Payable Collaboration meeting among Accounts Payable, BMT, and Operations Groups Business Support Teams was policies and procedures relating to expense reports.

Provide Reliable Water Deliveries and Manage Storage

Metropolitan member agency water deliveries were 117,500 acre-feet (AF) for November with an average of 3,900 AF per day, which was about 300 AF per day lower than in October. Metropolitan continued delivering water to the Cyclic and Conjunctive Use Programs. Treated water deliveries were 4,300 AF lower than in October, for a total of 58,400 AF, or 50 percent of total deliveries for the month. The Colorado River Aqueduct (CRA) pumped a total of 97,000 AF in November. State Water Project (SWP) imports averaged 2,600 AF per day, totaling about 78,300 AF for the month. The target SWP blend is 25 percent for Skinner. The blends changed from 25 percent to 50 percent during the month at Weymouth and Diemer during Lake Mathews tower chlorination.

Metropolitan has sufficient SWP and Colorado River supplies to meet demands in 2024. 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. Metropolitan continued deliveries to Desert Water Agency and Coachella Valley Water District. Metropolitan is continuing to minimize the use of Table A supplies this year to improve SWP carryover for next year, targeting around 400,000 AF in carryover and a full Diamond Valley Lake at the end of the year.

Staff completed the installation of phase one of the Greg Avenue Pump Station check valve replacement project. The purpose of the upgrade is to enhance the system's ability to reduce the negative effects of backflow through the pumps after a power loss or pump trip event.

Staff hoisting check valve into place (left) and constructing new pipe support (right)

The Technical Control Team hosted a two-day Value Engineering Workshop on Bromate Control Upgrades at the Jensen plant on November 6–7. The workshop focused on relocating the Caustic tank farm to a new area adjacent to the Fluoride section of the plant. The workshop's primary goal is to evaluate the project's impact on plant operations, with particular attention to minimizing plant shutdowns by optimizing construction sequencing and phasing. Following the workshop sessions, participants took part in an in-depth walking tour of the current Caustic area, the Ozone facility, the plant influent, and the proposed location for the new caustic tank farm. Attendees included members of the Technical Control team, consultants, engineers, plant staff, and plant management.

Participants at Value Engineering Workshop on Bromate Control Upgrades (left) at Jensen plant and walking tour to proposed new tank farm location (right)

Develop New Supplies and Optimize System Flexibility

Operations continued at the Pure Water Southern California Napolitano Innovation Center demonstration plant with staff supporting Los Angeles County Sanitation Districts' (LACSD) resumption of reverse osmosis concentrate testing. This testing is evaluating anomalous toxicity tests from earlier in the year to ensure that a full-scale treatment plant would comply with LACSD's discharge permits and environmental standards. Metropolitan staff also supported additional emissions testing and installed four new Conex containers for onsite storage to support the demonstration plant's long-term maintenance needs.

Installation of a new chemical line for the carbon dosing system at the PWSC Napolitano Center

Protect Source Waters and Ensure Water Quality Compliance

Metropolitan complied with all water quality regulations and primary drinking water standards during October 2024.

Processes and procedures at the Water Quality Laboratory in La Verne and the five satellite laboratories at the water treatment plants were audited from October 28 through November 1 by a state-approved assessor under the requirements for biennial recertification of the laboratory's state accreditation. The audit report and any corresponding corrective actions will be included as part of Metropolitan's certification application to the state's Environmental Laboratory Accreditation Program in 2025. Certification is required for all laboratories that monitor and report results in compliance with drinking water regulations.

Laboratory assessor reviewing sample receiving procedures at the Water Quality Laboratory

Optimize Water Treatment and Distribution

The State Water Project (SWP) target blend entering the Weymouth and Diemer plants increased from 25 to 50 percent before decreasing to zero percent in November. The SWP blend entering Lake Skinner decreased from 25 percent to zero percent. Flow-weighted running annual averages for total dissolved solids from September 2023 through August 2024 for Metropolitan's treatment plants capable of receiving a blend of supplies from the SWP and the Colorado River Aqueduct were 497, 571, and 508 mg/L for the Weymouth, Diemer, and Skinner plants, respectively.

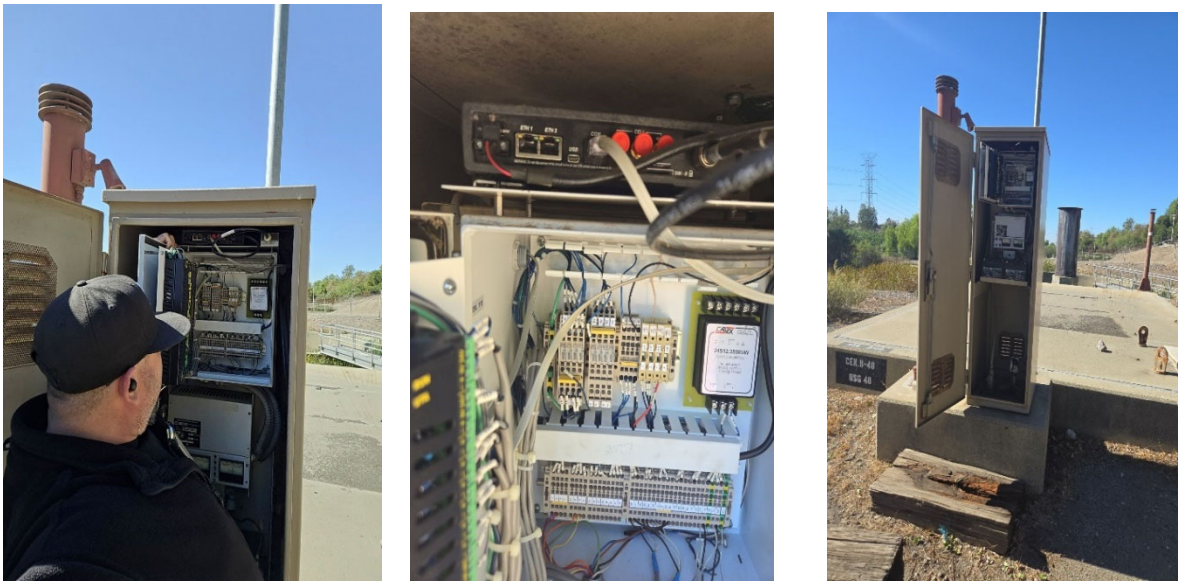
Staff at the Skinner plant refurbished their sample line chlorination trailer. Water quality samples are taken from sample taps at different points throughout the treatment process at every treatment plant. To keep the sample lines clean and representative of water quality in the process, the sample lines are cleaned and disinfected with a sodium hypochlorite solution as a regular preventative maintenance task. Staff refurbished the Skinner chlorination trailer to make it easier, faster, and safer to perform the sample line cleaning and disinfection.

Sample line chlorination trailer refurbished at the Skinner plant

Weymouth Control Systems staff installed new Rosemount flowmeters at the polymer, sulfuric acid, and aluminum sulfate tank farms. These new flowmeters ensure accurate flow rates will be recorded and available to the plant operators via the SCADA system. This allows for improved monitoring and control of the chemicals. Having an accurate flow rate improves operational efficiency and helps staff better manage chemical inventory and usage.

Staff calibrating alum flow meter (left) and staff calibrating polymer flow meter (right)

Weymouth Control Systems staff upgraded various Service Connection AMR Radios. These are some of the first GE Orbit Radios to be deployed as part of a district-wide project to upgrade the AMR meters These new radios are designed to communicate longer distances with lower signal latency and lower signal loss. This will allow Operations Control Center staff to respond quickly to service connection flow changes and data corrections with real-time data.



Staff completing radio upgrade (left), installed AMR radio and SCADA Pak (middle), and remote AMR service connection (right)

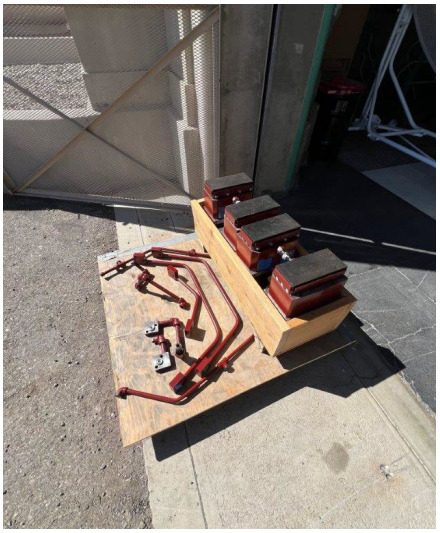
Staff installed two high-security meter cabinets on the Long Beach Lateral at service connection LA-16, which serves the Los Angeles Department of Water and Power in the City of Carson. These robustly designed cabinets will better protect metering and electrical equipment to prevent tampering.

Staff installing two high-security meter cabinets at service connection LA-16

Protect Infrastructure and Optimize Maintenance

Work continues with the Eagle plant unit 9 pump/motor repair. Contractor testing of the rotor and stator is in progress, Desert staff is ready to begin the process of cleaning the rotor and stator. Mechanical work includes ensuring bearing fit, rebuilding the hydraulic jacks, as well as cleaning and cataloging parts for reassembly. Staff is taking advantage of the pump outage to perform upgrades to ancillary components of the pump such as fabricating new oil sample taps and associated piping manifolds. These sample taps are used to collect oil samples for analysis to ensure that the oil is free of contaminants. This oil analysis is part of the condition-based maintenance program used to ensure that CRA motor and pump bearings operate without issue.

Lubrication oil sample tap bracket (left) and lubrication oil sample manifold (right)



Eagle plant unit 9 rotor and containment, ready for cleaning (left), staff scraping guide bearings, a laborious and technical process that ensures proper fit of the bearings (center) and rebuilt motor jacks, which allow for an oil wedge between bearing surfaces (right)

The Desert Control Systems Team is working in several underground solar vaults along the CRA to upgrade lead-acid batteries to lithium-polymer. The lithium-polymer batteries hold a longer charge and have a significantly longer lifespan, which will reduce the replacement frequency from 3 years to 9 years, reducing maintenance cost and waste generated. The new lithium-poymer batteries are also 50 percent lighter, making them easier and safer to handle.

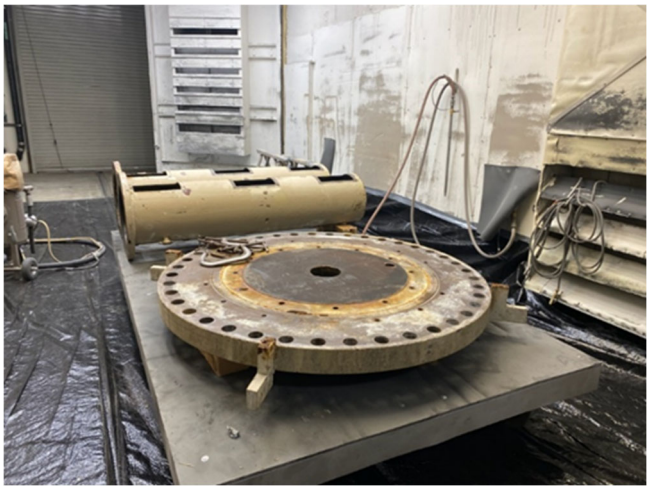
Old lead acid battery (left) and a new lithium battery installed (right)

The Desert Line Crew has been installing equipment for the communications upgrades at several locations throughout the system.

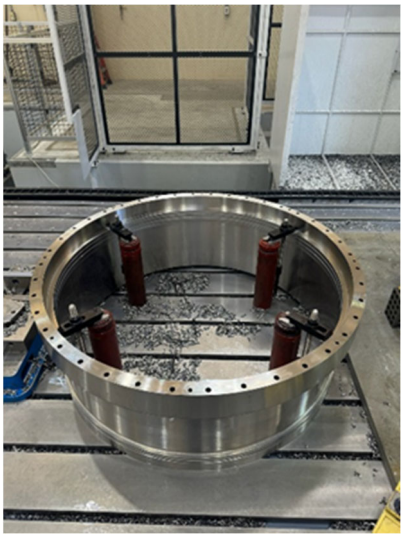
Las Vegas Junction communication site

The La Verne shops completed refurbishment of a 42” sleeve valve for the Red Mountain Pressure Control Structure. The sleeve valve required weld repairs and machining of existing components, and manufacturing of new components to return the valve to an operable condition. The sleeve valve was reassembled and functionally tested and delivered to the site for installation. Staff installed the 42-inch sleeve valve to replace valve V-03 at the Red Mountain Pressure Control Structure during the San Diego Pipeline 5 shutdown. The previously installed bulkhead was removed during the shutdown and returned to La Verne for coating repairs.

As-found valve gate (left), welding repairs of valve gate (middle) and machining of inner valve body (right)

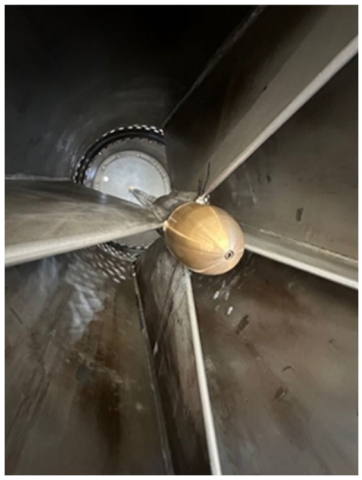


As-found sleeve valve cover (left) and completed valve cover (right)



Machining of new lower valve body (left) and assembly of sleeve valve components (middle and right)





Installation of valve shaft (left), installation of valve shaft nut (middle) and installed new stem nut cover (right)


Installation of actuator (left) and completed sleeve valve (right)

Staff installing a 42-in sleeve valve at the Red Mountain Pressure Control Structure

Staff provided top support at the Perris Bypass Pipeline shutdown to allow for inspection of the prestressed concrete cylinder pipeline.

Staff providing top support at the Perris Bypass Pipeline shutdown

Ensure Power and Environmental Regulatory Compliance

Diemer staff recently completed a project to upgrade the breaker panels around the plant for electrical resiliency and safety. Staff is double-checking that all the new labels and breaker schedules are correct and match the previous labeling, ensuring operational readiness and reliability.

Staff verifying labels on the electrical breaker panels

Weymouth Electrical Team reconfigured three 4,160-volt circuits that were damaged during the recent Asphalt Repaving Project at La Verne. Staff developed the concept for the repairs and met with Engineering to confirm that the plan would meet Metropolitan standards. This work required an electrical outage to the Water Quality Laboratory and the South Solar Power area. Staff performed high-voltage switching and obtained a clearance to work on the high-voltage equipment. Staff will install six new conductors and install them on a new 4,160-volt circuit breaker. The Hydroelectric Team and Power Support Unit provided support.

Electrician grounding conductors before work (left) and electricians preparing high voltage termination (right)

Enhance Emergency Preparedness and Response

Staff began site grading for the Diemer Helicopter Hydrant Facility. The helicopter hydrant consists of an open-top tank and supporting infrastructure, allowing helicopters to collect water to fight nearby fires quickly. Metropolitan collaborated with Yorba Linda Water District (YLWD) to develop a project that would benefit both agencies. YLWD 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 that both agencies' design and operational conditions are acceptable. Metropolitan will own and operate the facility after construction is completed.

Motor grader performing site grading for construction of Helicopter Hydrant Facility.

Prepare for Future Legislation and Regulations

On October 30, the Environmental Protection Agency published the final Lead and Copper Rule Improvements (LCRI). The LCRI builds on the 2021 Lead and Copper Rule Revisions (LCRR) and the original Lead and Copper Rule. The final LCRI mandates the replacement of all lead service lines within 10 years, lowering the lead action level from 15 to 10 parts per billion (ppb), removing the lead trigger level, improving tap sampling procedures, and improving public education and outreach materials to include renters and individuals with limited English proficiency. For Metropolitan, the LCRI will result in additional sampling at Metropolitan's desert housing but is not applicable to the main water treatment system. The final rule goes into effect on December 30. Staff is working on compliance procedures for the new LCRI.

On November 7, staff submitted comments on the California Air Resources Board's (CARB's) discussion draft on amendments to the Advanced Clean Fleets Regulation. The draft introduces a definition for "traditional utility-specialized vehicles" and alters exemption requirements, potentially allowing utilities to add internal combustion vehicles over 8,500 lbs. to their fleets when zero-emission trucks are not available in similar configurations or suitable for utility-specific operations. Staff recommended that CARB expand the definition of "traditional utility-specialized vehicle" to include vehicles with towing capacities exceeding 30,000 lbs., develop criteria for low-use vehicles, and refine the exemptions for both replacement and addition of new qualified internal-combustion engine-powered vehicles. Lastly, staff asked CARB to delay the compliance date for Class 8 ZEVs used to transport extremely hazardous materials such as chlorine until 2030 or exempt this application altogether. CARB expects to hold a board hearing in early 2025. Staff will continue to monitor and engage in future Advanced Clean Fleet amendments.

Advance Education and Outreach Initiatives

On November 1, staff provided a presentation on Metropolitan's approach to direct potable reuse (DPR) under the PWSC program to the Water Advisory Committee of Orange County. Topics included regulatory requirements, the benefits and challenges of different forms of DPR, and Metropolitan's research approach.

A tour of the Water Quality Laboratory was provided for Member Agency Legislative Coordinators on November 7, including summarizing the history of the Safe Drinking Water Act (passed in 1974) and contributions of the Water Quality Section to safeguarding Metropolitan's drinking water supplies.

Staff highlighted Metropolitan's reservoir management program with presentations at the International Symposium on Harmful Algal Blooms (October 27-November 1) and the North American Lake Management Society (NALMS) Annual Conference (November 5–8). These presentations covered the use of SCUBA diving and remotely operated vehicles to enhance reservoir monitoring (Metropolitan's Water Quality Division pioneered SCUBA as a water quality tool over 40 years ago), the dynamics of cyanotoxin-producing blooms, weather whiplash and the resulting turbidity in source water lakes, and sediment characterization to improve understanding of nutrient cycling in Metropolitan's lakes. Metropolitan was a sponsor of the NALMS conference and received recognition at the conference venue and in social media postings. The theme of the conference was "Managing Lakes Under Changing Climates."

Recognition of Metropolitan's sponsorship of the North American Lake Management Annual Symposium

Engineering, Operations, & Technology Committee

Management Announcements and Highlights

Item 7a

December 9, 2024

Engineering Services

Hinds, Eagle Mountain & Iron Mountain Storage Buildings

- Construction contract - $16.49 M
- Progress
  - Hinds – Structural steel delivery ongoing
  - Eagle Mtn. – Roof & electrical conduit installation ongoing
  - Iron Mtn. – Completed foundations
- Overall - 57% complete
- Expected construction completion – Late 2025

Eagle Mountain Buildings

Insulation & Roof Installation – Eagle Mtn. Storage Bldg.

Water System Operations

Managing State Water Project Supplies

Current Operational Conditions

- 2024 SWP Allocation at 40%
- CRA at 7-pump flow
- Deliveries to DWCV at 0 cfs
- Deliveries to CUP and Cyclic ongoing
  - Plan to stop by the end of this month
- SWP blend targets are 0% at Weymouth, Diemer, and Skinner
- November 2024 deliveries of 116 TAF, which is 1 TAF higher than November 2023

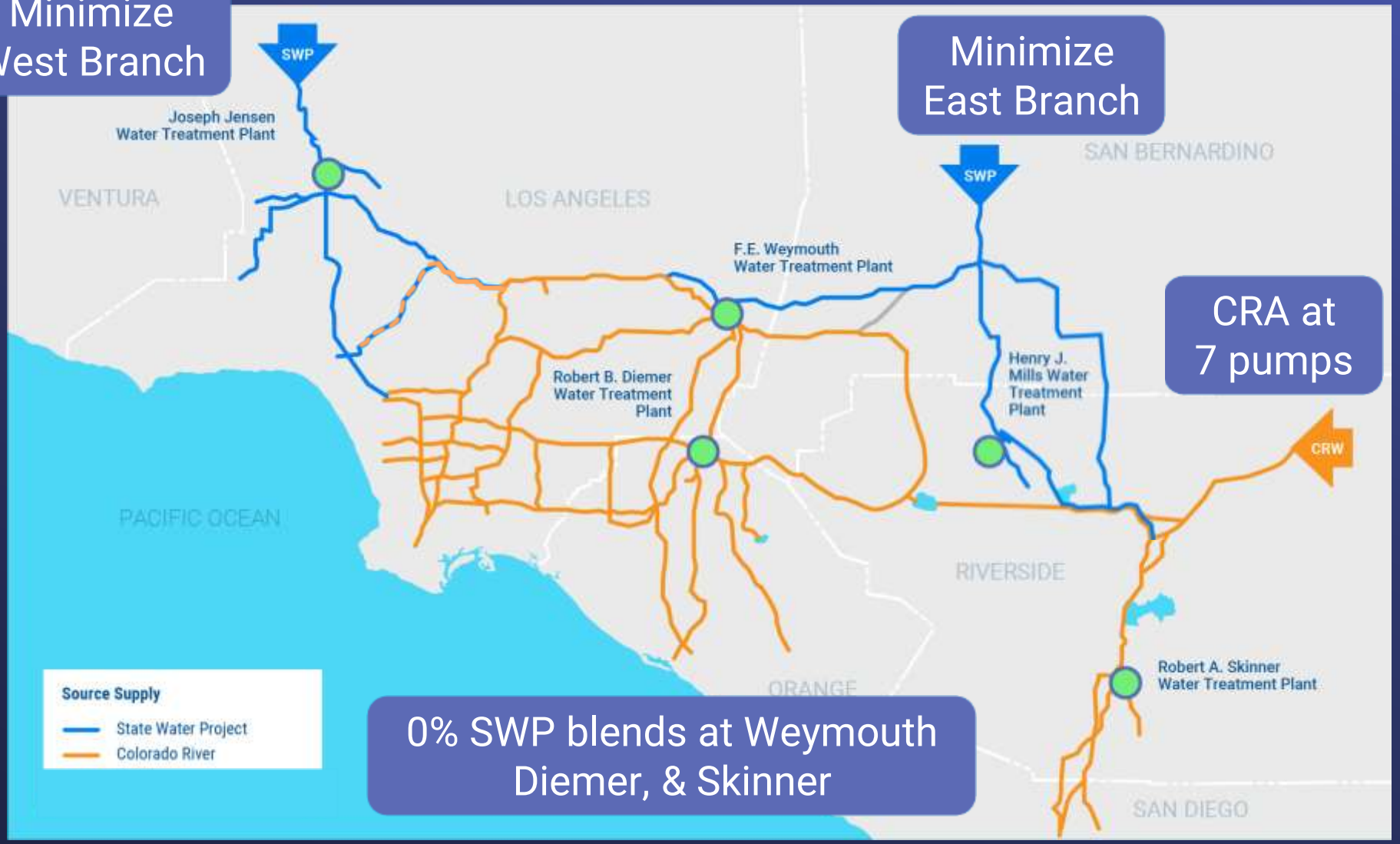
Managing State Water Project Supplies

December 2024 Operations

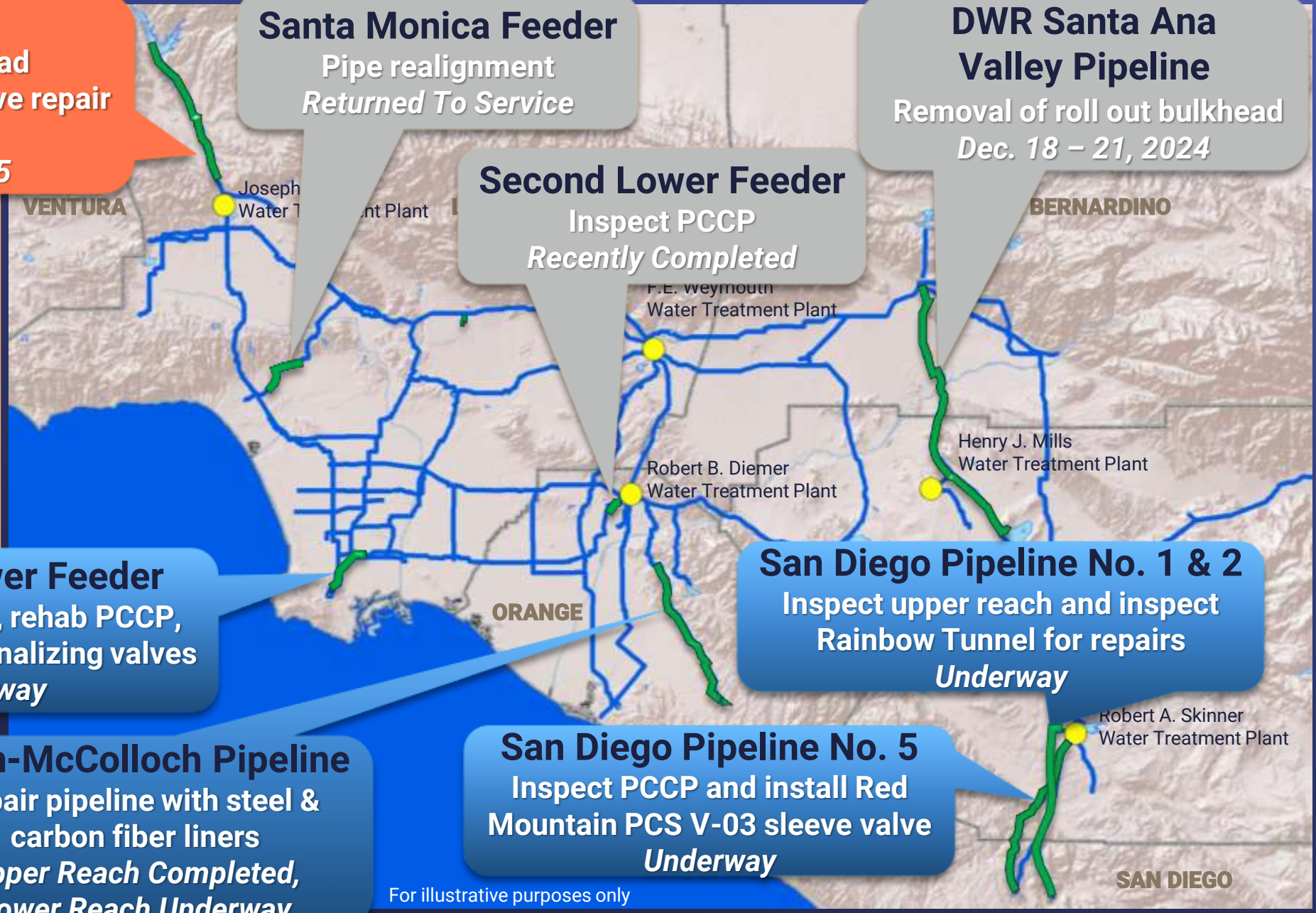
Manage SWP supplies to meet storage goals

400 TAF Carryover Target

Operation continues in January to manage low initial SWP Allocation



Ensuring Continued System Reliability



Foothill Feeder
Support DWR's bulkhead installation/removal and valve repair
Jan. 6 – 12, 2025
Jan. 27 – Feb. 2, 2025

Santa Monica Feeder
Pipe realignment
Returned To Service

Second Lower Feeder
Inspect PCCP
Recently Completed

DWR Santa Ana Valley Pipeline
Removal of roll out bulkhead
Dec. 18 – 21, 2024

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

Allen-McColloch Pipeline
Repair pipeline with steel & carbon fiber liners
Upper Reach Completed, Lower Reach Underway

San Diego Pipeline No. 1 & 2
Inspect upper reach and inspect Rainbow Tunnel for repairs
Underway

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

For illustrative purposes only

Information Technology

No update for this period


THE METROPOLITAN WATER DISTRICT OF
SOUTHERN CALIFORNIA