The Metropolitan Water District of Southern California

Agenda

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

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

Engineering, Operations, and Technology Committee

Meeting with Board of Directors *

September 8, 2025

8:30 a.m.

Monday, September 8, 2025 Meeting Schedule

08:30 a.m. EOT
10:30 a.m. CWC
11:30 a.m. SP BOD

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

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

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

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

MWD Headquarters Building • 700 N. Alameda Street • Los Angeles, CA 90012
Teleconference Locations:
UCSD Scripps Institution of Oceanography - MESOM 208 • 8880 Biological Grade • La Jolla, CA 92037
3008 W. 82nd Place • Inglewood, CA 90305
Cedars-Sinai Imaging Medical Group • 8700 Beverly Boulevard, Suite M 313 • Los Angeles, CA 90048

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

US 2-456

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

**** CONSENT CALENDAR ****

2. COMMITTEE ACTION (ONLY)

A. Approval of the Minutes of the Engineering, Operations, and Technology Committee for August 18, 2025 **21-4976**

Attachments: 09082025 EOT 2A (08182025) Minutes

3. COMMITTEE ITEMS (FOR BOARD CONSIDERATION)

7-2 Authorize an agreement with West Monroe Partners in an amount not to exceed $722,500 for Metropolitan's Intramet Redesign project; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA **21-4968**

Attachments: 09092025 EOT 7-2 B-L

7-3 Award a contract with EyeP Solutions Inc., in an amount not to exceed $334,791 to upgrade the Wireless Networks at Metropolitan's Riverside locations, including Skinner, Mills, Diamond Valley Lake and Lake Mathews; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA **21-4969**

Attachments: 09092025 EOT 7-3 B-L

7-4 Authorize an agreement with Carasoft Technology Corp. in an amount not to exceed $920,000 for the Network Visibility and Situational Awareness Upgrades to enhance Metropolitan's network monitoring capabilities through the implementation of advanced technology; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA **21-4970**

7-5 Amend the Capital Investment Plan for fiscal years 2024/2025 and 2025/2026 to include the Palos Verdes Reservoir Helicopter Dip Tank Facility project; the General Manager has determined that the proposed action is exempt or not subject to CEQA **21-4971**

7-10 Award a $7.988 million contract to Legion Contractors Inc. to construct electrical conduits at the Henry J. Mills Water Treatment Plant to support replacement of the plant's control system; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA **21-4967**

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

4. COMMITTEE ITEMS (ACTION FOR BOARD CONSIDERATION)

NONE

5. COMMITTEE ITEMS (INFORMATIONAL FOR BOARD CONSIDERATION)

9-4 Update on research and framework for a community benefits program for Pure Water Southern California **21-4991**

Attachments: 09092025 EOT 9-4 B-L

6. COMMITTEE ITEMS (INFORMATIONAL)

a. State Water Project Resilience Update; Guest Speaker Behzad Soltanzadeh, Department of Water Resources, Operations and Maintenance Division Chief **21-4974**

b. Project Labor Agreement Annual Report **21-4975**

Attachments: 09082025 EOT 6b Project Labor Agreement Annual Report

c. Seismic Resilience Report 2025 **21-4972**

Attachments: 09082025 EOT 6c Seismic Resilience Report 2025

d. Capital Investment Plan quarterly report for period ending June 2025 **21-4973**

Attachments: 09082025 EOT 6d Capital Investment Plan Quarterly Report for Period Ending June 2025

7. MANAGEMENT ANNOUNCEMENTS AND HIGHLIGHTS

a. Engineering Services activities **21-4977**
Information Technology activities
Water System Operations activities

Attachments: 09082025 EOT 7a Engineering Services Activities
09082025 EOT 7a Water System Operations Activities

8. FOLLOW-UP ITEMS

NONE

9. FUTURE AGENDA ITEMS

10. ADJOURNMENT

NOTE: This committee reviews items and makes a recommendation for final action to the full Board of Directors. Final action will be taken by the Board of Directors. Committee agendas may be obtained on Metropolitan's Web site https://mwdh2o.legistar.com/Calendar.aspx. This committee will not take any final action that is binding on the Board, even when a quorum of the Board is present.

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

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

THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

MINUTES

ENGINEERING, OPERATIONS & TECHNOLOGY COMMITTEE

August 18, 2025

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

Members present: Chair Erdman, Vice Chair Faessel, Directors Alvarez, Bryant, Crawford, Dennstedt, Fong-Sakai, Jay, Lewitt, McMillan, Miller, and Seckel.

Members absent: Directors Luna and Petersen.

Other board members present: Chair Ortega, Vice Chair Camacho, Directors Ackerman, Dick, Gray (teleconference posted location), Katz, and Shepherd Romey.

Committee staff present: Benson, Chapman, Chaudhuri, Eckstrom, Hattar, Parsons, Rubin, and Upadhyay.

1. OPPORTUNITY FOR MEMBERS OF THE PUBLIC TO ADDRESS THE COMMITTEE ON MATTERS WITHIN THE COMMITTEE'S JURISDICTION (As required by Gov. Code Section 54954.3(a))

None.

CONSENT CALENDAR ITEMS – ACTION

2. COMMITTEE ACTION

A. Approval of the Minutes of the Engineering, Operations, and Technology Committee for July 7, 2025.

7-1 Subject: Authorize an agreement with Kaygen Inc., in an amount not to exceed $473,640 for MyWarehouse Shopping Cart Replacement project; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA.

Presented by: No presentation requested.

Motion: Authorize an agreement with Kaygen Inc., in an amount not to exceed $473,640 for MyWarehouse Shopping Cart Replacement project.

7-2 Subject: Authorize an on-call professional services agreement with Allied Reliability, Inc. for a not-to-exceed total amount of $1.75 million for asset reliability services; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA.

Presented by: No presentation requested.

Motion: Authorize an on-call professional services agreement with Allied Reliability, Inc. for a not-to-exceed total amount of $1.75 million for asset reliability services.

7-3 Subject: Award a $1,454,000 construction contract to MMC Inc. to replace the San Jacinto Diversion Structure slide gates; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA.

Presented by: No presentation requested.

Motion: Award a $1,454,000 construction contract to MMC Inc. to replace the San Jacinto Diversion Structure slide gates.

7-4 Subject: Award a $370,900 construction contract to American Wrecking Inc. for the removal of three existing gate frames in support of the San Gabriel Tower Improvements; the General Manager has determined that the proposed action is exempt or not subject to CEQA.

Presented by: No presentation requested.

Motion: Award a $370,900 construction contract to American Wrecking Inc. for the removal of three existing gate frames in support of the San Gabriel Tower Improvements.

Director Alvarez made a motion, seconded by Director Bryant, to approve the consent calendar consisting of items 2A, 7-1, 7-2, 7-3, and 7-4.

The vote was:

Ayes:	Directors Alvarez, Bryant, Crawford, Dennstedt, Erdman, Faessel, Fong-Sakai, Jay, Lewitt, McMillan, Miller, and Seckel.
Noes:	None
Abstentions:	Fong-Sakai (Item 2A)
Recusals	None
Not voting:	None
Absent:	Directors Luna and Petersen

The motion for Item 2A passed by a vote of 11 ayes, 0 noes, 1 abstention, and 2 absent.
The motion for Items 7-1, 7-2, 7-3 and 7-4 passed by a vote of 12 ayes, 0 noes, 0 abstentions, and 2 absent.

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

4. COMMITTEE ACTION ITEMS FOR BOARD CONSIDERATION

There were none.

5. COMMITTEE INFORMATIONAL ITEMS FOR BOARD CONSIDERATION

There were none

6. COMMITTEE ITEMS INFORMATIONAL

a. Subject: Increase of funding for the Capital Investment Plan for fiscal years 2024-25 and 2025-26

Presented by: Francisco Becerra, Section Manager, Engineering Services

Mr. Becerra reported on the following:

- Information on potentially increasing the current biennium CIP budget to address known vulnerabilities to Metropolitan's conveyance, distribution, and treatment systems

The following Directors provided comments or asked questions.

1. Alvarez
2. Bryant
3. Seckel
4. Vice Chair Faessel
5. Miller
6. Chair Erdman

Staff responded to the Directors' questions and comments.

b. Subject: Update on Golden Mussels in the State Water Project

Presented by: Paul Rochelle, Section Manager, Water Quality

Dr. Rochelle reported on the following:

- Update on invasive golden mussels in the State Water Project, potential impact on operations, and Metropolitan's response

The following Directors provided comments or asked questions.

1. Miller
2. Jay
3. Seckel
4. Dick
5. Chair Ortega

Staff responded to the Directors' questions and comments.

c. Subject: Planning and Execution of Pipeline Shutdowns Within Metropolitan's Distribution System

Presented by: Scott Reierson, Unit Manager, Conveyance & Distribution Eastern Region

Mr. Reierson reported on the following:

- Overview of activities required to plan and execute a conveyance and distribution system shutdown

The following Directors provided comments or asked questions.

1. Seckel
2. Vice Chair Faessel
3. Chair Ortega

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: Mai Hattar, Group Manager and Chief Engineer, Engineering Services Group

Shane Chapman, Assistant General Manager, Operations

Ms. Hattar reported on the following:

- Lake Skinner Dam Perimeter Drainage Improvements

Mr. Chapman reported on the following:

- Successful completion of the Lake Mathews tower shutdown and discharge valve repairs at Iron Mountain pumping plant. A video of the Lake Mathews shutdown was also shared with the committee.
- The IT Group successfully completed its annual disaster recovery exercise of business continuity applications within our Oracle Cloud tenancy. This critical test involved a comprehensive business continuity switchover of critical business applications and their dependencies.

The following Directors provided comments or asked questions.

1. Dennstedt

8. FOLLOW-UP ITEMS

None

9. FUTURE AGENDA ITEMS

None

Chair Erdman returned to Item 6d for discussion in closed session.

6d. Subject: Quarterly Cybersecurity Update [Conference with Metropolitan Director of Info Tech Services, Information Technology, Jacob Margolis, or designated agents on threats to public services or facilities; to be heard in closed session pursuant to Gov. Code Section 54957(a)]

Presented by: Closed Session Presentation

10. ADJOURNMENT

The next meeting will be held on September 8, 2025.

Meeting adjourned at 10:59 a.m.

Dennis Erdman
Chair

THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

Board Action

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

9/9/2025 Board Meeting

7-2

Subject

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

Executive Summary

The IntraMet is a restricted and internal network that enables Metropolitan employees to store, share, and organize information. The site dates back to 1997 and requires a modernized replacement to enhance Metropolitan's internal communications and ability to engage and support employees. This action awards an agreement for professional services to design, develop, and deploy a new internal website, the "IntraMet".

The purpose of this contract is to replace Metropolitan's IntraMet with newer technologies to function as a central hub that serves a broad range of purposes, which the current site is not able to. This includes cloud-based file sharing, document management, content management, inclusion of social technology, employee profiles, live messaging, forums, status updates, and group sites coupled with published data catalogs to allow secure data sharing, accessible from multiple devices such as laptops, tablets, and mobile phones.

Staff Recommendation: Option #1

Option #1

Authorize an agreement with West Monroe Partners in an amount not to exceed $722,500 for Metropolitan's IntraMet Redesign project.
Fiscal Impact: Expenditures of $1,182,300 in capital funds for FY2024-2026
Business Analysis: This option will provide MWD staff with an optimal intranet tool to administer internal services and help collaborate on efforts shared between teams.

Option #2

Do not proceed with the project at this time.
Fiscal Impact: No capital expenditures
Business Analysis: This option will forgo an opportunity to increase collaboration and data sharing between internal staff while increasing security risks on an unsupported web platform.

Alternatives Considered

None

Applicable Policy

Metropolitan Water District Administrative Code Section 5108: Appropriations

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

Metropolitan Water District Administrative Code Section 11104: Delegation of Responsibilities

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

None

California Environmental Quality Act (CEQA)

CEQA determination for Option #1:

The proposed action is exempt from CEQA because there is no potential for the activity in question to have a significant effect on the environment. (State CEQA Guidelines Section 15061(b)(3)).

CEQA determination for Option #2:

None required

Details and Background

Background

Metropolitan's current IntraMet is over 25 years old and poses several challenges that impact employee productivity and security. Its outdated design and non-intuitive organizational structure make it difficult for staff to locate essential information, services, and resources. The search functionality is dated, and the platform does not support modern needs such as decentralized content management or secure, targeted data sharing among teams spread across multiple facilities and campuses. These limitations are particularly significant in the age of hybrid and remote work.

Additionally, the current IntraMet introduces operational inefficiencies such as the need for constant browser switching, which hinders interdepartmental workflows. More critically, the platform cannot be updated with the latest patches or security enhancements, increasing Metropolitan's exposure to cybersecurity threats and malicious actors.

Recognizing these issues, Metropolitan launched a project in 2021 to assess the design and usage of the existing IntraMet. Following a successful Request for Information and extensive internal feedback, it was determined that a full redesign and rebuild were necessary.

Metropolitan's most effective means of empowering employees to communicate and collaborate is through its internal website, the IntraMet. In its current form, the IntraMet offers important services such as company news, job opportunity listings, procurement portals, and access to applications like timesheets and benefits. However, modernizing the platform will not only preserve these services but also provide a scalable, secure, and user-friendly system that enables each business unit to control and manage content. The upgraded IntraMet will improve collaboration, enhance productivity, and support Metropolitan's mission to serve employees effectively in a digital-first environment.

Professional and Technical Services (West Monroe Partners) – New Agreement

RFP-MN-1386 was issued on November 26, 2024. Metropolitan received a total of eleven responsive proposals from the competitive procurement process. The small and/or disabled veteran business enterprise goal designated for this solicitation was 25 percent. Proposals were reviewed to determine compliance with the instructions as set forth in the solicitation and evaluated by a committee based on the following criteria: firm qualifications, record of past performance, key personnel and staffing, technical approach and methodology, cost proposal, and business outreach program. West Monroe Partners, a regional business enterprise with offices in Los Angeles, CA, scored

highest among all respondents and is recommended to be awarded a contract in the total amount not to exceed $722,500.

West Monroe Partners has 20 years of experience in delivering these services. This vendor has worked with other public agencies, utilities, and organizations, including Con Edison and Dominion Energy. Their services specialize in intranet design, being awarded the 2018 & 2020 Nielsen Norman Group's 10 Best Intranets, and in 2024, winning the Best Overall Intranet award. Based upon their proposal, references, and experience, the RFP review team selected this vendor to be awarded the work. Approval of this contract will create a mechanism for Metropolitan to redesign and optimize the IntraMet in order to integrate advanced functionalities for internal communications and serve as a secure central hub to engage and support employees across multiple browsers and devices.

Summary

The total project budget is $1,182,300 and includes funds for awarding a new agreement with West Monroe Partners, for $722,500 for professional and technical services, $351,425 for internal labor costs by Metropolitan staff, and $108,375 in contingency funds.

This project has been evaluated and recommended by Metropolitan's Capital Investment Plan Team, and funds are available within the fiscal year 2024/25 and 2025/26 capital expenditure plan. See **Attachment 1** for the Financial Statement.

Project Milestones

Project Site Design Approval – February 2026

Site & Content Migration – July 2026

Site Implementation – July 2027

Project Completion – August 2027

8/27/2025
Charles Eckstrom *Date*
Information Technology, Group Manager

8/27/2025
Deven Upadhyay *Date*
General Manager

Attachment 1 – Financial Statement

Ref# it12704464

Allocated Funds for MWD Intramet Redesign

	Current Board Action (Sept. 2025)
Labor	
Studies & Investigations	$ -
Final Design	-
Owner Costs (Program mgmt.)	351,425
Submittals Review & Record Drwgs	-
Construction Inspection & Support	-
Metropolitan Force Construction	-
Materials & Supplies	-
Incidental Expenses	-
Professional/Technical Services	722,500
Equipment Use	-
Contracts	-
Remaining Budget	108,375
Total	**$ 1,182,300**

THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

Board Action

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

9/9/2025 Board Meeting

7-3

Subject

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

Executive Summary

This action awards an agreement with EyeP Solutions Inc. to install a wireless network at the Riverside locations. This action will replace the current system, which consists entirely of unsupported hardware and is running WiFi technology that is over ten years old.

The purpose of this contract is to complete the wireless upgrade for the Riverside locations. EyeP Solutions Inc. will install the physical infrastructure necessary. This will consist of installing network infrastructure where identified, running conduits and low-voltage cables between network closets, and installing Wireless Access Points as indicated in Metropolitan's design.

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

Staff Recommendation: Option #1

Option #1

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

Fiscal Impact: Expenditures of $1,117,391 in capital funds for FY 2024-2026
Business Analysis: By moving forward, Information Technology will provide a properly designed and modern wireless network and drastically improve the coverage and bandwidth at these locations.

Option #2

Do nothing at this time
Fiscal Impact: No fiscal impact
Business Analysis: The wireless network at these locations will remain poor and unreliable.

Alternatives Considered

None

Applicable Policy

Metropolitan Water District Administrative Code Section 5108: Appropriations

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

Metropolitan Water District Administrative Code Section 11104: Delegation of Responsibilities

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

None

California Environmental Quality Act (CEQA)

CEQA determination for Option #1:

The proposed action is exempt from CEQA because there is no potential for the activity in question to have a significant effect on the environment. (State CEQA Guidelines Section 15061(b)(3).)

CEQA determination for Option #2:

None required

Details and Background

Background

The legacy wireless network at the Metropolitan Riverside plant locations currently utilizes unsupported hardware, rendering it virtually unsupportable and unreliable.

The continued use of end-of-life unsupported hardware at the Riverside sites has resulted in unnecessary administrative overhead in the Information Technology group, as well as unsatisfactory end-user experiences. The current state of the wireless network at the Riverside sites is the result of years of ad-hoc implementations, resulting in poor coverage. Additionally, areas that had no coverage remained as such due to challenges in physically installing a wireless network. The new wireless network would address these aforementioned challenges and issues.

Specifications number 2112 was issued on April 25, 2025, to upgrade the Wireless Networks at Metropolitan's Riverside locations. Metropolitan received a total of two responsive bids from the competitive process on June 10, 2025. After reviewing all of the bids, EyeP Solutions Inc. was selected for the Public Works policy, which dictates that the lowest bidder is awarded. The Business Outreach participation goal designated for this solicitation was 25 percent.

A total of $1,117,391 is allocated for this work. In addition to the amount of the contract $334,791, the allocated funds for Metropolitan staff include $11,520 for IT Support, $46,080 for contract administration and project management, $650,000 for support for construction support, and $75,000 for the remaining budget.

This project has been evaluated and recommended by Metropolitan's Capital Investment Plan (CIP) Evaluation Team, and funds are available within the fiscal year 2024/25 capital expenditure plan. See **Attachment 1** for the allocation of funds and **Attachment 2** for the Abstract of Bids.

Project Milestone(s)

Union Station Headquarters, completed in 2022

Union Station Courtyard and Parking Garages, in progress

Riverside – September 2025 Board

San Bernardino – February 2026 Board

8/26/2025

Charlie Eckstrom *Date*
Group Manager, Information Technology

8/26/2025

Deven Upadhyay *Date*
General Manager

Attachment 1 – Financial Statement

Attachment 2 – Abstract of Bids

Ref# it12707841

Allocated Funds for WiFi Riverside Sites Upgrade

	Current Board Action (Sept. 2025)
Labor	
Studies & Investigations	$ -
Final Design	-
Owner Costs (Program mgmt.)	57,600
Submittals Review & Record Drwgs	-
Construction Inspection & Support	650,000
Metropolitan Force Construction	-
Materials & Supplies	-
Incidental Expenses	-
Professional/Technical Services	334,791
Equipment Use	-
Contracts	-
Remaining Budget	75,000
Total	**$ 1,117,391**

The Metropolitan Water District of Southern California

Abstract of Bids Received on June 12, 2025

Specification No. 2112

Bids for Riverside County WiFi Upgrades

Engineer's Estimate: $650,000

Bidder and Location		Total	SBE $	SBE %	Met SBE[1]
1	EyeP Solutions, Inc	**$334,791**	**$334,791**	**100%**	**Yes**
2	Marquez Cable Systems, Inc	$585,245	-	-	-

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

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

9/9/2025 Board Meeting

9-4

Subject

Update on research and framework for a community benefits program for Pure Water Southern California

Executive Summary

Metropolitan is exploring the development of a voluntary community benefits program for the Pure Water Southern California Program (PWSC). While not required under law, community benefit programs are increasingly recognized as best practices for large infrastructure projects, particularly those that may have residual impacts on underserved and disadvantaged communities located near project facilities. The purpose of such a program would be to complement required environmental mitigation efforts and help address impacts to the communities most affected by the program through voluntary, community-driven actions.

This letter provides an overview of ongoing efforts to explore a potential community benefits program for PWSC. It is accompanied by a supporting presentation outlining key findings from recent research and a proposed approach framework, as well as two supporting memos providing additional context and background. No funding level is proposed at this time.

Fiscal Impact

Not applicable

Applicable Policy

2025 Metropolitan Legislative Priorities and Principles: Support the development of water recycling projects, including Pure Water Southern California, to improve long-term supply reliability.

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 the 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.

Details and Background

Background

PWSC is a partnership between The Metropolitan Water District of Southern California and the Los Angeles County Sanitation Districts (Sanitation Districts) to beneficially reuse cleaned wastewater that is currently being discharged into the ocean from the Sanitation Districts' A.K. Warren Water Resource Facility in the City of Carson. At full scale, PWSC would produce up to 150 million gallons of purified water each day. PWSC's proposed facilities and components would be located within Los Angeles County and would extend from the City

of Carson to as far north as the City of Azusa and as far east as the City of La Verne. Anticipated program facilities include an advanced water purification facility, conveyance pipelines, pump stations, and recharge facilities.

Metropolitan is evaluating a community benefits program as part of PWSC to help address potential impacts to local communities. The program's planned infrastructure, particularly the conveyance system, would pass through several communities identified through state screening tools as disadvantaged and underserved. A formal community benefits program would provide a structured framework for investments informed by the community. This approach builds on Metropolitan's history of community-focused efforts, including the Diamond Valley Lake Recreation program, Palo Verde Valley Community Improvement Fund, and Metropolitan's Project Labor Agreement.

Planning and Coordination to Date

In 2023, staff began evaluating the potential for a community benefits program, working in collaboration with the Sanitation Districts and with support from Kearns & West. This effort is intended to support the development of a consistent and locally informed framework approach for delivering community benefits alongside major infrastructure projects that would be part of PWSC.

Community benefits programs are voluntary initiatives that go beyond required regulatory mitigation. They are intended to help address concerns in communities, particularly in underserved and disadvantaged areas, that may experience disproportionate impacts from construction and operations by identifying investments and engagement opportunities. Demographic analysis conducted during the planning found that approximately 35 percent of the population located within one mile of the proposed PWSC advanced water purification facility and backbone conveyance system lives within disadvantaged communities as defined by the Department of Water Resources, and approximately 71 percent of the population is disadvantaged as identified by CalEnviroScreen.

The proposed approach framework for the program has been informed by research, internal coordination, and early discussions with staff from Metropolitan, the Sanitation Districts, and with input from local communities near proposed program facilities.

Community Benefits Program Development

Two memos support this update:

Memo 1 (**Attachment 1**) summarized findings from a review of peer agency programs, including efforts by the California Department of Water Resources, California High-Speed Rail Authority, LA Metro, and Gordie Howe International Bridge in Detroit. These examples illustrate how community benefits programs are used to address local concerns and provide lasting value in areas affected by infrastructure.

Memo 2 (**Attachment 2**) proposes a five-part approach framework specific to PWSC, shaped by community engagement, Metropolitan precedent, and additional factors. The five components are:

1. ***Regional Water Supply, Quality, and Resiliency Benefits***
   Contextualizes the broader regional benefit of PWSC, particularly for communities reliant on groundwater basins enhanced by PWSC.
2. ***Community-Focused Program Design***
   A commitment to incorporating equity, cultural, and community considerations into project design and construction planning.
3. ***Environmental Mitigation, Permit and Agreement Conditions, and Regulatory Compliance***
   Covers required actions that will provide benefits to local communities during construction and operation.
4. ***Workforce Development and Local Business Opportunities***
   Advances Metropolitan's Project Labor Agreement, Business Outreach Program, and workforce development initiatives to create access to job training, water industry careers and business opportunities.

5. ***Additional Community Benefits***
   Envisions potential direct actions through Metropolitan-led projects and the creation of a community benefits fund, with oversight from community advisory groups to ensure funding aligns with local priorities and needs.

Next Steps

Staff will consider and incorporate board input to refine the proposed framework and begin developing potential implementation paths. Further updates will be brought to the Board as planning advances.

8/27/2025
Mai M. Hattar *Date*
Chief Engineer
Engineering Services

8/27/2025
John Bednarski *Date*
Assistant General Manager

Attachment 1 – Community Benefits Research

Attachment 2 – Community Benefits Program Approach Framework

Ref# es12701949

Attachment 1

Summary of Desktop Research on Community Benefits Programs
Pure Water Southern California

MEMO

To: Rupam Soni, Community Relations Manager
Metropolitan Water District of Southern California (Metropolitan)

From: Joan Isaacson, Principal; John Bowie, Senior Director; and Christian Mendez, Director

Date: October 23, 2023; Revised November 13, 2023, and July 8, 2025

Re: **Summary of Desktop Research on Community Benefits Programs**
Pure Water Southern California

PURPOSE

The Metropolitan Water District of Southern California (Metropolitan) is planning to embark on multiple major infrastructure projects in upcoming years and anticipates consideration of community benefits programs for them. Having an established approach framework for planning community benefits programs will help to achieve consistency, efficiency, and effectiveness as Metropolitan undertakes these important projects. Metropolitan is initiating this type of approach for a community benefits program as part of Pure Water Southern California.

While community benefits programs are an increasingly common component of major infrastructure projects, they generally lack a standardized statutory definition. Additionally, their specific components and objectives can vary widely depending on the context and project needs. The community benefits program is a concept that has evolved over time to offset adverse consequences to those communities that will experience impacts of projects that have broader societal benefits. Some federal agencies have established guidance for specific projects, but for the most part, regional and local agencies determine their own approaches and protocols for community benefits programs. Regardless of the variability, **community benefits programs typically are voluntary commitments on the part of the agencies responsible for project implementation.**

This memo provides "baseline" information about community benefits programs for use by Metropolitan in developing its approach framework for Pure Water Southern California. It provides background and examples of definitions and public agency approaches, with an expansion on the relationship between community benefits programs and the environmental review process and environmental justice considerations (see below for definition of environmental justice). Some examples and options identified in the memo could be incorporated into Metropolitan's approach framework, and/or they might spur new ideas to optimize Metropolitans' objectives and needs for community benefits programs.

About the Project Team: Kearns & West primarily provides services in stakeholder facilitation and community engagement, with a significant focus on supporting major public infrastructure projects. However, many of our team members have prior work experience in environmental review and planning. Across our projects, we have interacted with a variety of community benefits programs, reflecting an array of approaches depending on the involved public agencies and specific project needs. The research for this memo was conducted by John Bowie, Kearns & West Director, who is a licensed member of the California Bar Association and has experience as a former Commissioner on the Palo Alto Utilities Advisory Commission. John is also a former fellow at UC Berkeley School of Law's Center for Law, Energy, and the Environment and has worked on a variety of environmental and natural

resource projects, including drafting guidance for drafting joint National Environmental Policy Act/California Environmental Quality Act (NEPA/CEQA) documents for a federal agency.

TERMINOLOGY

Because a standard statutory definition of a community benefits program is not established, terminology and definitions are variable. The discussion of the terminology below is an attempt to achieve precision in Metropolitan's conversations about community benefit programs. Ultimately, Metropolitan's approach framework needs to specify the definitions that work best for the Pure Water Southern California program goals and implementation paths.

Environmental Justice

The definition of "environmental justice" can vary subtly depending on the context of its use in discussion in policy, environmental review, news media, etc. The US Environmental Protection Agency (EPA) defines environmental justice as the fair treatment and meaningful involvement of all people, regardless of race, color, national origin, or income, with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. EPA further defines "fair treatment" as no group of people shall bear a disproportionate share of the negative environmental consequences resulting from industrial, governmental, and commercial operations or policies.

Equity

"Equity" is a broader term than environmental justice and often has specialized definitions by sector, such as water equity, climate equity, and economic equity. It generally refers to fairness and justice and is distinguished from equality. Whereas equality means providing the same to all, equity means recognizing that everyone does not start from the same place and requires acknowledgment and making adjustments to achieve greater balance.

Community Benefits Program/Plan

In our review of federal programs, we saw greater use of the term "community benefits plan," but in State of California programs, we saw greater use of "community benefits program." Therefore, the latter is used in this memo.

The general definition of a community benefits program – pieced from multiple sources – is a set of commitments made by the project proponent to address the adverse effects on the communities and the local environment in which they are built, recognizing that the benefits of the project are not fully experienced locally. It can be considered a blueprint for how the project will benefit the residents, businesses, and organizations within the host community. Benefits to environmental justice and underserved communities are often prioritized. While they can include mitigation required by the environmental review process and other regulatory-driven actions, the commitments often go above and beyond the regulatory requirements and address goals related to local needs like local jobs and workforce development, climate resilience, equity, and public health, based on input from local community members. These are voluntary commitments that have historically not been holistically addressed by the regulatory frameworks for project design and implementation.

Examples of project components that are typically considered different from community benefit program commitments are environmental mitigation measures, regulatory compliance measures, and permit conditions.

Community Benefit vs. "Community Benefits Program/Plan"

In our research, we often saw project features and environmental mitigation measures discussed as having community benefit or community improvement, especially when informed by a community engagement process. These are valid characterizations but substantively different than a designated community benefits program.

Community Benefit Agreement

Community benefit agreements have historical roots as contractual agreements between community benefit groups and developers, stipulating the benefits a developer agrees to fund or furnish, in exchange for project support. Benefits can include commitments to hire directly from a community, contributions to economic trust funds, local workforce training guarantees, and more. They are associated more with private developers, but public agencies are starting to use them too, such as the California High-Speed Rail Authority Community Benefits Agreement with unions and contractors. (The overarching objectives of the High-Speed Rail Authority agreement have similarities with Metropolitan's own landmark Project Labor Agreement for Construction Contracts.)

A community benefit agreement(s) may become an implementation action of a community benefits program.

EVOLUTION OF COMMUNITY BENEFITS PROGRAMS

Collecting information specifically about the history of community benefits programs proved challenging, which may relate to the lack of standardized definitions and implementation protocols. Interestingly, public agencies have informally provided features for public benefit and improvement as part of major development and infrastructure projects for decades. For example, consider the common and longstanding practice of incorporating a public park in a reservoir project or in a new public library or civic center complex. Current practice for community benefits programs has shifted from this historical broad public benefit to focus on addressing environmental justice and impacts on underserved communities.

Community benefits programs are distinctly tied to the environmental justice movement, which has roots in the 1960s Civil Rights Movement and 1980s activism around the siting of a solid waste landfill in Texas and a PCB (polychlorinated biphenyls) landfill in North Carolina, both in close proximity to African American communities.

The first major federal requirement for consideration of environmental justice was incorporated in 1994 into NEPA by Executive Order 12898. In a section called Federal Actions to Address Environmental Justice in Minority Populations and Low-income Populations, the order directs federal agencies to make achieving environmental justice a part of their mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of programs, policies, and activities on minority and low-income populations, including tribal populations. The executive order establishes using the NEPA process to promote environmental justice by addressing the human health, economic, and social effects on these populations, but notably, it doesn't specifically require mitigation measures for environmental justice impacts. However, the mitigation measures for environmental impacts should reflect the needs and preferences of impacted communities, based on meaningful community engagement.

Environmental justice is not mentioned in the statutory language of CEQA, and environmental justice was not intended as a fundamental purpose of CEQA as an environmental review statute. However, CEQA is regarded as a tool for addressing environmental justice concerns as they relate to the

environmental resource areas covered under CEQA. Furthermore, the current State of California Attorney General has taken actions to implement California law that defines environmental justice as the fair treatment of people of all races, cultures, and incomes with respect to the development, adoption, implementation, and enforcement of environmental laws, regulations, and policies. This includes ensuring that CEQA fairly addresses environmental impacts in relationship to these populations and that appropriate mitigation measures are identified and implemented.

In 2021, another federal executive order, the Justice40 Initiative[1], directed all federal agencies to develop programs, policies, and activities to address the disproportionate health, environmental, economic, and climate impacts on disadvantaged communities. Justice40 prioritizes environmental justice and ensures a whole-of-government approach to addressing current and historical environmental injustices. A cornerstone of the Justice 40 Initiative is a federal goal of delivering 40% of the overall benefits of relevant federal investments to disadvantaged communities. All Justice40-covered programs are required to engage in stakeholder consultation and ensure that community stakeholders are meaningfully involved in determining program benefits.

In alignment with Justice40, new federal programs explicitly include provisions for community benefits programs, including the following examples:

- The Department of Energy requires community benefits plans for all funding announcements and loan applications under the Bipartisan Infrastructure Law and Inflation Reduction Act. Four priorities are identified for the Community benefits plans: hiring American workers, engaging communities and labor, promoting diversity and inclusion, and implementing Justice40. Provisions allow for flexibility for innovative approaches as long as features can be measured and achieved.
- The Department of Transportation, as part of its Bipartisan Infrastructure Law Grants Program, requires Community Benefits Plans as part of all funding opportunity announcements and loan applications. Priorities for benefits include workforce investment, community engagement, diverse and equitable inclusion, accessibility, and Justice40 implementation.
- The Environmental Protection Agency's Green Infrastructure Funding Opportunities include the Clean Water State Revolving Fund, which provides low-cost financing for a wide range of water quality infrastructure projects, including stormwater and green infrastructure. Beyond the infrastructure goals, community benefits such as environmental justice, climate resilience, and public health are encouraged.

The priorities identified in the above examples represent a trend of community benefits programs that are unrelated to environmental impacts or are only loosely related to environmental impacts.

EXAMPLES

Of note, desktop research did not yield many examples of community benefits programs. There are many examples of community benefits agreements, and examples of community benefits programs in

[1]The Justice40 initiative was rescinded in January 2025 by Executive Order 14148, "Initial Rescissions of Harmful Executive Orders and Actions" (Jan. 20 2025), §3 (rescinds Executive Order 14008, "Tackling the Climate Crisis at Home and Abroad," which established the Justice40 Initiative). While it is referenced in this research memo, the Pure Water community benefits framework and approach paper was updated to align with current state and federal guidance.

the medical sector were also abundant. A few resources for community benefits programs integrated into development regulations and zoning were also uncovered, but they mainly focused on requiring public improvements and facilities for properties being "upzoned" for taller, denser buildings.

Our team believes that the following examples will be interesting and potentially helpful to Metropolitan when considering the development of its approach framework for community benefits programs. Please note that some of the following examples do not entirely align with the concept of community benefits programs but are likely still of interest.

California

State of California Department of Water Resources (DWR) – Delta Conveyance Project: DWR is developing a community benefits program for the proposed Delta Conveyance Project, which will ultimately identify and implement commitments, if the Delta Conveyance Project is approved, to help protect and enhance the cultural, recreational, natural resource, and agricultural values of the Delta. Development and eventual administration of this program will be a grassroots and collaborative process with the local community. The commitments in the community benefits program can include a wide range of possible approaches, including economic and social benefits from job training programs and local hiring targets or funding for local improvement projects such as infrastructure or recreational facilities. Informational materials explain that the Delta Conveyance Project is a large infrastructure project that has broad benefits but adverse impacts on communities within proximity of the project footprint. Community engagement to date has included stakeholder interviews, community workshops, and a questionnaire. The Delta Community Fund is planned as a community-driven approach for fund management for local residents, leaders, and other participants to be directly involved in implementation.

Notes: There's no mention of equity in the overview information (potentially due to the wide range of stakeholder interests and perspectives), but there is a clear distinction between regulatory mitigation (CEQA/NEPA) and the community benefits program. Go here for helpful Fact Sheet and Draft Community Benefits Program Framework.

California High-Speed Rail Authority – San Francisco to San Jose and San Jose to Merced Project Sections: Under contract to the Authority, Kearns & West, including Joan Isaacson, conducted substantial community outreach and engagement program as part of the separate CEQA/NEPA environmental review process for each section. Initial engagement solicited input for general ideas on "community benefits" for both sections. Then, the environmental team shored up their approach based on the Draft EIR/EIS analyses, which yielded different impact conclusions for each section.

The environmental mitigation for both sections was developed with substantial community input, with emphasis on the engagement of underserved and disadvantaged communities. The environmental mitigation in both documents is considered to have substantial public benefit and will help to reduce impacts in environmental justice communities.

However, the EIR/EIS for the San Francisco to San Jose Section indicates that, following the application of environmental mitigation, environmental justice communities would not be subject to disproportional impacts. The EIR/EIS for the San Jose to Merced Section indicates that, following the application of environmental mitigation, environmental justice communities would be subject to "residual" disproportional impacts. The San Jose to Merced Final EIR/EIS, therefore, includes an appendix that identifies "proposed offsetting mitigation measures," which collectively are similar to a community benefits program in theory. The appendix also documents High-Speed Rail Authority's methodology for determining the measures, cost estimates, and implementation roles.

Notes: Go here for Board presentation slides.

LA Metro – West Santa Ana Branch Transit Oriented Development Strategic Implementation Plan: In order to maximize the transit investment that will be made in the West Santa Ana Branch Transit Corridor – another kind of corridor project, like a major pipeline project – and to ensure that communities along the corridor equitably benefit from the investment, LA Metro facilitated the development of a Transit Oriented Development Strategic Implementation Plan. The plan was funded by the Federal Transit Administration Pilot Transit Oriented Development Project program and completed in partnership with the City of South Gate and Eco-Rapid Transit.

The Strategic Implementation Plan provides an overarching vision and strategic guidance for local West Santa Ana Branch jurisdictions to use as a reference as they develop and implement their own plans, policies, and economic development and mobility strategies in the 12 station areas along the alignment. Projects aligned with the Strategic Implementation Plan will contribute to equitable and sustainable transformation of the station areas, as well as making the areas safe and accessible via multiple modes of mobility.

LA Metro funds projects through an application process. The first two rounds appear to have provided $1 million, allocated in awards up to $200,000 each. Eligible funding activities specified in the Strategic Implementation Plan fall into six categories: Governance, Equitable Development & Community Preservation, Transit Supportive Planning, Placemaking, Mobility Access & Connectivity, and Sustainability and Resilience. The program includes provisions for technical assistance to applicants who may lack resources to otherwise prepare a competitive and comprehensive application.

Notes: The West Santa Ana Branch Transit Corridor involves linear infrastructure just like a pipeline project; of note is the use of a grant process to fund projects instead of direct project implementation. Go here for an overview.

Elsewhere

Windsor-Detroit Bridge Authority (Michigan) – Gordie Howe International Bridge Project: The Gordie Howe International Bridge project, with Canadian and US ports of entry, will deliver much-needed transportation improvements for international travelers, and it will also provide jobs and opportunities for growth to the Windsor, Ontario and Detroit, Michigan region. A key project element is the inclusion of a Community Benefits Plan. On the Gordie Howe International Bridge project, community benefits are identified opportunities that can advance economic, social, or environmental conditions for the local communities. In developing the Community Benefits Plan, initiatives providing positive outcomes for the Windsor-Detroit region and that specifically focus on enhancing the communities of Sandwich and Delray, the neighborhoods closest to the project area, were prioritized. The Community Benefits Plan is the result of community members, agencies, and governments coming together to identify a vision of the future, and it aspires to guaranteeing that the people located most directly adjacent to the Gordie Howe International Bridge project will be among its truest beneficiaries.

The Community Benefits Plan has a twofold strategy: Workforce Development and Neighborhood Infrastructure. The Neighborhood Infrastructure had about $15 million funding, but the funding information related to Workforce Development is more complex.

Notes: For the plan, go here.

DISCUSSION POINTS FOR NEXT STEPS

For the framework approach for Pure Water Southern California, Metropolitan could explore a three-pronged approach for environmental justice and equity: 1) The already established Project Labor Agreement; 2) required environmental mitigation that has public benefit and helps to address environmental justice considerations informed by community input; and 3) a community benefits program that could address any residual impacts to environmental justice communities and achieve other equity objectives established by Metropolitan.

Metropolitan should consider an option similar to LA Metro's that consists of funding projects through a competitive application process, especially given the similar corridor footprint of LA Metro's new transit line and Pure Water Southern California. However, while Pure Water Southern California's potential impacts in the pipeline corridor will primarily occur during construction, LA Metro's new transit line will have impacts during construction and during the many years of operation.

The City of Toronto's Community Benefits Framework is far more than what's needed by Metropolitan, but it might provide ideas on how to combine different types of programs into a single consistent approach.

Because Metropolitan is pursuing federal grant funding for Pure Water Southern California, the specific grant programs should be reviewed for requirements and guidance on incorporation of community benefits. For example, Metropolitan recently submitted an application for the Department of Interior/Bureau of Reclamation WaterSMART: Large-Scale Water Recycling Projects funding program. The WaterSMART program is a "covered" program under Justice40, President Biden's Executive Order that aims to ensure 40 percent of the overall benefits of certain climate, clean energy and other federal investments flow to disadvantaged communities that have been marginalized by underinvestment and overburdened by pollution. Go here for information about Justice40, including requirements for the covered programs.

Attachment 2

Pure Water Southern California
Approach for Community Benefits Program

Metropolitan Water District of Southern California
Pure Water Southern California
Approach for Community Benefits Program

7/8/25

1. Introduction

The Metropolitan Water District of Southern California (Metropolitan) is considering major infrastructure projects in upcoming years with the aim of ensuring that its system is resilient and can readily adapt to climate change and evolving water supply conditions. A component of these projects could involve providing certain benefits to the communities most affected by such projects, including those that are considered underserved and disadvantaged.

This paper recommends an approach for assessing and planning for community benefits as part of Pure Water Southern California (Pure Water), a program currently in the planning and environmental review stages, in preparation for approval consideration by the Metropolitan Board of Directors. This program would entail purifying and reusing cleaned wastewater that currently flows into the ocean from the A.K. Warren Water Resource Facility located in Carson, California, which is owned and operated by the Los Angeles County Sanitation Districts (LACSD).

At full scale, Pure Water would produce 150 million gallons of purified water each day, which would be used to recharge the groundwater aquifers that serve as a drinking water supply for the region. Additionally, this purified water would be used for some non-potable applications and could provide new source water for Metropolitan's existing treatment plants. Metropolitan is partnering with LACSD on Pure Water, and they have discussed the possibility of partnering on this community benefits program as well.

Methodology

The recommended approach documented in this paper is the result of a collaborative process involving Metropolitan and LACSD staff and Pure Water consultant team members. Kearns & West supported research, process facilitation, and report writing, including this paper. The first step involved discussing "baseline" information about other community benefits programs, including their histories, definitions, and examples as summarized in Memo #1[1]. The next step consisted of reviewing and soliciting feedback on components for the approach during a series of meetings with individual staff members as well as groups of Pure Water program staff, as listed in the Attachment. The third step of documenting the approach is accomplished in this paper.

Contents

This paper is organized in four sections:

- ***Section 1, Introduction:*** Overviews the overarching purpose of Pure Water's community benefits program.
- ***Section 2, Objectives:*** Establishes recommended objectives for the community benefits program.
- ***Section 3, Context Factors:*** Provides background information on related Metropolitan programs, federal and state policy, funding drivers, and underserved and disadvantaged communities across the Metropolitan service area and in the vicinity of the program area.

[1] Memo #1 was summary of desktop research on community benefits programs, terminology, examples, and additional considerations. Memo #1 was produced by the Kearns & West team.

- ***Section 4: Recommended Approach:*** Lays out the recommended approach and descriptions of its five components: Pure Water's Regional Water Supply, Quality, and Resiliency Benefits; Community-Focused Program Design; Environmental Mitigation, Permit and Agreement Conditions, and Regulatory Compliance; Workforce Development and Local Business Opportunities; and Additional Community Benefits.

2. Objectives

Metropolitan's purpose in considering community benefits as part of Pure Water is to address the long-term impacts of operations as well as significant construction impacts to local communities. These communities may benefit from water supply enhancements from the projects themselves, investments necessary for regulatory compliance, and additional programs intended for areas affected by project construction and operations. However, there may be more that can be accomplished through a formal community benefits program with the following objectives:

- Consider communities that may experience impacts from the program relative to the benefits provided to the wider region.
- Recognize that community members are experts about the conditions, needs, priorities, and goals in their areas, and use their input in determining effective actions that reduce program effects and contribute to local sustainability.

3. Context Factors

This section overviews various factors that have informed the community benefits program for Pure Water.

Metropolitan Precedents

Metropolitan has a long history of incorporating community projects and funding into major infrastructure programs, recognizing that the effects on local communities would not be offset by the program's regional benefits. Two are described below:

- **Diamond Valley Lake (DVL):** When the 810,000-acre-foot reservoir was constructed by Metropolitan between 1995 and 2000, an array of recreational opportunities for local and regional communities were integrated into the program. The amenities included on-water activities such as boating, fishing, canoeing, kayaking, and sailing; adjacent multi-purpose trails; bike paths; a public park; 2.5 miles of shoreline fishing; a marina, and concession area. Planning was accomplished collaboratively with other agencies servicing the region. Metropolitan's involvement continues as part of a 2017 agreement that includes an Implementation Committee with the other agencies and stakeholders for the purposes of securing funding and continuing the planning to enhance the recreational amenities. The DVL Recreation Program is a unique appropriation. It was funded with $92.8M in 2004 and $4.5M was added in 2021.
- **Seasonal Land Fallowing Partnership with Palo Verde Irrigation District:** In 2005, a 35-year agreement was implemented to pay farmers to refrain from irrigating between 7 and 28 percent of land in the Palo Verde Valley at Metropolitan's call, making water available for Metropolitan's service area. Metropolitan established a $6 million Community Improvement Fund that is managed and administered by a Board of Directors to support community improvement programs, small business development and workforce training in the Palo Verde Valley. As of 2018, the Community Improvement Fund Board of Directors awarded 45 public benefit grants totaling $1.7 million. The Board includes local citizens as well as local agency and Metropolitan representatives. The Board's

stated purpose for the fund is to, "Effectively oversee and utilize the mitigation funds allocated by Metropolitan for the purpose of mitigating the adverse effects of the Program on the Palo Verde Valley region by supporting economic growth in the Palo Verde Valley." The areas of interest identified in the purpose statement are economic development, community development, job creation, and related vocational training programs to enhance Palo Verde Valley communities. Building on this commitment, in February 2025, the Board voted to join with Palo Verde Irrigation District to contribute up to $8 million for a community improvement program funded by federal grants to support business development, public health, schools, public safety and other projects.

Metropolitan's Project Labor Agreement

In 2022, Metropolitan established a landmark Project Labor Agreement. It covers about 90 percent of Metropolitan's anticipated Capital Investment Plan projects, and ensures fair wages, provides new opportunities for workers in the service area to be part of the building and construction, and helps grow the small business community. Metropolitan views building a diverse and qualified workforce as critical. The Project Labor Agreement creates a Construction Careers Pipeline Program to support local and transitional workers. It includes recruitment and outreach focusing on equity and diversity, training, career placement, worker support and retention, and tracking progress on local worker and transitional worker goals. The employment goal for local workers is 60 percent – the highest in the region. The goal for transitional worker engagement is 15 percent on construction projects, also the highest in the region, aiming to employ workers who come from potentially at-risk situations due to various circumstances in their backgrounds.

Metropolitan's Diversity, Equity, and Inclusion Framework and Goals

In 2023, Metropolitan established a framework and goals for diversity, equity, and inclusion, which can help inform the approach for a community benefits program for Pure Water. The framework and goals shown in **Figure 1** address the agency's existing and future workplace; water planning, conveyance, and delivery; and communication and connection with underserved communities and nontraditional partners.

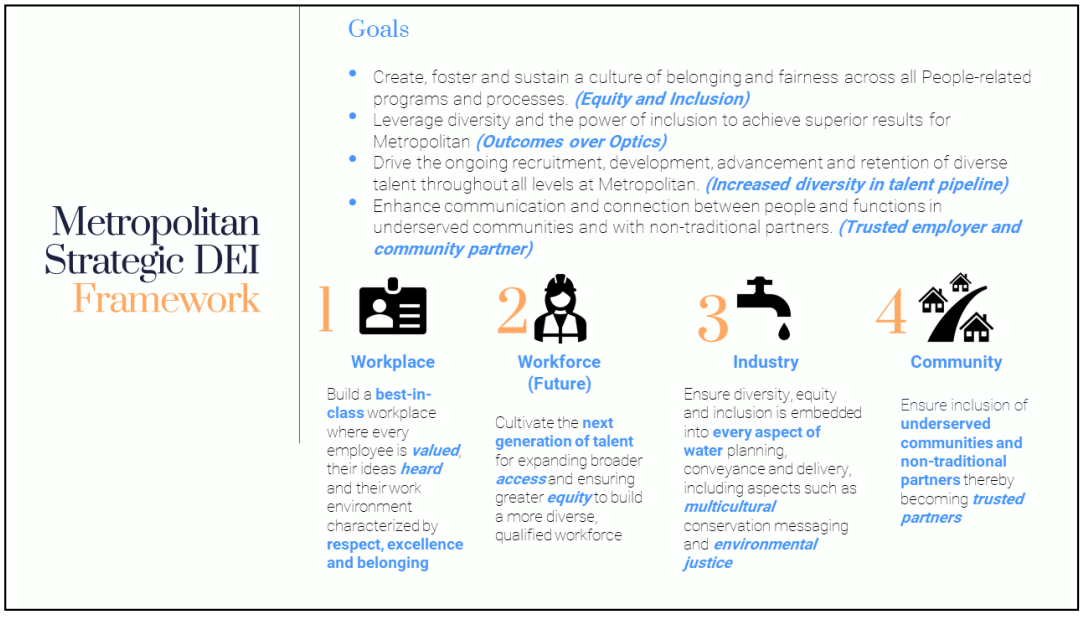

Figure 1: Metropolitan's Strategic Diversity, Equity, and Inclusion Framework.

Climate Adaptation Master Plan for Water

The Climate Adaptation Master Plan for Water (CAMP4W) includes equity as a central component of Metropolitan's climate resilience strategy. CAMP4W recognizes that addressing climate impacts requires ensuring that frontline, underserved, and historically underrepresented communities are engaged and considered in project planning and benefit distribution. Equity is reflected across CAMP4W's Policy Framework, Climate Decision-Making Framework, and Evaluative Criteria, which guide how projects and programs are assessed and implemented. Key attributes in assessing equity include community engagement, community benefits, broad community support, and a focus on underserved populations. A community benefits program can directly advance CAMP4W goals by helping ensure that climate resilience investments also result in meaningful, measurable benefits for the communities most impacted by environmental and infrastructure challenges.

Underserved and Disadvantaged Communities in Metropolitan's Service Area and Near Program Infrastructure

The California Department of Water Resources defines disadvantaged community households as those whose household income is 80 percent or less of the statewide median household income level and severely disadvantaged communities as those with 60 percent or less of the statewide median household income level, based on US Census 2020. The following sections provide information about the disadvantaged communities in the Metropolitan Service area that will benefit from Pure Water Southern California and the disadvantaged communities in the vicinity of program infrastructure to be constructed and operated.

Metropolitan Service Area

Using this definition and based on analysis by staff, 30 percent of the Pure Water program area is designated as a disadvantaged community. The program area is the combined service areas of member agencies that would be direct recipients of water from the full-scale program. These member agencies would receive water supplies through groundwater replenishment and/or raw water augmentation from the Weymouth and Diemer Water Treatment Plants. **Figure 2** shows the distribution of disadvantaged and severely disadvantaged communities in the service area and in relationship to the Pure Water facilities and backbone pipeline.

CalEnviroScreen uses environmental, health, and socioeconomic information to produce scores for every census tract in the state. An area with a high score is one that experiences a much higher pollution burden than areas with low scores. Communities with CalEnviroScreen scores of 75 percent or above are considered disadvantaged per state guidelines. Based on CalEnvirScreen 4.0 data, approximately 40 percent of the Pure Water program area is disadvantaged. **Figure 3** shows the distribution of disadvantaged communities identified using CalEnviroScreen. **Figures 2 and 3** together show the underserved communities in the program area that would benefit from the purified water resulting from Pure Water.

Near Program Infrastructure

Another consideration are the communities located along or within the vicinity of the proposed facilities and backbone pipeline alignment who will experience effects of construction. Approximately 35 percent of the population that is within one mile of the proposed advanced water purification facility and 39-mile backbone conveyance system falls within disadvantaged communities as identified by the Department of Water Resources and 71 percent is disadvantaged as identified by CalEnviroScreen. Those communities near the proposed facilities in the Carson area may also experience effects from operations. Using the CalEnviroScreen data, much of Carson, where many facilities would be located, ranks in the highest percentile of disadvantaged communities.

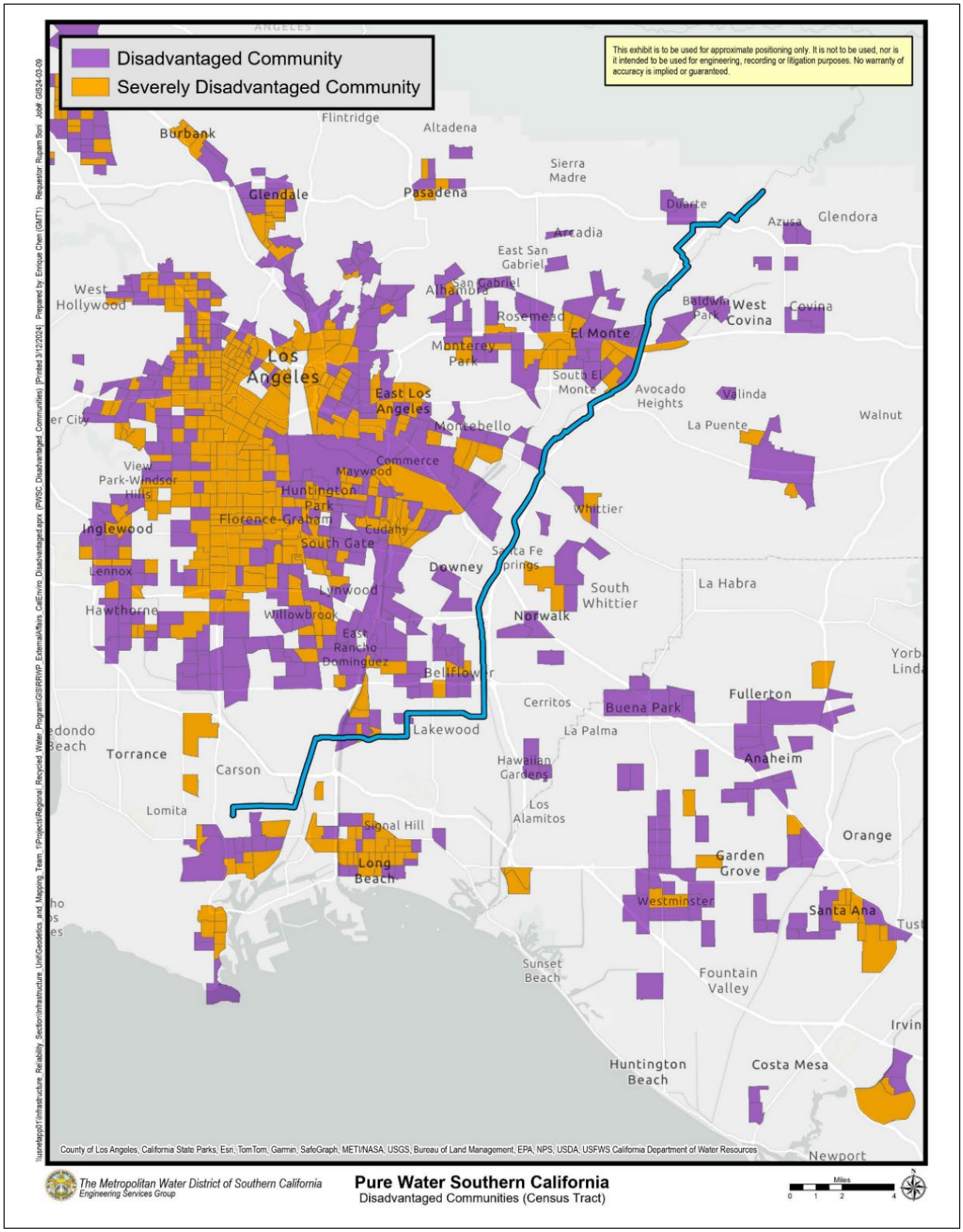

Figure 2: Disadvantaged and Severely Disadvantaged Communities in Metropolitan Service Area from California Department of Water Resources.

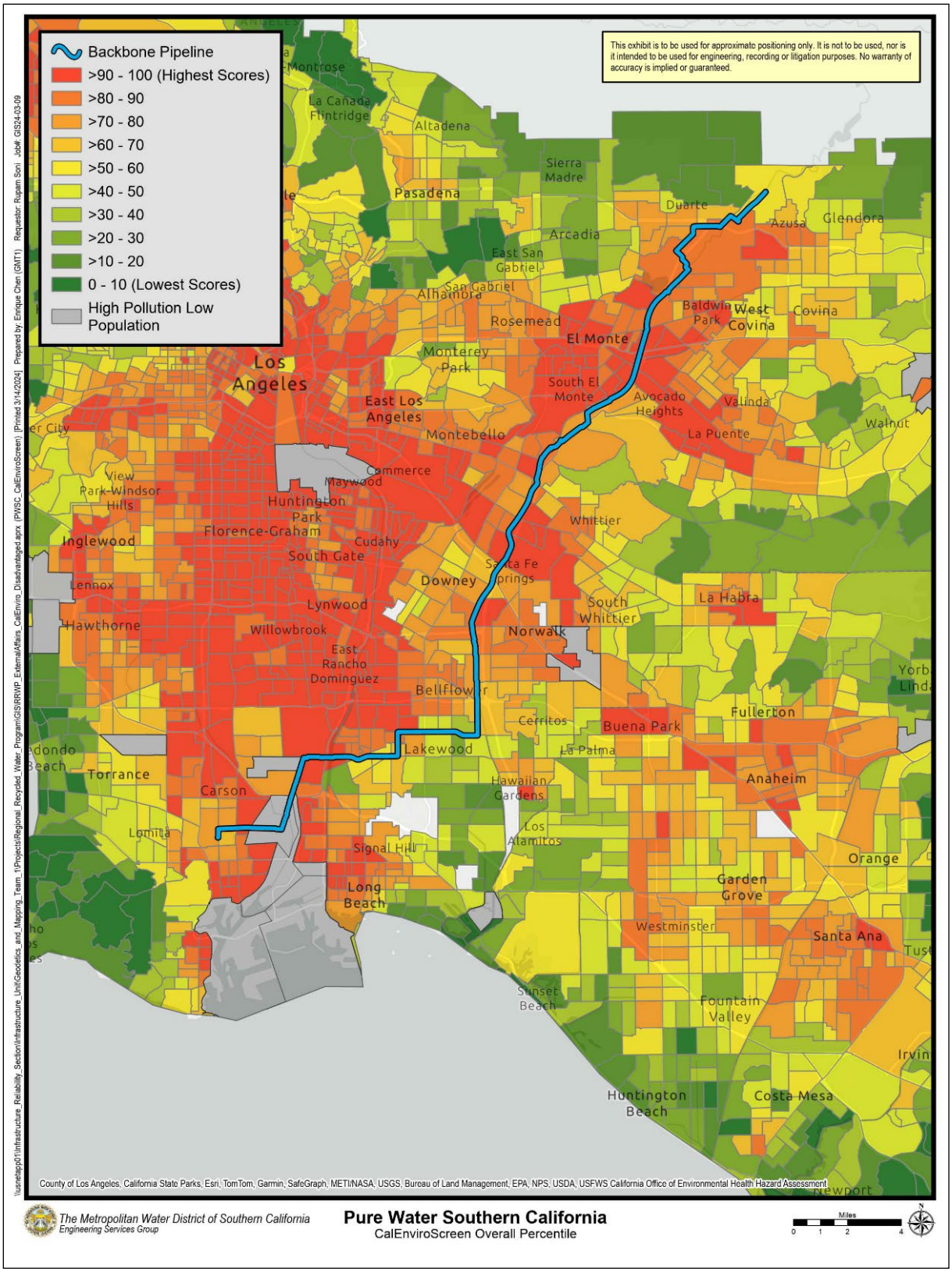

Figure 3: Disadvantaged Communities from CalEnviroScreen (75% or Higher Scores).

4. Recommended Approach

The framework of Metropolitan's recommended approach to community benefits is shown in the diagram in **Figure 4**. Importantly, each component is influenced by the many types of engagement with community members and other stakeholders conducted by Metropolitan and LACSD. Descriptions of the five components follow the diagram.

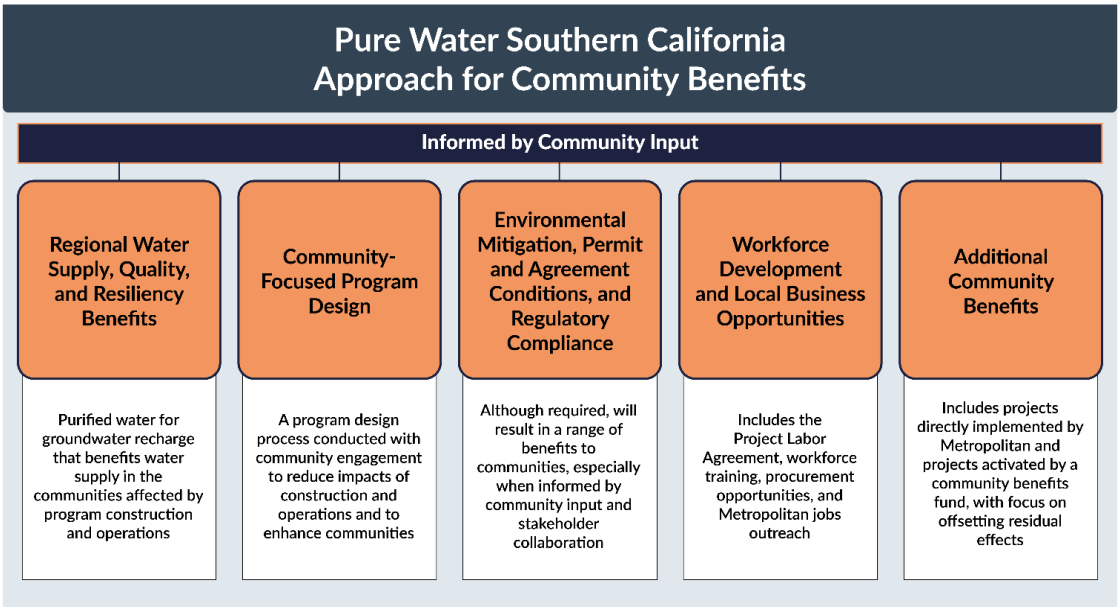

Figure 4: Proposed Approach for Community Benefits.

Regional Water Supply, Quality, and Resiliency Benefits

This first component of the approach addresses Pure Water's substantial regional benefits in relation to water supply, quality, and resiliency. The communities across the Metropolitan service area, particularly those located along or near the Pure Water proposed facilities and pipe alignment, will share in these water-related benefits.

These benefits were outlined in a recent funding application as follows:

"Many identified disadvantaged community areas are concentrated in areas where the primary source of water supply is groundwater, especially in the Central and West Coast groundwater basins. Potable reuse projects such as Pure Water produce water low in total dissolved solids (TDS), which would improve groundwater water quality in terms of lowering TDS, nitrate, sulfate, and chloride concentrations. These improvements would help with the long-term salt balance for the groundwater basins, protecting public water supply and the health of the communities that depend on these basins. Pure Water will help support groundwater aquifers in the service area by augmenting groundwater levels with purified water, thus providing water supply reliability."

Community-Focused Program Design

The second component of the approach is the community-focused design process for Pure Water. Metropolitan's process has been guided by the premise that while infrastructure primarily is driven by engineering parameters, its impact on equity, culture, and community fabric should also be considered during design and construction. Work in this area is already beginning. Metropolitan's engineering, planning,

and design teams and their LACSD counterparts have conducted extensive studies to explore alternatives and options for reducing the impacts of construction and operations. An essential part of these studies has been sharing preliminary drawings with local municipal staff and community leaders to hear feedback and ideas. This input is being considered to fine-tune the studies, create new alternatives, and advance the alternatives that indicate the greatest potential for the lowest levels of disruption.

Environmental Mitigation, Permit and Agreement Conditions, and Regulatory Compliance

The third component refers to the many actions that Metropolitan will be obligated to implement. One example is the mitigation required as part of environmental review to address potentially significant impacts. Another example is the many conditions that local agencies will attach to permits to allow construction in street rights-of-way, parks, and other places within their jurisdiction. Metropolitan may also enter into agreements with local agencies and the agreements would likely have conditions that Metropolitan will be required to meet. Compliance with federal and state environmental and health regulations pertaining to construction and operations will also result in mandatory actions for Metropolitan. Many of these required actions will result in various kinds of benefits in underserved areas.

Workforce Development and Local Business Opportunities

The fourth component is the collection of actions aligned with Metropolitan's commitment to local jobs, workforce development, and business opportunities. More specifically, this component advances objectives to increase the number of local and underserved community members who take part in Pure Water construction jobs, to provide workforce training for water/wastewater treatment jobs, and to generally increase awareness about, and access to, the wide range of jobs in the water industry, including jobs at Metropolitan. This component has four prongs:

- Project Labor Agreement (described above)
- Planned workforce training center in Carson for career paths both specific to Pure Water and across the broader water supply, treatment, and management sectors
- Diverse and equitable procurement opportunities, with provisions for local business participation through Metropolitan's Business Outreach Program
- Ongoing outreach about Metropolitan jobs and career paths

Additional Community Benefits

The fifth component is the additional community benefits in areas along and within the vicinity of the proposed facilities and pipeline alignment, prioritizing those communities that are likely to be most adversely affected, including those that are identified as underserved and disadvantaged. These are the additional actions from what may be required under other laws, rules, and regulations. These communities may experience environmental impacts of a program that benefits the wider region, and these effects may exacerbate historic and current environmental and health conditions. Some of these impacts may consist of "residual environmental effects," which refer to impacts identified during environmental review that may not be completely eliminated or avoided by the identified environmental commitments and required mitigation.

Additionally, the Envision framework[2], which Metropolitan intends to seek verification for, points to additional considerations, especially the Wellbeing and Community standards:

- **Wellbeing**: As integral parts of the community, sustainable infrastructure projects address individual comfort, safety and health. During construction and operation, physical safety of workers

[2] Envision is a framework developed by the Institute for Sustainable Infrastructure that encourages systemic changes in the planning, design, and delivery of sustainable, resilient, and equitable civil infrastructure through education, training, and third-party project verification.

and residents are ensured, and nuisances minimized (including light pollution, noise, and vibration). These components align to heighten the community experience.

- **Community:** It is important that the project maintain or enhance strong and cohesive communities. While infrastructure primarily is driven by engineering parameters, its impact on equity, culture, and the community fabric should also be considered during design and construction. The qualities and boundaries of what constitutes the affected community may vary depending on whether the project is located in a rural or urban setting. It is always important to consider the project's collective impact on society.

Two types of programs may be included in the Additional Community Benefits component: Direct Actions and Community Benefits Fund(s).

Direct Actions

Direct actions refer to projects that Metropolitan would directly fund and implement. Like all community benefit actions, the direct actions would be informed by community input. Direct actions could focus on reducing residual environmental effects from program construction and operations. They could also implement other Metropolitan goals for community benefits.

Community Benefits Fund(s)

A community benefits fund is a strategy for an agency to invest in community benefits and rely on community members to distribute the funding in ways that they believe will have the greatest positive impact and meet their communities' needs and goals. Projects funded would need to have a direct tie to the Pure Water program. The fund could be set up to optimize equitable involvement of affected communities and allocation of the funds in ways that help to achieve Metropolitan's goals for community benefits as well as community goals. Most community benefit fund programs include a community advisory committee comprised of a range of local interests. The community advisory committee typically then takes applications for projects and determines funding eligibility and amount based on alignment with established criteria. Project implementation is then conducted by applicants.

For Pure Water, having multiple advisory groups with their own funding allocations could help to achieve balanced investment in projects in underserved areas near the proposed facilities and backbone pipeline alignment. For example, community advisory groups could be established for the Carson area near the treatment facilities, for the Long Beach area where significant pipeline construction may occur in street rights-of-way and parks, and for the San Gabriel River corridor where pipeline construction may largely occur parallel to the river.

While the community advisory groups make the ultimate decisions about funding, the agreements establishing the funds and the advisory group responsibilities can set forth guidance. Potential guides for community advisory groups' funding allocations include (in addition to their own) prioritizing projects that:

- Benefit underserved communities
- Are informed by input from local community members
- Address residual effects identified during the Pure Water environmental review process
- Have multiple benefits related to jobs and workforce development, climate change preparation and resiliency, health, and/or quality of life
- Involve community members in workforce education and training, especially for jobs in water/wastewater agencies
- Are geographically dispersed

Attachment: Metropolitan, LACSD, and Consultant Participants

Metropolitan Water District of Southern California

Adrian Hightower, Sustainability and Resilience Special Projects Manager
Ana Reyes, Senior Environmental Specialist
Amy Mila de la Roca, Environmental Specialist
Bruce Chalmers, Program Manager (retired)
Carolyn Schaffer, External Affairs Group Manager
Deirdre M Brand, Senior Environmental Specialist (retired)
Deven Upadhyay, General Manager
Elisa Mendez, Pr. Public Affairs Representative
John Bednarski, Assistant General Manager, Water Resources & Technical Services
John Schlotterbeck, Senior Deputy General Counsel
Liji Thomas, Diversity, Equity and Inclusion Officer
Liz Crosson, Chief Sustainability, Resiliency and Innovation Officer
Olivia Sanchez, Project Labor Agreement Program Manager (retired)
Rosa Castro, Grants & Research Manager
Rupam Soni, Member Services and Public Outreach Section Manager

Los Angeles County Sanitation Districts (LACSD)

Basil Hewitt, Public Information Supervisor (retired)
Bryan Langpap, Public Information Section Manager (transferred)

Consultants

Andrea Bitterling, Southern California Planning Division Manager, HELIX Environmental Planning, Inc.
Christian Mendez, Director, Kearns & West
Donal Barron, Project Manager, AECOM
Joan Isaacson, Principal, Kearns & West

Engineering Services Group

- **Project Labor Agreement Update**

Summary

The attached report provides a summary of actions taken and updated results of Metropolitan's Project Labor Agreement, adopted in October 2022; the report includes details on contractor implementation associated with the Construction Careers Pipeline Program, outreach to apprenticeship readiness programs, outreach to the small business community, local and transitional hiring metrics, labor compliance, and reporting on financial impacts of the PLA.

Purpose

This report highlights outreach and implementation efforts to support the Project Labor Agreement (PLA) objectives and to report on the metrics compared to the goals stated in the PLA, for employment of local and transitional workers on Metropolitan's PLA-covered projects. This is the third annual report and covers the period from October 2024 through June 2025. Below is a summary of board actions that led to the approval of the amendment of the PLA to add covered projects.

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

By Minute Item 52738, dated March 8, 2022, the Board authorized the General Manager to negotiate a PLA pursuant to various terms and guiding principles communicated during previous oral reports and board discussions.

By Minute Item 53004, dated October 11, 2022, the Board approved the negotiated PLA to be used as a bid condition on contracts that are listed as part of an attachment to the PLA and authorized an agreement with Parsons Constructors Inc. for the administration of the PLA.

By Minute Item 53848, dated November 19, 2024, the Board authorized the General Manager to amend the PLA to add four new projects and approve the amended PLA's use as a bid condition for the newly added projects.

Attachments

Attachment 1 – Project Labor Agreement Annual Report – September 2025

Date of Report: September 8, 2025

THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

Project Labor Agreement Annual Report

September 2025

Pictured on the cover: Work on the Second Lower Feeder PCCP Rehabilitation Project, February 2025

Inside Cover Photo: Wadsworth Pumping Plant Eastide Pipeline Intertie Project, April 2024

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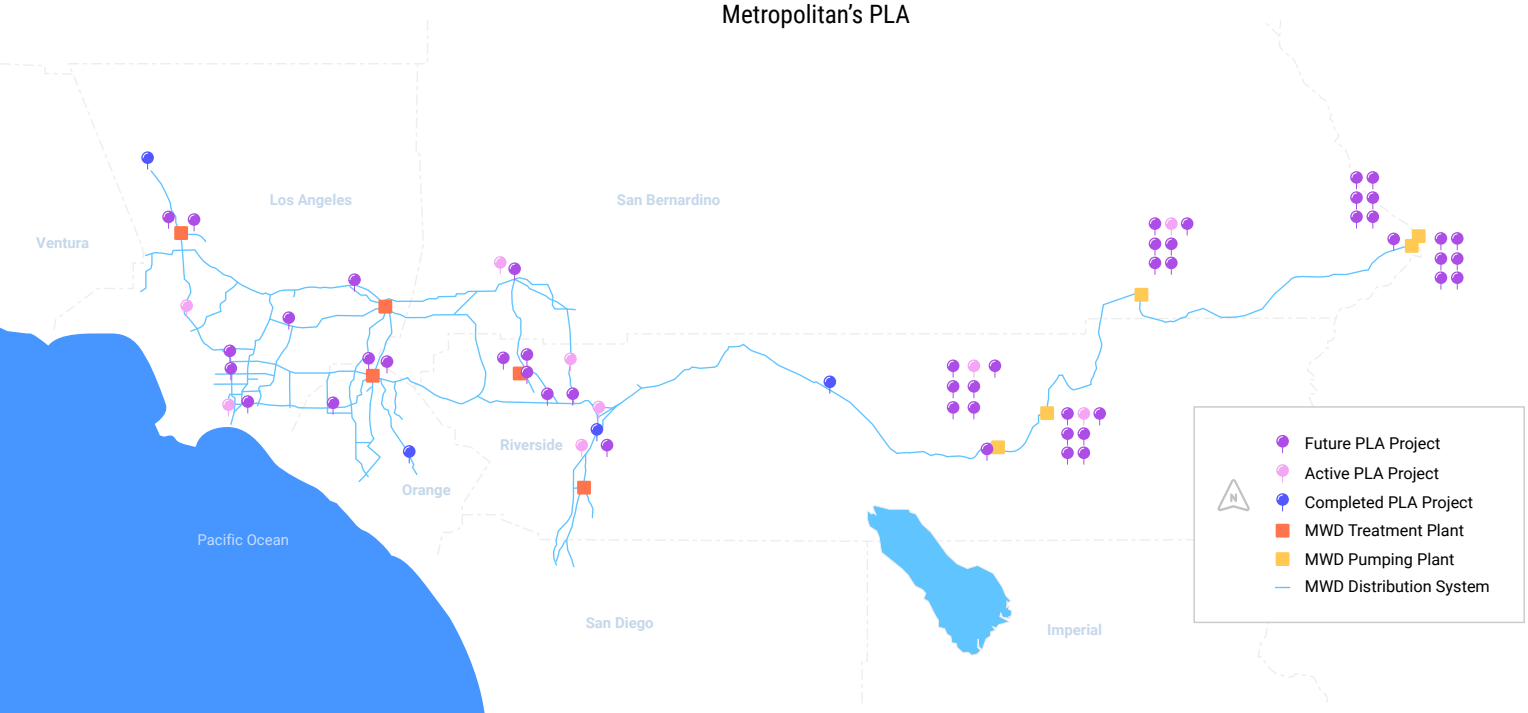
S7 Labor Compliance & Prevailing Wage Monitoring

S8 PLA Financials & Construction Update

Figure 1: Projects Covered by Metropolitan's PLA



S1

Introduction

Deven Upadhyay
Metropolitan Water District of Southern CA

Ernesto Medrano
Los Angeles and Orange Counties Building and Construction Trades Council

Albert Duarte
San Bernardino-Riverside Building and Construction Trades Council

Carol Kim
San Diego County Building and Construction Trades Council

Joshua Medrano
Tri-Counties Building and Construction Trades Council

Welcome to the Metropolitan Water District of Southern California's 2025 Project Labor Agreement (PLA) annual report. This report tells a story in numbers, photos and words about the programs, projects, and community partner activities associated with the landmark PLA, authorized by Metropolitan's Board of Directors in October 2022.

The main driver behind the PLA is regional investment. Metropolitan's PLA has a 60 percent goal of employing local workers, and a 15 percent goal of employing transitional workers who overcome challenges to begin a career in construction. The PLA currently includes 39 projects and programs identified by Metropolitan in the five-year term of the PLA. Together these projects account for 90 percent of Metropolitan's planned construction contract expenditures over the next several years and total nearly $1 billion.

Four projects have completed construction since the PLA's inception, with three projects having been completed after the publication of the 2024 PLA Annual Report. All of the projects that have completed construction have exceeded the local and transitional worker participation goals set in the PLA.

One of the main benefits of the PLA is the ability to cultivate a diverse workforce supported by a spirit of labor harmony with our building partners. The PLA's Construction Careers Pipeline Program (CCPP) increases opportunities for individuals from underrepresented communities to pursue careers in the construction industry. The CCPP connects Metropolitan's contractors and signatory union partners with graduates from Apprenticeship Readiness Programs (ARPs), which train students using the North America's Building Trades Unions' recognized multi-core craft curriculum (MC3) training. The CCPP also creates opportunities for veterans in partnership with the nationally recognized Helmets to Hardhats Program.

This report details PLA-related community workforce achievements, individual success stories, and business development victories from the past year as a result of Metropolitan's staff's close oversight and administration. The words of Metropolitan's labor partners give life to the tangible impacts in the construction community fostered by the PLA and the economic and workforce benefit brought to the nearly 19 million people we serve in Southern California.

Labor-Management PLA Meeting, November 2024

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Construction Careers Pipeline Program

Inland Feeder Rialto Pipeline Intertie, February 2026

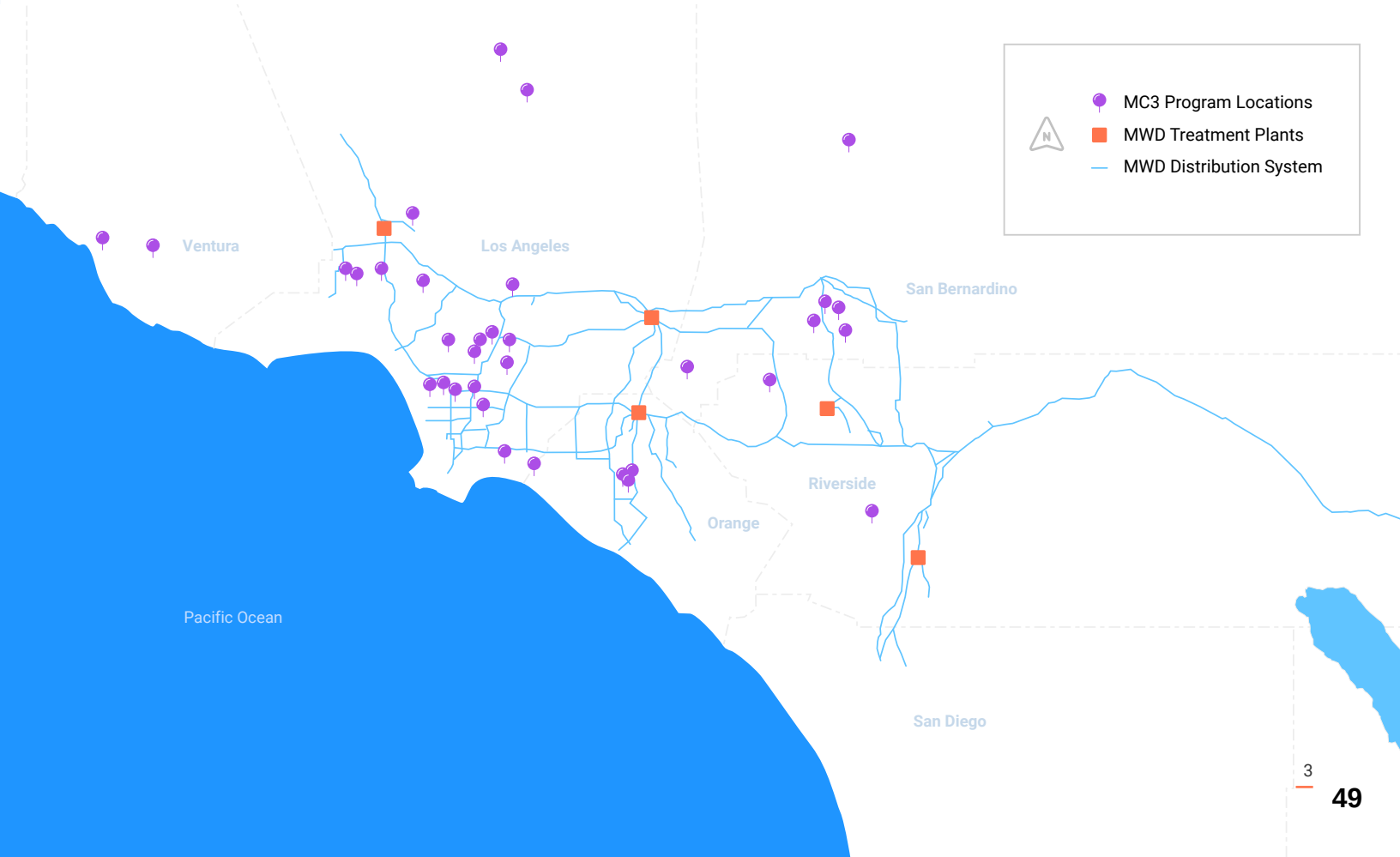
The PLA recognized a need to support non-traditional pathways to construction and established the CCPP to open doors for local and transitional workers interested in a construction career. We work in partnership with ARPs to identify potential candidates for interview by contractors working on Metropolitan projects.

Metropolitan partners that include San Bernardino's Cajon High School and Arroyo Valley High School award MC3 certifications to students in their construction education programs. Metropolitan finds opportunities to engage high school students in our service area with events like the Construction Career and Apprenticeship Resource Fair, which was attended by hundreds of high school students with the goal of introducing them to trade unions and other industry partners.

Construction Careers Pipeline Placements

The success of our outreach efforts is measured by the placement of five MC3 graduates on PLA projects. The graduates were able to launch their union-construction careers because of the PLA and chance to work with Metropolitan contractors. Two graduates highlighted in the 2024 PLA Annual Report have completed their assignments on Metropolitan projects and are continuing to advance their careers in construction through placements by the unions on projects outside of Metropolitan.

Figure 2: MC3 Program Locations



Ramon Sanchez
Steve P. Rados, Inc., Laborers Local 1184

Ramon is a laborer apprentice hired by Steve P. Rados, Inc. (Rados), the general contractor for Metropolitan's Inland Feeder Badlands Tunnel Surge Protection project. Ramon graduated from the San Bernardino Community College District's MC3 program and was later sponsored into Laborers Local 1184.

Although Ramon has prior experience in the construction industry, he credits SBCCD's MC3 program for reinforcing his foundational knowledge and introducing new skills that deepen his understanding and allow him to stay current with industry standards and practices. He is grateful for the opportunity that Rados has given him to both apply and showcase his skills on-site, while also gaining hands-on experience under the guidance of other journeypersons from this trade. He looks forward to advancing his career in the construction trades, with the goal of progressing from an apprentice to a journeyperson. Above all, a career in the construction trades has helped him progress towards his personal goals of purchasing a home soon and being better able to support his family.

Matthew Dill
Power Engineering, Co.

Matthew Dill is the general foreman for Power Engineering, Co. on the Diamond Valley Lake Wave Attenuator Replacement Stage 2 project; he has been in the construction industry for over 20 years. As a U.S. Army veteran, Matthew saw first-hand how experience in the military brought valuable skills, discipline, and experience that seamlessly transfer to the construction industry. As general foreman, Matthew oversees all aspects of the wave attenuator replacement project and plays a critical role in managing the day-to-day field operations to replace and rehabilitate wave attenuators at Diamond Valley Lake.

Matthew emphasized two core tenets that closely align between the armed forces and the construction trades: pride in one's work and a commitment to safety. In both environments, he noted that taking ownership of your duties and maintaining high standards not only reflects personal integrity but also contributes to the success of the entire team. Likewise, a strong safety culture is essential for protecting lives and ensuring that everyone returns home safely at the end of the day.

Delia Olivas Alvarez
Capital Industrial Coatings, Long Beach Job Corps

Delia Olivas Alvarez is a painter apprentice hired by Capital Industrial Coatings, a subcontractor to Rados, on the Inland Feeder Badlands Tunnel Surge Protection project. Metropolitan referred Delia to the subcontractor from Long Beach Job Corps, a career training and education program for low-income students between 16 and 24 years old. Delia completed her pre-apprenticeship training in painting and registered with the Painters Local 1036 union. She appreciates her Long Beach Job Corps mentor Juan Ortiz, also a member of Painters Local 1036, for his support of her education and advocacy.

Capital Industrial Coatings is a company committed to employee retention and has long-term plans to develop Delia as an accomplished union painter. Beyond opportunities on Metropolitan projects, Capital is working with Delia to obtain the necessary credentials to work on other contracts they have at various refineries in Southern California.

Employment of new apprentices, specifically apprentices that have worked less than 15 percent of the hours needed to complete their apprenticeship, is a cornerstone of the CCPP. Identifying this pool of new apprentices is supported using the LCP Tracker software. This software allows PLA administration staff to easily identify new apprentices that have completed less than 15 percent of their required hours for the state-approved apprenticeship program.

Metropolitan staff worked with MC3 programs and labor union partners to find candidates best suited for apprenticeship positions on various Metropolitan projects and helped candidates with resume and interview preparation. Since the PLA was adopted, 25 new apprentices have started their construction careers on Metropolitan projects within a month of registering in a state-approved apprenticeship program.

In addition to the five workers referred by Metropolitan for apprenticeship positions, payroll records indicate there have been 20 workers employed on Metropolitan projects within a month of enrolling in apprenticeship programs. Many were immediately dispatched to a Metropolitan project upon enrollment in their apprenticeship programs. Each of these workers have some of their earliest apprenticeship hours on Metropolitan projects, with many beginning their entire construction career with us.

Metropolitan's signatory union partners' dispaching of transitional workers exceeded goals set by the PLA. Here is how the hiring process works. When contractors request labor from the union halls, they do so via a worker dispatch form specific to the PLA's community workforce needs. The unions use this to prioritize workers in Metropolitan's service area as well as those who qualify as transitional workers, whenever possible.

Another category of transitional workers are veterans. Metropolitan is currently tracking 18 veterans through contractor payroll records. Like new apprentices, all veterans qualify as transitional workers across all PLA projects. Veterans have been identified through on-site staff worker interviews as well as through contractor efforts to employ existing veteran employees on Metropolitan projects.

S3

CCPP Community Outreach Update

Resource Fair, January 2024

Metropolitan continues to meet with ARPs, as well as other community partners providing construction outreach and education, in order to achieve the CCPP's community goals. This outreach includes participation at ARP events, organizing industry days for students and the public in our service area, and coordination with union leadership.

Partnership Highlights

October 9, 2024 – Riverside: Staff attended the fall Industry and Labor Advisory meeting for Alvord Unified School District's MC3 programs to provide input and guidance for strengthening the success of their workforce education programs for the building and construction industry.

October 10, 2024 – Riverside: Staff attended the San Bernardino/Riverside Trades Council meeting to discuss collaboration on the Inland Empire Career and Apprenticeship Resource Fair hosted by Metropolitan on February 28, 2025.

October 11, 2024 – Riverside: Staff attended the Norte Vista High School Career Event to share information with more than 100 students interested in entering a building trade following graduation. Information was presented about Metropolitan's PLA and the benefits and opportunities available as graduates of Norte Vista's MC3 program.

October 21, 2024 – Virtual: Metropolitan hosted the San Bernardino/Riverside Construction Workforce Development Roundtable, which featured community engagement, and industry, labor and education collaboration on construction career workforce development efforts in the Inland Empire with the goal to attract underserved populations to pursue careers in the construction industry.

October 23, 2024 – Virtual: Staff made a presentation to the Inland Empire Veterans Employment Committee about Metropolitan's PLA and placement opportunities for military veterans on Metropolitan construction projects.

October 29, 2024 – San Bernardino: Staff attended the Annual Career and Technical Education (CTE) Partners Convening meeting hosted by the San Bernardino County Board of Education to showcase the successes of CTE Pathway programs, including MC3 programs in the county. There was an opportunity to discuss industry standards, local labor market demands and improvements to the MC3 program.

November 5, 2024 – Virtual: Staff participated in a meeting with Build California and networked with construction industry professionals to identify partnership opportunities. Participants focused on ways to engage and activate the next generation of workers and bring greater awareness about the benefits and career opportunities in construction and local training programs.

November 12, 2024 – San Bernardino: Staff visited the San Bernardino Employment Resource Center to discuss partnership opportunities related to Metropolitan's PLA and veterans entering the work force.

November 13, 2024 – Los Angeles: A Labor/Management Collaboration Meeting was hosted at Metropolitan headquarters with all PLA signatory unions invited. Staff presented progress reports on current and upcoming PLA projects. Meeting co-chairs John Bednarski, Metropolitan's Assistant General Manager and Ernesto Medrano, Executive Secretary for the Los Angeles and Orange Counties Building and Construction Trades Council addressed the union attendees.

November 19, 2024 – Virtual: Staff attended the bi-monthly meeting of the American Indian Construction Apprenticeship Initiative to share information related to Metropolitan's PLA and discuss the tribes' MC3 programs and opportunities to educate Native Americans on training for entering a building trade apprenticeship program.

December 11, 2024 – Los Angeles: Staff attended the Maxine Waters EPC Net@Work Roundtable to discuss barriers for participation in programs and develop ways to overcome them.

December 12, 2024 – San Bernardino: Staff addressed the graduating cohort of SBCCD MC3 program and spoke about opportunities to work on Metropolitan PLA projects and other trade opportunities. Inland Empire Building and Construction Trades Council leader Albert Duarte joined the discussion.

December 12, 2024 – San Bernardino: Staff visited the San Bernardino County School Superintendent to establish a partnership related to construction CTE Programs, including MC3.

January 8, 2025 – Virtual: Metropolitan hosted the San Bernardino/Riverside Construction Workforce Development Roundtable collaborating on the Construction Career and Apprenticeship Resource Fair planned for February 28, 2025.

January 30, 2025 – San Bernardino: Staff attended the Construction Advisory Summit "Be a Part of the Future!" along with union leadership, Apprenticeship Readiness Fund and SBCCD.

February 4, 2025 – North Hollywood: Staff had a site tour of the North Hollywood Youth Build Program, which provides construction training to at-risk youth, and discussed potential partnership and placement opportunities on Metropolitan PLA projects.

February 6, 2025 – Hemet: Staff participated in the Evening with Industry held by the Hemet Unified Schools District. The event highlighted construction career pathway programs, including MC3 programs, giving industry members a chance to engage with high school students who are interested in a building trade apprenticeship program.

February 13, 2025 – Riverside: Staff spoke at the San Bernardino/Riverside Trades Council meeting about Metropolitan's PLA and the Inland Empire Career and Apprenticeship Resource Fair hosted by Metropolitan.

February 28, 2025 – San Bernardino: Metropolitan hosted its second Annual Construction Career and Apprenticeship Resource Fair at California State University San Bernardino. The event was held in partnership with the San Bernardino County Board of Education, the San Bernardino/Riverside Building Trades Council, and the San Bernardino County Workforce Development Board. More than 400 high school students and community members attended to learn about construction career readiness, along with employment opportunities and apprenticeship programs in construction.

February 19, 2025 – San Bernardino: Staff attended the Caltrans Heavy Equipment Trades Academy Contactor's Day, where information about the program and its certifications were shared, and attendees were given the opportunity to observe trainees demonstrate their skills in operating heavy equipment.

March 7, 2025 – San Bernardino: Staff attended the San Bernardino Valley College Open House celebrating the grand opening of the new 114,000-square-foot Applied Technology Building, which will house the college's MC3 program.

Metropolitan General Manager Deven Upadhyay address Labor-Management Meeting, November 2024

March 10, 2025 – Selma: Staff toured the new state-of-the-art Central Valley Training Center, and learned about their MC3 program, including program content, funding, collaboration with the local building trades council and political officials, community engagement and placements.

March 17, 2025 – Virtual: Staff presented information to the Inland Empire Veterans Employment Committee about Metropolitan's PLA and placement opportunities for military veterans on Metropolitan construction projects.

March 20, 2025 – Riverside: Staff co-presented with leadership from the San Bernardino-Riverside Construction and Building Trades Council to students at Ramona High School. The presentation included information about opportunities in the construction industry, apprenticeship programs, and Metropolitan's PLA placement opportunities for MC3 graduates.

March 20, 2025 – Virtual: Staff met with the Long Beach Job Corps to learn about their education programs. Staff met with instructors, reviewed new apprenticeship placement processes, and received a list of candidates for upcoming potential apprenticeship placements.

April 9 & 10, 2025 – Huntington Beach: Staff attended the Construction Industry Education Design Build Competition for Southern California, sponsored by the Western States Carpenters Union. Hosted at Golden West College in Huntington Beach, the competition was attended by 39 high schools and community college construction career pathway program and required students to design and build a more than 96-square-foot structure.

April 11 & 12, 2025 – Ontario: Staff participated as judges in the 2025 SkillsUSA State Leadership & Skills Contest for Middle School, High School and Community College students who came from throughout California to compete in construction design, welding, job interviews and extemporaneous speaking.

April 24, 2025 – Riverside: Staff attended the Riverside Unified School District's CTE Pathways Showcase for students in the construction pathway. Students demonstrated their skills in designing and building a small structure and engaged in one-on-one discussions about their plans to enter a trade apprenticeship program.

April 25, 2025 – Riverside: Staff met with Albert Duarte of the San Bernardino-Riverside Construction and Building Trades Council to review PLA details and implementation of CCPP and included apprenticeship placement strategies and further collaboration with MC3 programs and Metropolitan contractors.

Metropolitan's Native American/Alaskan Native Employee Association and the California Indian Manpower Consortium (CIMC) on a tour of the CRA to educate on construction careers at Metropolitan and assist the CIMIC with their development of an ARP

May 7, 2025 – Los Angeles: Staff attended the Maxine Waters EPC Spring Net@Work Roundtable. Community, industry, and labor partners discussed their MC3 program, barriers for participation, program needs and placement opportunities.

May 21, 2025 – Cajon: Metropolitan participated in the Cajon High School Trades Day where more than 25 industry, labor, and community partners engaged with students interested in a construction trade career.

June 10, 2025 – El Monte: Staff toured the Southern California Pipe Trades' A&J Training Facility in El Monte, visiting classrooms and training labs. They met with instructors and union management and witnessed the semi-finals of the apprenticeship competition.

June 23, 2025 – San Bernardino: Staff attended an MC3 cohort graduation for SBCCD students who were partnered with the Anti-Recidivism Coalition that offers education to previously incarcerated individuals.

June 30, 2025 – Colton: Project Labor Coordination team met with Center for Employment Training Colton at their facilities to learn about their trade programs, including a welding program, a green building construction program, and an upcoming Operating Engineers program.

July 23, 2025 - Virtual: Project Labor Coordinator team co-hosted a virtual "round table" event with the San Bernardino-Riverside Construction and Building Trades Council attended by labor unions and MC3 programs leaders in the Inland Empire to go over Metropolitan's PLA and facilitate meeting each other, sharing information about MC3 training and union apprenticeship programs.

Learning about the Pure Water Southern California project

Program Spotlight: San Bernardino Community College District

One of Metropolitan's early partners under the PLA CCPP is SBCCD, that offers an ARP to prepare participants to enter and succeed in state-approved apprenticeship programs. These programs are often the gateway to a career in the building and construction trades and path to middle-class jobs. The SBCCD offers a five-week, 32 hours per week program and was created in 2020 to address the need to increase the diversity of apprenticeship candidates in San Bernardino and Riverside Counties.

The SBCCD's ARP current grant focuses on preparing formerly incarcerated people who have faced barriers to employment in the construction industry. Stacy Garcia, manager of workforce development believes that "San Bernardino is heavily populated with people who need second chances and opportunities. I had a family member who tragically died at 19. He needed a second chance and if he would have been provided with this type of program, maybe he would still be with us today."

SBCCD partners with community-based organizations for cohort enrollment, such as the Anti Recidivism Coalition. This organization has a mission to empower formerly and currently incarcerated people by providing a support network and comprehensive reentry services. Marc Anthony Garcia, a recent program graduate says, "This program has helped me overcome barriers to reenter the workforce. I'm doing this not for myself, but for my family's future."

Future grants are expected to focus on other underserved populations, including, but not limited to women, people of color, and transitioning veterans.

The Anti-Recidivism Coalition offers education to previously incarcerated people

S4

Local & Transitional Worker Data

Transitional Worker Ramon Sanchez at the Inland Feeder Badlands Tunnel Surge Protection project

A Focus on Local Workers
Transitional Workers

Metropolitan places the highest importance on ensuring that its investments in water infrastructure benefit the community it service in a meaningful way. In addition to workforce goals for local residents, the PLA emphasizes participation by transitional workers. This 15 percent hiring goal targets individuals facing employment barriers or requiring assistance beginning their construction careers. The PLA defines transitional workers as any individual qualifying for one or more of the following categories:

- Veteran
- Apprentice with less than 15 percent of the work hours required for completion of a union apprenticeship program
- No high school diploma or general education diploma
- Homeless now or recently homeless within the past year
- Former foster youth
- Custodial single parent
- Experiencing unemployment (defined as receiving unemployment benefits for at least three months)
- Current recipient of government cash or food assistance benefits
- Documented income at or below 100 percent of Federal Poverty Level
- Formerly incarcerated
- Graduate of ARP/MC3 program

Contractor Workforce Data

PLA projects currently exceed the goals set for local and transitional worker employment as indicated in Figure 3. The data reflects information submitted by contractors on certified payroll records through June 2025.

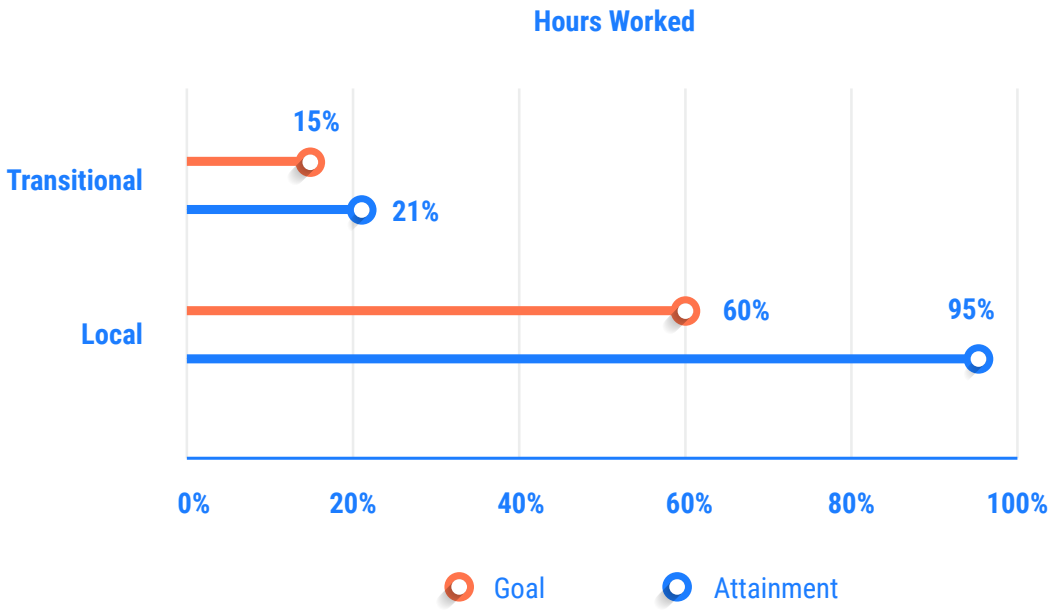


Figure 3: Local and transitional worker hours on PLA Projects exceeding contractual goals

Key Callouts

- Craft workers received an estimated $38,708,467.69 in wages and benefits and worked 453,225.32 reported hours on Metropolitan PLA projects.
- Local workers received an estimated $36,612,384.89 in wages and benefits and worked 433,151.81 reported hours on Metropolitan PLA projects.
- Transitional workers received an estimated $8,290,091.18 in wages and benefits and worked 97,429.20 reported hours on Metropolitan PLA projects.
- Note that one can be both a local and transitional worker; they are not mutually exclusive.

Eagle Mountain Pumping Plant Storage Buidling Replacement project, with similar projects also at Hinds and Iron Mountain Pumping Plants

S5

SBE & DVBE Outreach

Assistant General Manager Water & Technical Resource John Bednarski addresses a MetWorks audience there to learn about contracting opportunities, October 2024

Total hours worked by identified SBE, DVBE, DBE, MBE, and WBE firms constitute nearly 14% of all craft hours worked on PLA projects.

Metropolitan's Business Outreach Program has a demonstrated history of commitment to partnering with Small Businesses Enterprises and Disabled Veteran Business Enterprises (SBEs/DVBEs) over the last two decades. Metropolitan has invested more than $1.5 billion in its partnership with SBEs/DVBEs, providing tools and networking opportunities to promote opportunities with Metropolitan and its affiliates.

Metropolitan continues efforts to partner with SBEs/DVBEs and grow its network of partners. Every year, the Project Labor Coordinator team asks the signatory unions for current lists of signatory contractors that qualify as SBE, DVBE, or other similar certifications.

Contractors with 25 or fewer employees at the time they are awarded a PLA covered contract may first employ three of their existing employees before requesting a worker from the union hiring hall. This provision, known as the alternative core employee model, differs from the typical core employee procedure for other non-union contractors which requires every other worker to be a union dispatch. In addition to those contractors already qualifying as SBE and/or DVBE, Metropolitan is also committed to growing engagement with firms that qualify as Minority Business Enterprises, Disadvantaged Business Enterprises and Women Business Enterprises.

The list of known SBE and/or DVBE contractors who have worked on Metropolitan PLA projects include:

- Connor Concrete Cutting & Coring
- Crescent Diving
- Crosstown Electrical & Data, Inc.
- Dean's Certified Welding
- **Dinamic Mod Construction**
- Don H. Mahaffey Drilling Co.
- EG Montanez Construction, Inc.
- Environmental Construction Group
- Erosion Control Experts
- GeoX, Inc.
- GGG Demolition
- Global Transloading LLC
- Guida Surveying
- Infrastructure Quality Consulting
- Inland Overhead Door Company
- J & H Drilling Co dba M R Drilling
- Landmark Surveying Solutions
- Leed Electric
- Matrix Environmental
- MBI Excavation
- MDB General Engineering, Inc.
- Miller Equipment Co., Inc.
- Monzon & Sons Enterprises
- Premier Consultant Services
- Robcar dba Hudson Safe T Lite Rentals
- Smithson Electric
- **Southwest Chlorination**
- V & E Tree Service, Inc.
- WGJ Enterprises, Inc. dba PCI

The PLA allows qualifying SBE/DVBE companies with 25 or fewer workers to first employ three core employees per craft before hiring from the union hall. The SBE/DVBE contractors listed in bold above were able to qualify for the alternative core employee model. This list includes both union-signatory and non-union contractors.

Small business contractor Bill Holmes

Small Business Spotlight: Southwest Chlorination

Southwest Chlorination successfully completed disinfection work at the Perris Valley Pipeline Interstate 215 project during a shutdown shutdown. They are one of the small businesses that successfully applied the core employee flex option in Metropolitan's PLA. Owner Bill Holmes worked closely with staff to complete all necessary labor compliance and PLA documentation for union review .

Bill has worked in pipeline chlorination for 38 years and worked under Metropolitan's PLA for the first time on the Perris Valley Pipeline Interstate 215 Crossing. He enjoyed being able to explore his company's relationship with union participation under a PLA, while also staffing the project entirely with core workers. Two of Bill's sons were employed as craft laborers on this project. He credits Metropolitan's team for his success in navigating the state and union requirements. He appreciated the ability to work with Laborers Local 1184, and the chance to ensure that his family, the heart of his small business, was able to work with Metropolitan.

Key Business Outreach Program Events & Engagement

March 2–8, 2025 – Los Angeles: Staff participated in a panel discussion on the power of mentorship to elevate careers at the National Association of Women in Construction "Together We Rise" event.

March 6, 2025 – Montebello: Staff participated in the Society of American Military Engineers Inaugural Industry Day, which brought various federal, state, and local government agencies together to network with small businesses.

March 6-9, 2025 – Carlsbad: John Bednarski, Metropolitan Assistant General Manager, presented at the Western Winter Workshop where Metropolitan also had an exhibit to share workforce development successes with industry partners. The Workshop connected key decisionmakers for major capital project delivery organizations and public owners.

March 20 & May 30, 2025 – Los Angeles: Staff launched "The Bench" initiative, which connects small businesses with larger primes in a mentor-protégé program. Two program sessions have been hosted to-date.

Well attended labor-management PLA meeting invites collaboration

S6

Contractor Onboarding & Engagement

Metropolitan supports its contractors and their subcontractors throughout the stages of a PLA-covered contract. Staff work with contractors from contract award through project completion to achieve compliance with all requirements. The team reviews the PLA requirements, facilitates introductions with union and training partners, and coordinates PLA pre-job conferences.

The pre-job conference is the cornerstone for maintaining the PLA's spirit of labor harmony between the signatory parties. Contractors are required to detail craft staff needs, work schedule and project rules. They also must propose union work assignments at the pre-job conference. The contractor and their subcontractors review the work they will perform and the unions with which they will partner . This allows for an open dialogue between unions and contractors to better understand which unions' workforces will be performing each portion of work on a PLA project, all prior to work commencing.

As of June 2025, there have been 58 pre-job conferences for PLA projects (see Figure 4). Typically, there are several pre-job conferences hosted for each PLA contract as project work progresses to allow new subcontractors to meet this contract provision as the project moves toward completion. Each contractor performing covered work, regardless of their contract value or time spent on the project, is required to assign their work and meet with the signatory unions at a PLA pre-job conference.

Figure 4: PLA Pre-job Conference Tracking

Project	Number of Pre-job Conferences
Perris Valley Pipeline Interstate 215 Crossing	11
Second Lower Feeder Prestressed Concrete Cylinder Pipe (PCCP)	8
Wadsworth Pumping Plant Eastside Pipeline Intertie	6
Foothill Hydroelectric Power Plant Seismic Upgrade	6
Colorado River Aqueduct Conduit Structural Protection	4
Hinds, Eagle Mountain, and Iron Mountain Pumping Plants Storage Buildings	4
Inland Feeder Rialto Pipeline Intertie	5
Inland Feeder Badlands Tunnel Surge Protection Facility	3
Sepulveda Feeder Pump Station Project	4
Diamond Valley Lake Floating Wave Attenuator Remplacement	1
Allen-McColloch Pipeline PCCP 2024 Urgent Relining	6
Total Pre-job Conferences	**58**

Labor Compliance & Prevailing Wage Monitoring

Metropolitan's construction contracts are publicly funded and subject to all applicable state requirements, including the proper payment of prevailing wages. Site observations are compared to certified payroll records to verify data is reported accurately.

The PLA establishes worker payment requirements that may be greater than those on a typical public works contract. Contractors working under the PLA are required to pay craft workers according to the current prevailing wage rates, rather than the rates set by a public contract's bid advertisement date. The PLA also requires contractors to comply with the labor rates set forth in the appropriate union's master labor agreement. Between these three sources, craft workers on Metropolitan PLA projects are required to receive the highest pay rate.

Figure 4 illustrates the noted difference in the earliest required wage rates from the time the PLA became effective, 2022-2, and the current applicable wage rates, 2025-1, at the time of writing. Example crafts and classifications with uniform rates throughout Southern California have been selected from contractor payroll records.

Craft	Classification	2022-2 Rate (When PLA became effective)	2025-1 Rate (Current as of report writting)
Laborer	Group 1	$65.19	$71.69
Carpenter	Pile Driver, Derrick Bargeman, Rockslinger, Bridge or Dock Carpenter, Cable Splicer	$71.45	$77.95
Teamster	Group 3	$69.20	$75.46
Operating Engineer	Group 4	$87.25	$95.29
Cement Mason	Cement Mason, Curb and Gutter Machine Operator; Clary and Similar type of screed Operator	$69.10	$73.52

Work on the Second Lower Feeder PCCP Rehabilitation Project, February 2025

S7

PLA Financials & Construction Update

Drone view of the Inland Feeder Badlands Surge Protection Project

PLA Administration Cost

Analysis of Metropolitan expenditures by our PLA administration consultant, as well as expenditures by in-house staff, indicates that PLA administration costs are 0.83% of total construction expenditures through June 2025.

These costs include direct administration, and extensive outreach and training to apprenticeship readiness programs and the small business community. A cost of 1% of total construction cost is the general metric for PLA administration, which is budgeted on a project-by-project basis at contract award.

Seven Ongoing PLA Projects

SECOND LOWER FEEDER PCCP REHABILITATION REACH 3B

Start Date: February 2, 2023
Prime Contractor: J.F. Shea Construction, Inc.
Contract Value: $68,847,000
Small Business Enterprise Goal: 10%
Duration: 650 working days

Project Scope: The project consists of the rehabilitation of approximately 19,000 linear feet of PCCP including excavation, access portals and the removal of some existing PCCP; installing Metropolitan and contractor-furnished steel liner pipe, and modifying pipeline appurtenant structures; rehabilitating three existing isolation valve structures and two service connections; and installing and removing the Palos Verdes Reservoir temporary bypass lines.

Location: Various locations in Los Angeles County
Progress to Date: 96%

WADSWORTH PUMPING PLANT EASTSIDE PIPELINE INTERTIE

Start Date: February 2, 2023
Prime Contractor: Steve P. Rados, Inc.
Contract Value: $18,200,000
Small Business Enterprise Goal: 20%
Duration: 350 working days

Project Scope: The project consists of installation of approximately 600 linear feet of 96-inch-diameter pipeline, construction of a valve structure, relocation of transformer and switchgear, and other appurtenant work.

Location: Riverside County
Progress to Date: 97%

HINDS, EAGLE MOUNTAIN AND IRON PUMPING PLANTS STORAGE BUILDINGS

Start Date: July 31, 2023
Prime Contractor: J.F. Shea Construction, Inc.
Contract Value: $16,490,000
Small Business Enterprise Goal: 25%
Duration: 550 working days

Project Scope: The project consists of the replacement of sheds at Hinds, Eagle Mountain and Iron Mountain Pumping Plants with new storage buildings that are insulated and include enhanced features.

Location: Colorado River Aqueduct pumping plants across San Bernardino and Riverside Counties
Progress to Date: 73%

SEPULVEDA PUMP STATIONS – PROGRESSIVE DESIGN BUILD

Start Date: September 23, 2023
Prime Contractor & Designer: J.F. Shea Construction, Inc. & Tetra Tech, Inc.
Project Delivery Method: Progressive Design Build
Contract Value Estimate: $9,800,000 (NTE for Phase 1)
Small Business Enterprise Goal: 25%
Estimated Construction Completion Date: Fall 2027

Project Scope: This project consists of building two 30-cfs pump stations, conveyance pipelines, and associated supporting infrastructure at the Metropolitan-owned Venice and Sepulveda sites to reverse the flow of water and bypass the existing pressure control facilities.

Location: Los Angeles County
Progress to Date: 15% (Phase 1)

Inland Feeder-Rialto Pipeline Intertie skilled workforce

INLAND FEEDER – RIALTO PIPELINE INTERTIE

Start Date: March 12, 2024
Prime Contractor: Steve P. Rados, Inc.
Contract Value: $15,681,000
Small Business Enterprise Goal: 20%
Duration: 410 working days

Project Scope: The project consists of furnishing and installing approximately 250 linear feet of 96-inch diameter welded steel pipe; construction of a valve structure; installation of Metropolitan-furnished valves; removal and disposal of pipe coating material containing PCBs, and other appurtenant work.

Location: San Bernardino County
Progress to Date: 96%

INLAND FEEDER BADLANDS TUNNEL SURGE PROTECTION

Start Date: December 11, 2023
Prime Contractor: Steve P. Rados, Inc.
Contract Value: $18,840,000
Small Business Enterprise Goal: 20%
Duration: 370 working days

Project Scope: The project consists of constructing approximately 200 linear feet of 8-foot diameter steel pipe, an approximate 430,000-gallon surge tank, 84-inch diameter Metropolitan-furnished butterfly valve, control system, various electrical improvements, and other appurtenant work.

Location: Riverside County
Progress to Date: 96%

DIAMOND VALLEY LAKE FLOATING WAVE ATTENUATOR

Start Date: March 12, 2024
Prime Contractor: Power Engineering Construction
Contract Value: $7,842,856
Small Business Enterprise Goal: 15%
Duration: 400 working days

Project Scope: The project consists of rehabilitating and relocating the existing floating wave attenuator including removal and replacement of damaged post tension cables; repair of spalled concrete; replacement of timber walers; installation of anchor blocks and lighting; demolition of an existing dock; and installation of a new floating wave attenuator.

Location: Riverside County
Progress to Date: 80%

Inland Feeder Shutdown,
February 2025

Completed PLA-Covered Projects

Four PLA projects have been completed to-date and exceeded the local and transitional worker goals established in the PLA. One project, the Allen-McColloch Pipeline PCCP 2024 Urgent Relining, finished at nearly 100% local worker participation. The final participation numbers are included in the table below.

Project	General Contractor	Final Local Participation (60% Goal)	Final Transotional Participation (15% Goal)
Colorado River Aqueduct Counduit Structural Protection	Granite Construction	88.26%	27.98%
Allen-McColloch Pipeline PCCP 2024 Urgent Relining	J.F. Shea Construction, Inc.	99.84%	23.14%
Foothill Hydroelectric Power Plant Seismic Upgrade	West Valley Investment Group, Inc.	97.15%	22.23%
Perris Valley Pipeline Interstate 215 Crosing	J. W. Fowler	87.05%	22.92%

Upcoming PLA-Covered Projects

EAGLE MOUNTAIN AND JULIAN HINDS PUMPING PLANT UTILITY REPLACEMENT

Small Business Enterprise Goal: 25%
Duration: 350 working days

Project Scope: The project consists of the replacement of existing potable and non-potable water distribution piping systems; replacement of the existing wastewater system, access holes, excavation in cobbles, boulders, and granitic bedrock; surface restoration; replacement of the existing asphalt pavement including grading and drainage improvements; roadway striping; disinfection; hydrotesting; abatement of hazardous materials.

Location: Riverside County

ROBERT B. DIEMER WATER TREATMENT PLANT FLUOROSILICIC ACID TANK FARM IMPROVEMENTS

Small Business Enterprise Goal: 25%
Duration: 490 working days

Project Scope: The project consists of rehabilitation of the fluorosilicic acid (FSA) tank farm, which includes demolition of the existing tank farm and canopy structure; construction of a new FSA tank farm and canopy; abatement and removal of lead and asbestos containing materials; and construction of a temporary FSA chemical feed system.

Location: Orange County

GARVEY RESERVOIR REHABILITATION, STAGE 1

Small Business Enterprise Goal: 7%
Duration: 550 working days

Project Scope: The project consists of replacing the existing membrane liner and floating cover system; seismic retrofit of the outlet tower, relocation of an inlet structure, installation of a new electrical duct bank, and replacement of mechanical and electrical equipment.

Location: Los Angeles County

Construction on the DVL wave attenuator

THE METROPOLITAN WATER DISTRICT
OF SOUTHERN CALIFORNIA

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Robert B. Diemer Water Treatment Plant in Yorba Linda will receive site improvements in upcoming PLA-covered projects

Engineering Services Group

- **Seismic Resilience Report 2025**

Summary

This report summarizes Metropolitan's seismic resilience activities over the last five years and outlines goals for the coming years.

Purpose

This report complies with a board directive to provide an annual verbal update and a five-year written report on Metropolitan's efforts to improve seismic resilience. The annual verbal update was presented to the Board in April 2025.

Attachments

2025 Update of Seismic Resilience Report

Detailed Report

The 2025 Seismic Resilience Report summarizes Metropolitan activities undertaken within the last five years to assess and mitigate seismic risk. Metropolitan's objectives for its seismic resilience strategy are to (1) provide a diversified water supply portfolio, system flexibility, and emergency storage; (2) prevent damage to water delivery infrastructure in probable seismic events and limit damage in extreme events; (3) minimize water delivery interruptions through a dedicated emergency response and recovery organization; and (4) prepare for restoration by implementing resilient measures such as stockpiling materials, pre-event design, and emergency contractor retention.

Recent seismic-related improvements include the installation of earthquake-resistant ductile iron pipe on Colorado River Aqueduct Casa Loma Siphon No. 1, and completion of seismic upgrades to the Diemer West Filter Building, Union Station Headquarters building, and the Weymouth West Wash Water Tank.

Other activities include the initiation of a comprehensive risk assessment program for Metropolitan's dams, a program to modernize Metropolitan's dam monitoring systems, and a study, in collaboration with the University of California, Berkeley Center for Smart Infrastructure, to assess the risk to Metropolitan's pipeline system against earthquake hazards. Metropolitan also continues to work with member agencies and regional partners when conducting emergency response exercises.

The 2025 Seismic Resilience Report includes a chapter on the California Department of Water Resources (DWR) seismic program, including recent studies, design and construction activities, and emergency preparedness/ emergency response planning. Key accomplishments for DWR include completing the Perris Dam Seismic Remediation Project in 2022, the Castaic Dam Tower Bridge Seismic Retrofit in 2023, and updating its Emergency Response Plan outlining post-earthquake response protocols and procedures.

The report proposes primary goals in different areas to continue advancing the seismic resilience objectives for the next 5-year period. Examples of these goals include completion of the Pipeline Seismic Vulnerability Study and System Flexibility Study, completion of design or construction for facility seismic upgrades, such as the Weymouth Administration Building and the La Verne Water Quality Laboratory, and continuation of the dam

Date of Report: September 8, 2025

monitoring improvements and the dam safety assessments. It is also crucial to continue conducting emergency response exercises in coordination with member agencies and enhancing regional seismic resilience by reinforcing the mutual-aid framework with regional partners. Staff will continue to ensure accountability by providing annual updates and issuing five-year reports to the Board for guidance and feedback.

REPORT

SEISMIC RESILIENCE REPORT
2025 UPDATE

The Metropolitan Water District of Southern California

700 N. Alameda Street, Los Angeles, California 90012

Report No.
2025 MWD08 01S1
August 2025

Seismic Resilience Report 2025 Update

Prepared By:

The Metropolitan Water District of Southern California
700 North Alameda Street
Los Angeles, California 90012

Report Number 2025 MWD08 01S1
August 2025

Prepared under the direction of:

Mai Hattar	Interim Chief Engineer; Group Manager-Engineering Services

Prepared by:

Albert Rodriguez	Engineering Services
Bei Su	Engineering Services
Bashar Sudah	Engineering Services
Kingsley Ozegbe	Engineering Services
Andrew Brainard	Engineering Services
Rosa Lau	Engineering Services
Demetri Polyzos	Water Resources Management
Ian Whyte	Water Systems Operations
David Sarkisian	California Department of Water Resources

Reviewed by:

John Bednarski	Assistant General Manager-Water and Technical Resources
Keith Nobriga	Group Manager-Water System Operations
Catherine Stites	Office of the General Counsel
John Shamma	Engineering Services
Winston Chai	Engineering Services
Ernie Ariza	Engineering Services
Brandon Goshi	Group Manager-Water Resources Management

Additional copies: The Seismic Resilience Report is located on the Seismic Resilience SharePoint site. To obtain a copy of this document, please contact the Engineering Services Group.

Disclaimer

Extensive efforts have been made to ensure that the material contained in this document is accurate as of the date of publication. There are many factors, however, related to the content and applicability of this document which are beyond the control of MWD. In addition, the contents of this publication will be periodically updated, so the reader should inquire about any such changes in addition to reading this document. Finally, the reader is encouraged to seek appropriate technical and/or legal advice when specific facts or circumstances arise that raise questions concerning the applicability or interpretation of the policies and procedures discussed herein.

PUBLICATION HISTORY:

First Biennial Report (Report No. 1551/ 2020 MWD02 01S1)	*February 2018*
2020 Update (Report No. 1551-1/ 2018 MWD02 01S1)	*February 2020*
2025 Update (Report No. 2025 MWD08 01S1)	*July 2025*

Cover Photo: Installation of 104-inch diameter earthquake-resistant ductile-iron pipe on Metropolitan's Casa Loma Siphon

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1 Executive Summary

The 2025 Seismic Resilience Report provides an overview of Metropolitan's current seismic resilience strategy and the infrastructure improvements made to mitigate potential impacts to facilities and systems from earthquake hazards. The report maintains continuity with the 2020 Seismic Resilience Report, which listed goals for the purpose of enhancing seismic resilience for the 5-year planning period. Metropolitan's seismic resilience strategy is comprised of four main components – Planning, Engineering, Operations, and Reporting.

Under the Planning component, water supply diversification and improved system flexibility continue to be the primary goals for increased resilience. The Diamond Valley Lake to Rialto Pipeline Project and Sepulveda Feeder Pump Project will improve Metropolitan's ability to move Colorado River or stored water within Diamond Valley Lake to member agency service areas that are highly dependent on State Water project supplies improving both drought and seismic resilience for these areas. Additionally, the proposed Pure Water Southern California will provide a new reliable water source for the region in case of a seismic event impacting the region's imported water supplies.

Under the Engineering component, staff continues to implement the Seismic Upgrade Program, which aims to improve the performance of existing facilities against seismic events. Dam safety continues to be a priority with the initiation of a new Dam Safety Risk Assessment program and an initiative to modernize Metropolitan's existing dam monitoring systems, both initiated in 2023. Additionally, staff continues to conduct systemwide seismic assessments utilizing the latest technologies and updated methodologies for evaluating the risk of the infrastructure system.

Under the Operations component, Metropolitan continues to conduct emergency exercises in coordination with member agencies and regional partners. An example is the planning exercise with the California Department of Water Resources (DWR) and Los Angeles Department of Water and Power (LADWP) as part of the Seismic Resilient Water Supply Task Force to identify areas of improvement for strengthening the region's imported water network against future seismic events. Building up in-house fabrication and construction capacity allows Metropolitan to react to potential seismic damage quickly and effectively minimize interruptions to system operations. Upgrade of the La Verne fabrication shops and investment in heavy construction equipment have significantly improved Metropolitan's capability to restore its infrastructure system and assist in the region's recovery after a major seismic event.

Under the Reporting component, staff continues to provide annual seismic resilience updates to the Board as part of the infrastructure resilience updates to report progress and receive

feedback. Meanwhile, the 2025 Seismic Resilience Report summarizes achievements in the last five years and lays out the plan and focused areas for the next five years to continuously enhance infrastructure seismic resilience. Included in the report is a section on DWR's seismic program highlighting seismic preparedness accomplishments of the last five years related to the State Water Project, including the completion of the Perris Dam Seismic Remediation Project in 2022 and the Castaic Dam Tower Bridge Seismic Retrofit Project in 2023. Current activities include the design of modifications to the Castaic Dam Intake Tower and Outlet Works and emergency response planning.

The availability of water following a large seismic event will be vital for fire suppression, the general welfare of the public, and the region's economic stability. As documented in this report, Metropolitan has established a robust strategy for preparing and responding to seismic hazards. Since 2000, Metropolitan has invested more than $700 million toward seismic resilience, including pre-event risk mitigations and post-event restoration capacity, and will continue to incorporate seismic resilience in its planning and design activities.

2 Introduction

2.1 Purpose

The Metropolitan Water District of Southern California (Metropolitan) owns and operates a complex conveyance, treatment, and distribution system that serves a 5,200-square-mile service area within an active seismic region. Over its 95-year history, Metropolitan has been proactive in mitigating seismic risks posed to this expansive infrastructure, as well as improving its ability to maintain (or quickly restore) water deliveries following a major seismic event. This ability to mitigate seismic risks and maintain (or quickly restore) water deliveries following a seismic event is referred to as "seismic resilience." Metropolitan's strategy for seismic resilience follows a multi-layered approach for managing risk: providing a diversified water resource portfolio, system flexibility, emergency water storage, robust emergency response capabilities, and performing cyclical assessments of facilities and addressing identified vulnerabilities.

In February 2018, Metropolitan published *Report No. 1551 (2020 MWD02 01S1), Seismic Resilience First Biennial Report*, which provided an in-depth review of seismic events affecting Metropolitan and summarized Metropolitan's historical approach to mitigating seismic risk. The document also defined Metropolitan's current Seismic Resilience Strategy, the core components of that strategy, and identified performance objectives and near-term goals. An update was published in 2020 highlighting organizational achievements toward improved seismic resilience.

The *2025 Seismic Resilience Report* documents revisions to Metropolitan's Seismic Resilience Strategy, summarizes seismic-resilience-related studies completed since the publication of the last report; lists milestones related to structural upgrades, dam seismic safety enhancement, and emergency response planning; and highlights achievements in meeting seismic performance objectives and near-term goals. The report also identifies new performance objectives and goals that will further increase the seismic resilience of Metropolitan's infrastructure system.

2.2 Seismic Risk

Southern California is crossed by several faults of varying levels of activity that can generate large earthquakes and cause widespread damage. The region's imported water conveyance facilities – Metropolitan's Colorado River Aqueduct, the State Water Project California Aqueduct (California Department of Water Resources), and the Los Angeles Aqueduct (Los Angeles Department of Water and Power) are all crossed by the San Andreas Fault. Other faults cross different pipelines within Metropolitan's conveyance and distribution system, potentially impacting different sections of Metropolitan's service area. Ruptures of one of these faults can result in intense shaking and permanent ground displacements, causing damage to pipelines,

tunnels, building structures, and other treatment and distribution components. Figure 2-1 shows the major fault lines that cross Metropolitan's service area.

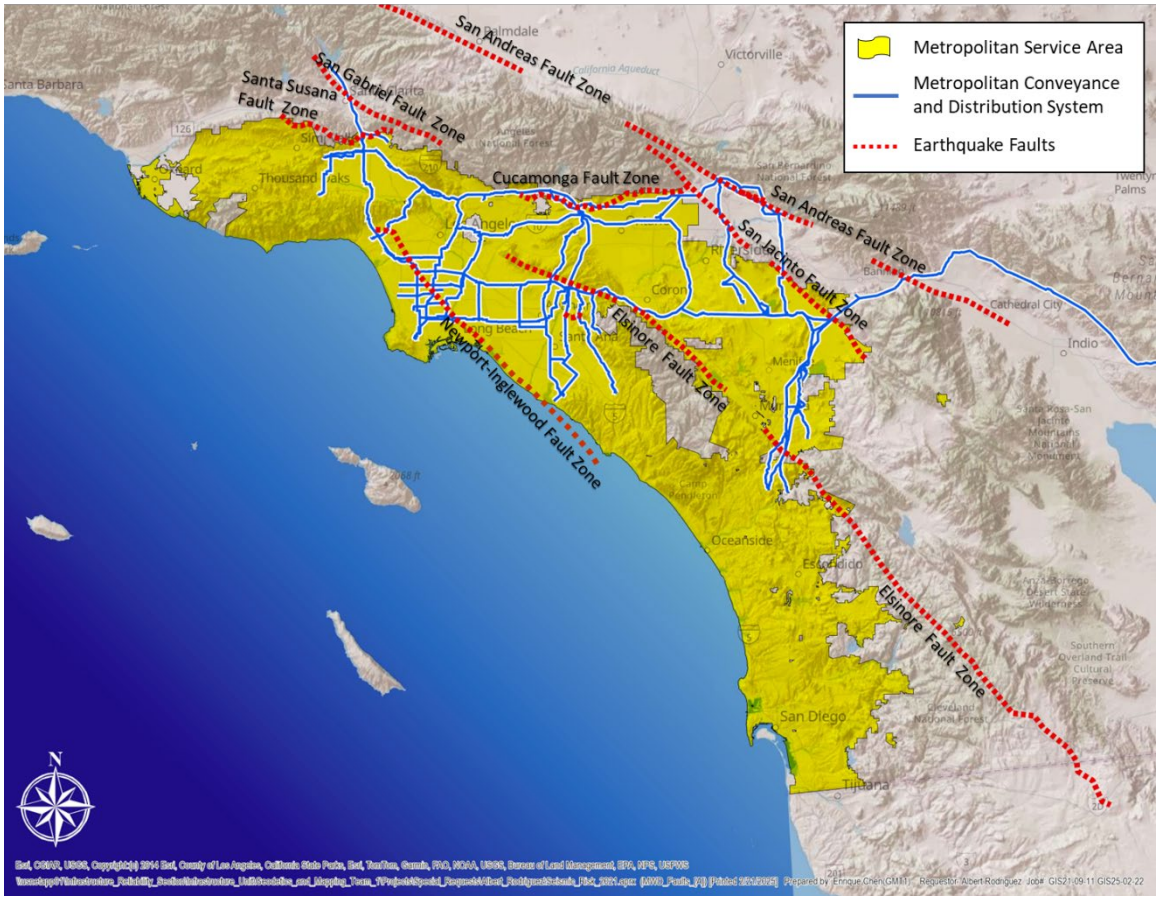

Figure 2-1: Major Southern California Faults in Metropolitan Service Area

2.3 Seismic Resilience Strategy

The Seismic Resilience Strategy has the following objectives which are applicable to Metropolitan's infrastructure and the region's resilience:

- Provide a diversified water supply portfolio, system flexibility, and emergency storage
- Prevent damage to water delivery infrastructure in probable seismic events and limit damage in extreme events
- Minimize water delivery interruptions through a dedicated emergency response and recovery organization
- Prepare for restoration by implementing resilient measures such as stockpiling materials, pre-event design, and emergency contractor retention

Metropolitan's Seismic Resilience Strategy was described in detail in the 2018 Report, and the overall structure of the strategy remains intact with refinements to reflect the maturity of the overall program and the emphasis on implementation. A detailed breakdown of the current Seismic Resilience Strategy is provided in Figure 2-2. The figure provides an overview of the comprehensive efforts taken to mitigate impacts from large earthquakes, to quickly respond following an earthquake event, and to provide transparency regarding seismic risk mitigation measures and receive feedback to facilitate improvements.

As shown in Figure 2-2, in addition to the activities conducted under the Planning, Engineering, Operations, and Reporting components of the Seismic Resilience Strategy, Metropolitan has continued its involvement with the Seismic Resilient Water Supply Task Force. The Seismic Resilient Water Supply Task Force is a collaboration between Metropolitan, the California Department of Water Resources (DWR), and the Los Angeles Department of Water and Power (LADWP) to improve the seismic resilience of the imported water supplies.

Investments in seismic mitigation must be balanced with other Metropolitan priorities to ensure effective and efficient risk mitigation. Since 2000, Metropolitan has invested more than $700 million toward seismic resilience. Investments include upgrade of facilities and pipelines to meet seismic performance goals and improving emergency response capabilities.

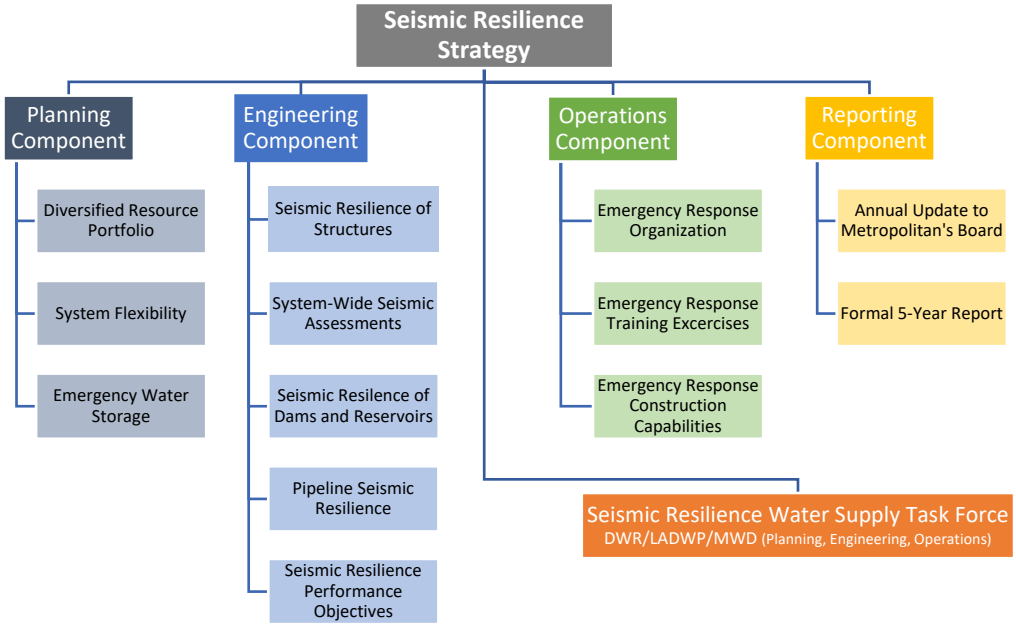

Figure 2-2: Seismic Resilience Strategy and Focus Areas

3 Planning Component

As a primary supplier to the Southern California water community, Metropolitan faces many challenges in meeting the region's needs for water supply reliability and quality. One of the challenges is the ability to maintain water deliveries within the region following a major seismic event. In general, Metropolitan's planning efforts focus on meeting peak demands during normal operations. However, during the original planning for Diamond Valley Lake (DVL), Metropolitan considered a scenario and planned to meet regional demands if imported supplies were interrupted due to a seismic event, leading to the development of a significant increase in storage dedicated to meeting demands during emergencies.

Since 2000, Metropolitan has provided about 49 percent (ranging annually between 38 and 56 percent) of the total water used in its service area from the Colorado River (via the Colorado River Aqueduct) and from the Sacramento-San Joaquin River Watershed (via the State Water Project). In addition to relying on imported supplies, Metropolitan and its member agencies have developed other sources, including groundwater, surface water, recycled water, desalination of seawater, and an aggressive water conservation and water use efficiency program. These investments, and Metropolitan's ongoing efforts in several different areas, coalesce toward the goal of long-term regional water supply reliability.

Metropolitan's Integrated Water Resources Plan (IRP) is the foundation for planning and developing a diverse water supply and emergency storage. The fundamental goal of the IRP is for Southern California to develop a water supply portfolio that will be able to maintain a reliable water supply. Maintaining this reliability includes making investments prior to major seismic events when there could be extended outages of imported water conveyance systems. To meet this fundamental IRP goal of a diversified water portfolio, Metropolitan believes in investing in the reliability of imported supplies, incentivizing its member agencies to develop increased water conservation, recycling, storage, and other resource-management programs. A significant part of imported water supply reliability is preparing for recovery periods following seismic events. With the commencement of the IRP process in 1993, Metropolitan formalized this process as a long-term strategy and official policy.

Metropolitan's success in improving water supply reliability by diversifying its water resource portfolio and by the application of adaptive resource management approaches has also increased seismic resilience. At a system level, the Planning component of seismic resilience has several facets:

- Diversified water supply portfolio
- System flexibility
- Emergency storage

3.1 Diversified Water Portfolio

Metropolitan has undertaken several planning initiatives over the years to maintain a diversified water portfolio. These initiatives include the IRP, periodic IRP updates, the Water Surplus and Drought Management (WSDM) Plan, and the Water Supply Allocation Plan (WSAP). Collectively, these initiatives provide policy framework guidelines and resource targets for Metropolitan to ensure regional water supply reliability, along with additional resilience for seismic events. In addition to Metropolitan's efforts to coordinate regional supply planning through its inclusive IRP process, Metropolitan's member agencies also conduct their own planning analyses and may develop projects independently of Metropolitan.

3.1.1 2020 IRP Regional Needs Assessment

The 2020 IRP Regional Needs Assessments strengthens the adaptive management approaches employed in prior updates through the incorporation of an explicit scenario planning step. With knowledge gained from the completion of the full "planning cycle" from the original 1996 IRP, Metropolitan was able to use the lessons learned from the previous 25 years to conduct the 2020 IRP Regional Needs Assessment. The key lesson is that the future is not predictable; rather, future outcomes are a function of many diverse drivers that are out of the control of the water community. The purpose of scenario planning is to broaden the understanding of plausible, but uncertain, future conditions affecting both supplies and demands. On the demand side, uncertainties surrounding future economic conditions, the extent to which local supplies are developed, and water use behavior will guide member agency dependence on Metropolitan in meeting their retail demands. On the supply side, factors such as climate change and regulatory uncertainty are expected to affect future supply availability in unpredictable ways.

The Regional Needs Assessment outcomes can be summarized through a set of findings grounded in the scenario reliability analysis. The findings fall within five key focus areas:

- SWP Dependent Areas – addressing identified vulnerabilities in the portion of Metropolitan's service area dependent upon State Water Project deliveries (the "SWP Dependent Areas");
- Storage – storage capacity, put/take capabilities, and accessibility as critical considerations in reliability and reducing the need for new core supply development;
- Retail Demand/Demand Management – managing variability in demand through appropriate regional measures and efficient water use;
- Metropolitan Imported Supplies – maintaining existing imported supply reliability and addressing risks to existing imported supplies from various drivers of uncertainty; and
- Local Supply – maintaining existing and developing new local supplies as a critical element of managing demands on Metropolitan.

The Regional Needs Assessment presents key technical findings and examines the effectiveness of generalized portfolio categories. It frames and guides the establishment of more specific targets to maintain reliability over the planning period and informs the Board on resource investment decisions as well as the establishment of a plan to fund them. Considering future uncertainties inherent in long-term resource planning, including uncertainties about climate change and regulatory requirements, as well as Southern California's population and economy, this scenario planning approach better prepares the region for a wider range of potential outcomes by identifying solutions and policies across a variety of possible future conditions. This strategy is designed to enable Metropolitan and its member agencies to manage future challenges and changes in California's water conditions and to balance investments with water reliability benefits.

3.1.2 Water Surplus and Drought Management (WSDM) Plan

Diversifying the region's water supplies and developing adequate and healthy water storage reserves have proven to be the backstop for water supply reliability. These actions have also contributed to improved seismic resilience for the region. Stored water reserves provide certainty for meeting the needs of the region when traditional sources of supply are challenged by drought, climate change, seismic events, and other risks. It is critical that these storage resources be developed, managed, maintained, and enhanced.

Metropolitan's WSDM Plan, which defines a regional water management strategy for Metropolitan and its member agencies, has focused on using storage to manage water supplies and enhance reliability since 1999. The WSDM Plan includes the following guiding principle: Metropolitan will encourage storage of water during periods of surplus and work jointly with its member agencies to minimize the impacts of water shortages on the region's retail consumers and economy during periods of shortage.

3.1.3 Water Supply Allocation Plan

When continued drought, earthquakes, or other natural disasters lead to shortages of supplies, Metropolitan distributes a limited amount of water through its Water Supply Allocation Plan (WSAP). First developed in 2008, Metropolitan's WSAP takes a basic premise —to fairly distribute a limited amount of water supply—and applies it through a detailed methodology to reflect a range of local conditions and needs of the region's retail water consumers. In particular, under severe drought conditions or a potential seismic event that impacts imported conveyance systems, it may be necessary and prudent to call for greater reductions in the use of limited water supplies and to reduce reliance on storage reserves. The WSAP has 10 levels of water supply allocations, each corresponding to a five percent reduction of supply. A Level 2 allocation, for example, represents a reduction of approximately 10 percent in the overall water supply

available to each member agency. The level of WSAP reduction implemented would correlate to the severity of interruption caused by the seismic event.

3.2 System Flexibility

Metropolitan develops its facilities to meet demands; however, in the course of developing a reliable system to meet demands, some flexibility has been incorporated into the system. This flexibility helps Metropolitan accommodate changes in water supply, demands, and water quality. System flexibility also helps mitigate the impacts of scheduled and unscheduled outages. Metropolitan's system flexibility has two key components:

- Operational flexibility: the ability to respond to changes in regional supply, water quality, or member agency demands
- Delivery flexibility: the ability to maintain partial to full deliveries during scheduled and unscheduled facility outages

Metropolitan has found that for scheduled and unscheduled outages of Metropolitan facilities, system flexibility at the regional and local levels is key to minimizing the effects of these outages. Water supply reliability and water demand-driven projects increase Metropolitan's system flexibility, which in turn can also increase seismic resilience. For example, the Diemer and Jensen water treatment plants (and associated feeders) were constructed as water demand-driven projects that also significantly improved delivery flexibility and seismic resilience within Metropolitan's distribution system. The service areas for these water treatment plants and the Weymouth Water Treatment Plant overlap creating the Common Pool service area (Figure 3-1), which can be supplied by the other two plants if one is removed due to a planned or unplanned outage. More recent examples include the Inland Feeder-Lakeview Pipeline interconnection, which improved the supply reliability of the Mills Water Treatment Plant by enabling the delivery of water from Diamond Valley Lake, and upgrades to the Greg Avenue Pump Station, which can deliver water from Weymouth into areas normally supplied by the Jensen Water Treatment Plant. These projects were initiated in response to drought, and also provide additional reliability against seismic events.

More recently, drought conditions between 2020 and 2022 in Northern California resulted in historic low allocations from the SWP with consecutive 5 percent allocations. The drought highlighted needed improvements in the system to move alternative supplies into those areas highly dependent on SWP supplies. As a result, Metropolitan has implemented two projects that will enable delivery of Colorado River or stored SWP supplies within DVL to the SWP dependent areas. The first project, DVL Storage to Rialto Pipeline Delivery, will enable pumping of up to 120 cfs of stored water within DVL to the Rialto Pipeline service area. The second project, the Sepulveda Feeder Pump Project (SFPP) Stage 1, will provide up to 30 cfs of additional supply to member agencies in Metropolitan's western SWP dependent area.

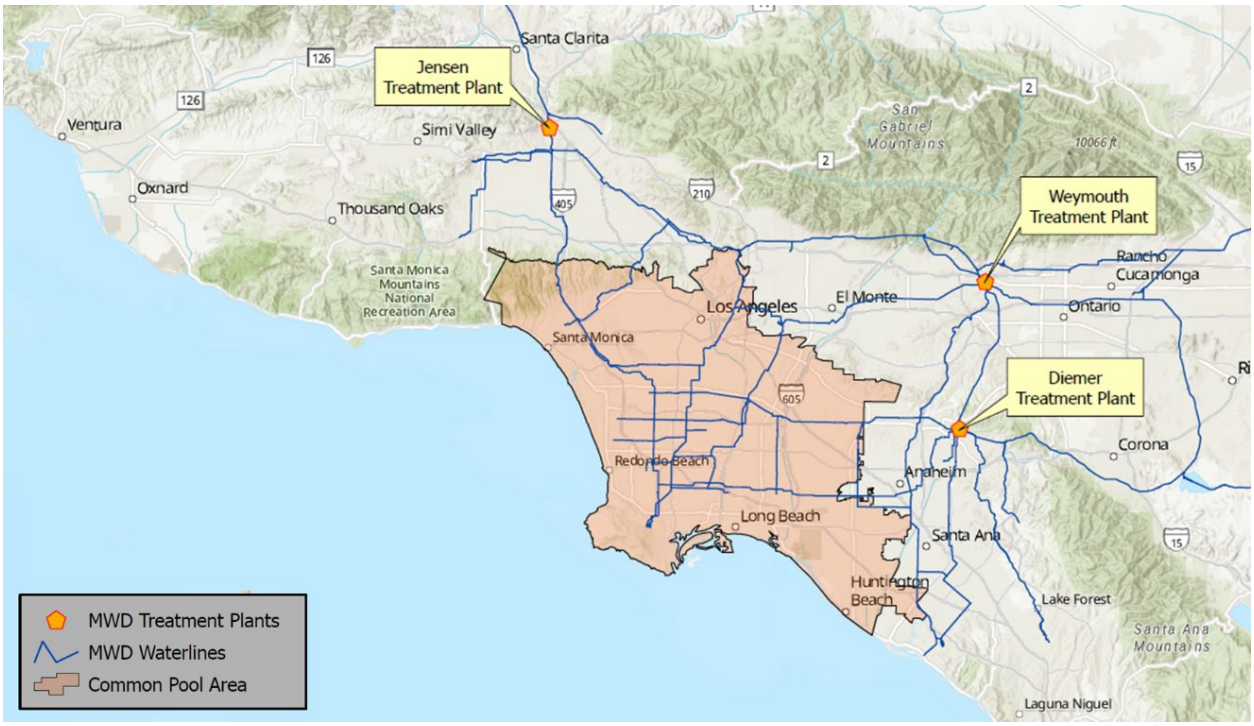

Figure 3-1: The Common Pool Service Area can be supplied by the Weymouth, Diemer, and Jensen Water Treatment Plants

While these projects are intended to improve the drought resilience of the SWP dependent areas, they will also provide benefits in case of a seismic event impacting deliveries of imported supplies to these areas.

3.3 Emergency Storage

Emergency storage requirements are based on the potential for a major earthquake that would damage all supply aqueducts, isolating Southern California from its imported water sources. Metropolitan maintains emergency storage throughout multiple reservoirs located on the coastal side of the San Andreas Fault.

In 2019, Metropolitan and its member agencies completed a collaborative process to update the regional planning estimate of Metropolitan's Emergency Storage Objective. This emergency storage represents the amount of water that Metropolitan would store for the region in preparation for a catastrophic earthquake that would damage the aqueducts that transport imported water supplies to Southern California, including the Colorado River Aqueduct, both the East and West branches of the California Aqueduct, and the Los Angeles Aqueduct.

The emergency storage allows Metropolitan to deliver reserve supplies to its member agencies to supplement local production. This helps avoid severe water shortages during periods when the imported water aqueducts may be out of service. The Emergency Storage Objective

incorporates three main considerations: 1) a six- and twelve-month outage period for the imported supply aqueducts based on the latest assessment[1] and operational flexibility of Metropolitan's system; 2) a retail water demand cutback ranging from 25 to 35 percent given the level of conservation that the region achieved during recent droughts; and 3) an aggregated loss of 10 to 20 percent of local supplies accounting for factors that could affect local production during emergency conditions. The methodology and recommendation of the workgroup were described in detail in a draft white paper, "2018 Evaluation of Regional Storage Portfolio: Draft Evaluation of Metropolitan's Emergency Storage Objective," and presented to Metropolitan's Board in May 2019[2].

Under this update, Metropolitan's Emergency Storage Objective was set to 750 TAF, as this level of storage would prevent severe water shortages in the region given the latest estimate on expected recovery durations. The emergency storage volume represents a planning estimate for the amount of water that Metropolitan would store for the region in preparation for a catastrophic earthquake or other disasters. It is not intended to set a basis or a policy for allocating or apportioning storage for any individual member agency.

Figure 3-2: Emergency Storage is allocated throughout multiple reservoirs such as Diamond Valley Lake (shown)

3.4 Other Actions

Metropolitan is evaluating the implementation of a large-scale recycled water project, Pure Water Southern California (PWSC). PWCS is a collaboration with the Los Angeles County Sanitation Districts (LACSD) that will purify up to 150 million gallons per day of treated wastewater from the LACSD's A.K. Warren Water Resource Facility in Carson for groundwater augmentation and potential incorporation at Metropolitan's treatment facilities, which can then be treated and delivered through Metropolitan's distribution system. PWSC's location within the Los Angeles basin will improve the region's seismic resilience by providing another water source for Metropolitan's member agencies in case of a seismic event that impacts the region's imported water supplies for an extended period.

3.5 Summary

Through its IRP, Metropolitan has established a fundamental goal that Southern California will have a reliable water supply system for present and future generations, even if imported water supplies are disrupted due to a major seismic event. This reliability is achieved through Metropolitan's collaborative efforts with its member agencies in developing local water supplies, emphasis on water conservation, and establishment of emergency storage on the coastal side of major earthquake faults that are crossed by the SWP, CRA, and LAA. These reliability actions enable Metropolitan to continue water deliveries during the period when imported supply aqueducts are out of service due to damage from a major seismic event. Metropolitan also continues to coordinate with state and regional entities to develop robust plans to bring back the imported supply aqueducts in service to minimize the outage period and disruption. In addition, Metropolitan's planning efforts to diversify the water supply and increase overall system flexibility over time have also contributed to providing resilience against potential in-basin earthquakes.

Metropolitan will continue to evaluate its water resource planning programs in terms of how they may further enhance seismic resilience and coordinate these efforts with the Engineering and Operations functions that are described in Sections 4 and 5 of this report.

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1 The latest assessment of potential outage durations for the region's imported water supply aqueducts (Colorado River Aqueduct, the Los Angeles Aqueduct, and the State Water Project East and West branches) following a seismic event developed as part of the 2015 Seismic Resilience Water Supply Task Force between Metropolitan, LADWP, and DWR.

2 https://bda.mwdh2o.com/Board%20Archives/2019/05-May/Letters/064883968.pdf

4 Engineering Component

Metropolitan develops strategies that assess systemwide risks and identify facilities' deficiencies against earthquake hazards. Component-specific mitigation measures are developed and implemented based on established priority. These strategies include evaluating the seismic resilience of structures; systemwide seismic assessments that address multiple facilities and infrastructure components; other specialized efforts that address the seismic resilience of dams and reservoirs and linear components such as tunnels and pipelines; and developing component-specific seismic design criteria.

4.1 Seismic Resilience of Structures

The purpose of evaluating the seismic resilience of structures is to prevent seismic damage to water delivery infrastructure from probable events and to limit damage due to extreme events to minimize water delivery interruptions. For occupied structures, the goal is to protect life safety and critical functions. Metropolitan applies a systematic approach to evaluate existing structures that were constructed in accordance with earlier codes, and where necessary, to upgrade structures with identified seismic deficiencies. The criteria applied to the seismic evaluations incorporate current code provisions and up-to-date industry standards. In general, structures are upgraded to maintain seismic performance levels that are comparable to the levels of a new facility.

A seismic risk-reduction program identifies seismic deficiencies of structures and quantifies the associated risks through an effective evaluation process, enabling limited resources to be allocated strategically to projects that address key vulnerabilities and maximize improvements in the seismic resilience of the water delivery system. A 5-step process aims to achieve the above objectives were developed: 1) a preliminary high-level evaluation to quickly assess structures for potential seismic deficiencies; 2) prioritization of seismically deficient structures; 3) detailed evaluations and development of retrofit options, 4) seismic retrofit implementation, and 5) periodic reevaluation of structures.

Over the past two decades, the prioritization (step 2) was primarily aimed at improving the seismic resilience of above-ground facilities and structures constructed prior to 1990 with emphasis on water delivery facilities and facilities with potential life-safety risks. For example, the Weymouth Water Treatment Plant was placed into service in 1941 and expanded twice to meet growing demand. Weymouth basins 5 through 8 were constructed in 1962 as part of the plant's second expansion. In 2022, Metropolitan's Board authorized rehabilitation of the basins including seismic improvement of the concrete basin inlet channel. These improvements increase

seismic performance of the basin structure (Figure 4-1) and other water treatment equipment such as the baffle walls.

Figure 4-1: Seismic Reinforcement of Weymouth Basin 7

4.1.1 Progress to date

A comprehensive inventory list of Metropolitan's above-ground structures is used to track the progress of the evaluation and seismic upgrades of structures. To date, Metropolitan has completed preliminary evaluations of all 311 pre-1990 above-ground structures (Figure 4-2). Upgrades of many critical structures have also been completed, including the five pumping plants along the Colorado River Aqueduct, the Jensen Administration Building, the Diemer Administration Building, and the Lake Mathews Outlet Tower.

As shown in Figure 4-2, of the 116 structures identified as potentially deficient, 74 have been upgraded and 16 are authorized for study, design, or construction. The remaining 26 structures will proceed through Metropolitan's Capital Investment Plan (CIP) evaluation process to obtain authorization for the detailed evaluations.

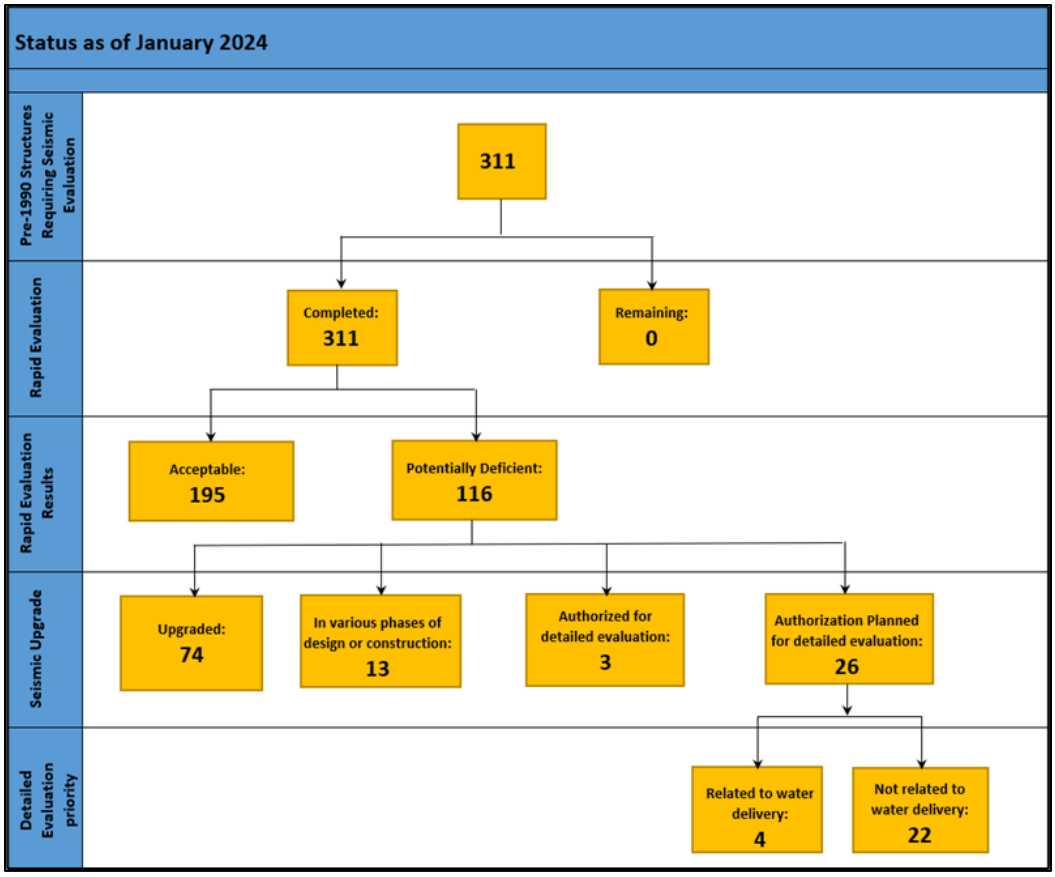


Figure 4-2: Status of Seismic Assessments and Upgrades for Pre-1990 Structures

In 2017, the strategy for achieving the seismic resilience of structures was modified to further enhance the seismic resilience of the delivery system. The refined strategy moved beyond assessing only pre-1990 above-ground structures to include the following:

- Fully and partially buried structures
- Seismic anchorage and bracing of non-structural components such as equipment, pipes, and ducts.
- Structures constructed between 1990 and 2000 (prior to the adoption of UBC 1997)

For the first two items, it was recognized that fully and partially buried structures, while less vulnerable to seismic hazards than above-ground structures, are nevertheless important to maintaining system reliability. Similarly, the seismic resilience of non-structural components, such as equipment and piping, is also important for minimizing operational downtime after a seismic event. To this end, Metropolitan initiated a pilot study to identify potential deficiencies of non-structural components at several facilities across multiple treatment plants. Upon completion of the pilot study, the information gathered will be used to start a comprehensive assessment of non-structural components at all Metropolitan facilities.

The third item, relating to UBC 1997, is included in the expanded effort since seismic design codes have been modified such that some structures designed and constructed after 1990 also warrant an assessment. Recorded ground motions in the 1994 Northridge Earthquake, for example, revealed that the design seismic force specified in building codes at the time was underestimated for sites located close to faults. This near-fault effect was incorporated into the subsequent code (UBC 1997). As a result, certain structures designed between 1990-2000 prior to the adoption of UBC 1997 may be vulnerable to a major earthquake.

Metropolitan has begun the preliminary evaluations of the post-1990 above ground structures (Figure 4-3). As shown in the figure, of the 6 structures identified as potentially deficient, 1 has been upgraded and 1 is authorized for preliminary design. The remaining 4 structures will proceed through Metropolitan's CIP evaluation process to obtain authorization for the detailed evaluations.

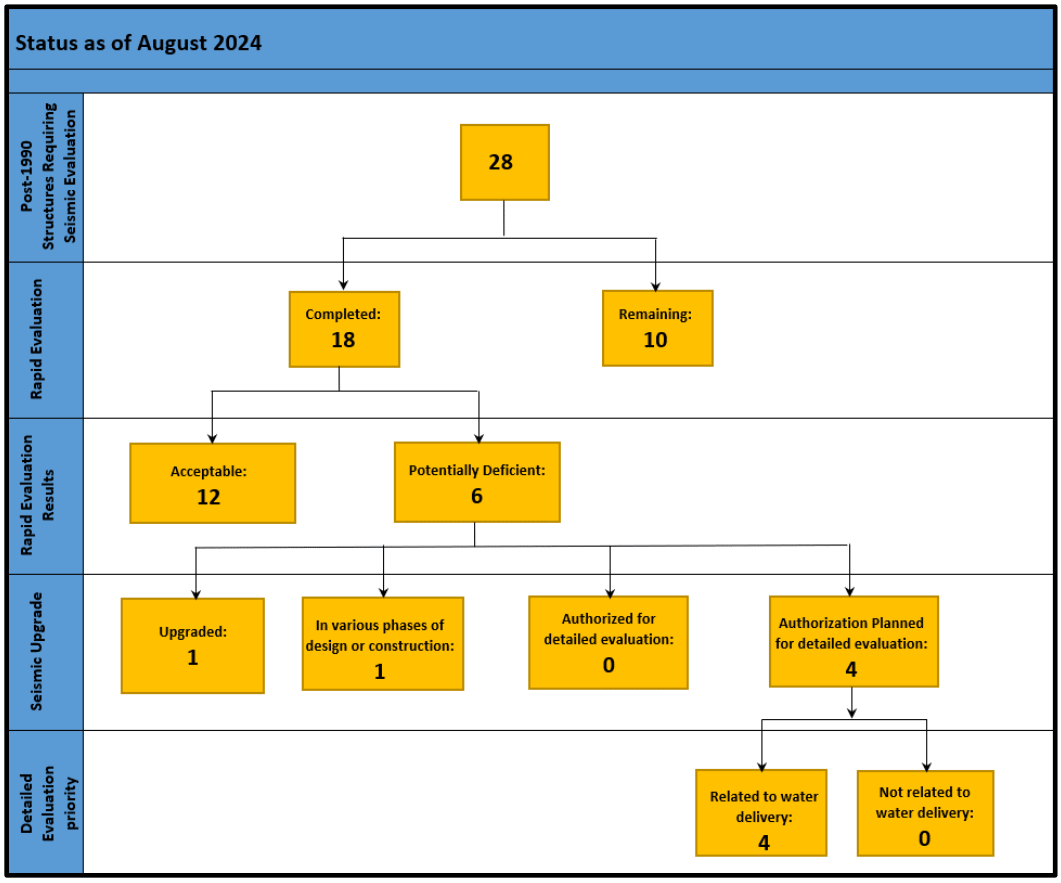


Figure 4-3: Status of Seismic Assessments and Upgrades for Post-1990 Above Ground Structures

Moving forward, the near-term focus is to complete the detailed evaluations and seismic retrofit projects that have been authorized to date. Long-term goals include:

- Continue assessment of seismic design criteria to incorporate updated seismic resilience strategy
- Develop a systematic approach to improve the seismic resilience of non-structural components
- Conduct preliminary evaluations for critical fully or partially buried structures
- Complete the preliminary evaluation of post-1990 above ground structures

4.2 Systemwide Seismic Assessments

Metropolitan conducts studies to further the organization's understanding of the vulnerability of its infrastructure system to seismic hazards. The studies support emergency response training and planning for future earthquake events by estimating the magnitude of damage that may occur from various seismic events. Current studies are described below.

Local Hazard Mitigation Plan – The Local Hazard Mitigation Plan will assess Metropolitan's exposure to natural hazards, including earthquakes, wildfires, landslides, floods, droughts, extreme weather events, and climate change. The plan sets goals for hazard mitigation and identifies studies and projects that will move the organization toward those goals. The plan will require approval by the Federal Emergency Management Agency (FEMA) and adoption by Metropolitan's Board of Directors. Completion of the Local Hazard Mitigation Plan would qualify Metropolitan for federal grant funding programs to offset the costs of hazard mitigation studies and projects.

Pipeline Seismic Vulnerability Assessment – A collaboration with the University of California, Berkeley Center for Smart Infrastructure (CSI), the Pipeline Seismic Vulnerability Assessment evaluates the risk to Metropolitan's pipeline system against the seismic hazard. Whereas previous studies have looked at damage under specific earthquake scenarios, this study will utilize a probabilistic approach to evaluate the impacts on Metropolitan's conveyance and distribution system, considering earthquakes with varying ranges of magnitudes at different faults. This approach provides a more comprehensive understanding of the relative risk, considering uncertainties in estimating hazard level and damage extent, for different pipelines. The findings will inform the prioritization process and result in a more effective mitigation effort. Figure 4-4 shows four potential repair realizations based on a hindcast of the 1994 Northridge Earthquake (M 6.7), as part of the model calibration process. The multiple realizations are a result of modeling the damage probability at each pipe segment using a Poisson distribution. The

parameters of the Poisson distributions are estimated based on pipeline fragility curves and the estimated ground shaking and ground failure intensities from the 1994 Northridge earthquake.

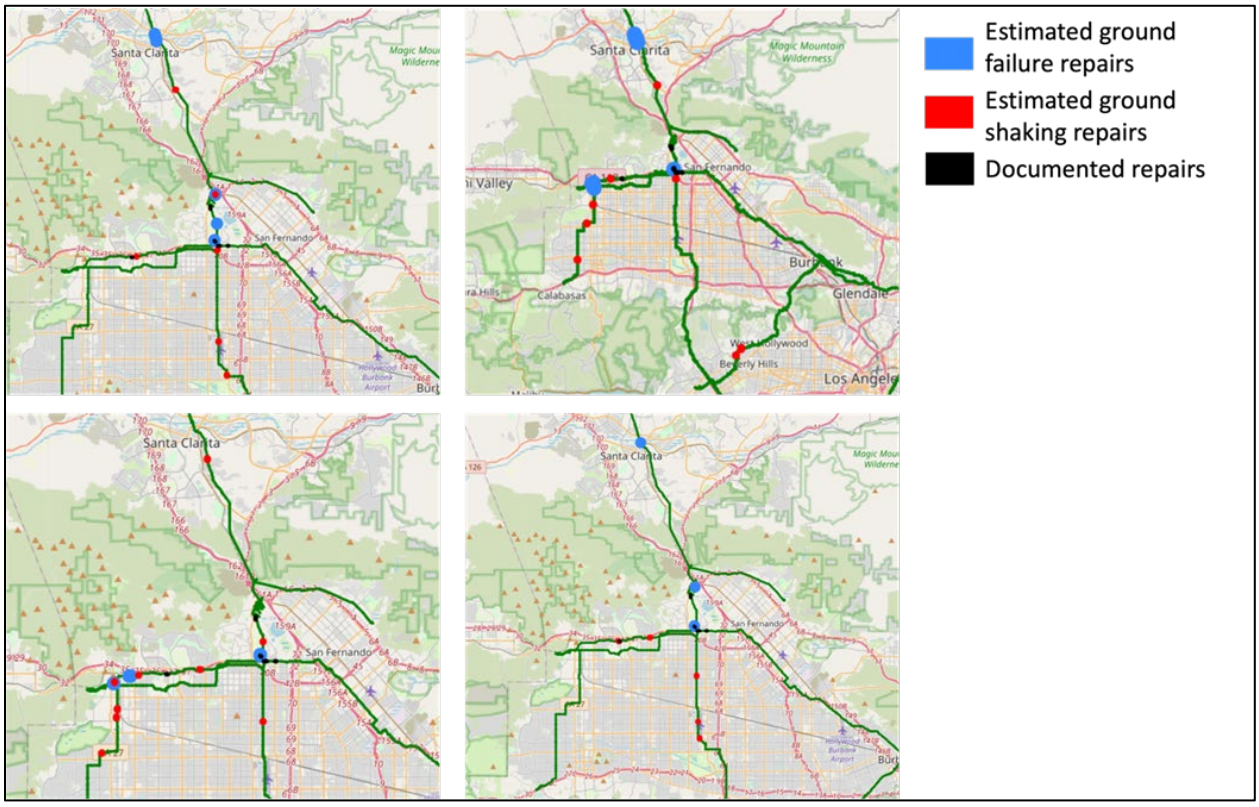


Figure 4-4: Examples of Pipeline Repair Location Realizations from Northridge Hindcast for Pipeline Seismic Vulnerability Assessment

4.3 Dams and Reservoirs Seismic Resilience

The seismic resilience of Metropolitan's dams and reservoirs is safeguarded by a robust and proactive comprehensive dam safety program managed by the Engineering Services Group (ESG). ESG's Safety of Dams and Geotechnical Team performs inspections, interprets, and analyzes collected surveillance and monitoring data, evaluates dam structures and appurtenant works, reports the findings, and serves as Metropolitan's liaison with the California Department of Water Resources, Division of Safety of Dams (DSOD).

Metropolitan owns and operates 20 facilities that are under the jurisdiction of DSOD, and there are a total of 24 individual dams, as some of these facilities have multiple dams. Metropolitan's portfolio of dams includes concrete arch dams, embankment dams, and rectangular reinforced concrete reservoirs or basins.

Several new programs were recently initiated that aim to bolster the seismic resilience of Metropolitan's dams by evaluating seismic risk and identifying risk reduction measures, better monitoring of the dams' performance during and after earthquakes and preparing for emergencies that could result from earthquakes.

4.3.1 Dam Safety Risk Assessments

A program was initiated in 2023 to perform comprehensive risk assessments of Metropolitan's dams which aim to identify potential failure modes (PFM) for the dam systems, and to estimate the risk associated with the PFMs. These comprehensive evaluations are done in accordance with current industry standards and best practices and include all the dam/reservoir system components such as spillways, outlet towers, and other appurtenant structures. The risk of failure as a result of a seismic event is estimated semi-quantitively considering a range of site-specific earthquake scenarios including the more frequent smaller events as well as the less frequent much larger events, and any necessary risk reduction measures are identified. In addition to identifying risk reduction measures, the understanding of seismic risk will inform the periodic updates to the inspection and monitoring procedures for the dams and provide the basis for prioritizing CIP projects.

The first risk assessment was completed for Lake Mathews dams and appurtenant structures in 2024, and the risk assessment for Lake Skinner was completed in 2025. The risk assessments concluded that the risk associated with seismic PFMs at both Lake Mathews and Lake Skinner dams are relatively low, below the action level identified in the federal risk guidelines. No immediate risk reduction measures were deemed necessary. However, further studies including detailed three-dimensional numerical analyses and enhanced post-seismic monitoring and surveillance were recommended.

These assessments are prioritized based on perceived risk at sites, with additional assessments scheduled to be completed by 2028.

4.3.2 Automated Dam Monitoring Systems

Another new initiative to modernize Metropolitan's existing dam monitoring systems began in 2023. The existing monitoring systems at several dams will be upgraded with state-of-the-art automated data acquisition systems (ADAS) that provide the ability to collect, view, and evaluate data on a near real-time basis from many instruments located in and around the dams and appurtenant structures. Data collected from different types of instruments that monitor pore pressures, groundwater levels, seepage flows, ground shaking, and deformation can be reviewed immediately after an earthquake to assess the performance of the dam and appurtenant structures. The upgraded systems also provide easy-access dashboards for data, and notification capabilities when preset thresholds are exceeded.

The monitoring system at Garvey Reservoir was upgraded in 2024. Monitoring system upgrade at Diamond Valley Lake is underway with a planned completion date of June 2025. Additional monitoring system upgrades planned for Lake Mathews and Lake Skinner will utilize the same approach as Garvey Reservoir and Diamond Valley Lake.

Figure 4-5 shows the instrumentation layout at Garvey Reservoir and the earthquake record from the recent 4.4 magnitude Highland Park earthquake, which occurred on August 12, 2024, with an epicenter located approximately 4 miles northwest of the reservoir. The new seismic accelerograph installed on the Garvey Reservoir North Embankment provided useful data immediately after the earthquake, which enabled staff to quickly evaluate the impact of the earthquake on the dam.

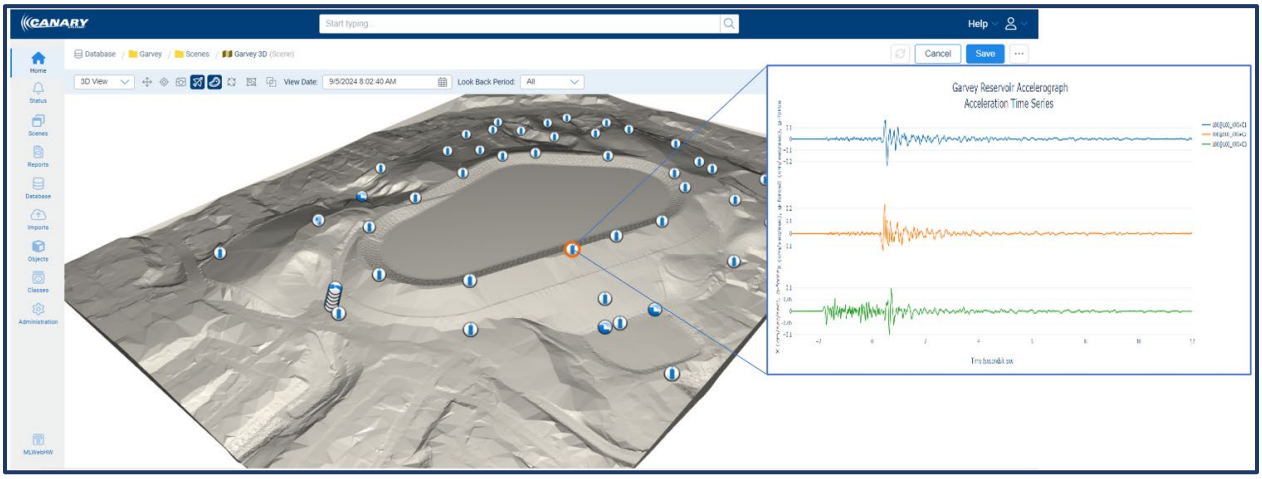


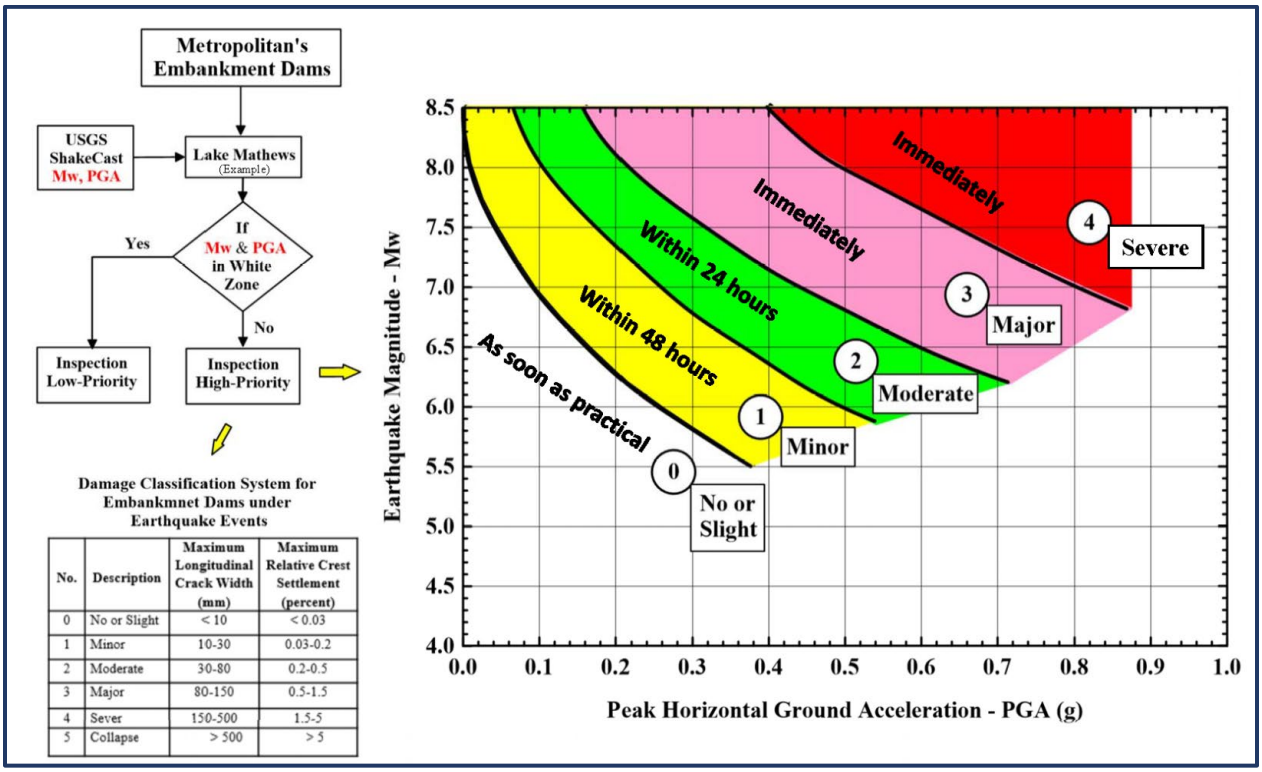
Figure 4-5: Garvey Reservoir Dam Monitoring System Dashboard and Recent Earthquake Data

4.3.3 Emergency Preparedness and Response

State-mandated Dam Emergency Action Plans (EAP) were completed and approved by the California Governor's Office of Emergency Services (Cal OES). A total of 13 EAPs were completed and approved, and several EAP exercises have been conducted with Metropolitan staff. The EAPs identify potential emergency conditions resulting from significant ground shaking during an earthquake and specify actions to be taken during and after the emergency.

In addition to the Dam EAPs, a new procedure was developed to allow the Dam Safety Assessment Team (DSAT), which is part of Metropolitan's Emergency Operations Center (EOC) organization, to prioritize post-earthquake inspections based on the earthquake magnitude and the recorded Peak Ground Acceleration (PGA) at or near the dam location. The purpose of this

procedure is to prioritize post-event inspections on the dam(s) that are likely impacted by the event. The new guideline is shown in Figure 4-6.



No.	Description	Maximum Longitudinal Crack Width (mm)	Maximum Relative Crest Settlement (percent)
0	No or Slight	< 10	< 0.03
1	Minor	10-30	0.03-0.2
2	Moderate	30-80	0.2-0.5
3	Major	80-150	0.5-1.5
4	Sever	150-500	1.5-5
5	Collapse	> 500	> 5

Figure 4-6: Dam Safety Assessment Team – Emergency Response Time Chart

4.4 Pipeline Seismic Resilience

Metropolitan's pipelines have been constructed in conformance with standards and practice at the time of design. Historically, there have been very few prescriptive code requirements for seismic design of pipelines. More recently, there have been developments in evaluation guidelines and mitigation measures for large-diameter pipelines, including improved techniques to analyze the interaction between pipelines and surrounding soil during shaking, increased post-earthquake reconnaissance on water systems, and demonstrated performance of earthquake-resistant pipeline products.

Two types of seismic hazards, ground shaking and permanent ground displacement (PGD), can potentially cause damage to pipelines. PGD could occur at fault crossings, liquefiable zones, and unstable slopes. Metropolitan has conducted and will continue to update seismic vulnerability assessment of its distribution system, which consists of mainly large-diameter pipelines. From historical data and records of Metropolitan's pipeline performance in past earthquakes, large-diameter pipelines are less vulnerable to ground shaking. Damage resulting in severe pipeline leaking was mainly caused by PGD. Therefore, the current focus of Metropolitan's pipeline

seismic resilience strategy is to mitigate vulnerabilities caused by PGD to effectively reduce overall risks with limited resources. In the meantime, Metropolitan will opportunistically address other seismic vulnerabilities when an aging pipeline is slated for rehabilitation.

Metropolitan has adopted seismic design criteria for pipelines to resist various hazards. For new design or rehabilitation of pipelines at fault crossings, Metropolitan will attempt to characterize the fault rupture location, direction, and ground displacement which can be used as the input to simulate the interaction between pipeline structure and surrounding soil. Slope instability hazards are analyzed similarly applying nonlinear finite element models of subgrade structures and soil materials to capture the soil-structure interaction. Mitigation measures could include strengthening pipelines and joints, soil improvements, and application of earthquake-resistant pipelines. Since the extent of liquefaction areas is difficult to define for the purpose of calculating pipeline strain and stress, the approach to address liquefaction hazards is avoidance and restoration. New pipeline installation will avoid potential liquefaction zones. For existing pipes, the resilient strategy, such as isolation, pre-event design, and stockpiling described in a later section, will be most prudent. Pipe joints and thrust are evaluated to resist the shaking hazards.

Examples of some of Metropolitan's ongoing and recently completed pipeline-related seismic projects are provided below.

Casa Loma Siphon No. 1 - The Casa Loma Siphon No. 1 seismic upgrade project was completed in 2024 and put into active service. The project utilized Earthquake Resistant Ductile Iron Pipe (Figure 4-7) to replace approximately 700 feet of the existing siphon with a 104-inch-diameter-double barrel system able to accommodate long-term subsidence and potential rupture of the San Jacinto Fault at the crossing.

Figure 4-7: Earthquake Resistant Ductile Iron Pipe Joint Assembly for Casa Loma Siphon

Prestressed Concrete Cylinder Pipe Rehabilitation - Metropolitan's rehabilitation program of its prestressed concrete cylinder pipelines (PCCP) is progressing as planned. The program will install welded steel liners within the existing PCCP pipeline sections of Metropolitan's conveyance and distribution system. Approximately 18 miles of a planned approximate 29 miles have been relined on Metropolitan's Second Lower Feeder. Reach 9 of the Second Lower Feeder PCCP Rehabilitation crosses the Los Angeles River and the Newport-Inglewood Fault. The feeder is being evaluated for improvements to the proposed steel liner rehabilitation of the PCCP, which will increase the feeder's seismic capacity against potential fault ruptures. Possible improvements include improved joint construction to match the yield strength of the steel liner and modifications of the grout material between the liner to the PCCP to achieve higher performance during a seismic event. Metropolitan is also progressing with the design for the PCCP Rehabilitation Project for the Sepulveda Feeder, which will line approximately 19 miles of pipe.

Sepulveda Canyon Slope Stability - The Sepulveda Canyon Control Facility (SCCF) is an important system and central in controlling the flow and hydraulic operating pressure of the Sepulveda Feeder system. The SCCF is situated in a large tributary canyon, located near the Getty Center and west of the junction of Interstate 405 and Sepulveda Boulevard in Los Angeles.

The facility was originally constructed on level pads created by placing and compacting fill in Sepulveda Canyon. Site work, including placement of this compacted fill, was carried out between 1969 and 1970. Grading for the original site development and canyon-area fill was performed with only partial removal of alluvial soils present in the bottom of a V-shaped canyon. These soils were reportedly removed to just above the groundwater level. The pads were established at elevations designed to maintain sufficient head to control the distribution of water from the facility. Site grading involved constructing an east-facing fill slope in the narrow canyon area that ranges from about 90 to 130 feet in height and is inclined at approximately 1.5:1 to 2:1 (horizontal to vertical).

Major infrastructure at the SCCF consists of large circular tanks, a pressure control structure, hydroelectric power generation, overflow structures, and the Sepulveda Feeder pipeline. Recent field investigations indicated that the facility may suffer liquefaction-induced slope failure in the existing alluvial soils under the most recently updated seismic code. The planned Sepulveda Feeder Pump Stations Project has developed effective measures to stabilize the slope that include soil remediation and a soil retaining system (Figure 4-8). The pipe approaching and leaving the facility will be evaluated to remain in service following a seismic event and slope movement.

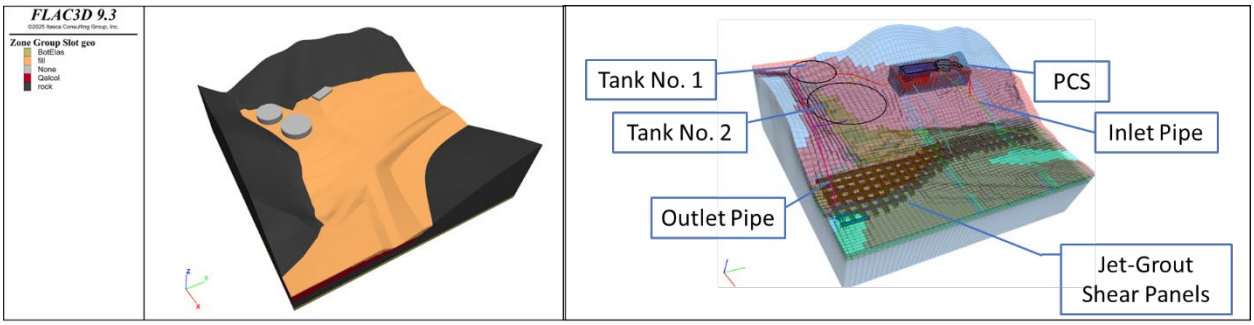


Figure 4-8: FLAC 3D Models of Sepulveda Canyon Site, with left model showing fill area (yellow) and right model showing 3-D mesh of proposed mitigation to stabilize the slope

4.5 Tunnel Seismic Resilience

Metropolitan's main conveyance line, the CRA, and its distribution system traverse through complex topographies that required tunnel construction in some areas. The CRA features approximately 92 miles of tunnels, accounting for 38 percent of the 242-mile aqueduct. The western portion of the CRA is in a seismically active area and crosses several known active faults. The distribution system includes 41 tunnels with a combined total length of 68.9 miles, representing 8.3 percent of the entire system. Similarly, many known active faults in the region also present a significant seismic risk to this part of the system.

The primary hazards associated with seismic events for tunnels include ground shaking, fault rupture, and other ground failures related to the site characteristics such as liquefaction, landslides, and rockfalls. The performance of tunnels during a seismic event also depends on the different tunnel attributes, including construction method, geological conditions, type of liner, and depth of cover. Recent projects for tunnel-related seismic improvements include the Whitewater Tunnel No. 2 and the Iron Mountain Tunnel.

Whitewater Tunnel No. 2 – Whitewater Tunnel No. 2 is part of the Colorado River Aqueduct, which conveys water from the Colorado River into the Metropolitan's service area. The tunnel is located near the Garnet Hills segment of the San Andreas Fault Zone and is crossed by a strand of the Garnett Hills fault. A project to improve the seismic resilience of the tunnel is currently in preliminary design. The project will strengthen the portal sections of the tunnel and improve access to the western portal including road improvements and construction of a new access structure. Since the precise location of the fault crossing is difficult to define, the design of a bypass tunnel is part of the resilient measures to plan for the potential restoration of the damaged tunnel segment regardless of its location. The project is currently nearing completion of preliminary design.

Iron Mountain Tunnel – The Iron Mountain Tunnel is part of the Colorado River Aqueduct, which conveys water from the Colorado River into the Metropolitan's service area. The western end of the tunnel was constructed through old alluvial fan deposits predominantly consisting of slightly to moderately consolidated, boulder, cobble, gravel, sand, and silt deposits. Approximately 2,500 feet of the Iron Mountain Tunnel concrete lining is distressed with a continuous longitudinal crack running near the centerline of the crown. The width of the crack ranges from 1/8-inch up to approximately 2 inches but is more consistently about a ½ inch to 1-inch wide. Metropolitan has performed focused tunnel inspections and has concluded that although the observed tunnel lining distress does not present an immediate threat to structural integrity, it could have the potential to adversely impact the long-term reliability of the CRA system. Iron Mountain Tunnel seismic improvements are focused on strengthening the distressed portion of the tunnel to prevent potential damage from earthquake-induced shaking. The project is currently in the study phase, which will consider different strengthening options.

5 Operations (Emergency Response)

5.1 Emergency Response Training

In addition to training emergency response staff on National Incident Management System procedures, Metropolitan regularly conducts emergency response training exercises which are often based upon a postulated seismic event (Figure 5-1). Exercises can be in the form of table-top exercise, a high-level review of policies and procedures, or a functional exercise, a simulated emergency event.

Recent seismic related exercise examples include:

- "ShakeOut 2024" – Functional exercise located at Metropolitan's Emergency Operations Center with participation from member agencies including the Foothill Municipal Water District, Calleguas Municipal Water District, City of Long Beach Water Department, and Southern California Edison
- "ShakeOut 2022"- Functional exercise located at Metropolitan's EOC with participation from member agencies including the Three Valleys Municipal Water District, Foothill Municipal Water District, Upper San Gabriel Valley Municipal Water District, City of Pasadena, and City of San Marino
- "ShakeOut 2020" – Functional exercise located at Metropolitan's Emergency Operations Center with participation from member agencies including the City of Anaheim, City of Burbank, Eastern Municipal Water District, City of Fullerton, City of Glendale, and Las Virgenes Municipal Water District

Figure 5-1: Metropolitan staff conducting emergency response exercise at the Emergency Operations Center

The Metropolitan EOC also conducts monthly communication tests, which include Metropolitan's emergency two-way radio system, on-line WebEOC system, Met-Alert mass notification system, and satellite phones. These monthly tests reach out to the member agencies, treatment plant control centers, ICPs, Metropolitan management, and the Department of Water Resources. These regular exercises help prepare Metropolitan and its member agencies to respond to future emergencies.

5.2 Emergency Response Capabilities

Metropolitan continues to maintain the necessary staffing, materials, and equipment to respond to two simultaneous pipeline breaks. The Machine Shop and Coating Shop at La Verne are available to fabricate pipe sizes up to 12 feet in diameter, and Metropolitan's construction forces have the necessary equipment and expertise to make the repairs in-house. In May 2022, Metropolitan's Board approved Stage 5 of the La Verne Shops upgrades which included building and utility upgrades, refurbishment of existing equipment, and installation of new equipment (Figure 5-2). This project is expected to be completed in 2025.

Figure 5-2: Installation of new equipment at the La Verne Shops

6 Reporting

The reporting component of Metropolitan's seismic resilience strategy focuses on the following areas:

1. Record Keeping: Tracking progress and maintaining a record of expenditures
2. Annual Updates: Providing annual updates to Metropolitan's Board of Directors
3. Formal Reporting: Preparing a formal Seismic Resilience Report every five years

6.1 Record Keeping

The component involves tracking progress on key seismic activities. Key seismic resilience activities include the planning, engineering, operations, and near-term goals identified in Section 8. Specific activities include:

- Systemwide planning studies related to seismic resilience
- Seismic evaluations of structures, facilities, and components
- Designs for seismically upgrading structures/systems and related construction activities
- Emergency response training exercises
- Update component-specific seismic design criteria and performance objectives
- Joint efforts with external agencies through the Task Force

For each of these activities, progress is tracked and reported at regular intervals.

6.2 Annual Updates

Staff provides updates to Metropolitan's Board of Directors on an annual basis. The annual update focuses on refinements in seismic resilience strategies due to new information on regional seismicity, new technologies, industry standards, and recent seismic events. It also highlights recent accomplishments and recaps progress toward near-term goals.

6.3 Formal Reporting

The report summarizes seismic resilience objectives, goals, and accomplishments; consolidates key reference materials; and provides a high-level summary of the various activities related to seismic resilience throughout Metropolitan. Specific areas of emphasis can include:

- Knowledge Transfer: The formal report will provide a convenient, comprehensive source for seismic resilience information. The report will contain key information for all seismic resilience efforts throughout Metropolitan and will include a list of all formal Metropolitan reports on seismic issues. Individuals can use this information to familiarize

themselves with Metropolitan's seismic resilience history, issues, and goals, which will make them more effective in supporting seismic resilience efforts.

- Accountability: Through annual reporting to the Board, seismic resilience programs will maintain a higher degree of visibility, focus, and momentum on projects and studies that will help Metropolitan meet target goals.
- Transparency: The sharing of seismic resilience studies, projects, and performance objectives will benefit the facility planning efforts of member agencies. Seismic risk, mitigation, and projected duration of outages are complex issues that deserve adequate discussions between Metropolitan and member agencies to facilitate decisions and investments that best serve the public.

This summary report is updated every five years.

7 Seismic Resilient Water Supply Task Force

The Seismic Resilient Water Supply Task Force is a joint effort between Metropolitan, the California Department of Water Resources, and the Los Angeles Department of Water and Power. The task force was formed in 2016 to mitigate impacts and promote a coordinated response in the event of a large-scale earthquake impacting the region's major imported water conveyance systems. The task force meets annually and as needed to review and update goals and objectives (Figure 7-1). Additionally, the task force conducts joint emergency response exercises.

7.1 Joint Emergency Response Plan and Exercises

A Joint Agency Emergency Response Plan was developed, which describes a strategy for responding to emergencies caused by natural disasters or other unavoidable circumstances that would significantly damage the three largest aqueducts that bring water to the Southern California. The three aqueducts are the State Water Project's California Aqueduct (CA), which is owned and operated by the State of California's Department of Water Resources (DWR); the Los Angeles Aqueduct (LAA), which is owned and operated by the City of Los Angeles Department of Water and Power (LADWP); and the Colorado River Aqueduct (CRA), which is owned and operated by The Metropolitan Water District of Southern California (Metropolitan). DWR, LADWP and Metropolitan are the focus of this plan because the overlap of service area of the three agencies allows for a unique opportunity to coordinate emergency repairs following a catastrophic event that disrupts the imported water supply to the region. As such, the focus of the plan is the response to emergencies on the imported conveyance systems.

Figure 7-1: Seismic Resilient Water Supply Task Force Emergency Planning Exercise in March 2025

The plan will be updated every three years by representatives from each agency's emergency management departments. The updated plan will be reviewed and approved by System Operations or a higher-level manager.

The plan is exercised every two years, at a minimum, and follows the exercise processes set forth by the United States Department of Homeland Security. An Exercise After-Action Report and Improvement Plan will be created after each exercise and presented to the managers of each agency for review.

8 State Water Project Seismic Resilience

DWR continues to enhance the seismic resilience of the State Water Project (SWP) through a multi-pronged approach of re-evaluating SWP infrastructure with current seismic loading parameters, design and construction of seismic improvements, emergency preparedness, and research. Within the last three years, DWR's Division of Engineering Geotechnical Services Branch has fully implemented the SWP Seismic Program (SWP-SP). The objective of the SWP-SP is to identify and evaluate the overall seismic risk to the SWP and to establish priorities for seismic studies, risk reduction, and mitigation. Multiple projects are currently underway.

Re-Evaluations

- Between 2019 and 2024, DWR conducted advanced non-linear finite element analyses of the Oroville Dam Flood Control Outlet Monoliths 25 and 26 (the gated monoliths). The radial gates and the roadway bridge were also reanalyzed. Retrofit projects have been included in future planning as DWR awaits technical feedback from regulatory agencies.
- DWR completed screening-level structural analyses of "hard structures" at Pyramid and Cedar Springs Dams. More advanced analyses were also conducted for the Pyramid Dam outlet tower, which was identified as the most "seismically vulnerable" of the structures.
- DWR completed re-analysis of the left abutment of Castaic Dam considering current seismic loading conditions and potential future groundwater conditions.
- DWR completed the *Hyatt Powerplant Seismic Walkdown*. Phase 1 of the effort included a high-level assessment of plant equipment and systems for criticality and vulnerability to seismic shaking. Phase 2, completed in 2023, consisted of structural calculations of key equipment to determine the need for seismic retrofits. The on-going Phase 3 consists of design and construction of retrofits which largely consist of adding anchor bolts, strapping, or other means of preventing overturning or sliding failure during the design level seismic event.
- Phase 1 seismic walkdowns were also performed for Pearblossom Pumping Plant and Devil Canyon Powerplant.

Design and Construction

- In 2022, DWR completed the *Perris Dam Seismic Remediation* project which included deep soil-cement mixing to improve the dam's foundation and construction of a large berm to improve its stability and reduce deformations in association with extreme seismic events.

- In 2023, DWR completed the *Castaic Dam Tower Bridge Seismic Retrofit* which required a temporary drawdown of the lake to allow for installation of carbon-fiber reinforced polymer wrap on the bridge's piers (Figure 8-1).
- DWR continued to engage with the US Bureau of Reclamation on the BF Sisk Dam *(San Luis Reservoir) Safety of Dams* project that will address seismic deficiencies for multiple segments of the dam. The first construction contract was issued in April of 2022 and anticipated to complete in late 2025.
- DWR is currently evaluating 42 seismically vulnerable bridges on the California Aqueduct in the San Joaquin Field Division and designing retrofit measures to be implemented by late 2027.
- DWR is currently designing modifications to the Castaic Dam Intake Tower and Outlet Works to prevent damage to critical components and allow drawdown of the reservoir following a major earthquake. Construction is scheduled to be complete in late 2027.
- DWR is currently evaluating alternatives to minimize the risk of failure and improve post-seismic operation of the existing headworks and radial gate on the main spillway at Pyramid Dam. Construction is anticipated in the 2028 – 2030 timeframe.

Figure 8-1: Castaic Dam High Tower and Access Bridge, with scaffolding installed for installation of carbon-fiber reinforced polymer wrap on piers

Emergency Preparedness

- DWR prepared or updated inundation maps for nearly all its dams for inclusion in Emergency Actions Plans (EAPs) for SWP dams. DWR also updated and submitted all its dam EAPs, with DSOD-approved inundation maps, to CalOES.

- In 2022, DWR established the Emergency Preparedness Program (EPP) to drive continuous improvement of the SWP's response and recovery capabilities.
- In 2022, the SWP EPP modernized post-earthquake response plans and procedures that provide for a scaled response commensurate with the magnitude and geographic expanse of damage that might be experienced.
- On an annual basis, DWR conducts annual Emergency Action Plan seminars and conducts communication drills for its dams.
- The creation of the SWP Emergency Preparedness Program (EPP) has led to increase in exercises. Prior to the SWP EPP, typically just one tabletop or functional exercise occurred each year. DWR is now averaging three tabletop and two functional EAP exercises per year.
- Field Divisions instituted duty monitoring and/or implemented their EAPs for the following events:
    - 2022 – North Complex Fire near Oroville Dam
    - 2022 – Tropical Storm "Kay" for Southern FD
    - 2022 – Route Fire near Castaic Dam
    - 2021 and 2023 – High Flow Operations at Del Valle Dam, DFD
    - 2023 – Devils Den Pumping Plant Fire, San Luis FD
    - 2023 – January Winter Storms
    - 2024 – Post Fire, near Pyramid and Castaic Dams, SFD
    - 2024 – Thompson Fire, near Oroville Dam (Figure 8-2)

Figure 8-2: 2024 Thompson Fire burning along the rim of Lake Oroville (photo courtesy of CalFire)

Seismic Hazard Characterization

DWR commonly partners with leading consultants and researchers to ensure the best available information is utilized to design and re-evaluate SWP assets. DWR's efforts in the fields of faulting and seismicity, in particular, have been significant in advancing the state of practice and characterization of seismic hazards in California. Examples of the efforts undertaken over the past five years include:

- Investigation of the Grizzly Valley fault near Grizzly Valley Dam, including fault trench excavation
- Investigation of the Indian Creek fault near Antelope Dam, including detailed field mapping in preparation of fault trench excavation
- Investigation of the West Tracy fault at Clifton Court Forebay, including seismic reflection imaging
- Investigation of the Midway fault near Bethany Dam, including detailed field mapping in preparation of fault trench excavation
- Investigation of the Right Abutment faults at Del Valle Dam, including subsurface investigation and fault trench excavation
- Evaluation of most recent fault slip on the "Palomas Segment" of the San Gabriel fault in proximity to Pyramid Dam and Castaic Dam (Figure 8-3)
- Investigation of the Waterman Canyon fault at the Devil Canyon Power Development, including detailed field mapping in preparation of fault trench excavation
- Down-hole and surface shear wave velocity data collection at several dams to support development of current earthquake ground motion estimates
- Site-specific seismic hazard analyses, including deterministic and probabilistic analyses, utilizing the latest fault parameters and attenuation relationships, to better characterize and understand the likelihood of strong ground motions at SWP dams

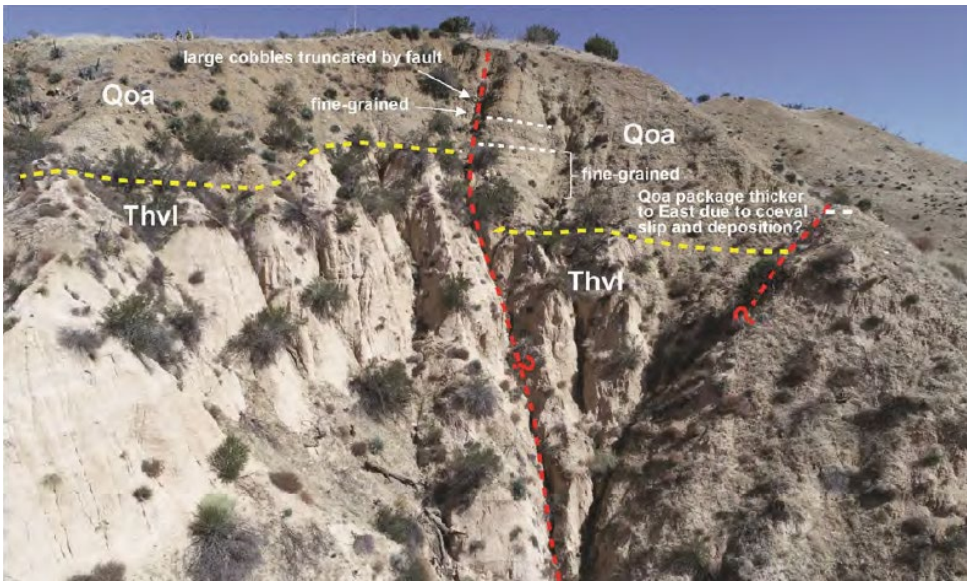


Figure 8-3*:* Drone Image of San Gabriel Fault (Palomas Segment) fault strand displacing base of Older Alluvium (Qoa) deposit (yellow dashed line)

9 Proposed Seismic Resilience Goals

9.1 Status of 2020 Listed Goals

The 2020 Seismic Resilience Report identified near-term goals to further Metropolitan's seismic resilience objectives. The near-term goals are listed below along with an update of the work done to date.

9.1.1 System Level Goals

Goal	Conduct Special Seismic Studies
• Update 2006 System Reliability Study, which analyzed the impacts of various single outage scenarios on Metropolitan's ability to meet member agency demand	
Outcome: An update of the study is planned to begin in 2025. The study update will assess the flexibility of the system to withstand a 7-day outage and an extended outage. Flexibility analysis will consider member agency ability to move water from different service connections within their systems, availability of local supplies, and member agency interconnections.	

Goal	Conduct Planning Studies
• Complete the 2020 IRP and comprehensive distribution system study under collaborative regional process. Update the emergency storage objective based on new IRP goals and forecasts.	
Outcome: 2020 IRP was finalized and approved by the Board in 2022.	

9.1.2 Facility Level Goals

Goal	Complete Construction of Approved Projects
• Weymouth West Wash Water Tank Seismic Upgrade • Union Station Headquarters Building Seismic Upgrade • Diemer West Filter Seismic Upgrade • CRA Casa Loma Siphon Barrel No. 1 Replacement	
Outcome: All four projects have been completed	

Goal	Complete Design of Approved Seismic Upgrade Projects
• Weymouth Administration Building Seismic Upgrade and Building Improvements (Administration and Control Buildings): the final design of both facilities is ongoing • La Verne Water Quality Lab and Field Engineering Building Seismic Upgrades and Building Improvements: preliminary design of the WQ Lab is ongoing while the preliminary design of a new Field Engineering Building has been scheduled • Lake Mathews Disaster Recovery Facility Seismic Upgrades: construction of the seismic upgrade has been completed • Upper Feeder San Gabriel Tower Seismic Upgrade: a detailed seismic assessment revealed that the tower can withstand the design earthquake • Weymouth Inlet Channel Structural Upgrades: construction of the seismic upgrade is ongoing along with the upgrade of Weymouth Basins 5-8. • Foothill HEP Seismic Upgrade: construction of seismic upgrade has been completed • Diemer WWRP No. 2 Seismic Upgrade and Slope Stability Mitigation: preliminary design is ongoing • Sepulveda Canyon Control Facility: final design for the seismic mitigation of the existing tanks and slope stabilization is ongoing	
Outcome: The current status for each project is provided in the box above	

Goal	Seismic Upgrade of Below-Ground Structures
• Initiate evaluation of below-ground structures. Identify and list all structures. Develop a prioritization system for evaluation.	
Outcome: Completed inventory of structures. Visual assessments of structures within Orange, Riverside, San Bernardino, and Los Angeles Counties have been completed. Staff has developed a program for linking the inspection findings to Metropolitan's GIS database for future reference. The results of the visual inspections will be used to identify and prioritize needed repairs.	

9.1.3 Task Force Goals

Goal	Emergency Response Plan and Exercises
• Conduct annual exercises to ensure familiarity with Joint Agency Emergency Response Plan • Semi-annual verification of emergency contact list for DWR, Metropolitan, and LADWP	
Outcome: Partners have held multiple exercises and continue to update the contact list during regular Task Force meetings.	

9.2 Proposed 2025 Seismic Goals

9.2.1 System Level Goals

Goal	Conduct Special Seismic Studies
• Complete Pipeline Seismic Vulnerability Study in partnership with CSI	

Goal	Conduct Planning Studies
• Conduct System Flexibility Study • Review Emergency Storage Criteria	

9.2.2 Facility Level Goals

Goal	Seismic Upgrade of Facilities
• Complete construction of Weymouth Administration Building Seismic Upgrade and Building Improvements (Administration and Control Buildings) • Complete construction of Weymouth Basin 5-8 Seismic Upgrade • Complete seismic upgrade design of La Verne Water Quality Lab • Complete seismic upgrade design of La Verne Storage Building • Complete seismic upgrade design of La Verne Engineering Building • Continue with seismic evaluation of non-structural components • Complete the rapid seismic evaluation of Post-1990 Structure Assessment	

Goal	Pipeline and Tunnel
• Complete design of Whitewater Tunnel No. 2 Seismic Upgrades • Complete studies for seismic mitigation of the Iron Mountain Tunnel • Evaluate seismic risk of the Eagle Mountain siphons • Evaluate seismic mitigation of the Newport Inglewood fault crossing for the Second Lower Feeder Reach 9	

Goal	Dams and Reservoirs
• Complete Garvey Reservoir Outlet Tower seismic rehabilitation • Complete seismic evaluation of Lake Skinner Outlet Tower • Continue with dam monitoring system upgrades • Continue with periodic dam safety assessments	

Goal	Seismic Upgrade of Below-Ground Structures
• Perform initial seismic risk screening and prioritize the list of below-ground structures for seismic evaluation	

9.2.3 Task Force Goals

Goal	Emergency Response Plan and Exercises
• Conduct annual exercises to ensure familiarity with the Joint Agency Emergency Response Plan • Semi-annual verification of emergency contact list for DWR, Metropolitan, and LADWP	

Engineering Services Group

- **Capital Investment Plan quarterly report for period ending June 2025**

Summary

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

Purpose

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

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

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

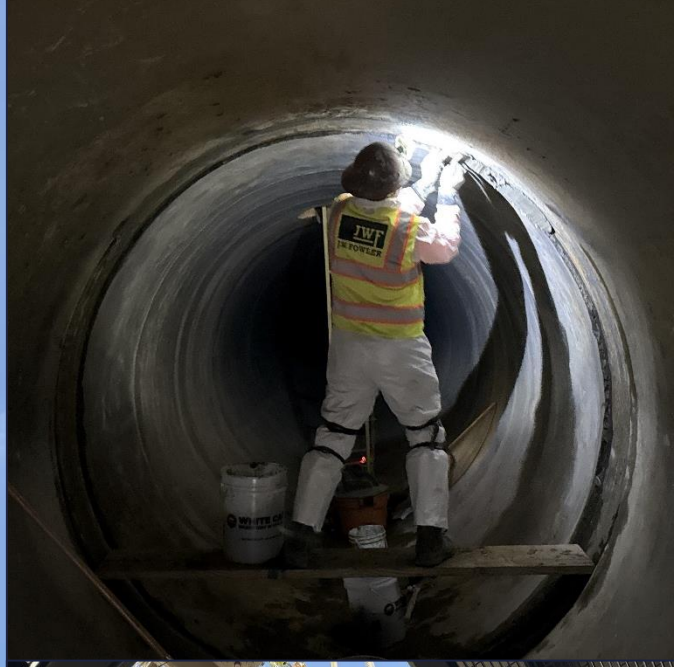
Section 8122(c) of Metropolitan's Administrative Code requires the General Manager to report on the execution of any relocation agreement under the General Manager's authority involving an amount in excess of $100,000.

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 June 2025

Date of Report: September 8, 2025



The Metropolitan Water District of Southern California

Capital Investment Plan
Quarterly Report

April - June 2025

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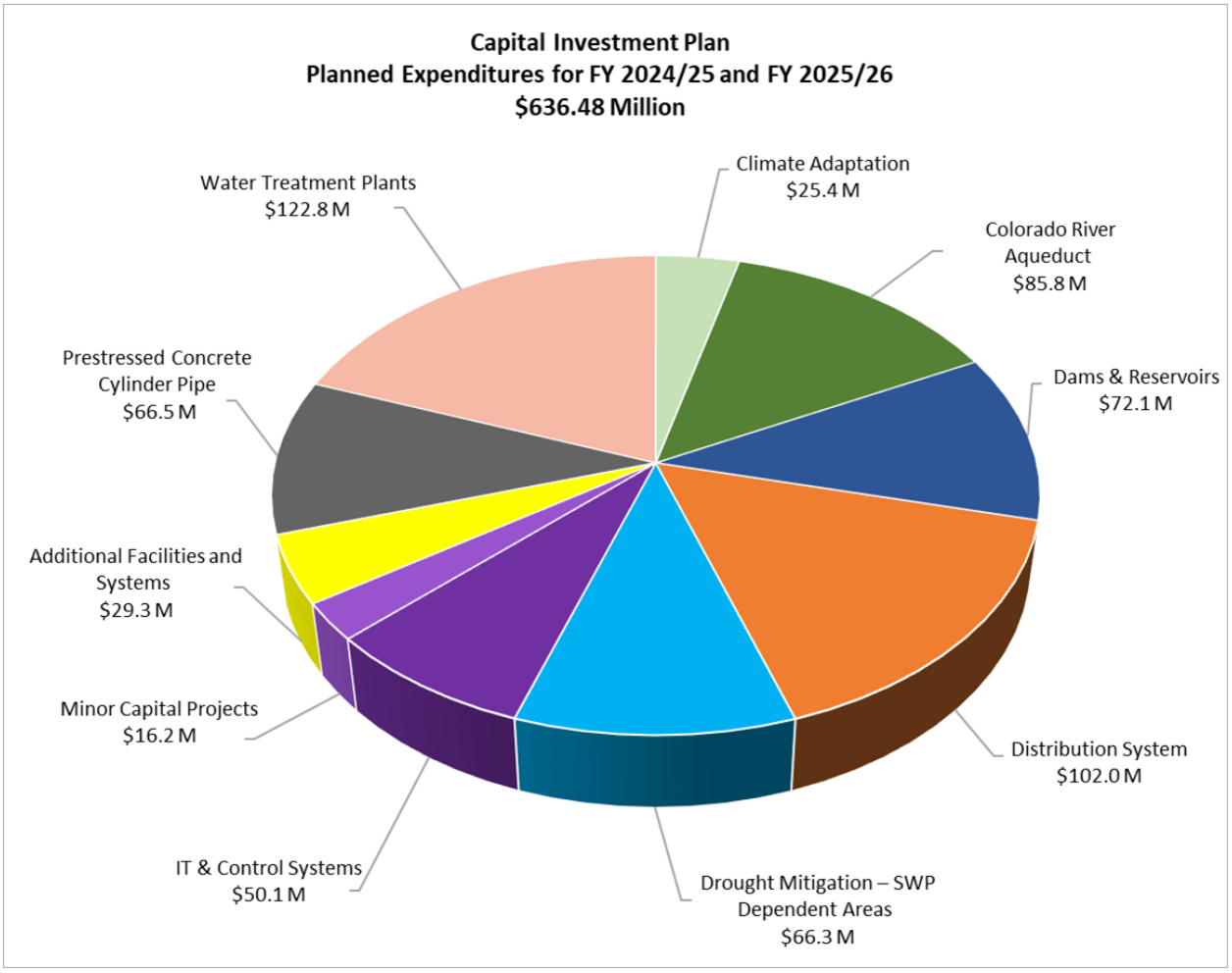
Capital Investment Plan for Fiscal Years 2024/25 & 2025/26

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* – Installing scaffolding for surge tank construction; *Perris Valley Pipeline I-215 Tunnel Crossing* – Placing cement mortar lining inside pipeline; *Wadsworth Pumping Plant Bypass Pipeline* – Installing an 84-inch diameter isolation valve]

Executive Summary

This report provides a summary of the Capital Investment Plan (CIP) activities and accomplishments during the 4th Quarter of Fiscal Year (FY) 2024/25, which ended in June 2025. CIP expenditures through the 4th Quarter totaled approximately $343.9 million with 35 active procurement and construction contracts at the end of the quarter. The expenditures are projected to stay above plan through the 1st half of the next fiscal year before ending the biennium near the planned expenditure of $636.48 million. The CIP funds allocated to specific projects through the reporting quarter totaled approximately $524.9 million, leaving approximately $111.5 million available to be allocated during the remainder of the current biennium.

During the quarter, eight project-specific board actions were heard in open sessions. One construction contract and two procurement contracts were awarded by the Board during the reporting period with a total contract amount of approximately $132.1 million. During the same time, a total of approximately $27.0 million in contract earnings were recorded, reflecting construction progress on projects such as Colorado River Aqueduct Pumping Plants Domestic Water Treatment System Upgrades; Diamond Valley Lake Floating Wave Attenuator Replacement; Hinds, Eagle Mountain, and Iron Mountain Pumping Plants Storage Buildings; Inland Feeder Badlands Tunnel Surge Protection Facility; Perris Valley Pipeline Interstate 215 Tunnel Crossing; Second Lower Feeder PCCP Rehabilitation - Reach 3B; and Weymouth Water Treatment Plant Basins Nos. 5-8 and Filter Building No. 2 Rehabilitation.

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

Staff has commenced CIP budget process for the next biennium and is planning to complete the review of the project proposals during the next reporting period. 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 4th Quarter, board actions heard in open session included eight CIP project-specific actions summarized in Table 1 below. These actions awarded three contracts totaling approximately $132.3 million; authorized one new professional/technical services agreement in an amount not-to-exceed approximately $0.9 million; authorized increases to five existing professional/technical services agreements (including on-call agreements) totaling approximately $25.2 million; and authorized approximately $36 million increases in change order authority to a new procurement contract. The table below excludes information on any board items heard in closed session.

Table 1: 4th Quarter Board Actions

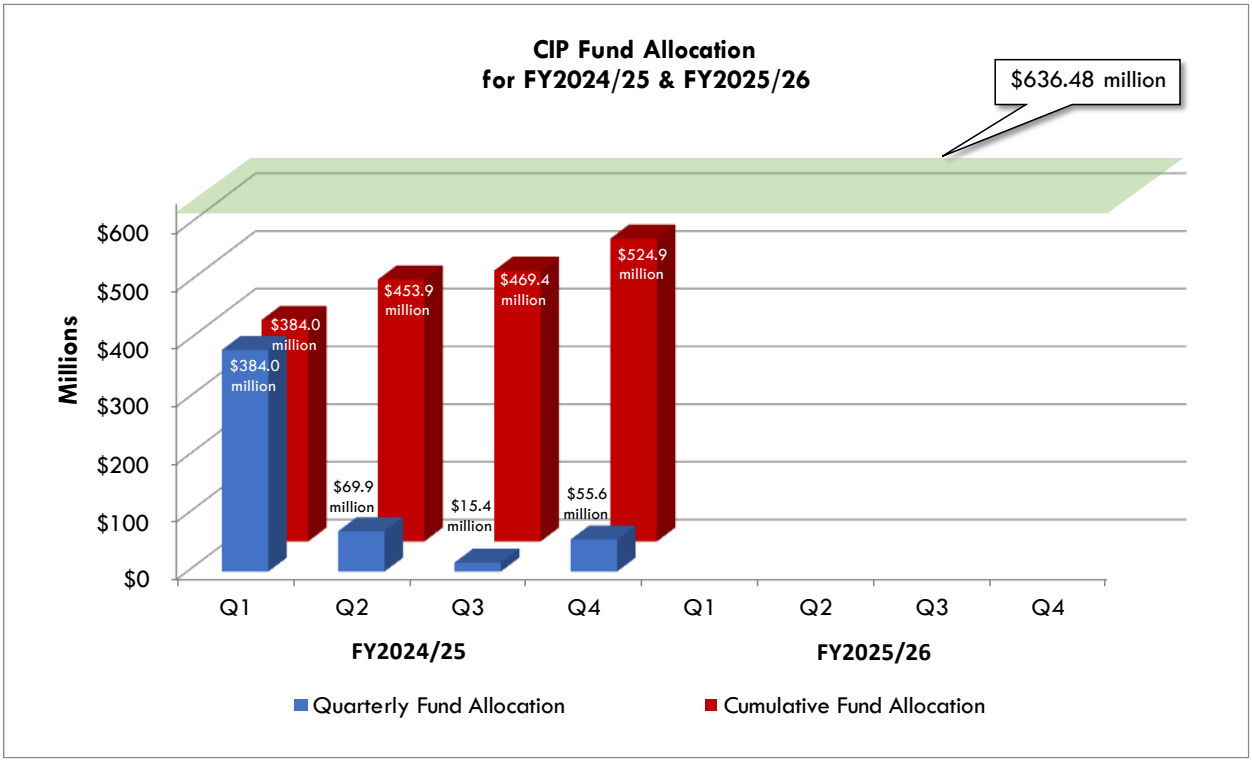
Month	Board Letter Item No.	Project	Action Taken
April	7-2	Data Storage Infrastructure Refresh	Authorized an agreement not-to-exceed $850,000
April	7-4	Jensen Solids Mechanical Dewatering Facility	Authorized an increase of $3.3 million to an existing agreement
April	8-1	Michael J. McGuire Water Quality Laboratory Upgrades	Adopted CEQA determination and authorized an increase of $12.4 million to an existing agreement
May	7-2	Weymouth Ozone Contactor Expansion Joint Improvements	Authorized an unplanned project

Month	Board Letter Item No.	Project	Action Taken
May	7-4	Jensen Control Room HVAC System Upgrades	Awarded $457,498 construction contract
May	8-1	CRA High-Voltage Transformers Replacement	Awarded a $131 million procurement contract, authorized the General Manager to execute change orders up to an aggregate amount not-to-exceed $42.5 million, and authorized an increase of $6.5 million to an existing agreement
June	7-2	On-Call Agreements for Engineering Services for Arc Flash Assessment and Mitigation	Authorized $1.5 million increases to each of two existing on-call agreements
June	7-3	Rio Hondo Pressure Control Structure Valve Replacement – Stage 1	Awarded $807,004 procurement contract

The previously referenced April 2024 board action appropriated a total of $636.48 million to perform work on planned CIP projects through the current biennium. To be considered a planned project, the project must be identified and described in the CIP Appendix for the two-year budget cycle. Consistent with the April 2024 action, all requests to allocate funds and proceed with planned CIP projects are reviewed and approved by the Chief Engineer acting under the General Manager's authority. Unplanned projects, those that are not already identified in the CIP Appendix, require a separate board authorization. During the 4th Quarter, the board amended the CIP to include one new CIP project, Weymouth Ozone Contactor Expansion Joint Improvements.

Figure 2 shows the allocation of the funds from Appropriation No. 15535 for this quarter and a total for the current biennium through the quarter, which is approximately $524.9 million, leaving approximately $111.5 million to be allocated during the remainder of the current biennium. This amount includes the allocation of $10 million to the Minor Capital Projects Program. During the 4th Quarter, approximately $41.1 million was allocated for new work authorized, and approximately $14.5 million was reallocated from the CIP Appropriation No. 15535 to projects that had prior authorizations. 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 4th Quarter of FY 2024/25 is presented in the **Construction and Procurement Contracts** section of this report. The total progress earnings for these contracts in the 4th Quarter totaled approximately $27.0 million and primarily reflect construction progress on Colorado River Aqueduct Pumping Plants Domestic Water Treatment System Upgrades; Diamond Valley Lake Floating Wave Attenuator Replacement; Hinds, Eagle Mountain, and Iron Mountain Pumping Plants Storage Buildings; Inland Feeder Badlands Tunnel Surge Protection Facility; Perris Valley Pipeline Interstate 215 Tunnel Crossing; Second Lower Feeder PCCP Rehabilitation - Reach 3B; and Weymouth Water Treatment Plant Basins Nos. 5-8 and Filter Building No. 2 Rehabilitation.

Planned Expenditure and Budget

Table 2 below shows the planned and actual expenditures for the biennium through the end of the 4th Quarter of FY 2024/25. Figure 3 shows the forecast of expenditures through the end of the current biennium, against planned expenditures for the same time interval. Actual expenditures through the 4th Quarter of FY 2024/25 were approximately 110% of planned expenditures.

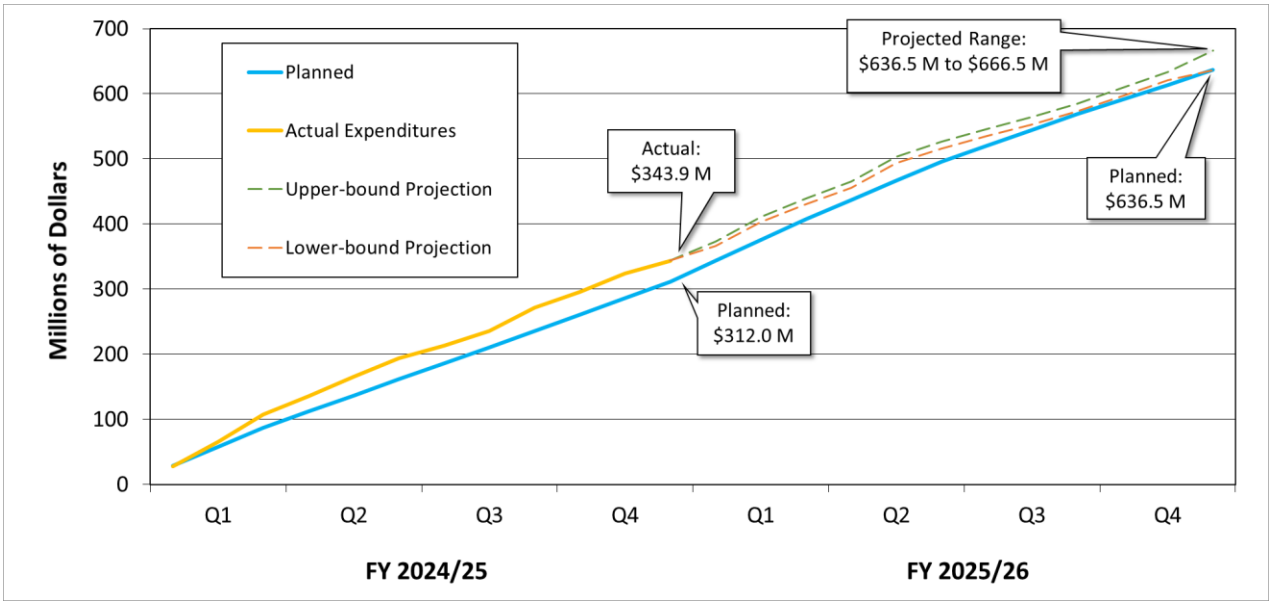
Table 2: Planned & Actual Expenditures for FYs 2024/25 & 2025/26

Quarter	Planned Expenditures (millions)	Actual Expenditures[1] (millions)
FY 2024/25, Q1	$87.2	$107.7
FY 2024/25, Q2	$74.3	$86.0
FY 2024/25, Q3[2]	$73.9	$77.7
FY 2024/25, Q4	$76.6	$72.4
Totals	**$312.0**	**$343.9**

[1] Excludes expenditures covered by grants for drought mitigation projects.

[2] The CIP Quarterly Report for the 3rd Quarter of FY 2024/25 reported $77.8 million in CIP expenditures for Q3, which is being amended to $77.7 million in this quarter's report. This adjustment is necessary to remove overhead charges that were added to Direct Potable Reuse Demonstration Facility grant billable and matching fund projects' expenditures.

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 $636.5 million and $666.5 million, with the actual expenditures approximately 10% higher than the planned expenditures through the 4th Quarter of FY 2024/25. The variance above the planned expenditures is mainly due to several factors, including unplanned spending on urgent relining of distressed PCCP segments of the Allen-McColloch Pipeline, revised construction contract payments for awarded contracts based on updated project schedules and contractor work plan shifts, and anticipated higher contract bids for key upcoming contracts.

Funding of Infrastructure Projects with Outside Sources

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

Pure Water Southern California

In December 2022, Metropolitan's Board authorized the General Manager to use $80 million in project funding from the State Water Resources Control Board (SWRCB) to commence activities related to the initiation of the Pure Water Southern California program. Metropolitan received the $80 million funding in one lump sum payment on May 24, 2023, to support the design activities for the program. Funds are available for expenditure until June 30, 2026. The use of these funds is not included as part of Metropolitan's CIP expenditures. Through the reporting quarter, approximately $39.6 million has been used to support program management tasks, including the preparation of various plans for program implementation and preliminary design of the initial two reaches of the conveyance pipelines.

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

The U.S. Bureau of Reclamation (USBR) awarded a $5 million WaterSMART grant to Metropolitan in 2023. The grant agreement was finalized in May 2024. A three-time matching fund is required for this grant. Metropolitan also received a notice of intent to award a Large-Scale Water Recycling Project (LSWRP) grant in May 2024, which will reimburse 25 percent of the planning and design costs up to $99,199,096 through the grant term. In November 2024, Metropolitan again received a notice of intent to award an LSWRP grant in the amount of $26,273,759, for a total LSWRP grant amount of $125,472,855. Metropolitan will share the LSWRP grant with LACSD, who will provide their share of the matching funds. The Board authorized the acceptance of the grant award on December 10, 2024, and USBR executed the grant agreement on January 10, 2025. The agreement allows Metropolitan to include program-related expenditures for reimbursement from April 2020, when the feasibility study was submitted. Metropolitan has submitted invoices for both grants and has received $3.6 million from the WaterSMART grant and $17.4 million from the LSWRP grant through the reporting period.

Drought Mitigation Projects

In December 2022, Metropolitan's Board adopted a resolution to accept $50 million in state funding from the California Department of Water Resources to support Metropolitan's drought mitigation projects. The Board also designated the Group Manager of Engineering Services to be the signatory to execute actions related to the funds. The California Department of Water Resources (DWR) will administer the funds and release the reimbursement after Metropolitan invoices expenses. The $50 million fund is available for reimbursement through June 30, 2026, and five percent of this amount may be used for administrative costs by DWR. From the state-allocated amount, it allocated to Metropolitan $47.5 million to improve and expand its infrastructure to be more resilient and flexible to respond to fluctuating water supplies. The improved system will enhance the ability to convey water throughout all its service area. Under this grant, staff will be required to submit invoices to DWR to receive reimbursement for expenditures that comply with the grant requirements. To date, three projects on the east side of Metropolitan's system are covered under this grant. These three projects are part of an overall plan to provide direct delivery of Diamond Valley Lake (DVL) supplies to the Rialto Pipeline. During the reporting quarter, a progress report and invoices for the quarter were submitted and approved by DWR for $5.9 million. As of June 2025, a total of $34.2 million in reimbursement has been received from the State for the three projects. This funding allows additional rehabilitation projects to proceed as a result of applying state grant funds towards the applicable CIP projects.

In November 2023, Metropolitan submitted a grant application to USBR requesting $5 million to support Inland Feeder/SBVMWD Foothill Pump Station project as part of water supply reliability improvements in the Rialto Pipeline service area. USBR offers funding through its WaterSMART Drought Response Program: Drought Resiliency Projects for Fiscal Year 2024 to water districts in the Western United States to increase water supply reliability through investments in existing infrastructure and increased water management flexibility. The USBR program funds up to $5 million per project for projects that can be completed within three years. This funding allows additional rehabilitation projects to proceed as a result of applying the grant funds towards the applicable CIP projects. The grant requires a

50 percent cost-sharing. If the grant award is $5 million, Metropolitan would provide at least the same amount ($5 million). The source of the cost-share funds is budgeted CIP funds planned to be spent on the project and will fulfill Metropolitan's grant matching funds requirement. The total cost of this project is estimated to be $34 million. During the reporting quarter, USBR continued compiling information to prepare a National Environmental Policy Act (NEPA) document, initiated consultation with the federal permitting agency, and received initial comments on the biological assessment for the project.

Battery Energy Storage System Projects

In October 2020, Metropolitan's Board authorized adding battery energy storage system (BESS) projects to the CIP to enhance the efficiency of Metropolitan's long-term power use, provide a hedge against projected electricity price increases, and improve the resiliency of the electric power supply at the Jensen, Skinner, and Weymouth Water Treatment Plants. This decision was aided by the California Public Utilities Commission's enhanced incentives for microgrid-capable BESS at critical facilities, which are expected to reimburse Metropolitan for $8.147 million of project costs. Weymouth BESS construction was completed in January 2025 and commissioning & startup are expected to be completed in the second quarter of FY 2025/26. Jensen and Skinner BESS constructions are currently underway. The Skinner is expected to be completed in the second quarter of FY 2025/26, and the Jensen is expected to be completed in the third quarter of 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 CO2/kWh reduction in greenhouse gas emissions.

Webb Tract Wetland Restoration and Rice Field Development Projects

In May 2023, Metropolitan's Board adopted a resolution to support a grant application for a $20.9 million grant from the Sacramento-San Joaquin Delta Conservancy (Delta Conservancy), and staff signed a grant agreement with the 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 approximately 1,400 acres of rice fields and design, permitting, and construction of approximately 2,400 acres of wetland on the Webb Tract island. Under this grant, staff submits invoices to Delta Conservancy quarterly to receive reimbursement of expenditures that comply with the grant requirements. As of June 2025, a total reimbursement of $1,319,921 has been received from the Delta Conservancy. A Metropolitan board action planned for August 2025 will consider awarding an agreement to lease 2,159 gross acres to a farming partner to grow rice on Webb Tract. Wetland final design is ongoing, with 90% design drawings and specifications currently under review. Utilizing the Governor's Cutting the Green Tape Initiative, the California Department of Fish and Wildlife is expected to provide concurrence on Metropolitan's Statutory Exemption for Restoration Projects, which will complete the California Environmental Quality Act review in July 2025. Permitting is estimated to be completed in the fall of 2025 and construction is estimated to begin in spring of 2026.

Diemer Helicopter Hydrant Project

Metropolitan and the Yorba Linda Water District (YLWD) signed a memorandum of understanding outlining the commitment to jointly fund and construct a helicopter hydrant facility at the Robert B. Diemer Water Treatment Plant (Diemer plant). The project will be partially funded by an up to $500,000 grant previously awarded by the United States Forest Service (USFS) to YLWD to construct the facility. Metropolitan is now a subrecipient of the grant and the grant funds will be used to defray Metropolitan's cost for the project. During the reporting quarter, Metropolitan has received $96,347.50 from USFS. YLWD requested an extension of the grant deadline from March to September 2025 to align with construction and commissioning. The construction is underway and is estimated to be completed in the summer of 2025.

Major Capital Programs Overview

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

- Program
- Project Group/Appropriation
- Project

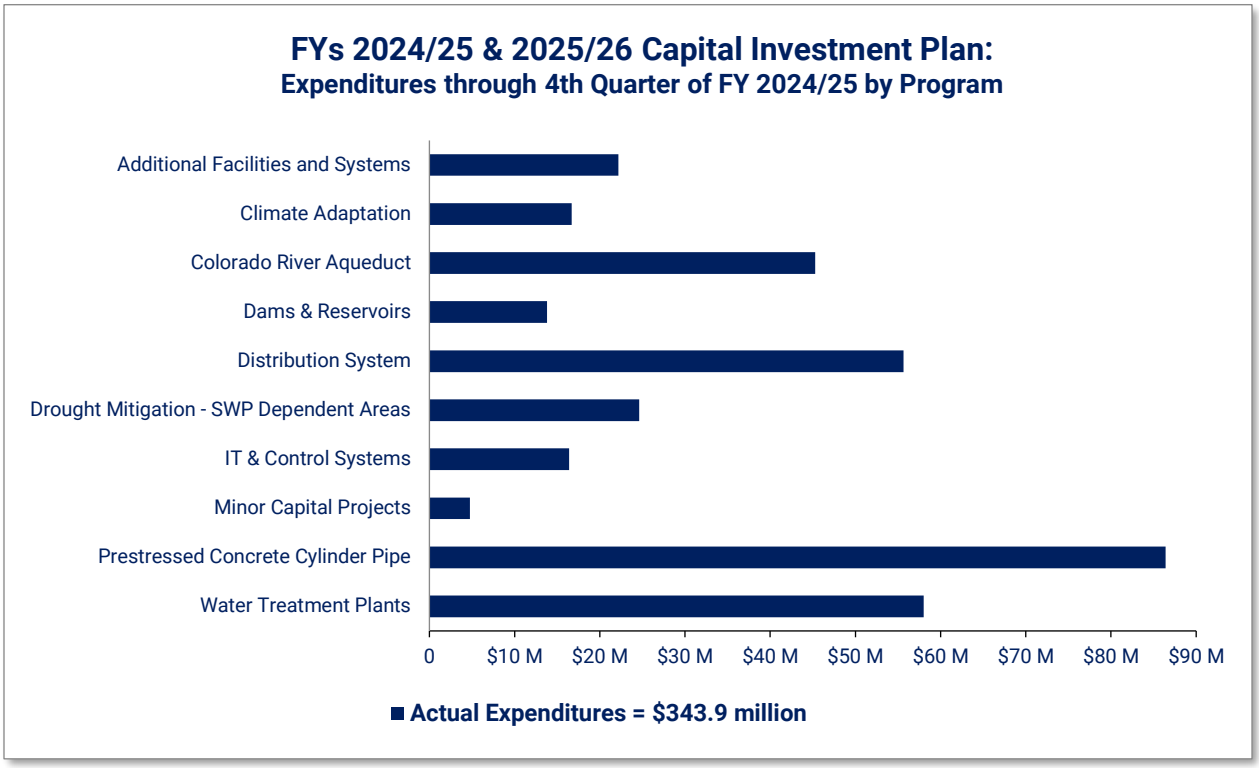
Metropolitan's CIP is comprised of 10 programs, which capture all projects within the CIP. The 10 programs are listed below in alphabetical order. Programs are comprised of one or more project groups/appropriations, and project group/appropriations are comprised of one or more projects. The status of each of the programs is provided later in this section of the report. A comparison of the program planned expenditures and actual costs to date for each of the programs is provided in Table 14 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 4th Quarter of FY 2024/25.

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



Major Capital Project Programs – Highlights

This section provides 4th 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 4th 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	Diamond Valley Lake Floating Wave Attenuator System Improvements – Stage 2
Climate Adaptation	Direct Potable Reuse Demonstration Facility
Colorado River Aqueduct (CRA)	Eagle & Hinds Pumping Plant Utilities Replacement
Dams & Reservoirs	Garvey Reservoir Rehabilitation - Stage 1
Distribution System	Hollywood Tunnel North Portal Control Structure Upgrades
Drought Mitigation - SWP Dependent Areas	Badlands Tunnel Surge Protection Facility
Information Technology (IT) & Control Systems	CIP Budgeting System Improvements
Prestressed Concrete Cylinder Pipe (PCCP)	Second Lower Feeder PCCP Rehabilitation - Reach 3B
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 Jun. 2025) $22.19 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 (4th Quarter)

Accomplishments

- Completed construction for the following project:
  - Headquarters Fire Alarm/Smoke Control System Upgrades
- Continued construction for the following projects:
  - Diamond Valley Lake Floating Wave Attenuator System Improvements – Stage 2
  - La Verne Shops Upgrades – Stage 5: Building Completion
- Completed procurement and installation for the following project:
  - Michael J. McGuire Water Quality Laboratory Equipment Replacement
- Completed final design of the following projects:
  - Diamond Valley Lake Floating Restroom and Boat Dock Replacement
  - Lake Mathews Aboveground Storage Tank Replacement
- Continued final design of the following projects:
  - Diamond Valley Lake East Marina Utilities
  - Eagle Rock Security Upgrade – Stage 1
- Initiated final design of the following project:
  - Michael J. McGuire Water Quality Laboratory Upgrades
- Continued preliminary design of the following projects:
  - Apprentice Training Center Facility
  - CRA Aircraft Facility Improvement – Stage 1
  - Desert Housing and Property Improvements
  - Headquarters Building Automation System Upgrades
  - Headquarters HVAC System Rehabilitation
  - La Verne Shops Upgrades – Stage 6
- Continued study of the following project:
  - CRA Aircraft Facility Improvements – Stage 2

Upcoming Activities

Upcoming work for the next quarter will include:

- Continue construction for the following projects:
  - Diamond Valley Lake Floating Wave Attenuator System Improvements – Stage 2
  - La Verne Shops Upgrades – Stage 5: Building Completion
- Advertise construction contracts for the following projects:
  - Diamond Valley Lake Floating Restroom and Boat Dock Replacement
  - Lake Mathews Aboveground Storage Tank Replacement
- Continue final design of the following projects:
  - Diamond Valley Lake East Marina Utilities
  - Eagle Rock Security Upgrade – Stage 1
  - Michael J. McGuire Water Quality Laboratory Upgrades
- Complete preliminary design of the following project:
  - Headquarters Building Automation System Upgrades
- Continue preliminary design of the following projects:
  - Apprentice Training Center Facility
  - CRA Aircraft Facility Improvements – Stage 1
  - Desert Housing and Property Improvements
  - Headquarters HVAC System Rehabilitation
  - La Verne Shops Upgrades – Stage 6
- Continue study of the following project:
  - CRA Aircraft Facility Improvements – Stage 2

Diamond Valley Lake Floating Wave Attenuator System Improvements – Stage 2

Total Project Estimate:
$10.5 million

Total Project Cost to Date:
$6.1 million

This project will improve the wave attenuator system at Diamond Valley Lake by moving the existing wave attenuator to a new location where the existing attenuator is better suited and adding a new 1,100-foot-long wave attenuator in its place to improve the protection of the marina from wind-generated waves.

Phase	Construction
% Complete for Current Phase	72%
Construction Contract Award	February 2024
Estimated Construction Completion Date	October 2025
Contract Number	2004

The contractor continued fabrication and installation of the new north floating wave attenuator (FWA) modules. Concrete spall refurbishment on the existing south FWA modules was initiated. In the upcoming quarter, the contractor will continue installation of the new north FWA modules and complete concrete spall refurbishment on the existing south FWA modules.

Lifting a floating wave attenuator module at Diamond Valley Lake

Climate Adaptation Program

Actual Biennium Expenditures (Jul. 2024 through Jun. 2025) $16.70 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 (4th Quarter)

Accomplishments

- Advanced Water Treatment Demonstration Facility
  - Continued preparation for Nitrification-Only (N-Only) tertiary membrane bioreactor (MBR) optimization testing to support the planning and design of a full-scale advanced purification facility
  - Continued reverse osmosis system modifications to support optimization testing and equipment qualification
- Battery Energy Storage Systems (BESS) at Jensen, Weymouth, and Skinner Plants
  - Continued commissioning and startup at the Weymouth plant
  - Continued construction at the Jensen and Skinner plants
- Direct Potable Reuse Demonstration (DPR) Facility
  - Conducted a value engineering workshop on the proposed DPR pilot testing approach and site improvements
  - Continued development of DPR pilot testing and site improvement plans
  - Continued preparation of procurement packages for DPR pilot testing equipment
- Zero Emission Vehicle Fleet Infrastructure
  - Districtwide Zero Emission Fleet Infrastructure
    - Continued development of the enhanced programmatic planning and study documents
  - Headquarters Building Zero Emission Vehicle Infrastructure Upgrades – Stage 1
    - Continued final design and coordination with Los Angeles Department of Water and Power (LADWP)
  - Zero Emission Fleet Pilot Infrastructure – Stage 1
    - Completed installation of pilot chargers at the Weymouth plant and testing, commissioning, and integration of pilot chargers installed at the Headquarters Building
  - Zero Emission Fleet Pilot Infrastructure – Stage 2, Phase 1
    - Began installation of a total of five Level 2/2+ charging stations at Lake Mathews, Weymouth plant, Jensen plant, and Skinner plant
    - Began design of a total of seven Level 2/2+ charging stations at Diemer plant, Mills plant, and Weymouth plant
    - Continued design of a total of three Level 3 fast charging stations at Mills plant, Weymouth plant, and Gene pumping plant

Upcoming Activities

Upcoming work for the next quarter will include:

- Advanced Water Treatment Demonstration Facility
  - Continue preparation for N-Only tertiary MBR optimization testing to support the planning and design of a full-scale advanced water purification facility
  - Complete reverse osmosis system modifications to support optimization testing and equipment qualification
- Battery Energy Storage Systems at Jensen, Weymouth, and Skinner Plants
  - Continue commissioning and start-up at the Weymouth plant
  - Continue construction at the Jensen and Skinner plants
- Direct Potable Reuse Demonstration Facility
  - Advertise procurement packages for DPR testing equipment
  - Continue development of DPR pilot testing and site improvement plans
  - Provide an updated draft DPR testing plan to the Independent Science Advisory Panel (ISAP)
- Zero Emission Vehicle (ZEV) Infrastructure Upgrade projects:
  - Districtwide Zero Emission Fleet Infrastructure
    - Complete the enhanced programmatic planning and study document for the Weymouth plant
    - Continue the enhanced programmatic planning and study documents for the remaining 16 sites
    - Begin coordination with the utility service providers
  - Headquarters Building Zero Emission Vehicle Infrastructure Upgrades – Stage 1
    - Continue final design and coordination with LADWP
  - Zero Emission Fleet Pilot Infrastructure – Stage 1
    - Complete testing, commissioning, and integration of pilot chargers installed at the Weymouth plant
  - Zero Emission Fleet Pilot Infrastructure – Stage 2, Phase 1
    - Complete design of a total of three Level 3 fast charging stations at Mills plant, Weymouth plant, and Gene pumping plant
    - Continue installation of a total of five Level 2/2+ charging stations at Lake Mathews plant, Weymouth plant, Jensen plant, and Skinner plant
    - Continue design of a total of seven Level 2/2+ charging stations at Diemer plant, Mills plant, and Weymouth plant

Direct Potable Reuse Demonstration Facility

Total Project Estimate:
$18.4 million

Total Project Cost to Date:
$3.4 million

This project will expand the existing process train to facilitate additional testing and data collection, aiming at process optimization and incorporation of Direct Potable Reuse (DPR) treatment options for regulatory acceptance and full-scale implementation at the Advanced Water Treatment Plant Demonstration Facility in Carson. DPR treatment processes will be added for pathogen and chemical controls in accordance with the latest DPR framework provided by the California Division of Drinking Water. This project will also include design and construction/installation of permanent exhibits, equipment, and accessible tour routes to support public outreach functions at the Demonstration Facility.

Phase	Preliminary Design
% Complete for Current Phase	70%
Current Phase Authorized	June 2022
Estimated Completion Date of Current Phase	November 2025

Value engineering workshop for the proposed DPR pilot testing approach was conducted and site security improvements were completed. In the upcoming quarter, DPR testing equipment procurement bid packages will be advertised.

Metropolitan's Advanced Water Treatment Demonstration Facility in Carson
(aka the Grace F. Napolitano Pure Water Southern California Innovation Center)

Colorado River Aqueduct (CRA) Program

Actual Biennium Expenditures (Jul. 2024 through Jun. 2025) $45.30 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 (4th Quarter)

Accomplishments

- Completed construction for the following project:
  - CRA Freda Siphon Barrel Number 1 - Internal Seal Installation
- Continued construction activities for the following projects:
  - CRA Domestic Water Treatment System Upgrades at all five pumping plants
  - Hinds, Eagle Mountain, and Iron Mountain Pumping Plants Storage Buildings
- Continued equipment procurement for the following projects:
  - Gene Pumping Plant Unit No. 1 Brushless Motor Exciter System
  - Intake and Gene Pumping Plants Transformer Bushings and Pressure Device Replacements
- Awarded procurement contract and authorized final design for the following project:
  - CRA High-Voltage Transformers Replacement
- Advertised construction contract for the following project:
  - Eagle & Hinds Pumping Plant Utilities Replacement
- Continued final design of the following projects:
  - Black Metal Mountain 2.4 kV Electrical Power Upgrades
  - Cabazon Radial Gates Facility Improvements
  - Copper Basin Reservoir Discharge Valve Structure Rehabilitation
  - CRA Conduit Erosion Control Improvements
  - CRA Desert Region Security Improvements – Stage 1
  - CRA Pumping Plant Sump System Rehabilitation
  - CRA Pumping Plant Village Utility Replacement
  - CRA Pumping Plants Main Pump Access Improvements
  - Iron Mountain Station Light & Power Electrical Improvements
- Initiated final design of the following project:
  - Intake Transformer Bank Protection Relays Replacement
- Continued preliminary design of the following projects:
  - CRA 230kV Transmission Tower Barrier Improvements
  - CRA Desert Region Security Improvements – Stage 2
  - CRA Pumping Plant Delivery Lines Rehabilitation
  - Hinds Pumping Plant Discharge Valve Platform Replacement
  - Iron Mountain Tunnel Rehabilitation
- CRA 230 kV Transmission Line Rehabilitation and Improvements
  - Continued study of east transmission line
- CRA Main Pump Motor Rehabilitation
  - Continued study to assess rehabilitation options for pump units and their ancillary support systems for all five pumping plants

Upcoming Activities

Upcoming work for the next quarter will include:

- Continue construction activities planned for the following projects:
  - CRA Domestic Water Treatment System Upgrades at all five CRA pumping plants
  - Hinds, Eagle Mountain, and Iron Mountain Pumping Plants Storage Buildings
- Continue procurement for the following projects:
  - Gene Pumping Plant Unit No. 1 Brushless Motor Exciter System
  - Intake and Gene Pumping Plant Transformer Bushings and Pressure Device Replacements
- Initiate procurement for the following project:
  - CRA High-Voltage Transformers Replacement
- Continue final design of the following projects:
  - Black Metal Mountain 2.4 kV Electrical Power Upgrades
  - Cabazon Radial Gates Facility Improvements
  - Copper Basin Reservoir Discharge Valve Structure Rehabilitation
  - CRA Conduit Erosion Control Improvements
  - CRA Desert Region Security Improvements – Stage 1
  - CRA Pumping Plant Sump System Rehabilitation
  - CRA Pumping Plant Village Utility Replacement
  - CRA Pumping Plants Main Pump Access Improvements
  - Intake Transformer Bank Protection Relays Replacement
  - Iron Mountain Station Light & Power Electrical Improvements
- Initiate final design of the following project:
  - CRA High-Voltage Transformers Replacement
- 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.
  - Identify urgently needed short-term rehabilitation efforts.

Eagle & Hinds Pumping Plant Utilities Replacement

Total Project Estimate:
$27.4 million

Total Project Cost to Date:
$3.4 million

This project will replace the domestic water distribution and the wastewater systems at Eagle Mountain and Hinds pumping plants. The work consists of replacement and installation of the main drinking water distribution and building lateral pipes, backflow prevention devices, valves, meters, remote water quality analyzers, septic tanks, leach fields, and other appurtenances to deliver quality water and collect/treat wastewater reliably. This project will also replace the existing asphalt pavement, including grading and drainage improvements.

Phase	Final Design
% Complete for Current Phase	98%
Current Phase Authorized	December 2017
Estimated Completion Date of Current Phase	September 2025

The construction contract bid package was advertised in April. In the upcoming quarter, the construction contract bids will be received and evaluated.

Existing asbestos cement pipe (left) and corrosion damaged pipe (right) at the Eagle Mountain Pumping Plant

Dams and Reservoirs Program

Actual Biennium Expenditures (Jul. 2024 through Jun. 2025) $13.80 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 (4th Quarter)

Accomplishments

- Diamond Valley Lake Dam Monitoring System Upgrades
  - Continued replacement of instrumentation and automatic data acquisition equipment
  - Began database development for data reporting, visualization, and analysis
- Garvey Reservoir Rehabilitation – Stage 1
  - Continued final design
- Lake Skinner Dam Drainage System Improvements
  - Continued construction
- Lake Skinner Outlet Tower Seismic Upgrade
  - Continued detailed seismic evaluation of the outlet tower

Upcoming Activities

Upcoming work for the next quarter will include:

- Diamond Valley Lake Dam Monitoring System Upgrades
  - Complete instrumentation and automatic data acquisition equipment installation
  - Continue database development
- Garvey Reservoir Rehabilitation – Stage 1
  - Complete final design
  - Advertise a construction bid package, which includes outlet tower retrofit, rehabilitation of reservoir liner, and replacement of reservoir floating cover.
- Lake Skinner Dam Drainage System Improvements
  - Complete construction
- Lake Skinner Outlet Tower Seismic Upgrade
  - Complete detailed seismic analysis

Garvey Reservoir Rehabilitation - Stage 1

Total Project Estimate:
$120 million

Total Project Cost to Date:
$9.8 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	90%
Current Phase Authorized	May 2023
Estimated Completion Date of Current Phase	September 2025

The design consultant continued the final design. As the reservoir has been removed from service, staff accelerated final design completion and advertisement of this construction contract. In the upcoming quarter, the design consultant will complete the final design for outlet tower retrofit, reservoir liner rehabilitation, and reservoir floating cover replacement; and a construction bid package will be advertised.

The existing reservoir floating cover and outlet tower at Garvey Reservoir

Distribution System Program

Actual Biennium Expenditures (Jul. 2024 through Jun. 2025) $55.65 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 (4th Quarter)

Accomplishments

- Completed construction for the following projects:
  - OC-88 Pump Station Chiller Replacement
  - Perris Valley Pipeline I-215 Tunnel Crossing
  - Rialto Pipeline Rehabilitation at Station 2986+30 and Rehabilitation of Service Connection CB-11
  - San Diego Canal Concrete Liner Replacement – Site 236
  - Santa Monica Feeder Cathodic Protection
- Completed procurement for the following project:
  - Foothill Feeder Blowoff Valve Replacement
- Continued procurement for the following projects:
  - Auld Valley and Red Mountain Pressure Control Structure Upgrades – a 42-inch stainless steel sleeve valve for the Red Mountain Pressure Control Structure
  - East Lake Skinner Bypass Slide Gates Replacement
  - Hollywood Tunnel North Portal Control Structure Upgrades
  - Lakeview Pipeline Relining – Stage 2
  - Orange County Area Pressure Control Structure Globe Valve Replacement
  - San Jacinto Diversion Structure Slide Gates V-01, V-02, V-03, and V-04 Rehabilitation
- Awarded a procurement contract for the following project:
  - Rio Hondo Pressure Control Structure Valve Replacement – Stage 1
- Continued final design of the following projects:
  - Auld Valley and Red Mountain Pressure Control Structures Upgrades
  - Hollywood Tunnel North Portal Pressure Control Structure Upgrades

Upcoming Activities

Upcoming work for the next quarter will include:

- Continue procurement for the following projects:
  - Auld Valley and Red Mountain Pressure Control Structure Upgrades – a 42-inch stainless steel sleeve valve for the Red Mountain Pressure Control Structure
  - East Lake Skinner Bypass Slide Gates Replacement
  - Hollywood Tunnel North Portal Pressure Control Structure Upgrades
  - Lakeview Pipeline Relining – Stage 2
  - Orange County Area Pressure Control Structure Globe Valve Replacement
  - San Jacinto Diversion Structure Slide Gates V-01, V-02, V-03, and V-04 Rehabilitation
- Continue final design of the following projects:
  - Auld Valley and Red Mountain Pressure Control Structures Upgrades
  - Hollywood Tunnel North Portal Pressure Control Structure Upgrades

Hollywood Tunnel North Portal Control Structure Upgrades

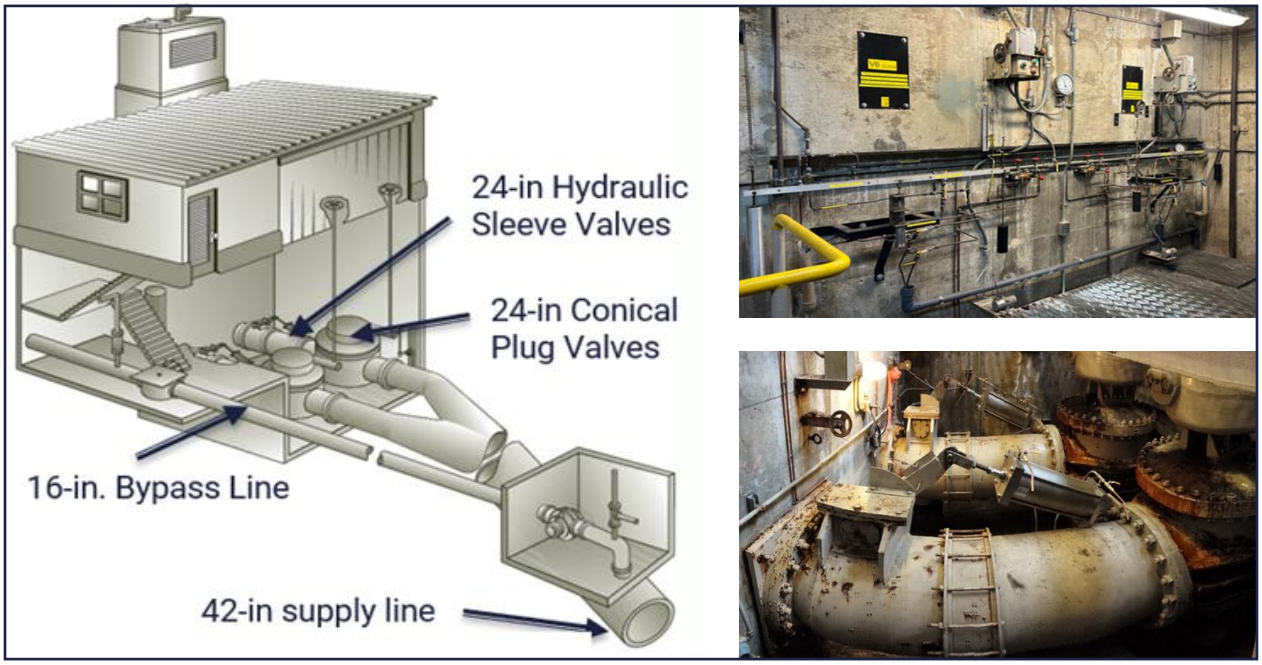
Total Project Estimate:
$13.1 million

Total Project Cost to Date:
$2.2 million

This project will replace the existing sleeve valves and hydraulic actuators at the North Portal of the Hollywood Tunnel with new control valves with electric actuators. The upgrade includes replacing the mechanical controls with electronic controls tied to SCADA system, which will allow the facility to be monitored and controlled from the Eagle Rock Operations Control Center. This project will also replace isolation valves, control valves for the bypass, install new electrical service to support the load necessary for the new control systems, and other improvements necessary to upgrade and rehabilitate the equipment and support systems.

Phase	Final Design Procurement
% Complete - Final Design	50%
% Complete - Procurement	8%
Final Design Authorized	July 2022
Procurement Contract Award Date	March 2025
Estimated Final Design Completion Date	April 2026
Estimated Procurement Completion Date	September 2026
Contract Number for Procurement	2099

Final design continued, and submittal review for valve procurement was initiated. In the upcoming quarter, final design will continue, the submittal review will be completed, and the vendor will begin fabrication of the valves.



Hollywood Tunnel North Portal Control Structure configuration (left) and inside of the structure (right)

Drought Mitigation - SWP Dependent Areas Program

Actual Biennium Expenditures (Jul. 2024 through Jun. 2025) $24.64 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 (4th Quarter)

Accomplishments

- Badlands Tunnel Surge Protection Facility
  - Completed installation of the steel surge tank
  - Began exterior coating for the steel surge tank
- Inland Feeder/Rialto Pipeline Intertie
  - Continued site work and installation of electrical components
- Inland Feeder/San Bernardino Valley Municipal Water District (SBVMWD) Foothill Pump Station Intertie
  - Completed procurement of two 54-inch diameter butterfly valves
  - Continued final design and acquisition of right-of-way and environmental permits
  - Continued procurement of a 132-inch diameter butterfly valve
- Sepulveda Feeder Pump Stations
  - Concluded negotiation of a Guaranteed Maximum Price (GMP) for Phase 2 of the Venice Pump Station
  - Continued early procurement of authorized long-lead equipment
  - Continued Phase 1 design of Sepulveda Pump Station under a progressive design-build services agreement
- Wadsworth Pumping Plant Bypass Pipeline
  - Continued site work and installation of electrical components

Upcoming Activities

Upcoming work for the next quarter will include:

- Continue progress on the following projects:
  - Badlands Tunnel Surge Protection Facility: Continue construction
  - Inland Feeder/Rialto Pipeline Intertie: Continue 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
  - Sepulveda Feeder Pump Stations
    - Continue Phase 1 progressive design-build work for Sepulveda Pump Station
    - Board authorization and begin Phase 2 work on the Venice Pump Station
    - Continue procurement of long-lead equipment
  - Wadsworth Pumping Plant Bypass Pipeline: Continue construction

Badlands Tunnel Surge Protection Facility

Total Project Estimate:
$29 million

Total Project Cost to Date:
$24.6 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	93%
Construction Contract Award Date	November 2023
Estimated Construction Completion Date	October 2025
Contract Number	2040

The contractor completed the surge tank installation and started exterior coating. In the upcoming quarter, construction will be largely completed.

Applying exterior coating to the surge tank

Information Technology and Control Systems Program

Actual Biennium Expenditures (Jul. 2024 through Jun. 2025) $16.41 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 (4th Quarter)

Accomplishments

- Control System Upgrade – Phase 4
  - Advertised construction bid package for spare conduit ductbanks at the Mills plant
- Desert Microwave Site Tower Upgrades
  - Continued construction for network equipment installation
- Emergency Radio Communications Systems Upgrade
  - Continued preparation of request for proposal (RFP)
- Enterprise Content Management Phase II
  - Continued design
- Enterprise Data Analytics
  - Continued developing system requirements and design
- Headquarters Network Switch Replacement
  - Completed decommissioning and removal of old equipment
- MWD IntraMet Upgrade
  - Continued RFP evaluation
- Oracle Database Upgrade
  - Continued database migration
- WiFi Implementation
  - Completed installation of WiFi equipment and activated WiFi services at Headquarters courtyard and parking garage
  - Advertised construction bid package for Riverside region
  - Conducted initial post-award job walks for Los Angeles region
- WINS Water Billing System Upgrade
  - Continued system upgrade

Upcoming Activities

Upcoming work for the next quarter will include:

- Control System Upgrade – Phase 4
  - Evaluate construction bid package for spare conduit ductbanks at the Mills plant
- Desert Microwave Site Tower Upgrades
  - Continue construction for network equipment installation
- Emergency Radio Communication Systems Upgrade
  - Continue preparation of RFP

- Enterprise Content Management Phase II
  - Continue design
- Enterprise Data Analytics
  - Continue developing system requirements and design
- Headquarters Network Switch Replacement
  - Complete documentation and initiate project close-out
- MWD IntraMet Upgrade
  - Complete RFP evaluation
- Oracle Database Upgrade
  - Continue database migration
- Real Property Group Business System Replacement
  - Complete user acceptance testing of the new system integration with financial system
- WiFi Implementation
  - Continue post-award job walks for Los Angeles region
  - Evaluate construction package bids for Riverside region
- WINS Water Billing System Upgrade
  - Continue system upgrade

CIP Budgeting System Improvements

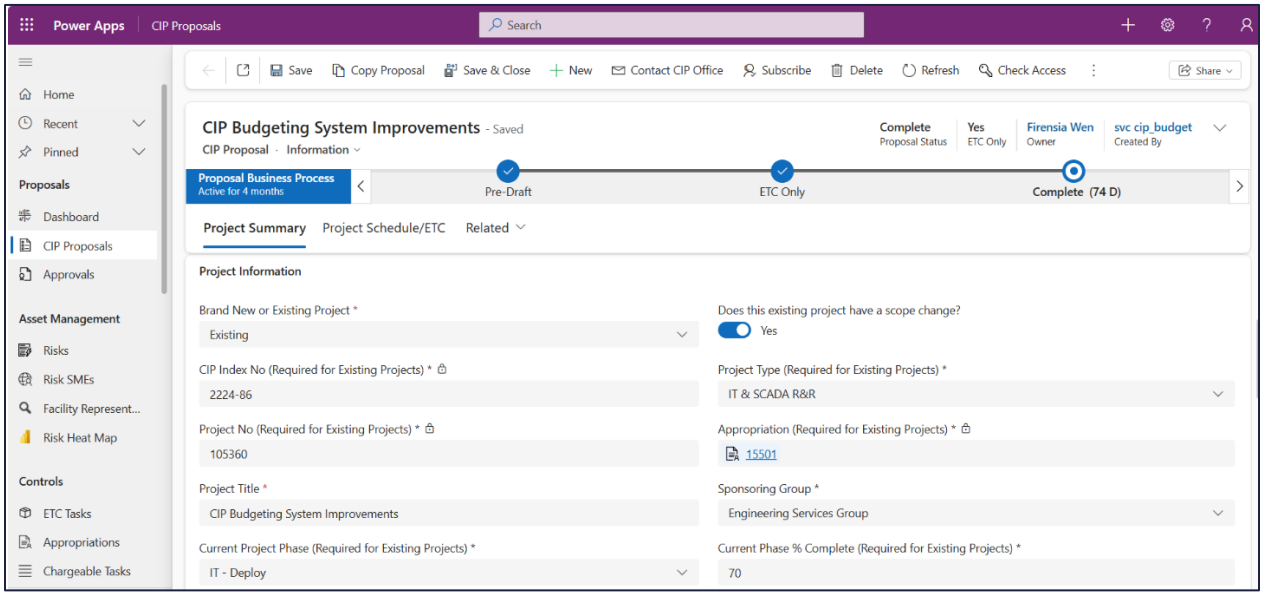
Total Project Estimate:
$1.0 million

Total Project Cost to Date:
$0.5 million

This project will replace the current SharePoint CIP budget system with a new enhanced system. The new system will be developed using commercially available, off-the-shelf software specifically designed for CIP budgeting application that uses Enterprise Data Analytics web-based platform. The new system will be an integrated proposal form containing risk-consequence and resource-loaded project schedule information, which will use a single workflow to prepare, approve, and track the form, thereby streamlining the submittal and approval process to reduce the required administrative effort, provide greater capability to modify and enhance the proposal form, and improve the overall user experience. The scope also includes enhancements to InVizion budget software that will expedite the budget analysis and development.

Phase	Design, Development, Deployment
% Complete for Current Phase	60%
Current Phase Authorized	October 2023
Estimated Completion Date of Current Phase	April 2026

The new CIP Budgeting System went live and was utilized for gathering and evaluation of project proposals for preparation of the upcoming biennial CIP budget. In the upcoming quarter, further system enhancement sprints will be deployed, and hyper care will be performed.



Screenshot of the new CIP Budgeting System

Prestressed Concrete Cylinder Pipe (PCCP) Program

Actual Biennium Expenditures (Jul. 2024 through Jun. 2025) $86.41 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 (4th Quarter)

Accomplishments

- Second Lower Feeder
  - Reach 3B –In the reporting quarter, the contractor completed shutdown-related work including installation of the final PCCP relining pipe closure piece in Western Avenue, its associated mortar lining, and completed disinfection of the pipeline. Metropolitan completed testing of the pipeline and returned it to service on April 23, 2025. The contractor completed street surface restoration work at all nine sites used during the shutdown and began work to enhance a temporary reservoir bypass pipeline installed at the Palos Verdes Reservoir site as part of the Second Lower Feeder PCCP Rehabilitation - Reach 3A project. The bypass pipeline facilitated the recent shutdown and has helped to reduce nitrification issues in the Palos Verdes Feeder.
- Sepulveda Feeder
  - Reach 1 – Continued final design to rehabilitate approximately 4.7 miles of Sepulveda Feeder PCCP pipeline, from just north of the Inglewood Lateral south to the West Coast Feeder, through the cities of Inglewood and Hawthorne, and unincorporated Los Angeles County.
  - Reach 2 – Continued final design and permitting to rehabilitate approximately 3.8 miles of Sepulveda Feeder PCCP pipeline, from the Dominguez Gap Channel south to the intertie with Second Lower Feeder, through the cities of Torrance and Los Angeles.
  - Reach 9 – Continued final design of Reach 9, the first construction package of the North Reach, which is necessary to support the operation of Stage 2 of the Sepulveda Feeder Pump Stations project.
  - North Reach – Continued preliminary design of the northern 20-mile portion of the Sepulveda Feeder, including both steel and PCCP portions of the pipeline and appurtenances.

Upcoming Activities

Upcoming work for the next quarter will include:

- Second Lower Feeder
  - Reach 3B – Complete punch-list items, including replacement of step-up power transformers for two sectionalizing valve vaults, enhancements of Palos Verdes Reservoir bypass pipeline, and installation of SCADA system at all three sectionalizing valve vaults.
- Sepulveda Feeder
  - Reach 1 – Continue final design
  - Reach 2 – Continue final design
  - Reach 9 – Continue final design to rehabilitate 3.8 miles of PCCP
  - North Reach – Continue preliminary design

Second Lower Feeder PCCP Rehabilitation - Reach 3B

Total Project Estimate:
$105.6 million

Total Project Cost to Date:
$100.4 million

This project will reline approximately 3.6 miles of the Second Lower Feeder PCCP pipeline with steel liner from the intertie with the Sepulveda Feeder south to Oak Street Pressure Control Structure, through the cities of Torrance, Los Angeles, and Lomita, and replace three 42-inch diameter sectionalizing valves at the intertie with the Sepulveda Feeder with three new 48-inch diameter sectionalizing valves.

Phase	Construction
% Complete for Construction	99%
Construction Contract Award Date	January 2023
Estimated Construction Completion Date	September 2025
Contract Number	2026

The contractor completed all shutdown-related work, including commissioning of the three 48-inch sectionalizing valves, street surface restoration, and installation of electrical, mechanical, and instrument components at the three sectionalizing valve structures. In the upcoming quarter, the contractor will continue to work on punch-list items.

Commissioning of a new flow meter at Second Lower Feeder Station 1859 in the City of Los Angeles

Water Treatment Plants Program

Actual Biennium Expenditures (Jul. 2024 through Jun. 2025) $58.01 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 (4th Quarter)

Accomplishments

- Completed construction for the following project:
  - Mills Electrical Upgrades – Stage 2
- Continued construction for the following projects:
  - Diemer Helicopter Hydrant Facility
  - Weymouth Basins Nos. 5-8 & Filter Building No. 2 Rehabilitation
  - Weymouth Hazardous Waste Staging and Containment
- Continued procurement for the following project:
  - Diemer Helicopter Hydrant Facility
- Completed final design of the following project:
  - Diemer Fluorosilicic Acid Tank Farm Improvements
- Continued final design of the following projects:
  - Diemer Filter Rehabilitation
  - Jensen Plant Site Security Upgrades
  - Weymouth Administration Building Upgrades
- Executed a Board-authorized agreement amendment for final design of the following projects:
  - Jensen Finished Water Reservoir Rehabilitation
  - Mills Finished Water Reservoir Rehabilitation
- Obtained a Board authorization to amend an existing agreement to perform final design of the following project:
  - Jensen Solids Mechanical Dewatering Facility
- Continued preliminary design of the following projects:
  - Diemer Washwater Reclamation Plant Improvements & Slope Stabilization
  - Jensen Bromate Control Upgrades
  - Jensen Modules Nos. 2 & 3 Solids Removal System Rehabilitation
  - Jensen Reservoir Bypass Gate Replacement
  - Mills Basin Solids Removal System Rehabilitation
  - Mills Perimeter Security & Erosion Control Improvements

Upcoming Activities

- Complete construction for the following projects:
  - Diemer Helicopter Hydrant Facility
  - Weymouth Hazardous Waste Staging and Containment
- Continue construction for the following project:
  - Weymouth Basins Nos. 5-8 & Filter Building No. 2 Rehabilitation
- Complete final design of the following projects:
  - Diemer Filter Rehabilitation
  - Jensen Plant Site Security Upgrades
  - Weymouth Administration Building Upgrades
- Execute a Board-authorized agreement amendment for final design of the following project:
  - Jensen Solids Mechanical Dewatering Facility
- Begin final design of the following projects:
  - Jensen Finished Water Reservoir Rehabilitation
  - Mills Finished Water Reservoir Rehabilitation
- Continue preliminary design of the following projects:
  - Diemer Washwater Reclamation Plant Improvements & Slope Stabilization
  - Jensen Bromate Control Upgrades
  - Jensen Modules Nos. 2 & 3 Solids Removal System Rehabilitation
  - Jensen Reservoir Bypass Gate Replacement
  - Mills Basin Solids Removal System 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:
$109.7 million

This project will rehabilitate and replace the Weymouth Water Treatment Plant's Basins Nos. 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 Nos. 1-8.

Phase	Construction
% Complete for Construction	96%
Construction Contract Award Date	May 2022
Estimated Construction Completion Date	October 2025
Contract Number	1982

The contractor completed the installation of mechanical piping, inlet gates, and electrical equipment, and performed equipment testing in Basins Nos. 1-4. In the upcoming quarter, the contractor will continue replacing filter valves and actuators in Filter Building No. 2.

Hoisting a new inlet gate during installation at Basin No. 3

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 June 2025)	$12.4M	$10.4M	$9.2M	$0.8M	$32.8M
Number of Projects Approved	47	45	50	13	155
Number of Projects Completed (through June 2025)	46	33	9	1	89
Number of Projects with Durations of Over 3 Years	1	12	0	0	13

* Numbers may not sum due to rounding.

Through June 2025, 89 of the 155 projects approved under the appropriations mentioned above have been completed, and 13 active projects have exceeded three years in duration, as described below.

- Diemer Foam Abatement Upgrade has experienced delays due to longer than anticipated time for review and approval of scum skimmer submittal before proceeding with procurement. The project is scheduled to be complete in February 2026.
- 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 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.
- Foothill Feeder Pipe Protection construction was completed in March 2025. Additional time is required to pay vendor invoices and complete project closure documents. The project is scheduled to be completed by October 2025.
- Lake Matthews Mobile Chlorinator Delivery Line Replacement has experienced delays due to expansion/contraction cracks shown after completion of construction, which are being addressed. The project is scheduled to be complete by August 2025.
- Lake Perris Aeration System Diffuser Replacement has experienced delays due to longer than anticipated time for preparation of diving plan and approval by Department of Water Resources. The project is scheduled to be completed by August 2025.
- Pasadena Water and Power Site Microwave Tower Replacement experienced delays due to longer than anticipated time for review and approval of the lease agreement between the City of Pasadena and Metropolitan. The project is scheduled to be completed by September 2025.
- Ramona PCS Rehabilitation has been experiencing delays due to longer than anticipated lead time for motor procurement and coordination of the Middle Feeder North shutdown required for valve removal. The project is scheduled to be completed by July 2026.
- 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.
- Skinner Washwater Reclamation Plant No. 2 Basin 6 Launder and Weir Replacement construction was completed in June 2025. Additional time is required to pay vendor invoices and complete project closure documents. The project is scheduled to be completed by August 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 July 2025.
- Vibration Data Collection System Upgrade has experienced delays due to additional time required to review terms and conditions of the vendor's contract. Installation of the updated software is underway. The project is scheduled to be completed by January 2026.

Minor Cap Projects, 4th Quarter

Authorized Projects

No project was authorized under the Minor Cap Program during the 4th Quarter of fiscal year 2024/25 (April through June 2025).

Completed Projects

Four projects were completed under the Minor Cap Program during the 4th Quarter of fiscal year 2024/25 (April through June 2025):

- Eagle Mountain Communications Room Security Upgrades
- Jensen Chemical Flow Meter Replacement
- Skinner Chlorine Building UPS Replacement
- Weymouth Rejection Overflow Structure Security Improvements

Canceled Projects

One project was canceled during the 4th Quarter of fiscal year 2024/25 (April through June 2025):

- Sepulveda Feeder Stray Current Drain Station Improvements was originally initiated in FYs 2018/19 and 2019/20 minor cap appropriation. The project was canceled to be addressed by planned Sepulveda PCCP rehabilitation projects.

Expenditures

Actual biennium expenditures to date (July 2024 through June 2025) for the Minor Capital Projects Program were $4.76 million.

Project Actions

Table 5 lists capital project actions authorized by the General Manager along with funding allocation amounts during the 4th Quarter of FY 2024/25, through the authority delegated by the Board in April 2024. The total funding amount authorized during the 4th Quarter is $192,570,750 through twenty-three management actions. In some cases listed below, the Total Amount Authorized may differ from the Amount Authorized for Current Biennium when the work authorized is scheduled to extend beyond the current biennium. In these cases, it is anticipated that staff will request sufficient funds to be allocated from the CIP Appropriation for the next biennium to cover the planned remaining future-year costs of the project. When the Amount Authorized for Current Biennium is equal to the Total Amount Authorized, the authorized work is planned to be completed within the current biennium. Table 5 excludes any board items heard in closed session and minor cap authorizations. Minor cap authorizations can be found in the Minor Capital Projects Program section of this report.

Table 5: Capital Projects Funded in 4th Quarter

Project Authorized	Activity Authorized	Amount Authorized for Current Biennium	Total Amount Authorized
CRA Employee Housing Fencing and Shade Structure Improvements	Construction	$2,498,217	$2,800,000
CRA High-Voltage Transformers Replacement	Final Design and Procurement	$5,000,000	$149,200,000
Desert Microwave Tower Sites Upgrade	Procurement and Construction	$8,217,522	$8,300,000
Diamond Valley Lake Forebay Joint Seal Replacement	Initial Study	$50,000	$50,000
Diemer Hydrogen Peroxide and Sodium Hypochlorite Tank Improvements	Initial Study	$55,000	$55,000
Diemer Sewer Metering Upgrades	Initial Study	$55,000	$55,000
Diemer Yard Paving Improvements	Field Investigation and Final Design	$180,000	$200,000
Emergency Radio Communication System Upgrade	Battery System Procurement and Installation	$1,455,750	$1,455,750
Gene Transformer Bank Protection Relay Replacement	Construction	$475,000	$475,000
Hollywood Tunnel North Portal Control Structure Upgrades	Procurement: Two 24-inch diameter Gate Valves and Two 24-inch diameter Sleeve Valves	$2,844,140	$3,100,000
Inland Feeder Supply Reliability Pipeline Improvements	Study and Final Design	$1,272,000	$1,300,000
Jensen Solids Mechanical Dewatering Facility	Final Design	$3,000,000	$5,400,000
Lake Mathews Area Paving	Final Design	$685,000	$710,000

Project Authorized	Activity Authorized	Amount Authorized for Current Biennium	Total Amount Authorized
Lake Mathews New Office Building	Initial Study	$185,000	$200,000
Michael J. McGuire Water Quality Laboratory Upgrades	Final Design	$12,000,000	$16,000,000
Orange County Region Service Center Storage Yard	Initial Study	$50,000	$50,000
San Gabriel Tower Improvements	Gate Frame Removal and Rebar Inspection Contract Document Preparation and Advertisement	$176,000	$180,000
Skinner Finished Water Reservoir Effluent Slide Gate Rehabilitation & Dry Start-Up System	Construction	$1,555,300	$1,670,000
Skinner Potable Pumps Variable Frequency Drive Rehabilitation	Initial Study	$50,000	$50,000
Upper Feeder and Lower Feeder RWIP Improvements – UF 42+06, UF 90+08, and LF 919+54	Preliminary Design and Final Design	$379,000	$400,000
Upper Feeder Expansion Joint Upgrade[3]	Additional Study	$520,000	$545,000
Weymouth Fluorosilicic Acid Tank Farm Improvements	Initial Study	$45,000	$45,000
Weymouth Ozone Contactor Expansion Joint Improvements	Field Investigations and Final Design	$330,000	$330,000
	Total	**$41,077,929**	**$192,570,750**

[3] Additional study funding was required to obtain additional data needed to determine the recommendation for upgrades to the expansion joint type and location.

Due to changes to the project implementation for the following projects, $14,487,485 was reallocated to the previously authorized projects listed in Table 6 below. While the reallocation changed the biennial funded amount, the total authorized funding for the projects remained the same.

Table 6: General Manager Actions to Reallocate Capital Project Funds

Project Authorized (Title)	Amount Authorized for Reallocation
Conveyance and Distribution System - Rehabilitation for FY2018/19 through FY 2023/24 Remaining Budget	$500,000
District Housing Improvements	$6,900,000
Michael J. McGuire Water Quality Laboratory Equipment	$1,616,205
Michael J. McGuire Water Quality Laboratory Upgrades	$2,000,000
Perris Valley Pipeline	$3,471,280
Total	**$14,487,485**

CEQA Determinations

Table 7 lists CEQA exemption determinations made by the General Manager during the 4th Quarter. Consistent with CEQA, the Board delegated this authority to the General Manager in April 2024. Adoption of Negative Declarations, Mitigated Negative Declarations, and certification of Environmental Impact Reports will continue to require action by Metropolitan's Board. This table excludes information on board items.

Table 7: CEQA Exemption Determinations

Projects
Apprentice Training Center Facility
Diemer Chemical Tank Farm Improvements
Lake Mathews Aboveground Storage Tank Replacement
Skinner Plant Fire Alarm Control Panels 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 10 and Table 11.

Table 8: 4th Quarter Contract Actions

Contract Actions during Q4 for FY 2024/2025, April 2025 through June 2025	
Contracts Awarded by Board	1 construction contract totaling $0.46 million 2 procurement contracts totaling $131.64 million
Total Earnings Authorized[4]	$27.02 million
Construction Contracts Completed	Notices of Completion were filed for 9 construction contracts (Table 9)
Procurement Contracts Completed	3 procurement contracts were completed[5]
Active Contracts at end of Q4[6]	16 construction contracts, totaling $323.27 million (Table 10) 19 procurement contracts, totaling $204.25 million (Table 11)[7, 8] $527.52 million total value*

*Numbers may not sum due to rounding.

The figures on the next two pages show the locations of the sixteen construction contracts that were active through the end of the 4th Quarter.

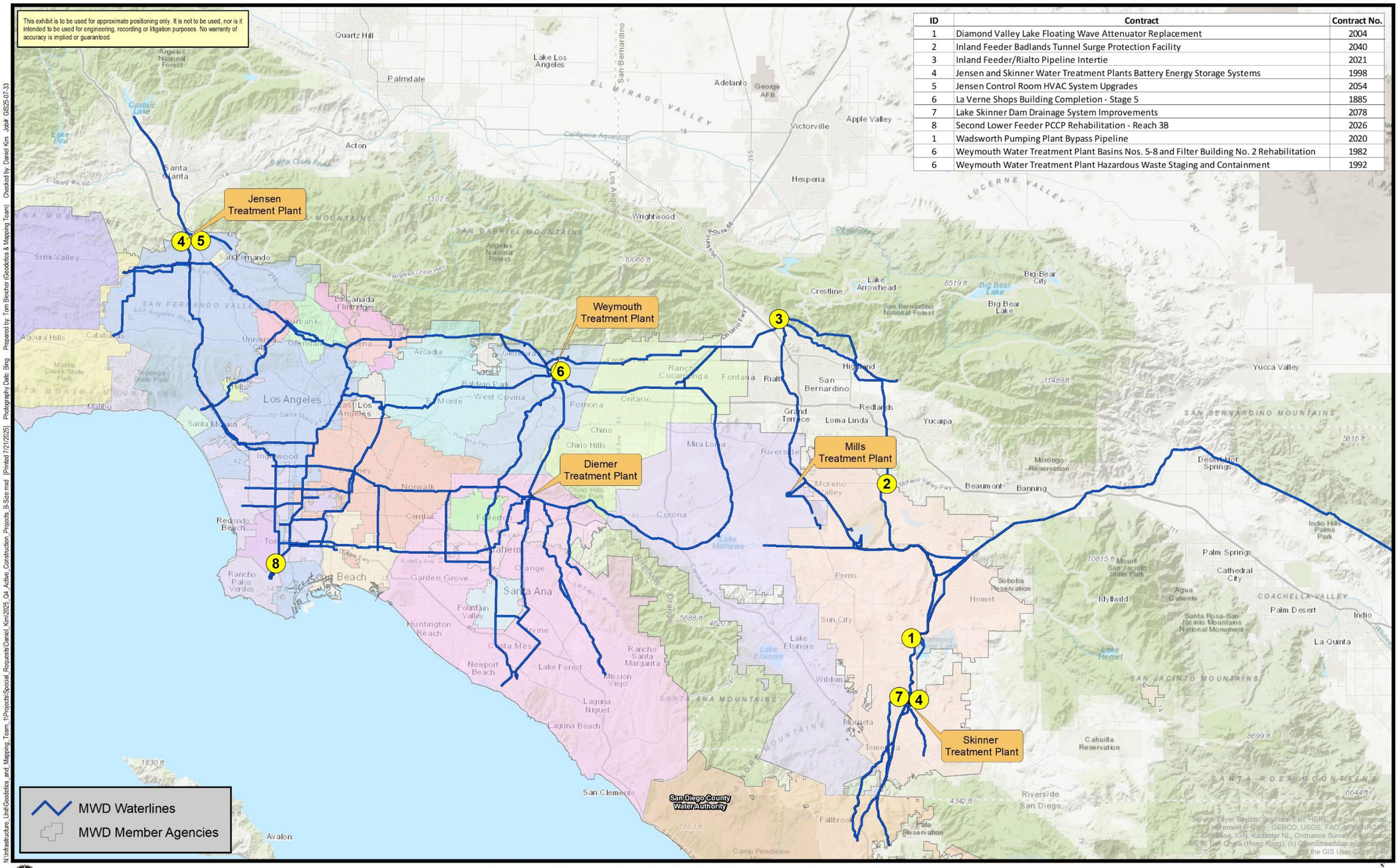
[4] Includes payments for O&M work under CIP contracts and grant-funded drought mitigation contracts. For the contracts that filed NOC during the reporting quarter, final contract costs are used in the total earnings calculation, and for those with outstanding pending issues, the amount equal to original bid amounts plus any approved change orders and/or final adjustments to unit price bid items is used.

[5] Contract 2022 for Furnishing Butterfly Valves for the Wadsworth Bypass Pipeline, Inland Feeder-Rialto Pipeline Intertie, and Badlands Tunnel Isolation Surge Tanks, PO 214941 for Furnishing Air Release and Vacuum Valves for San Diego Pipeline Nos. 3 and 5, and PO 219516 for Furnishing Plug Valves for the Foothill Feeder and Rialto Pipeline were completed during the reporting quarter.

[6] Active contracts at the end of the 4th Quarter are those that are ongoing at the end of June 2025 and have not filed Notice of Completion with the county where the work was performed.

[7] Excludes $1,531,044 procurement contract to Logicalis Inc. to furnish communications sites network equipment for the Desert Microwave Tower Sites Upgrade project due to contract execution under Master Contract of National Association of State Procurement Officials (NASPO) ValuePoint Cooperative Purchasing Program for Data Communications Products & Services.

[8] Excludes $407,741 procurement contract to Ireland Inc. (dba Core-Rosion Products) to furnish two 15,000-gallon sodium hypochlorite tanks for the Copper Basin Reservoir. This contract has not been executed.

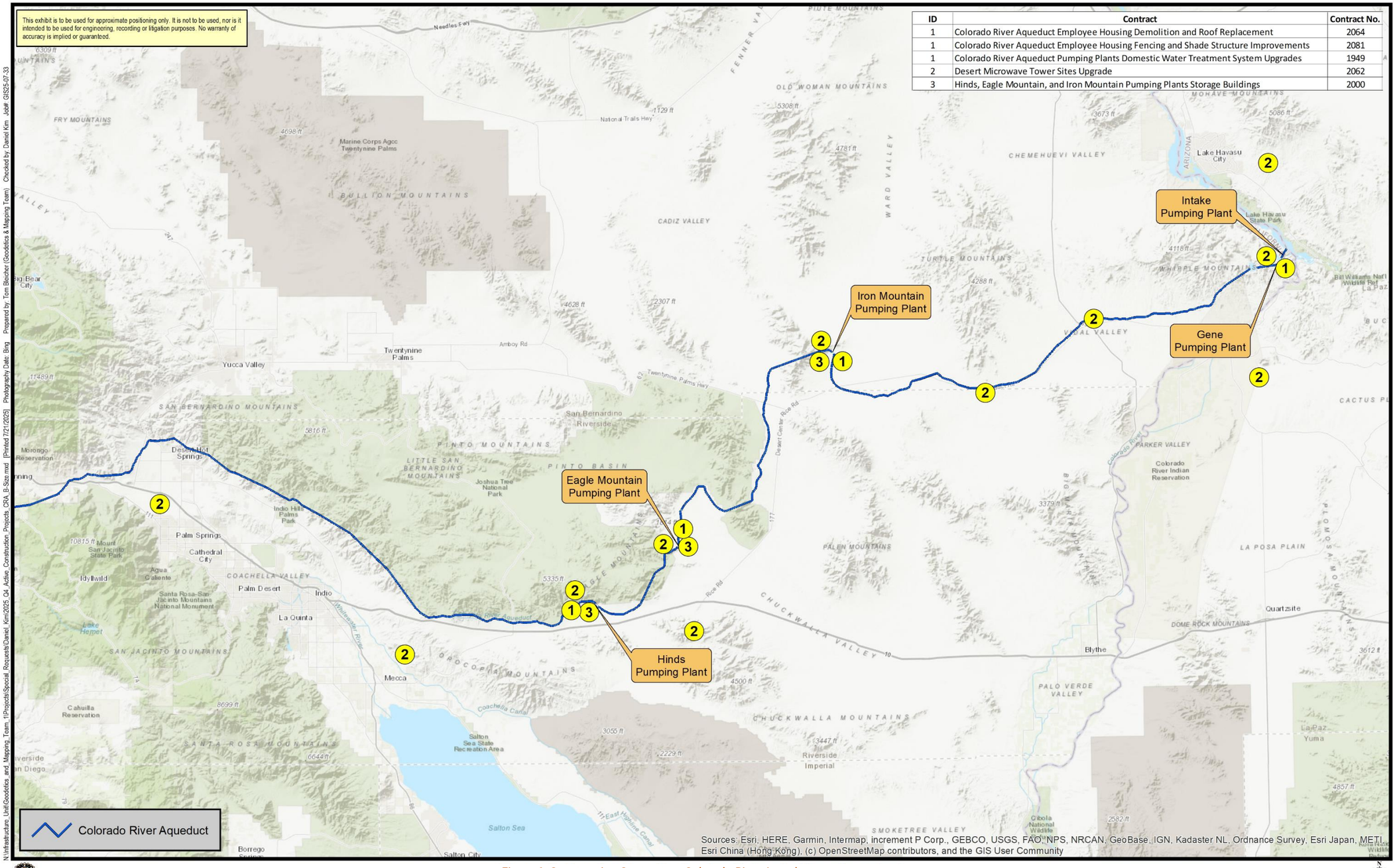


ID	Contract	Contract No.
1	Diamond Valley Lake Floating Wave Attenuator Replacement	2004
2	Inland Feeder Badlands Tunnel Surge Protection Facility	2040
3	Inland Feeder/Rialto Pipeline Intertie	2021
4	Jensen and Skinner Water Treatment Plants Battery Energy Storage Systems	1998
5	Jensen Control Room HVAC System Upgrades	2054
6	La Verne Shops Building Completion - Stage 5	1885
7	Lake Skinner Dam Drainage System Improvements	2078
8	Second Lower Feeder PCCP Rehabilitation - Reach 3B	2026
1	Wadsworth Pumping Plant Bypass Pipeline	2020
6	Weymouth Water Treatment Plant Basins Nos. 5-8 and Filter Building No. 2 Rehabilitation	1982
6	Weymouth Water Treatment Plant Hazardous Waste Staging and Containment	1992

N:\Infrastructure_Unit\Geodetics_and_Mapping_Team_1\Projects\Special_Requests\Daniel_Kim\2025_Q4_Active_Construction_Projects_B-Size.mxd [Printed 7/21/2025] Photography Date: Bing Prepared by: Tom Bleicher (Geodetics & Mapping Team) Checked by: Daniel Kim Job#: GIS25-07.33

The Metropolitan Water District of Southern California
Engineering Services Group

Figure 5: Construction Contracts – Greater Los Angeles Region



ID	Contract	Contract No.
1	Colorado River Aqueduct Employee Housing Demolition and Roof Replacement	2064
1	Colorado River Aqueduct Employee Housing Fencing and Shade Structure Improvements	2081
1	Colorado River Aqueduct Pumping Plants Domestic Water Treatment System Upgrades	1949
2	Desert Microwave Tower Sites Upgrade	2062
3	Hinds, Eagle Mountain, and Iron Mountain Pumping Plants Storage Buildings	2000

The Metropolitan Water District of Southern California
Engineering Services Group

Figure 6: Construction Contracts – Colorado River Aqueduct

Metropolitan's Administrative Code authorizes the General Manager to execute change orders on construction contracts in an aggregate amount not to exceed five percent of the original amount of the contract or $250,000, whichever is greater. If changes occur on a construction contract that will exceed this total, additional authorization from the Board is required. In addition, the General Manager is authorized to execute change orders on procurement contracts in an amount not to exceed $250,000. In the 4th Quarter, the Board authorized a change order authority not to exceed $42.5million for Contract No. 1897 with Siemens Energy, Inc. for the CRA High-Voltage Transformers Replacement.

Notices of Completion during 4th Quarter:

The following table shows the nine board-awarded construction contracts for which Metropolitan accepted the contract as completed during the 4th Quarter of FY 2024/25 and filed a Notice of Completion (NOC) with the county where the work was performed. In accordance with Section 9204 of the Civil Code of the State of California, an NOC is filed within 15 days of acceptance by Metropolitan of completion of construction by the contractor.

Table 9: Notices of Completion Filed This Quarter

Contract No.	Construction Contract	Notice of Completion	Original Bid Amount	Final Contract Costs	Change Order	Change Order %
1896	Jensen Admin. Bldg. Entrance Glass Fiber Reinforced Concrete Panels Replacement	6/26/2025	$281,900	*	*	*
1928	Perris Valley Pipeline Interstate 215 Tunnel Crossing	6/26/2025	$59,489,720	$60,933,487	$1,443,767	2.43%
1962	MWD HQ Building Fire Alarm & Smoke Control Improvements	4/7/2025	$13,999,000	$13,208,731	($790,269)	(5.65%)
1963	Santa Monica Feeder Cathodic Protection	6/23/2025	$897,469	$941,000	$43,532	4.85%
1990	Henry J. Mills Water Treatment Plant Electrical Upgrades, Stage 2	6/26/2025	$9,200,000	$9,532,082	$332,082	3.61%
2024	OC-88 Pump Station Chiller Replacement	5/14/2025	$2,654,000	$2,892,041	$238,041	8.97%
2057	CRA Freda Siphon Barrel No.1 Internal Seal Installation	4/9/2025	$3,895,000	$3,895,000	$0	0%
2058	Rialto Pipeline Rehabilitation at Station 2986+30	4/1/2025	$2,197,460	$2,243,395	$45,935	2.09%
2119	San Diego Canal Rehabilitation – Site 236	4/22/2025	$1,833,650	$1,838,571	$4,921	0.27%
		Totals:	**$94,448,199**			

For the 4th Quarter, the total bid amount of the completed construction contract was approximately $94.4 million.

For Contract No. 1896 - Jensen Admin. Bldg. Entrance Glass Fiber Reinforced Concrete Panels Replacement, although 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.

For Contract No. 1946 – Colorado River Aqueduct Pumping Plants - Overhead Crane Replacement, the NOC filing was reported in the CIP Quarterly Report for 4th quarter of FY2023/24. However, the final contract cost and change order amount were not reported due to outstanding pending issues. The issues were resolved, and the amounts were finalized during the reporting quarter. The final contract cost is $17,238,934, including the final change order amount of $3,819,934, which resulted in a change order percentage of 28.5%. The majority of the changes stemmed from unforeseen site conditions encountered during the project and owner-directed additional work to abate unanticipated lead-containing materials and upgrade the crane controls, enhancing their operational functionality to better support capital projects and ongoing maintenance activities.

For Contract No. 1999 – Foothill Hydroelectric Power Plant Seismic Upgrade, the NOC filing was reported in the CIP Quarterly Report for 3rd quarter of FY2024/25. However, the final contract cost and change order amount were not reported due to outstanding pending issues. The issues were resolved, and the amounts were finalized during the reporting quarter. The final contract cost is $6,357,522, including the final change order amount of $183,522, which resulted in a change order percentage of 3.0%.

For Contract No. 2024 – OC-88 Pump Station Chiller Replacement, change orders were issued to resequence the work to support the urgent rehabilitation of Allen-McColloch PCCP pipeline, relocate existing utilities, and provide additional power to the new equipment.

For Contract No. 2057 – CRA Freda Siphon Barrel No. 1 Internal Seal Installation, internal seals at forty-nine out of eighty-two locations were installed due to the discovery of unanticipated hazardous materials during the installation and the additional time and cost to abate the hazardous materials. The remaining locations will be completed during future shutdowns via a separate construction contract.

For Contract No. 2108 – Allen-McColloch Pipeline PCCP 2024 Urgent Relining, the NOC filing was reported in the CIP Quarterly Report for 3rd quarter of FY2024/25. However, the final contract cost and change order amount were not reported due to outstanding pending issues. The issues were resolved, and the amounts were finalized during the reporting quarter. The final contract cost is $25,078,826, including the final change order amount of $166,826, which resulted in a change order percentage of 0.7%. The bulk of the changes resulted from changes to traffic control plans and dewatering system to dispose of groundwater.

Final contract costs shown represent actual earnings 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 (July 2024 through June 2025) is 1.62 percent[9].

[9] Original amount of construction contracts completed (July 2024 through June 2025) = $158,716,276
Change orders for completed construction contracts (July 2024 through June 2025) = $2,567,538
Change order percentage (July 2024 through June 2025) = 1.62%

The table on this page lists the 16 ongoing construction contracts through the end of the 4th Quarter. This list contains construction contracts awarded by the Board.

Table 10: Active Construction Contracts at the End of 4th Quarter

	Cont. No.	Contract Title	Contractor	Contract Amount[10]	Earnings Through Jun. 2025[11]	Start Date	Est. Completion Date	Est. Percent Complete
1	1885	La Verne Shops Building Completion – Stage 5[12]	Woodcliff Corporation, Inc.	$19,638,644	$19,210,144	6/10/22	12/25	98%
2	1949	Colorado River Aqueduct Pumping Plants Domestic Water Treatment System Replacement[12]	J.F. Shea Construction, Inc.	$33,459,237	$16,431,869	1/20/22	4/26	49%
3	1982	Weymouth Water Treatment Plant Basins Nos. 5-8 & Filter Building No. 2 Rehabilitation[12]	J.F. Shea Construction, Inc.	$96,307,270	$92,658,721	6/10/22	10/25	96%
4	1992	Weymouth Water Treatment Plant Hazardous Waste Staging and Containment[12]	J.F. Shea Construction, Inc.	$2,470,790	$2,372,690	3/12/24	8/25	96%
5	1998	Jensen and Skinner Water Treatment Plants Battery Energy Storage Systems	Ameresco, Inc.	$11,604,521	$10,831,654	10/7/21	9/25	93%
6	2000	Hinds, Eagle Mountain, and Iron Mountain Pumping Plants Storage Buildings[13]	J. F. Shea Construction, Inc.	$16,490,000	$12,961,038	7/31/23	5/26	79%
7	2004	DVL Floating Wave Attenuator Replacement[13]	Power Engineering Construction Co.	$7,842,856	$5,681,368	3/12/24	10/25	72%

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

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

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

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

	Cont. No.	Contract Title	Contractor	Contract Amount[10]	Earnings Through Jun. 2025[11]	Start Date	Est. Completion Date	Est. Percent Complete
8	2020	Wadsworth Pumping Plant Bypass Pipeline[12, 13, 14]	Steve P. Rados, Inc.	$15,531,329	$15,063,665	2/2/23	2/26	97%
9	2021	Inland Feeder/Rialto Pipeline Intertie[12, 13, 14]	Steve P. Rados, Inc.	$15,719,035	$14,244,485	10/16/23	10/25	91%
10	2026	Second Lower Feeder PCCP Rehabilitation - Reach 3B[13, 15]	J.F. Shea Construction, Inc.	$78,528,556	$78,239,806	2/13/23	9/25	99%
11	2040	Inland Feeder Badlands Tunnel Surge Protection Facility[12, 13, 16]	Steve P. Rados, Inc.	$18,863,802	$17,455,472	12/11/23	10/25	93%
12	2054	Jensen Plant Control Room Wildfire Smoke Control	IPI Construction Inc.	$457,498	$0	6/17/25	6/26	0%
13	2062	Desert Microwave Communication Tower Site Upgrades	MasTec Network Solutions LLC	$2,556,478	$0	3/27/25	2/26	0%
14	2064	Colorado River Aqueduct Employee Housing Demolition and Roof Replacement	Resource Environmental, Inc.	$1,285,000	$1,285,000	10/2/24	7/25	100%
15	2078	Lake Skinner Dam Perimeter Drainage Improvements	Heed Engineering	$588,000	$572,000	1/10/25	9/25	97%

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

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

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

	Cont. No.	Contract Title	Contractor	Contract Amount[10]	Earnings Through Jun. 2025[11]	Start Date	Est. Completion Date	Est. Percent Complete
16	2081	CRA Employee Housing Fencing and Shade Structure Improvements	Fencecorp, Inc.	$1,931,217	$48,620	4/3/25	12/25	3%
		Total contract value for active construction contracts:		**$323,274,234**				

The following table lists the 19 ongoing procurement contracts at the end of the 4th Quarter.

Table 11: Active Procurement Contracts at the End of 4th Quarter

	Cont. No.	Contract	Contractor	Contract Amount[17]	Earnings Through Jun. 2025[18]	Start Date	Est. Delivery Completion Date	Est. Percent Complete[19]
1	1867	Furnishing Butterfly Valves for the Weymouth Water Treatment Plant – Schedule 1[20]	Crispin Valve, LLC	$5,066,975	$3,769,482	12/18/17	9/25	74%
2	1897	Furnishing 69kV and 230kV Power Transformers for the CRA Pumping Plants	Siemens Energy, Inc	$130,836,680	$0	6/25/25	3/30	0%
3	1912	Furnishing Large-Diameter Conical Plug Valves	Ebara Corporation	$23,750,060	$23,473,343	12/24/18	D[21]	99%
4	1922	Furnishing One Double Column Vertical Machining Center for the La Verne Maintenance Shops	Gosiger Machine Tools, LLC (Gosiger West)	$2,319,600	$2,273,100	9/17/18	D[21]	99%
5	1955	Furnishing Membrane Filtration Systems for the CRA Domestic Water Treatment Systems	Wigen Water Technologies	$1,380,556	$1,238,807	5/28/20	D[21]	90%
6	1965	Furnishing Equipment for the Jensen Ozone Power Supply Units Upgrades	Suez Treatment Solutions, Inc.	$4,141,194	$3,616,396	3/30/20	D[21]	87%
7	2002	Furnishing Steel Liner for Lakeview Pipeline[15, 22]	Northwest Pipe Company	$23,565,941	$7,958,731	12/14/23	10/25	34%
8	2028	Furnishing Slide Gates for the San Jacinto Diversion Structure	Whipps, Inc.	$820,853	$0	12/8/22	12/25	0%
9	2029	Furnishing Slide Gates for East Lake Skinner Bypass Channel	Whipps, Inc	$892,552	$0	4/10/24	11/25	0%

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

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

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

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

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

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

	Cont. No.	Contract	Contractor	Contract Amount[17]	Earnings Through Jun. 2025[18]	Start Date	Est. Delivery Completion Date	Est. Percent Complete[19]
10	2048	Furnishing Butterfly Valves for the Inland Feeder/SBVMWD Foothill Pump Station Intertie - Schedule 1[23]	Sojitz Machinery Corp. of America	$2,814,591	$2,777,975	6/15/23	D[21]	99%
11	2056	Furnishing a Brushless Motor Exciter System for Gene Pumping Plant Unit No. 1	WEG Electric	$544,501	$0	5/27/24	12/25	0%
12	2096	Furnishing a 132-inch Butterfly Valve for the Foothill Pump Station Intertie	Vogt Valves, Inc.	$1,779,174	$0	6/3/24	6/26	0%
13	2098	Furnishing a 42-Inch Stainless Steel Sleeve Valve for Red Mountain Control Structure	Vogt Valves, Inc.	$589,957	$0	12/5/24	9/26	0%
14	2099	Furnishing Knife Gate Valves for the Hollywood Tunnel Pressure Control Structure - Schedule 1	Integrated 8(a) Solutions, Inc.	$321,575	$0	4/10/25	9/26	0%
15	2099	Furnishing Sleeve Valves for the Hollywood Tunnel Pressure Control Structure - Schedule 2	Bailey Valve, Inc	$2,151,947	$0	4/10/25	9/26	0%
16	2142	Furnishing Construction Materials and Installing Reinforcing Steel at Diemer Plant	Heed Engineering	$511,532	$392,502	11/4/24	7/25	77%
17	PO 214904	Furnishing Two Butterfly Valves for the Lake Skinner Outlet Tower Valve Replacement	B&K Valves and Equipment, Inc.	$1,255,976	$0	6/13/23	8/25	0%
18	PO 219501	Furnishing of Five Globe Valves to be Installed at Four Pressure Control Structures in the Orange County Region[22]	B&K Valves and Equipment, Inc.	$698,000	$0	12/5/23	9/25	0%
19	PO 228265	Furnishing globe valves to be installed at the Rio Hondo Pressure Control Structure	B&K Valves and Equipment, Inc	$807,004	$0	2/15/24	3/26	0%
		Total contract value for active procurement contracts:		**$204,248,668**				

[23] Contract 2048 includes tariff and work on Furnishing Butterfly Valves for the Inland Feeder/SBVMWD Foothill Pump Station Intertie - Schedule 1

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 12 and Table 13 on the following page summarize the comparison between the target metrics and the actual performance metrics for each project category for the current reporting period. In cases where the actual performance exceeded the target metric, explanations for the variance are provided. Actual performances are reported for the Board awarded construction contract projects.

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

Project[24]	Metric	Actual Cost of Metric	Construction Cost	Target Range	Actual %
CRA Freda Siphon Barrel No.1 Internal Seal Installation	Inspection	$331,561	$4,273,457	9% to 12%	7.8%
Headquarters Fire Alarm & Smoke Control Upgrades	Inspection	$1,740,978	$15,327,015	9% to 12%	11.4%
Mills Electrical Upgrades – Stage 2[25]	Inspection	$1,788,592	$11,720,003	9% to 12%	15.3%
OC-88 Pump Station Chiller Replacement[26]	Inspection	$411,358	$3,007,281	9% to 12%	13.7%
Perris Valley Pipeline Interstate 215 Tunnel Crossing	Inspection	$5,954,821	$62,458,022	9% to 12%	9.5%
Average	**Final Design**				N/A
	Inspection				10.6%

[24] Although an NOC was filed for the Colorado River Aqueduct Pumping Plants - Overhead Crane Replacement construction contract in the CIP Quarterly Report for the 4th quarter of FY 2023/24, the actual inspection performance was not reported as the final contract cost and change order amounts were not finalized due to outstanding pending issues. During this reporting quarter, the pending issues were resolved, and the amounts were finalized. The final construction cost is $17,355,595, and the estimated inspection cost is $2,206,765, resulting in the actual inspection performance of 12.7% of the construction costs using the best information available at the end of the reporting quarter, which is above the target range of 9-12% for construction costs above $3M. Unforeseen site conditions, upgrades to the controls systems for operational enhancements, and unanticipated abatement of lead-containing materials resulted in a one-year construction completion delay and required additional inspection efforts for this contract.

[25] Inspection costs for Mills Electrical Upgrades – Stage 2 were higher than the target range due to differing site conditions, which resulted in change orders requiring resequencing of work that required longer than anticipated shutdowns to complete construction.

[26] Inspection costs for OC-88 Pump Station Chiller Replacement were higher than the target range due to resequencing of work to support the urgent rehabilitation of Allen-McColloch PCCP pipeline and longer than anticipated delivery of equipment, which lengthened the construction and required additional coordination.

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

Project	Metric	Actual Cost of Metric	Construction Cost	Target Range	Actual %
Jensen Control Room HVAC System Upgrades[27]	Final Design	$234,703	$547,498	9% to 15%	42.9%
Rialto Pipeline Rehabilitation at Station 2986+30	Inspection	$209,766	$2,984,283	9% to 15%	7.0%
San Diego Canal Concrete Liner Replacement – Site 236	Inspection	$280,641	$1,886,258	9% to 15%	14.8%
Santa Monica Feeder Cathodic Protection	Inspection	$119,124	$941,000	9% to 15%	12.7%
Average	**Final Design**				42.9%
	Inspection				10.5%

[27] Final design costs for Jensen Control Room HVAC System Upgrades were higher than the target range due to in-house value engineering exercises, which resulted in a redesign that significantly reduced the need for building structural modifications and complexity of the smoke control system, resulting in significant construction cost savings.

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 (April through June 2025).

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 4th Quarter of FY 2024/25 (April through June 2025).

Program Status

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

Table 14: Program Fund vs. Cost and Planned Expenditures vs. Actuals

Capital Programs	Total to Date		Biennium to Date	
	Funded Amount ($1,000's)	Costs thru June 2025 ($1,000's)	Biennium to Date Planned Expenditures ($1,000's)	Biennium Actual Expenditures ($1,000's)
Additional Facilities and Systems	$359,925	$306,870	$19,120	$22,187
Climate Adaptation	$262,888	$238,287	$7,760	$16,696
Colorado River Aqueduct	$614,429	$543,005	$43,640	$45,297
Dams & Reservoirs	$166,248	$140,731	$36,230	$13,804
Distribution System	$1,016,708	$925,882	$59,370	$55,655
Drought Mitigation - SWP Dependent Areas	$135,416	$90,035	$39,320	$24,635
Information Technology & Control Systems	$286,184	$250,740	$24,130	$16,407
Minor Capital Projects	$109,629	$88,998	$8,490	$4,755
Prestressed Concrete Cylinder Pipe	$535,761	$484,571	$16,880	$86,412
Water Treatment Plants	$2,442,976	$2,373,680	$57,060	$58,014
Total CIP	$5,930,164	$5,442,800	$312,000	$343,862

Notes on the above table:

- Numbers may not sum due to rounding.
- Numbers are based on the general ledger information downloaded on 7/23/2025.

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THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

Board Report

Engineering Services Group

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

Summary

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

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

Purpose

Informational

Attachments

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

Date of Report: September 2025

Engineering Services' Monthly Activities for August 2025

Highlights

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

Goal: Follow Through on Business Model Refinement Recommendations
Outcome: Initiate an Integrated Strategy for Infrastructure Reliability (ISIR)
• Completed the second bi-monthly meeting with member agencies to advance the goals and objectives for the ISIR effort. The third workshop is scheduled for September 19, 2025. • Initiated a Phase 2 study for the East-West Conveyance Pipeline.
Goal: Develop a Biennial Budget that Meets Metropolitan's Needs
Outcome: Implement risk-informed capital investment planning to ensure reliable critical infrastructure
• As of early August, the Capital Investment Plan (CIP) Evaluation Committee had reviewed and scored 83 new projects and 488 existing projects for inclusion in the biennium 2026/28 CIP. Data from this process will be used to prioritize and plan the CIP out as far as 30 years. This plan is expected to be presented to the Board in March 2026. At the same time, staff is reviewing spending for the current biennium and intends to present options for increasing the current CIP appropriation to accommodate refurbishment and replacement needs.
Goal: Execute CAMP4W Implementation Strategy to Integrate Climate Adaptation District-Wide
Outcome: Identify Climate Adaptation Strategies
• Metropolitan staff executed a task order with a consultant to initiate an operational system and flexibility study. The kick-off meeting was held in August.
Outcome: Evaluate projects and programs using the CAMP4W assessment criteria

- Continued working with the project proponents of Pure Water Southern California (PWSC) and Sites Reservoir to assess resilience criteria.
- The preliminary assessment of PWSC for the full buildout of 150 mgd was presented in July 2025. Additional assessments will be presented on September 30 for additional delivery options. A comprehensive assessment of PWSC using the CAMP4W assessment criteria is scheduled for November 2025.

Outcome: Integrate Climate Considerations and Implement Adaptation Strategies

- Updated criteria for CIP proposal evaluation to add/boost points for projects with sustainability components such as generating or storing renewable energy, reducing reportable GHG emissions, and helping to achieve environmental stewardship and sustainability commitment.

Goal: Complete Environmental Impact Report (EIR) and Planning for Board to Consider Pure Water Southern California

Outcome: Complete EIR analyses and public process

- Completed 60-day public review period for the draft EIR. Currently responding to comments received from agencies, organizations, and individuals. Certification of EIR in early 2026 is on track.

Outcome: Update program cost and staging approach

- Program cost updates are being prepared for each staging approach. A board workshop will be held in September 2025 to present the updated cost information.

Outcome: Convene Regional Water Reuse Collaborative to identify and launch coordination and integration opportunities

- The PWSC team visited the Hyperion Water Reclamation Plant to tour the membrane bioreactor pilot plant. Presentations were made to both PWSC and Pure Water Los Angeles (PWLA) teams on program components, planning, and research efforts to date. Staff also shared program funding information with PWLA. PWSC will host the next collaboration activity at Los Angeles Sanitation's Warren Facility and tour the Grace F. PWSC Innovation Center.

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

Outcome: Execute board-approved supply reliability projects

- The Notice to Proceed for construction of the Venice Pump Station was issued. This action initiates construction of Stage 1 for the Sepulveda Feeder Pump Stations Project.
- Construction for the Wadsworth Pump Plant Bypass is 97 percent complete and is anticipated to be complete in February 2026.

• Construction for the Inland Feeder Badlands Tunnel Surge Protection is 96 percent complete and is anticipated to be complete in August 2025.
Outcome: Advance Foothill Pump Station/Inland Feeder Intertie Project
• Permit acquisition is on schedule. State permits are anticipated to be obtained in September 2025 and Federal permits in December 2025. • A board action to award a construction contract is planned for early 2026 after environmental permits are obtained.
Outcome: Evaluate Further Potential Investments toward addressing State Water Project Dependent Areas
• Completed the feasibility study to determine the viability and analysis of a conveyance facility from Antelope Valley-East Kern Water Agency VEK conveyance facilities to the State Water Project West Branch.

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

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

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

Colorado River Aqueduct (CRA) Program

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

- CRA Main Motor Protection Relay Replacement — This project will replace obsolete electromechanical motor protection relays and related components for the forty-five (45) main 6.9 kV pumps at the five CRA pumping plants with modern microprocessor-based relays. Implementation will occur in multiple stages to minimize operational impacts. Stage 1, serving as the pilot, will replace five of the most

deteriorated relays. Installation is two percent complete and anticipated to be complete by September 2026.

- CRA Eagle and Hinds Utilities — This project will replace the existing potable water, non-potable water, and sewer lines at the Eagle Mountain and Hinds pump plants house. Design is complete, and a board action to award a construction contract is planned for October 2025.
- CRA Pump Plant Sumps Rehabilitation — This project rehabilitates the sump and circulating water systems at all five CRA pumping plants. The scope of work also includes replacement of the structural support systems, piping, valves, motors, and electrical equipment. Final design is 90 percent complete and is anticipated to be complete by September 2025.

Dams & Reservoirs Program

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

- 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. Design is complete, and award of a construction contract is planned for November 2025.
- Lake Skinner Drainage Improvements – This project replaces the existing drainage ditch at Lake Skinner Dam with an improved trapezoidal drainage ditch to improve stormwater drainage away from the face of the dam. Construction was completed in July 2025.
- Lake Mathews Pressure Control Structure (PCS) and Electrical System Upgrades — This project will replace the aging Lake Mathews discharge facility and electrical system. The project includes the construction of a new PCS with a bypass pipeline alongside the existing forebay, a new chlorination facility, and upgrading the electrical system to accommodate future power needs. This project utilizes a progressive design-build project delivery method. It is anticipated that an RFQ for Phase 1 design-build services will be released by September 2025, and the Phase 1 contract awarded in spring 2026. The project is anticipated to be completed by 2031.

Lake Skinner Drainage Improvements – Placing Concrete V-Ditch

Distribution System Program

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

- Auld Valley Pressure and Red Mountain Control Structure (PCS) Valve Replacement — This project will rehabilitate one 42-inch sleeve valve and procure one 42-inch sleeve valve for the Red Mountain Pressure Control Structure and rehabilitate two 42-inch sleeve valves for the Auld Valley Pressure Control Structure. One valve at the Auld Valley PCS has been rehabilitated, and the second one is currently being rehabilitated by Metropolitan forces. Both valves will be installed during a future shutdown. Metropolitan is currently reviewing the submittals provided by the vendor to procure the new 42-inch sleeve valve for Red Mountain, which is planned to be installed in the fall of 2026.
- Lakeview Pipeline Procurement — This project will procure 12,500 feet of steel liner pipe segments with diameters ranging from 114 inches to 117 inches. This initial quantity of Metropolitan-furnished pipe will allow the future Lakeview Pipeline Stage 2 project contractor to begin field installation while procuring the remaining pipe segments. Fabrication is complete, and pipe deliveries to the Etiwanda Pressure Control Facility began in July 2025 and are expected to continue through the end of September 2025.

Lakeview Pipeline Procurement – Lakeview Pipeline Steel Liner Delivery to Etiwanda Storage Site

Additional Facilities and Systems Program

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

- La Verne Shops Improvements — This project will improve the La Verne Shops building and install Metropolitan-furnished shop equipment. The contractor installed the plasma cutter, roof access ladders, air compressor equipment, and a new waterjet system. Construction is approximately 97 percent complete and is scheduled to be complete in December 2025.
- Water Quality Lab Building Upgrades — This project upgrades the Michael J. McGuire Water Quality Laboratory in La Verne to increase its seismic resiliency and to efficiently address new and evolving water quality issues and regulations. Planned improvements include strengthening of the existing structure to meet current seismic criteria for essential facilities; building expansion and functional layout improvements; replacement of specialized laboratory equipment; and implementation of technology upgrades to support current and future water quality regulations. The project also includes revised landscaping and parking, accessibility, and sustainability improvements. Final design is approximately five percent complete and is scheduled to be complete in March 2028.
- CRA Aircraft Facilities Improvements Stage 1 — This project will refurbish the pavement and access roads, and upgrade the lighting at the Gene, Iron Mountain, Eagle Mountain, and Hinds Pumping plants' runways. In addition, new weather stations will be installed at the Eagle Mountain and Hinds Pumping plants' runways. Preliminary design is approximately 10 percent complete and is anticipated to be complete by December 2025.
- CRA Aircraft Facilities Improvements Stage 2 — This project will install a new aircraft hangar at the Gene runway facility that will provide indoor parking for Metropolitan's caravan aircraft. The study is approximately 95 percent complete and is anticipated to be complete by September 2025.

Prestressed Concrete Cylinder Pipe (PCCP) Program

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

- Second Lower Feeder PCCP Rehabilitation Reach 3B — This project installs 3.7 miles of steel lining and three conical plug valves along a portion of the Second Lower Feeder that traverses the cities of Lomita, Los Angeles, and Torrance. The contract completed the installation of the three conical plug valves and the installation of steel lining in April 2025. The electrical and SCADA work at the valve vaults and site restoration is complete. The contractor continues warranty work and punch list items on Western Avenue and continues with the modifications to the Palos Verdes Reservoir Bypass Line. Construction is 98 percent complete and is scheduled to be complete in September 2025.
- Sepulveda Feeder PCCP Rehabilitation Reach 2 — This project installs steel lining along 3.8 miles of PCCP through several cities, including the cities of Torrance and Los Angeles. Final design is complete, and the project is scheduled to be advertised in August 2025.
- Calabasas Feeder — This project will rehabilitate 9.3 miles of PCCP segments with steel liner through the city of Los Angeles. Preliminary design is 70 percent complete and is scheduled to be complete by March 2026.

Second Lower Feeder PCCP Rehabilitation Reach 3B
Began Excavation for Helo-pod Piping at Palos Verdes Reservoir

Water Treatment Plants Program

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

- Weymouth Basins 5–8 and Filter Building No. 2 Rehabilitation — This project rehabilitates major mechanical and structural components of Basins 5–8 and Filter Building No. 2 at the Weymouth plant, including the flocculation/sedimentation equipment, sludge pumps, baffle boards, walls, launders, and outlet drop gates. The project also includes seismic upgrades of basin walls and inlet channel, hazardous material abatement, and replacement of inlet gates in Basins 1-4 and filter valves and actuators in Filter Building No. 2. Rehabilitation work and equipment testing for the basins is complete. The contractor continued the replacement of filter valves and actuators in Filter Building No. 2. Construction is approximately 97 percent complete and is scheduled to be complete in December 2025.
- Weymouth Administration Building Upgrades — This project upgrades the Weymouth Administration Building to withstand a significant earthquake. The planned upgrades include structural strengthening consistent with current seismic standards for essential facilities, accessibility and fire/life safety improvements, architectural modifications near the areas of structural upgrades, and improvements associated with the preservation of historic architectural features. Final design is complete, and the project is scheduled to be advertised for bids in fall 2025.
- Diemer Filter Rehabilitation — This project rehabilitates the 48 filters at the Diemer plant to enhance filter performance, minimize filter media loss, and rehabilitate or replace aging components. Planned upgrades include replacing filter media, filter valve actuators, and instruments; modifying the filter upstream influent weir and surface wash laterals; and improving the coal grit removal facilities for the east and west sides of the plant. Final design is approximately 99 percent complete and is scheduled to be complete in fall 2025.
- Diemer Fluorosilicic Acid Feed Facility Improvements — This project rehabilitates the Diemer plant's fluorosilicic acid feed facility to mantain operational reliability, meet Metropolitan's current chemical safety standards, and enhance worker safety. Planned upgrades include replacing the two fluorosilicic acid storage tanks; refurbishing and replacing chemical feed equipment and piping; improving the secondary containment layout, inlcuding relocation of controls and addition of safety features; and replacement of the facility roof structure. Final design is complete.

Weymouth Basins 5–8 and Filter Building No. 2 Rehabilitation —
MWD Construction Inspector, Christopher Gocken, Inspecting Joint at Basin 8

Adapt to changing climate and water resources

Pure Water Southern California

The 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 of purified water from the Advanced Water Purification Facility (AWPF) in Carson for indirect potable reuse and direct potable reuse (DPR) applications.

- Environmental Planning — The draft EIR was completed, published in May 2025, and the 60-day public review period has closed. Staff is reviewing comments received and preparing responses. Board certification of the final EIR is scheduled for early 2026.
- Program Management — PWSC program management provides project controls, scheduling, budget development, risk management, coordination with program partners and stakeholders, grants and funding, and preparation of various plans and studies.

  - In December 2024, the Board authorized entering into an agreement with the United States Bureau of Reclamation (USBR) to accept up to $125,472,855 in funding under the USBR Large-Scale Water Recycling Program grant. Metropolitan has received approximately $17.4 million from USBR to date.
  - Technical studies are underway to support the planning of DPR implementation and development of program phasing options, including treated water augmentation.
  - A board workshop was held on July 22 to discuss term sheets for future agreements with member agencies that will be directly taking water.
  - Updated program costs are in development and will be presented to the Board this fall.

- Advanced Water Purification Facility — The AWPF will purify treated wastewater from the Los Angeles Sanitation Districts' (LACSD) A.K. Warren Water Resource Facility using membrane bioreactors (MBRs), reverse osmosis, and ultraviolet/advanced oxidation. With its expertise in biological wastewater treatment, LACSD will be responsible for implementing the AWPF pretreatment, including the MBR facilities. A final draft of conceptual facilities has been prepared. This document records key assumptions of AWPF components.

- Direct Potable Reuse — Metropolitan has completed bench-scale testing to screen potential DPR treatment processes that could be used for the program. Planning of pilot-scale and demonstration-scale testing is in progress. Key testing equipment will be procured in the coming months to facilitate the design of the DPR testing facility.

- Conveyance Pipeline System — The PWSC conveyance system consists of the backbone pipeline that extends 39 miles from the AWPF, repurposing an existing pipeline owned by the San Gabriel Valley Municipal Water District, and constructing a new DPR pipeline to convey water from the backbone eastward for raw water augmentation at Metropolitan's Weymouth plant.
  - Completed the Conceptual Design Report for the conveyance system and continued preparing the comprehensive cost update.
  - Continued coordination with Southern California Edison (SCE) in drafting a lease agreement for Metropolitan's usage of approximately 12 miles of SCE right-of-way along the San Gabriel River.
  - Continued utility and geotechnical field investigations for Reaches 1 and 2, with preliminary design anticipated to be completed by the year's end.

Drought Mitigation—State Water Project Dependent Areas

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

- Foothill Pump Station Intertie and Butterfly Valve Procurement — This project will connect Metropolitan's Inland Feeder to San Bernardino Valley Municipal Water District's Foothill Pump Station. The project is one of four Rialto Pipeline service area supply reliability improvement projects. Foothill Pump Station will provide the hydraulic lift needed for direct water delivery from Diamond Valley Lake to the Rialto Pipeline. The project will install supply and discharge bypass pipelines, isolation valves and their vault, and a surge protection system. The project requires permits from CA

Fish and Wildlife and US Fish and Wildlife (USFWS) to address impacts to endangered species found at the project site. The project received a $5M USBR grant, and USBR is assisting Metropolitan with permit consultation with USFWS. USFWS is expected to issue a Biological Opinion by December 2025. Final design is currently in progress and is anticipated to be completed by November 2025.

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

Sustain Metropolitan's mission with a strengthened business model

Value Engineering Program

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

CRA Pumping Plant Sump System Rehabilitation

In August, Engineering conducted a Constructability Review (CR) workshop for the CRA Pumping Plant Sump System Rehabilitation project. This project will replace pumping systems that collect and discharge drainage from plant dewatering and maintenance activities, portions of pump circulating water systems, lighting systems, and sump access ladders and platforms. All these systems date back to the initial construction of the CRA in the late 1930s and have experienced significant corrosion and deterioration during more than 80 years of continual operation.

Originally advertised and awarded in 2018, the contract was later modified to equipment procurement only due to COVID-19 work restrictions in 2020. Long-lead items such as pumps and motors were acquired before the contract was terminated.

This CR examined the current, revised scope of work prior to advertising. The work involved includes replacing equipment integral to pump operations and involves the installation of temporary pumping systems and Metropolitan-Furnished Equipment during limited outage periods. Workshop participants included staff from Design, Construction Management, Construction Contracts, Operations, Environmental Planning, and consultant subject matter experts, guided by a professional facilitator.

Partner with interested parties and the communities we serve

Partnering Workshop

A targeted partnering meeting focused on CRA electrical projects was held in July 2025 to optimize collaboration on electrical protection systems at desert facilities. These projects are shutdown-driven, which creates a cycle of urgency to meet shutdown dates. Construction for these projects is also often performed by Metropolitan forces, which allows for close coordination from the project's initiation to completion. Approximately 25 staff members from the Engineering and Operations Groups were in attendance, including Project Management, Electrical, Design, Hydroelectric, and Desert teams.

THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

Board Report

Operations Group

- **September Operations Groups Monthly Activities Report**

Summary

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

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

Purpose

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

Attachments

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

Date of Report: September 9, 2025

Operations Groups

GM Business Plan Updates

GOAL: Develop a Biennial Budget that Meets Metropolitan's Needs
OUTCOME: Implement risk-informed capital investment planning to ensure reliable critical infrastructure
UPDATE: Work continues for the updated Strategic Asset Management Plan (SAMP), as well as the beginning of a comparative industry review.
OUTCOME: Budget for enhanced mission-critical capabilities
UPDATE: An agreement with Allied Reliability was approved by the Board that will help accelerate the improvements needed to support the management of system reliability as well as risk at best value.

GOAL: Execute CAMP4W Implementation Strategy to Integrate Climate Adaptation District-Wide
OUTCOME: Assess climate risks and vulnerabilities
UPDATE: (1) Continued working with an independent transmission developer on assessing potential projects; (2) Agreement with a consultant for hydro valuation services is in process; and (3) Work continues as part of updating the SAMP and comparative industry review.
OUTCOME: Evaluate projects and programs using the CAMP4W assessment criteria
UPDATE: Operations staff continued participating in the assessment of two CAMP4W projects – Pure Water (45 MGD, 75 MGD, and 150 MGD) and Sites Reservoir.
OUTCOME: Integrate climate considerations and implement adaptation strategies
UPDATE: Protective measures to guard against nitrification included increasing disinfectant residual and pH, leaving the three treatment plants serving the central pool portion of the distribution system, increased monitoring of water quality in the distribution system, and limited flushing at one location in August to maintain water quality.

Operations Groups

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

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

UPDATE: (1) System modification and baseline monitoring continued at the demonstration plant in preparation for the next phase of testing, and additional membrane modules were installed to increase the capacity of the treatment train; (2) On August 19, the Independent Science Advisory Panel draft report on the July 2 workshop was distributed to the project team; comments and recommendations will be addressed and incorporated into the program as appropriate; and (3) The project team met with the State Water Resources Control Board's Division of Drinking Water and Los Angeles Regional Board on August 25 to discuss PWSC program testing results, plans for the next phase of testing, and planning for direct potable reuse.

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

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

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

GOAL: Provide Organizational Stability and Deliver Operational Excellence

OUTCOME: Maintain excellence in daily operations and reliability

UPDATE: (1) Individual teams within the multidisciplinary District-wide golden mussel response taskforce held many meetings and workshops throughout August to continue assessing strategies and approaches for protecting infrastructure and groundwater replenishment deliveries, including coordination with potentially impacted member agencies; (2) Bench tests on specific invasive mussel control measures were initiated in August; and (3) Water continues to be managed according to Water Surplus and Drought Management principles and operational objectives according to the Annual Operating Plan, with an emphasis to position SWP supplies to meet future demands in the SWP-dependent areas.

Operations Groups

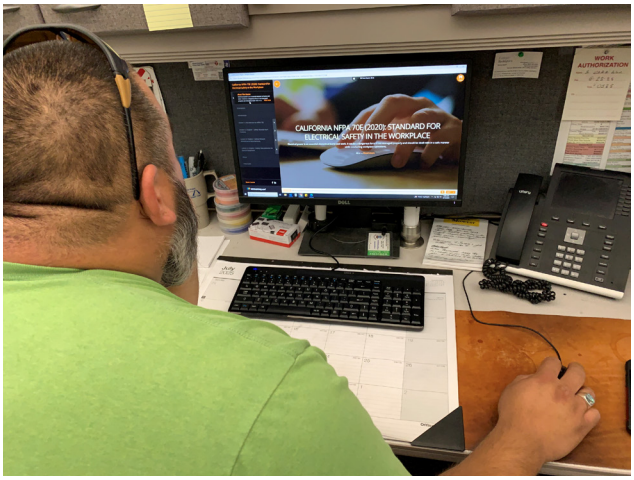
Operations Groups Business Plan Strategic Priorities & Objectives

Strategic Priority #1: EMPOWER

Enhance Workforce Safety and Security

Diemer plant staff identified an emergency stop on equipment that did not notify personnel when activated. Currently, work is underway so that the activation of the emergency stop will alert the control room, informing personnel to perform a check of staff working around the equipment.

Desert staff are piloting new National Fire Protection Association (NFPA) 70E training. This training provides staff with information related to arc-flash and electrical safety topics. This training is critical for staff who perform high-voltage switching and electrical work.



Desert staff member taking new NFPA 70E training class

Strategic Priority #2: SUSTAIN

Manage Business Operations, Budget, and Staffing

Business Management Team staff continue to work with the Operations Groups to develop and review non-fleet operating equipment requests, staffing plans, and biennium budget development for FY 2027/28, as well as partnering with IT and Finance to streamline BVC reporting timeframes. Staff is also working to redesign the Operations Groups' SharePoint site to distinguish each Group, its respective sections, and to provide content-rich, user-friendly platforms.

Develop Solutions to Enhance Operational and Business Processes

In collaboration with AFSCME Local 1902, a voluntary pilot program was completed to evaluate the effectiveness of converting the O&M Assistants based at Gene Pump Plant to regular part-time employees. The pilot program ran for 18 months and provided positive feedback from both participants and desert management. In August, the Board authorized permanent adoption of the pilot program, providing staff with predictability in their schedule and management with a greater ability to cross-train staff and redeploy resources as necessary.

Operations Groups

Strategic Priority #3: ADAPT

Ensure Resilient and Reliable Operations

Metropolitan member agency water deliveries were 140,000 acre-feet (AF) for August with an average of 4,500 AF per day, which was about 300 AF per day higher than in July. Treated water deliveries were 4,300 AF lower than July for a total of 67,900 AF, or 49 percent of total deliveries for the month. The Colorado River Aqueduct (CRA) pumped a total of 96,000 AF in August. SWP imports averaged 2,900 AF per day, totaling about 90,000 AF for the month. The target SWP blend is currently 40 percent for Diemer, Weymouth, and Skinner plants.

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

Staff began unloading pipe sections at the Etiwanda Reservoir that will be used to reline the Lakeview Pipeline in San Jacinto. The Lakeview Pipeline was installed in 1973 to enable the Skinner service area to receive supplies from the SWP. The line conveys untreated water to the Skinner area through the Department of Water Resources' Santa Ana Valley Pipeline and Lake Perris facilities. In combination with the Inland Feeder, Metropolitan uses the Lakeview Pipeline to balance salinity levels in the Skinner area by blending flows from the SWP and the CRA. The Lakeview Pipeline also delivers untreated water to two service connections.

Since its construction, the 11-foot-diameter Lakeview Pipeline has been shut down numerous times to repair leaking joints. The pipeline is approximately 11.5 miles long and comprises 1,520 steel pipe segments with rubber-gasket bell and spigot joints. To date, 139 of the 1,520 pipeline segments have received remedial repairs.

Staff unloading 120-inch diameter pipe (left) and pipe storage area (right)

Operations Groups

Advance Pure Water Southern California

Staff continued baseline monitoring for nitrification-denitrification tertiary membrane bioreactor (MBR) testing and continued working with the Los Angeles County Sanitation Districts (LACSD) to procure and install snail mitigation measures at the Napolitano Innovation Center demonstration plant. With the support of LACSD staff and their crane, Metropolitan staff installed additional modules to increase the capacity of one of the MBRs in the demonstration treatment train in preparation for the next phase of testing. Staff partnered with LACSD staff to complete piping installation for the above-ground waste activated sludge system and continued coordinating with the Weymouth Electrical team and SCADA team to finalize electrical connections.

Metropolitan and LACSD staff in a safety meeting prior to MBR installation (left), using a crane to remove an MBR cassette (middle), and installing MBR modules (right)

Operations Groups

Develop New Supplies and Optimize System Flexibility

With the completion of the Perris Valley Pipeline that crosses under the 215 Freeway, Metropolitan can now supply high-quality drinking water from the Mills plant to Eastern Municipal Water District's Eastern Branch through Service Connection EM-24. To ensure accuracy and reliability of the service connection, staff replaced the billing meter.

Crane on-site waiting to lift new flowmeter in place at EM-24

Strategic Priority #4: PROTECT

Protect Source Waters

Individual teams within the District-wide golden mussel response task force held many meetings and workshops throughout August to continue assessing strategies and approaches for protecting infrastructure and groundwater replenishment deliveries, including coordination with potentially impacted member agencies. Bench-scale tests on specific control measures were also conducted in August.

On August 20, the California Department of Water Resources treated Silverwood Lake with copper sulfate to control a cyanobacterial bloom that was producing the taste and odor compound geosmin and elevated levels of microcystin, a non-regulated cyanobacterial toxin. Following the treatment, levels of geosmin and microcystin dropped in the lake.

Operations Groups

Optimize Water Treatment & Distribution Operations

Jensen plant staff completed preventative maintenance on field water quality analyzers. These online analyzers provide real-time chlorine, turbidity, and pH levels throughout the distribution system, providing data to the Operations Control Center and Water Quality. They also act as early warning systems to help maintain high water quality standards.

Staff performing maintenance on field water quality panel at Beverly Hills PCS

Skinner plant staff repaired an acoustic flowmeter, which measures the flow of water by sending sound signals upstream and downstream, comparing travel times. The difference is used to calculate velocity and flow rate—critical for water accounting, process control, and hydroelectric operations. Technicians troubleshot the unit, replaced a circuit board, and returned the flowmeter to service.

Staff replacing a flowmeter circuit board

Operations Groups

Weymouth plant staff made critical repairs to the ozone contactor analyzer sump pump system after discovering one of the two pumps had failed. The issue was traced to a malfunctioning foot valve. Staff coordinated with Safety, Operations, and Control Systems teams to create an outage that allowed safe repairs while keeping the ozone system online. The pump was repaired and returned to service, optimizing the treatment process and ensuring reliable ozone operations.

Repaired ozone analyzer sump pump system at Weymouth plant

The SWP target blend entering the Weymouth and Diemer plants decreased from 100 percent to 40 percent after a brief maintenance-related outage at Lake Mathews and remained at 40 percent in August 2025. The SWP target blend entering Lake Skinner remained at 40 percent in August 2025. Flow-weighted running annual averages for total dissolved solids from July 2024 through June 2025 for Metropolitan's treatment plants capable of receiving a blend of supplies from the SWP and the CRA were 580 mg/L, 561 mg/L, and 562 mg/L for the Weymouth, Diemer, and Skinner plants, respectively.

A variety of actions have been taken throughout the summer to maintain water quality in the distribution system and guard against nitrification. These protective measures included increasing disinfectant residual and pH leaving the three treatment plants serving the central pool portion of the distribution system, increased monitoring of water quality in the distribution system, and limited flushing at one location in August to maintain water quality.

Ensure Water Quality and Environmental Compliance

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

Staff met with the State Water Resources Control Board's Division of Drinking Water on August 7 to discuss updates to the required Colorado River Watershed Sanitary Survey for the years 2021 through 2025.

Operations Groups

Optimize Maintenance and Asset Management

Weymouth plant staff conducted annual oil sampling of the oil-filled transformers at the on-site electrical substations. The reliable operation of these transformers depends on the quality of the insulating oil, which functions both as an insulator and a coolant. Monitoring and assessing oil condition through dissolved gas analysis is vital for ensuring the health and longevity of the transformers. These maintenance activities are essential for identifying and addressing potential problems before they occur and ensuring the reliability of the treatment processes.

Oil-filled transformer (left) and taking an oil sample for dissolved gas analysis (right)

Staff addressed issues with the perimeter lighting at the Etiwanda Hydroelectric Plant, which surrounds the reservoir. Pull boxes at the light poles had been buried by natural land erosion, and recent weather events damaged the power supply to the fixtures, causing the lights to fail. To resolve this problem, staff removed the old pull boxes, rebuilt the bases, and repaired the conduits and wires. The repairs will restore lighting, allowing staff and security to see the area clearly at night.


A buried pull box (left) and staff making repairs to a new raised unit (right) at Etiwanda HEP

Operations Groups

Eagle Mountain pump plant staff replaced the granular activated carbon (GAC) media for the domestic water system. The spent media was vacuumed out of the vessels and disposed of before new media was added. Periodic maintenance and replacement of the GAC media is required to ensure safe drinking water for local staff and families.

Staff replacing the GAC media for the domestic water system at Eagle Mountain pump plant

Unpaved patrol roads throughout the desert region experience erosion from wind and water over time. Staff perform periodic maintenance to keep patrol roads safe and easily navigable. Staff completed compaction of roads, banks, and repaired erosion issues around the Eagle Mountain pump plant.

Staff repairing road banks and erosion areas near Eagle Mountain pump plant

Operations Groups

Pipeline isolators are used at the desert pump plants to separate pipeline sections so staff can safely repair equipment. An isolator was installed for the repair of Iron Mountain Unit 5 discharge valve. When removed, the isolator is replaced with a spool piece. Staff repaired eroded coating and mortar lining prior to installation of the spool piece. Repairs were completed, staff removed the isolator, installed the spool piece, and successfully tested the newly rebuilt discharge valve.

Spool piece prior to repair (left) and spool piece after coating repair (right)

Staff remove pipeline isolator fitting from Iron Mountain Unit 5

Operations Groups

Support Capital Project Development and Implementation

In an effort to support the Sepulveda Feeder PCCP Rehabilitation Reach 9 project, staff are preparing the valves, currently stored at the Lake Mathews facility for a 3D scan to assist in the planned installation. The scan requires the valve storage crates to be disassembled and the protective wrapping to be removed. After the scan, the valve and its components will be re-crated and protected for storage.

Staff positioning valves (left) and fall protection scaffolding (right) at the Lake Mathews storage facility

Enhance Emergency Preparedness and Response

In early August, staff supported the Los Angeles Department of Water and Power (LADWP) when local water service was cut off due to a failed valve in LADWP's system. While the permanent repair was being made, Metropolitan staff identified a location at the Jensen plant (LA-25 service connection) that served as a source of water for a temporary pumping operation. LADWP's contractor worked with Jensen staff to set up thousands of feet of hose and high-pressure pumps to deliver water to the trunk line that serves the impacted area. Metropolitan also activated its emergency operations center and Jensen incident command post during this period to enhance communication and response. This collaboration with LADWP highlights the importance of regional partnerships in maintaining water reliability, especially during emergencies.

Operations Groups

Ensure Power and Environmental Regulatory Compliance

The mid-summer operating period to date has been relatively mild across the CAISO and WECC operational footprints. Energy markets in August 2025 have seen adequate natural gas supplies and moderate energy prices. The CRA averaged slightly less than 7 pumps in August 2025. The CRA energy cost budget for fiscal year 2024/25 was $71.4 million; the actual costs forecast for fiscal year 2024/25 came in slightly lower at $64.3 million, due to moderate energy costs. The CRA energy cost forecast for fiscal year 2025/26 is $83.8 million, and current forecasts are tracking significantly lower at $70.4 million, due to lower forward cost curves and active management of Hoover scheduling to optimize for market conditions.

Staff continued work on the Metropolitan's first-ever affected system cluster study for generation developers wishing to connect to transmission systems adjacent to the Colorado River Aqueduct Transmission System (CRATS). This study encompasses seven generation projects connecting to the Southern California Edison (SCE) and Western Area Power Administration systems, which impact Metropolitan's 230 kV transmission system. Staff are currently working on developing preliminary interim mitigation agreements, or "bridge agreements", to allow generation developers to secure funding by demonstrating a provisional agreement with Metropolitan. This would allow the developers to reach commercial operation while permanent mitigations are in development. This would also include an agreement with the California ISO to temporarily limit the amount of energy generated by these projects until permanent system upgrades are in place.

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

Staff is currently investigating potential participation in a real-time pricing pilot program offered by SCE. This has the potential to reduce retail energy costs at several retail services supplied by SCE. The program is authorized by the California Public Utilities Commission and would have no net cost to participating customers.

Following approval by the Board in June 2025, staff is developing an agreement with a firm for the purpose of managing and reducing retail electric energy costs. This firm will review Metropolitan's retail energy usage at each retail meter point with SCE, LADWP, and City of Riverside Public Utilities, and recommend optimum rate strategies for each location. Metropolitan's retail electric energy costs have typically run about $12-15 million per year but are trending sharply upwards due to recent rate increases.

Power scheduling staff are closely monitoring the USBR 24-month forecast for Hoover generation following the announcement in January 2025 that USBR will severely curtail Hoover generation for Lake Mead elevations below 1,035 feet. Staff are evaluating potential cost impacts and mitigation strategies.

Operations Groups

Strategic Priority #5: PARTNER

Engage in Legislative and Regulatory Processes

On July 28, the National Drinking Water Advisory Council (NDWAC) met to discuss EPA's plan to rescind parts of its 2024 PFAS MCL rule. EPA intends to maintain the MCLs for PFOA and PFOS at 4.0 parts per trillion (ppt) but will rescind the MCLs and Hazard Index for the other four PFAS (PFHxS, PFBS, Gen-X, and PFNA). NDWAC members raised concerns that this action could erode public trust, violate the Safe Drinking Water Act's anti-backsliding provision, invite legal challenges, and disrupt state-level PFAS regulations. Some also pointed out cost and feasibility issues for small systems. EPA officials confirmed plans to issue proposed rulemakings in the fall, followed by public comment and additional consultations with NDWAC before finalizing the rules in spring 2026. Staff will monitor developments in PFAS regulation efforts.

On July 29, the California Air Resources Board (CARB) released proposed amendments to the Advanced Clean Fleets (ACF) regulation and the Low Carbon Fuel Standard (LCFS). Key updates to the ACF regulation include the repeal of sections applicable to federal or private fleets, the introduction of the zero-emission vehicles (ZEV) Milestone option within the State and Local Government Agency Requirements, and amendments required by AB 1594 (Garcia, 2023) that allow early access for exemptions for "traditional utility-specialized vehicles." Proposed amendments to the LCFS aim to enhance crediting support for hydrogen stations and the development of stations that can accommodate larger medium-duty hydrogen fuel cell electric vehicles. Public comments are due by September 15, with amendments set for adoption on September 25. Staff are currently reviewing the proposed language and will prepare comments during the rulemaking period.

On August 1, EPA proposed to rescind its 2009 Greenhouse Gas (GHG) Endangerment Finding, a key factor in regulating emissions from new motor vehicles and engines. Without this finding, EPA would lack the authority under the Clean Air Act to set GHG emissions standards, which could result in the elimination of GHG regulations for light, medium, and heavy-duty vehicles. EPA plans to retain regulations for criteria pollutants, air toxic standards, Corporate Average Fuel Economy testing, and fuel economy labeling. Public hearings on the proposal took place from August 19 to 21, and comments on the proposed rulemaking are due by September 15.

On August 18, CARB released its report in response to Governor Newsom's June 2025 Executive Order N-27-25, directing CARB, along with other state agencies, to submit a plan to expand the adoption of ZEVs despite federal opposition. The report details actions in six areas, including (1) utilizing the LCFS program to maintain private investment in the ZEV market; (2) providing increased incentives and funding; (3) prioritizing charging and refueling infrastructure; (4) reducing electric vehicle charging costs; (5) creating a new statewide indirect source rule to reduce emissions from high-impact areas; and (6) directing state agencies to lead by example through ZEV-first purchasing policies and support for local government fleet electrification. Staff will closely monitor any regulatory outcomes derived from CARB's report.

Operations Groups

Advance Education and Outreach Initiatives

Staff provided an update on fluoridation of drinking water to a retail agency Community Advisory Group on August 7. The presentation covered the history and benefits of community water fluoridation, Metropolitan's operational practice, a federal district court ruling on water fluoridation in 2024, and recent activities around the country related to community water fluoridation.

On August 8, Metropolitan hosted a Weymouth plant and Water Quality Lab tour for high school students from the Los Angeles Service Academy (LASA). Participants gained valuable insights into the essential work of ensuring safe and reliable water for the region. It also sparked curiosity about careers in public service and environmental stewardship. On August 21, tours of the plant and laboratory were provided to Arizona Generation and Transmission.

Tour and presentation for Los Angeles Service Academy students at Weymouth plant

Operations Groups

Engage with Member Agencies & Other Stakeholders on Technical Matters

Jensen plant staff welcomed representatives from the District Office of Assemblymember Jesse Gabriel, who serves communities across the San Fernando Valley, for an informative and hands-on plant tour. The visit started with a detailed presentation outlining the plant's water treatment process and a comprehensive walking tour. Throughout the visit, guests expressed strong interest in learning about water treatment and distribution operations, and the measures to ensure a consistent and reliable water supply to their constituents. Staff were enthusiastic about showcasing their work and highlighting the systems and safeguards that support dependable water service across the region.

Staff leading a tour of visitors from the District Office of Assemblymember Jesse Gabriel at Jensen plant