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
J. Lewitt
M. Luna
J. McMillan
C. Miller
M. Petersen
K. Seckel

Engineering, Operations, and Technology Committee

Meeting with Board of Directors *

April 7, 2025

9:00 a.m.

Monday, April 7, 2025 Meeting Schedule
09:00 a.m. EOT
11:00 a.m. LEG
12:30 p.m. Break
01:00 p.m. OPE
02:30 p.m. OWA

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

If you have technical difficulties with the live streaming page, a listen-only phone line is available at 1-877-853-5257; enter meeting ID: 862 4397 5848.

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

MWD Headquarters Building • 700 N. Alameda Street • Los Angeles, CA 90012
Teleconference Locations:
3008 W. 82nd Place • Inglewood, CA 90305
San Diego County Water Authority • Lobby Conference Room • 4677 Overland Avenue • San Diego, CA 92123

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

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

US 2-456

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

2. CONSENT CALENDAR OTHER ITEMS - ACTION

A. Approval of the Minutes of the Engineering, Operations, and Technology Committee for March 10, 2025 **21-4407**

Attachments: 04072025 EOT 2A (03102025) Minutes

3. CONSENT CALENDAR ITEMS - ACTION

7-1 Authorize an increase to a professional services agreement with Grid Subject Matter Experts, LLC for a new not-to-exceed total amount of $1.245 million for electric transmission planning and North American Electric Reliability Corporation-related electric reliability compliance services; the General Manager has determined the proposed action is exempt or otherwise not subject to CEQA **21-4403**

Attachments: 04082025 EOT 7-1 B-L

7-2 Authorize an agreement with Red8 in an amount not to exceed $850,000 for the implementation of the Data Storage Infrastructure Refresh project; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA **21-4197**

7-3 Authorize an agreement with Metal Toad Media, Inc. for a new fixed cost of $299,000 per year with a not-to-exceed amount of $996,200 for the duration of the three-year agreement to host, manage, and maintain Metropolitan's external websites; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA **21-4405**

Attachments: 04082025 EOT 7-3 B-L

7-4 Authorize an increase of $3.3 million to an existing agreement with Stantec Consulting Services Inc. for a new not-to-exceed total amount of $4.99 million for final design of a mechanical dewatering facility at the Joseph Jensen Water Treatment Plant; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA **21-4406**

Attachments: 04082025 EOT 7-4 B-L

7-5 Authorize an amendment to a reimbursable agreement with BH Luxury Residences LLC for the relocation of the Santa Monica Feeder within the city of Beverly Hills; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA **21-4421**

Attachments: 04082025 EOT 7-5 B-L

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

4. OTHER BOARD ITEMS - ACTION

8-1 Adopt the CEQA determination that the proposed action was previously addressed in the certified 2024 Program Environmental Impact Report and authorize an increase of $12.4 million to an agreement with La Cañada Design Group Inc. for a new not-to-exceed total amount of $16.8 million for final design to upgrade the Michael J. McGuire Water Quality Laboratory **21-4404**

Attachments: 04082025 EOT 8-1 B-L

5. BOARD INFORMATION ITEMS

9-2 Annual Infrastructure Resilience Update **21-4412**

6. COMMITTEE ITEMS

a. Pure Water Southern California Quarterly Update **21-4410**

b. 2025 Quarterly Desert Housing Update **21-4411**

c. Garvey Reservoir Update **21-4459**

d. 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)] **21-4409**

7. MANAGEMENT ANNOUNCEMENTS AND HIGHLIGHTS

a. Engineering Services activities **21-4408**
Information Technology activities
Water System Operations activities

Attachments: 04072025 EOT 7a Engineering Services 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

March 10, 2025

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

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

Members absent: Director Crawford.

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

Committee staff present: Bednarski, Chaudhuri, Eckstrom, Hattar, Nobriga, Parsons, Rubin, and Upadhyay.

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

None

CONSENT CALENDAR ITEMS – ACTION

2. CONSENT CALENDAR OTHER ITEMS – ACTION

A. Approval of the Minutes of the Engineering, Operations, and Technology Committee for February 10, 2025.

3. CONSENT CALENDAR OTHER ITEMS – ACTION

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

Presented by: No presentation requested

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

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

Presented by: No presentation requested

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

7-3 Subject: Deferred to April 2025

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

The vote was:

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

The motion for Items 2A, 7-1, and 7-2 passed by a vote of 10 ayes, 0 noes, 0 abstention, and 3 absent.

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

4. OTHER BOARD ITEMS – ACTION

None

5. BOARD INFORMATION ITEMS

None

6. COMMITTEE ITEMS

a. Subject: Capital Investment Plan Quarterly Report for period ending December 2024

Presented by: Jeff Nikolas, Senior Engineer, Engineering Services, Capital Investment Plan

Mr. Nikolas reported on the following:

- Capital Investment Plan Quarterly Report for the Second Quarter of FY 2024/25 which covers October 2024 through December 2024
- Informational summary of report that was provided in the board packet

The following Directors provided comments or asked questions.

1. Fong-Sakai
2. Dick

Staff responded to the Directors' questions and comments.

b. Subject: Asset Management Program Update

Presented by: Ricardo Hernandez, Unit Manager, Operations Projects & Asset Management

Mr. Hernandez reported on the following:

- Annual update of Asset Management Program
- Update of progress on Asset Management (AM) accomplishments
- Initial overview of AM tools being developed to refine long-term planning
- Next steps include updating the Strategic AM Plan, continuing to advance AM initiatives to close maturity gaps, and providing additional details on AM in a subsequent update

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

Presented by: Michael Thomas, Unit Manager, Engineering Services

Mr. Thomas reported on the following:

- Risk management in capital project planning and delivery
- Update on Metropolitan's approach to managing risk associated with capital projects
- Continued enhancement of Metropolitan's risk management approach

The following Directors provided comments or asked questions.

1. Erdman
2. McMillan
3. Seckel
4. 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: John Bednarski, Interim Assistant General Manager, Water Resources and Technical Services

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

Mr. Bednarski reported on the following:

- Diamond Valley Lake storage to Rialto Pipeline delivery
- Construction update

Mr. Nobriga reported on the following:

- 2025 Annual Operating Plan
- Managing State Water Project supplies
- Current shutdowns

8. FOLLOW-UP ITEMS

None

9. FUTURE AGENDA ITEMS

An in-depth look at the possibility of enhancing electrical generation will be brought back to the Committee at the appropriate time.

10. ADJOURNMENT

The next meeting will be held on April 7, 2025.

Meeting adjourned at 10:06 a.m.

Dennis Erdman
Chair

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

4/8/2025 Board Meeting

7-1

Subject

Authorize an increase to a professional services agreement with Grid Subject Matter Experts, LLC for a new not-to-exceed total amount of $1.245 million for electric transmission planning and North American Electric Reliability Corporation-related electric reliability compliance services; the General Manager has determined the proposed action is exempt or otherwise not subject to CEQA

Executive Summary

On January 3, 2024, Metropolitan entered into a sole source agreement for professional services with Grid Subject Matter Experts, LLC (GridSME) to perform work related to electric transmission planning and North American Electric Reliability Corporation (NERC) reliability compliance assessments. During the second half of 2024, Metropolitan received an unexpected influx of requests for affected system studies and a request from a generator developer to connect a project directly to the Colorado River Aqueduct transmission system (CRATS). Staff is relying on the expertise of GridSME to perform technical analysis in support of these requests, which will exhaust the current authorized amount of $245,000. This agreement extension will ensure sufficient capacity and duration in the agreement to complete the current study request queue in a timely manner. Expenditures for services provided by GridSME for affected system studies and the direct connection to CRATS will be reimbursed by the parties that have requested affected system studies or a direct connection to the CRATS.

This action authorizes an increase to an existing agreement (Agreement No. 218061) with GridSME for electric transmission planning and NERC-related electric reliability compliance services.

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

Staff Recommendation: Option #1

Option #1

Authorize an increase of $1.0 million to a professional services agreement with GridSME for a new not-to-exceed total amount of $1.245 million for electric transmission planning and NERC-related electric reliability compliance services.

Fiscal Impact: No immediate fiscal impact
Business Analysis: Approving the proposed amendment will ensure sufficient capacity and duration in the agreement to complete the current generator interconnection study request queue in a timely manner.

Option #2

Do not authorize the increase to Agreement No. 218061.
Fiscal Impact: No immediate fiscal impact
Business Analysis: The current authorized amount is insufficient to complete the current study queue. Not approving the extension will delay the completion of the study work.

Alternatives Considered

Staff is preparing a Request for Proposals (RFP) for supplemental transmission planning services for board review and approval in 2025; however, the timeline to complete the RFP and obtain the requisite approvals will delay the timely completion of the affected system and generation interconnection request studies.

Applicable Policy

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

Metropolitan Water District Administrative Code Section 11104: Delegation of Responsibilities

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

Staff will present the results of the RFP for transmission planning services for consideration at a later board meeting.

California Environmental Quality Act (CEQA)

CEQA determination for Option #1:

The proposed action is not defined as a project under CEQA because it will not result in a direct physical change in the environment or a reasonably foreseeable indirect physical change. (State CEQA Guidelines Section 15378(a).) In addition, the proposed action is not defined as a project under CEQA because it involves organizational, maintenance, or administrative activities; personnel-related actions; and/or general policy and procedure making that will not result in direct or indirect physical changes in the environment. (Public Resources Code Section 21065; State CEQA Guidelines Section 15378(b)(2) and (5)). Finally, the proposed action is not defined as a project under CEQA because it involves the creation of government funding mechanisms or other government fiscal activities that do not involve any commitment to any specific project that may result in a potentially significant physical impact on the environment. (State CEQA Guidelines Section 15378(b)(4).)).

CEQA determination for Option #2:

None required.

Details and Background

Background

Metropolitan owns a 230,000-volt transmission system that provides power to its Colorado River Aqueduct (CRA) pumps. Metropolitan also has long-term contracts for energy from the Hoover and Parker Dams, which is transmitted to the CRA pumps over Metropolitan's transmission lines. Southern California Edison (SCE) provided Metropolitan with energy and transmission operating (TOP) services under a 1987 Service and Interchange Agreement. SCE decided not to renew this agreement in 2017 due to market changes, and following a search for a new service provider, the Board authorized the successor agreements with the Arizona Electric Power Cooperative.

In 2023, due to changes in the electric market, staff was directed to determine feasible alternatives to contracting for transmission operating services, including building and staffing a dedicated control center. GridSME, a consultant specializing in electric reliability compliance and electric transmission planning headquartered in Folsom, California, was selected for this task due to their work on a similar study for Metropolitan in 2017 and previous knowledge of our unique system and operating philosophy. Metropolitan entered into a sole source agreement with GridSME for this purpose in January 2024 with a maximum value of $120,000.

In early 2024, Metropolitan received a request for an affected system study from generation developer CDH Vidal. An affected system study is requested by a generator developer who wishes to connect their project to the grid to determine the impact of that generator on adjacent systems. These studies are highly technical in nature and assess a proposed generation project's impacts on the transmission system across several dimensions (steady-state thermal loading, steady-state, transient, and post-transient voltage stability impacts, and so forth). These

studies are critical to ensure that a generation project does not have an adverse impact on Metropolitan's transmission system or water operations and to protect Metropolitan against incurring costs to mitigate any negative impacts through operational procedures or physical system improvements. The timelines of these studies are critical to protect Metropolitan's interests and to support the broader state and national policies promoting renewable energy development and robust electrical energy markets.

These studies are also highly time sensitive from the point of view of the interconnecting generation customer. If there are significant impacts that require mitigation, the generation customers require this information to ensure the viability of their project and secure the necessary financing. Delays in the completion of the study work will impact the implementation of California's energy policy and potentially harm the viability of these generation projects.

Affected system studies are paid for by the generation developer. The developer signs a study agreement and makes a study deposit, typically on the order of $50,000 to $250,000, from which the actual study costs are deducted. Any residual funds are returned to the developer once the study is completed.

Due to limited staffing availability, and GridSME's expertise and immediate availability, GridSME was engaged to assist with the technical analysis. To reflect this additional demand, the GridSME agreement was increased to $180,000 in May 2024.

During the second half of 2024, Metropolitan received an unexpected influx of seven additional affected system study requests from generators interconnecting to the California ISO (CAISO) and Western Area Power Administration systems, as well as a request to connect directly to the CRATS. Due to the complexities of the affected system study requests, ongoing resource constraints, and the time criticality of the work involved, staff elected to consolidate the affected system study requests into a single comprehensive cluster study. GridSME is currently the primary technical resource engaged with this cluster study; to reflect this additional demand, the GridSME contract was extended to the current authorized amount of $245,000 in August 2024. However, significant additional work is required to meet the study queue in a timely manner; therefore, it is requested to extend the authorized agreement by $1.0 million to a new authorized amount of $1.245 million to accommodate the remaining work as well as any additional requests that are received in 2025.

Staff is currently preparing and executing an RFP for supplemental transmission planning professional services; however, this RFP will be available for board review and approval no earlier than the second or third quarter of 2025. Therefore, staff recommends increasing the current agreement with GridSME to ensure continuity in the ongoing study process and to complete this work in a timely manner.

Affected system study requests and generator interconnection requests are funded by customer deposits; therefore, the majority of the costs of these studies will be recovered and will have minimal budget impact.

Proposed Amendments to the GridSME Agreement

Amendment to Agreement No. 218061 will extend the agreement with Grid Subject Matter Experts, LLC (GridSME) to December 31, 2029, and increase the authorized amount by $1.0 million to a new not-to-exceed limit of $1.245 million**.**

3/25/2025

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

3/25/2025

Deven Upadhyay *Date*
General Manager

Ref# wso12698324

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

4/8/2025 Board Meeting

7-3

Subject

Authorize an agreement with Metal Toad Media Inc. for a new fixed cost of $299,000 per year with a not-to-exceed amount of $996,200 for the duration of the three-year agreement to host, manage, and maintain Metropolitan's external websites; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA

Executive Summary

Metropolitan's external websites have been hosted and maintained by the Managed Service Provider (MSP) that was selected for the website redesign project, which was approved in 2019. This action would authorize Metropolitan to enter into an agreement with Metal Toad Media Inc. Metal Toad Media Inc. will serve as the MSP for Metropolitan's four external websites; providing support and maintenance for three years at a not-to-exceed amount of $996,200. Metal Toad Media Inc. was selected through a competitive Request for Proposal process due to their qualifications and staff expertise on the specific technology used for the external websites, as well as the increased breadth of support activities provided.

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

Staff Recommendation: Option #1

Option #1

Authorize an agreement with Metal Toad Media Inc. for a new fixed cost of $299,000 per year with a not-to-exceed amount of $996,200 for the duration of the three-year agreement to host, manage, and maintain Metropolitan's external websites.

Fiscal Impact: Expenditures of $598,000 in operations and maintenance funds for FY 2024/25 and FY 2025/26 are planned and budgeted. The remaining $299,000 will be budgeted in the future in FY 2026/27.
Business Analysis: Ensure continued support and functionality of Metropolitan's external websites, with improvements that optimize and further secure these sites. This will reduce hosting costs over time and improve our cybersecurity posture.

Option #2

Do not proceed with the project at this time.
Fiscal Impact: Pay the full $245,000 for the current calendar year agreement with the existing provider, plus any additional costs associated with changes or upgrades. Significant exposure to additional ad hoc support costs; existing agreement covers fewer activities in its fixed scope than Option #1.
Business Analysis: Agreement with the current provider will continue, which will perpetuate ongoing support challenges and delay progress on optimizations and feature enhancements, as well as require an agreement renegotiation at an undetermined price later this year.

Alternatives Considered

Information Technology has considered migrating the external websites to a Microsoft Azure cloud tenant that is managed by IT staff. Limited staff availability, new technical skills required, and unknown cost implications were justifications to avoid this alternative at this time.

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)

By Minute Item 51557, dated April 9, 2019, the Board authorized a $1,500,000 agreement with Sensis Inc. to redesign the mwdh2o.com website and implement a Content Management System, as set forth in Agenda Item 7-2 board letter.

Summary of Outreach Completed

Not applicable

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

Background

One of the most effective tools for Metropolitan to communicate with the public and provide access to information is through external-facing websites. These sites allow Metropolitan to disseminate information on water issues in its service area with member agencies, local officials, media, educators, and the general public.

For any business or public agency, a consistently available, well-optimized, and modern website is essential to inspire confidence from visitors and is often the first impression people have when interacting with the organization. The mwdh2o.com redesign project, approved in 2019, modernized the technology used by Metropolitan's websites and introduced the Umbraco Content Management System to improve the efficiency of website management.

Metropolitan's current agreement for maintenance and hosting of public-facing websites expires in December 2025. After internal discussion, it was decided that a search for a new MSP to handle the public-facing websites was necessary in order to improve support and evaluate existing technology for optimization and cost savings opportunities. The four external Metropolitan websites being managed by this service provider are: mwdh2o.com, bewaterwise.com, mwdinnovates.com, and socalwaterdialogue.org.

After a competitive RFP process, the evaluation committee has selected Metal Toad Media Inc. as the preferred service provider. Metal Toad Media Inc. demonstrated the best qualifications both in the firm's completed projects and in the experience of individual staff in the technology stack. In addition to the ongoing maintenance of the existing external websites, services will include an architecture review, cloud computing optimization, an increased threshold for support tasks included in the fixed cost, and no additional cost for upgrades to the Umbraco Content Management System. The new agreement is for fixed-cost services of $299,000 per year which includes professional services for maintenance of the websites and hosting costs. This cost is budgeted in the

Information Technology group budget for FY 2024/25 and FY 2025/26, and will be budgeted in the future for FY 2026/27.

An amount of $97,200 has been allocated under this contract for additional services beyond what is included in the fixed costs. These services may include the development of new features, migrations to new or emerging technology, redesign efforts that go beyond basic in-scope changes, and other enhancement requests that fall outside the scope of the fixed-cost services.

3/25/2025
Charlie Eckstrom *Date*
Group Manager, Information Technology

3/25/2025
Deven Upadhyay *Date*
General Manager

Ref# it12700189

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

4/8/2025 Board Meeting

7-4

Subject

Authorize an increase of $3.3 million to an existing agreement with Stantec Consulting Services Inc. for a new not-to-exceed total amount of $4.99 million for final design of a mechanical dewatering facility at the Joseph Jensen Water Treatment Plant; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA

Executive Summary

Metropolitan currently uses four lagoons on the grounds of the Los Angeles Department of Water and Power (LADWP) for solids processing and handling at the Joseph Jensen Treatment Plant (Jensen plant). Settled solids collected from the Jensen plant's sedimentation basins are thickened on-site and pumped through a solids-transfer system to LADWP lagoons. At the lagoons, the residual materials are dried and then transported for off-site disposal. Through an existing agreement with LADWP, Metropolitan has exclusive use of two lagoons through 2062, and the remaining two lagoons will revert back to LADWP by December 2033. A future mechanical dewatering facility is needed to meet the Jensen plant's long-term solids handling needs. Preliminary design of the new mechanical dewatering facility has been completed, and staff recommends proceeding with final design.

This action authorizes an increase to an existing agreement with Stantec Consulting Services Inc. (Stantec) for final design of the mechanical dewatering facility at the Jensen plant. See **Attachment 1** for the Allocation of Funds, **Attachment 2** for the List of Subconsultants, and **Attachment 3** for the Location Map.

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

Staff Recommendation: Option #1

Option #1

Authorize an increase of $3.3 million to an existing agreement with Stantec Consulting Services Inc. for a new not-to-exceed total amount of $4.99 million for final design of a mechanical dewatering facility at the Jensen plant.

Fiscal Impact: Expenditure of $5.4 million in capital funds. Approximately $3.5 million in capital funds will be incurred in the current biennium and have been previously authorized. The remaining capital expenditures will be funded from the next capital investment plan budget.
Business Analysis: This option will improve the reliability of the Jensen plant's solids handling process, maintain treated water quality, and enhance operational flexibility.

Option #2

Do not proceed with the project at this time.
Fiscal Impact: None
Business Analysis: Staff would continue to use LADWP lagoons to process residual solids under the current use agreement. Since two of the lagoons must be returned in December 2033, staff would return to the Board with an alternative approach to address the needs of the Jensen plant's solids handling.

Alternatives Considered

Upon completion of preliminary design for the Jensen mechanical dewatering facility, staff reassessed the availability and capability of in-house Metropolitan staff to conduct final design, considering: (1) current work assignments for in-house staff to determine the potential availability of staff to conduct this work; and (2) specialized technical expertise needs.

After assessing the current workload for in-house staff, the relative priority of this project, and the specialized technical expertise required, staff recommends continuing the use of both a professional services agreement and in-house staff to perform final design of the subject project. This approach will allow for the completion of this program and other capital work within their current schedule and ensure the work is conducted in the most efficient manner possible.

Applicable Policy

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

Metropolitan Water District Administrative Code Section 11104: Delegation of Responsibilities

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

By Minute Item 49271, dated December 11, 2012, the Board authorized an agreement with LADWP for Metropolitan use of solids lagoons at the Aqueduct Filtration Plant.

By Minute Item 53247, dated May 9, 2023, the Board authorized an amendment to the use agreement with LADWP to forego construction of two new lagoons on LADWP's property and to extend the date of use of two solids lagoons and an amendment to an existing professional services agreement for preliminary design of a mechanical dewatering facility at the Jensen plant.

By Minute Item 53598, dated April 9, 2024, the Board appropriated a total of $630 million for projects identified in the Capital Investment Plan for Fiscal Years 2024/25 and 2025/26.

California Environmental Quality Act (CEQA)

CEQA determination for Option #1:

The proposed action is exempt from CEQA because it consists of basic data collection, research, experimental management, and resource evaluation activities that do not result in a serious or major disturbance to an environmental resource. These may be strictly for information-gathering purposes or as part of a study leading to an action that a public agency has not yet approved, adopted, or funded. (State CEQA Guidelines Section 15306.)

CEQA determination for Option #2:

None required

Details and Background

Background

The Jensen plant was placed into service in 1972 and has a rated capacity of 750 million gallons per day. Located in Granada Hills, the Jensen plant normally treats water from the West Branch of the State Water Project and delivers it to Metropolitan's Central Pool and to exclusive service areas on the west side of the distribution system.

In February 2013, Metropolitan and LADWP entered into a use agreement that allowed Metropolitan to use four lagoons on the site of LADWP's Aqueduct Filtration Plant for solids dewatering. The term of use was ten years for Lagoons 2 and 3 and 50 years for Lagoons 7 and 8. In conjunction with a future mechanical dewatering facility at the Jensen plant, this agreement met Metropolitan's long-term solids handling needs while allowing a local youth sports organization to maintain its current ballfield location on the grounds of the Jensen plant.

Residual chemicals and settled solids collected from the Jensen plant's sedimentation basins are currently thickened on-site and pumped through a solids-transfer system to the four LADWP lagoons. They are then transported for off-site disposal once they have dried.

In May 2023, Metropolitan's Board authorized: (1) an amendment to the agreement with LADWP to extend Metropolitan's use of Lagoons Nos. 2 and 3 until construction of a mechanical dewatering facility is complete or until December 31, 2033, whichever occurs first, and (2) an amendment to an existing agreement to provide engineering services for preliminary design of the mechanical dewatering facility at the Jensen plant. This mechanical dewatering facility would allow the plant to manage solids without reliance on Lagoons 2 and 3. Lagoons 2 and 3 would be returned to LADWP use once the dewatering facility at the Jensen plant is operational. Under the current design approach, Metropolitan's continued use of Lagoons 7 and 8 would be limited to scenarios including concurrent high plant flow and peak turbidity conditions.

Preliminary design work was conducted as a hybrid effort of Metropolitan staff and a specialized consultant. Staff completed surveys of the proposed site, assessed existing infrastructure, and provided recommendations for site selection, truck haul routes, facility layout, and site preparation work. The consultant established design criteria, including equipment sizing, polymer requirements, and operational requirements during periods of high turbidity.

Preliminary design for the mechanical dewatering facility at the Jensen plant has been completed, and staff recommends proceeding with final design at this time.

Jensen Solids Mechanical Dewatering Facility – Final Design

Planned improvements for Jensen's residual solids processing include site preparation and construction of a mechanical dewatering facility and associated solids conveyance piping, chemical feed, and electrical and control systems.

Final design activities include: (1) preparation of drawings and specifications; (2) development of site ground improvement criteria and methodology; (3) constructability review; (4) development of an engineer's cost estimate; and (5) advertising and receiving competitive bids. These activities are planned to be conducted by both Metropolitan staff and Stantec under an existing agreement described below. The scope of work for Stantec includes final design for civil, structural, mechanical, and electrical disciplines. Metropolitan staff will perform final design for instrumentation design, environmental support, project management, technical oversight, and review of consultant work.

A total of $5.4 million is required for this work. Allocated funds include $3.3 million for the final design activities by Stantec described above. Other allocated funds for professional services include $400,000 for geotechnical investigations and value engineering, which will be performed by specialty firms under contracts planned to be executed under the General Manager's authority. Allocated funds for Metropolitan staff activities include $700,000 for design activities described above; $550,000 for environmental support, project controls, and project management; and $450,000 for remaining budget. **Attachment 1** provides the allocation of the required funds.

As described above, final design will be performed by Stantec and Metropolitan staff. Engineering Services' performance metric target range for final design of projects with a construction cost of more than $3 million is 9 to 12 percent. For this project, the performance metric goal for final design is 10.0 percent of the total construction cost. The total estimated cost for design is $4.0 million, which includes $3.3 million for Stantec and $700,000 for Metropolitan design activities. The estimated cost of construction of the Jensen mechanical dewatering facility is anticipated to range from $40 million to $55 million.

Engineering Services (Stantec Consulting Services Inc.) – Amendment of Existing Agreement

In May 2023, Metropolitan's Board authorized an agreement with Stantec to complete preliminary design of the mechanical dewatering facility at the Jensen plant. Stantec was prequalified through Request for Qualification No. 1302 and was selected based on the firm's expertise in the design of large water/wastewater treatment plants with solids processing facilities. Preliminary design has been completed, and Stantec is now recommended to provide engineering services for final design as described above.

This action authorizes an increase of $3.3 million to the existing agreement with Stantec Consulting Group Inc. for a new not-to-exceed total amount of $4.99 million to perform the final design for the mechanical dewatering facility at the Jensen plant. For this agreement, Metropolitan has established a Small Business Enterprise participation level of 25 percent. Stantec has agreed to meet this level of participation. The subconsultants for this agreement are listed in **Attachment 2**.

Project Milestone

December 2026 – Completion of final design of the Jensen mechanical dewatering facility

3/24/2025
Mai Hattar *Date*
Interim Chief Engineer
Engineering Services

3/24/2025
Deven Upadhyay *Date*
General Manager

Attachment 1 – Allocation of Funds

Attachment 2 – List of Subconsultants

Attachment 3 – Location Map

Ref# es12700704

Allocation of Funds for Jensen Solids Mechanical Dewatering Facility

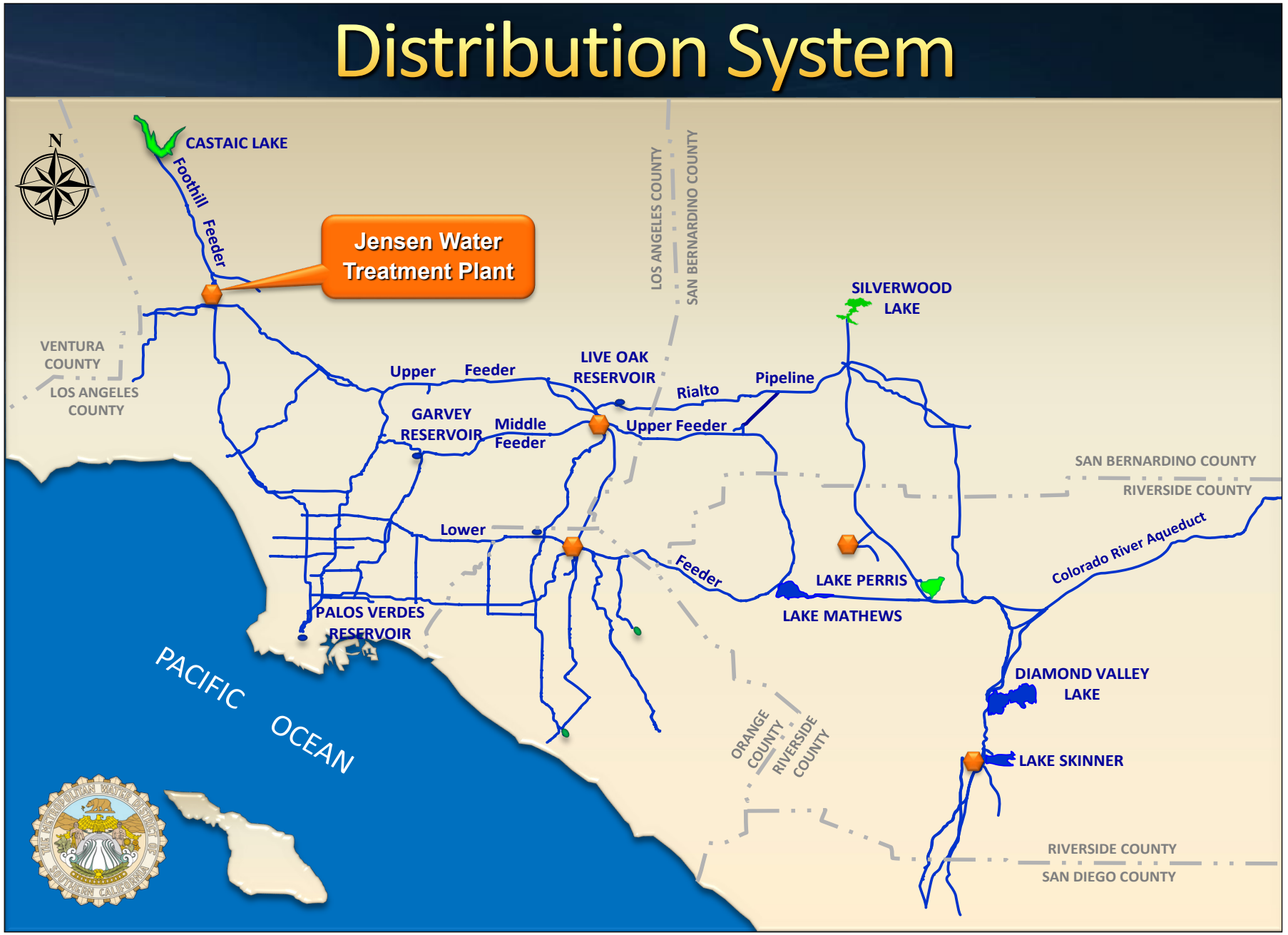
	Current Board Action (Apr. 2025)
Labor	
Studies & Investigations	$ -
Final Design	700,000
Owner Costs (Program mgmt., envir. support)	550,000
Submittals Review & Record Drwgs.	-
Construction Inspection & Support	-
Metropolitan Force Construction	-
Materials & Supplies	-
Incidental Expenses	-
Professional/Technical Services	
Stantec Consulting Inc.	3,300,000
Geotechnical Investigations	300,000
Value Engineering	100,000
Right-of-Way	-
Equipment Use	-
Contracts	-
Remaining Budget	450,000
Total	**$ 5,400,000**

The total amount expended to date to develop the mechanical dewatering facility at Jensen is approximately $2.8 million. The total estimated cost to complete this project, including the amount appropriated to date, funds allocated for the work described in this action, and future construction costs, is anticipated to range from $55 million to $70 million.

The Metropolitan Water District of Southern California

Subconsultants for Agreement with Stantec Consulting Services Inc.
Agreement No. 208770

Subconsultant and Location	Service Category; Specialty
ProjectLine Technical Services Costa Mesa, CA	Mechanical and electrical design
Beyaz and Patel Inc. San Diego, CA	Structural design


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

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

4/8/2025 Board Meeting

7-5

Subject

Authorize an amendment to a reimbursable agreement with BH Luxury Residences LLC for the relocation of the Santa Monica Feeder within the city of Beverly Hills; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA

Executive Summary

This action authorizes the General Manager to amend an agreement with BH Luxury Residences LLC, substantially on the terms outlined in this letter, to relocate about 1,500 feet of the Santa Monica Feeder. In August 2023, a reimbursable agreement with BH Luxury Residences LLC was executed to relocate Metropolitan's Santa Monica Feeder pipeline. Since that time, Metropolitan's costs to support the project have increased beyond those that were originally envisioned. This agreement amendment will enable all costs incurred by Metropolitan for this relocation to be reimbursed by BH Luxury Residences LLC.

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

Staff Recommendation: Option #1

Option #1

Authorize an amendment to a reimbursable agreement with BH Luxury Residences LLC to provide design review and inspection-related activities for the relocation of the Santa Monica Feeder.

Fiscal Impact: None. All project costs will be fully reimbursable by BH Luxury Residences LLC.
Business Analysis: This option will maintain the reliability of treated water deliveries to member agencies.

Option #2

Do not authorize an amendment to a reimbursable agreement with BH Luxury Residences LLC.
Fiscal Impact: Unknown
Business Analysis: Without the amendment, Metropolitan may not be fully reimbursed for the cost of the relocation.

Alternatives Considered

None

Applicable Policy

Metropolitan Water District Administrative Code Section 8122(c): General Manager's Contracting Authority in Specified Circumstances, Relocation Agreements

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 to provide design and inspection-related activities, including a review of the design drawings and specifications for the relocation of the Santa Monica Feeder, is not defined as a project under CEQA because it involves organizational, or administrative activities; and/or general policy and procedure making that will not result in direct or indirect physical changes in the environment. (Public Resources Code Section 21065; State CEQA Guidelines Section 15378(b)(2) and (5).) Also, the proposed action is exempt from CEQA because it consists of activities limited entirely to inspections, to check for performance of an operation, or quality, health, or safety of a project. (Section 15309 of the State CEQA Guidelines.)

CEQA determination for Option #2:

None required

Details and Background

Background

The Santa Monica Feeder was originally installed in 1941. The feeder distributes treated water to the cities of Glendale, Burbank, Los Angeles, Beverly Hills, and Santa Monica. The pipeline extends approximately 24 miles in a southwesterly direction, starting at the Eagle Rock Control Tower and terminates at the SMN-1 service connection in the city of Santa Monica. It varies in size from 28 inches to 84 inches in diameter.

In January 2020, BH Luxury Residences LLC notified Metropolitan of its intentions to develop a project site for mixed-use residential condominiums and retail as part of the One Beverly Hills Project. The project site is bounded by Wilshire Boulevard to the north, Merv Griffin Way to the east, Santa Monica Boulevard to the south, and the Los Angeles Country Club to the west. At that time, Metropolitan's Santa Monica Feeder traversed the property along Merv Griffin Way for 800 feet, adjacent to the existing Beverly Hilton Hotel and parking structure within the footprint of the proposed development. BH Luxury Residences LLC proposed to relocate this portion of the Santa Monica Feeder and provide Metropolitan with a new permanent easement.

In August 2023, a reimbursable agreement with BH Luxury Residences LLC was executed to relocate Metropolitan's Santa Monica Feeder pipeline. Metropolitan's scope included a technical review of the construction drawings and specifications for the relocation; preparation of easement documentation; performing submittal reviews and field inspections; conducting the pipeline shutdown; and preparation of the record drawings upon completion of construction. BH Luxury Residences LLC's scope included retaining a consultant to prepare the construction drawings and specifications for the relocation and a contractor to perform the construction activities for the relocation. The total reimbursable cost for Metropolitan's work was estimated to be $490,000, which is within the General Manager's contracting authority.

In November 2024, a pipeline shutdown for the Santa Monica Feeder was performed to allow BH Luxury Residences LLC's contractor to complete the relocation by constructing the connections between the new pipeline and the existing pipeline. However, the work could not be completed due to an elevation discrepancy between the new and existing pipelines which was discovered during the construction process. The discrepancy was the result of the contractor laying the pipeline at a higher elevation than shown in the design drawings. New fabricated fittings were needed to bridge the distance between the new and existing pipelines. As a result, additional work by Metropolitan staff was incurred, including review of additional design drawings, submittals, and documentation for the revised construction plan; survey to verify the dimensions of the new fittings; conducting a second shutdown of the pipeline; furnishing equipment for new air release vacuum valve assemblies including two 8-inch plug valves. It also includes the installation and replacement of nuts, bolts, and gaskets at four accessways, as the contractor had installed nuts and bolts that did not meet Metropolitan specifications. The construction work has been completed, and the pipeline was placed into service on March 14, 2025.

Per Metropolitan's Admin. Code 8122(c)(3), board authorization is required to execute any agreement involving an amount that exceeds $500,0000 "for the relocation or protection, or both, of District-owned facilities to accommodate the improvements of facilities owned by others." The total reimbursable cost for Metropolitan's work under the agreement will be increased by $410,000 for a total of approximately $900,000. Therefore, a board-authorized agreement amendment is required for full reimbursement of expenses.

Santa Monica Feeder Relocation - Reimbursable Agreement (No funds required)

Metropolitan's 29.5-inch diameter welded steel Santa Monica Feeder pipeline is located within a 10-foot easement that crosses BH Luxury Residences LLC's project site. Metropolitan and BH Luxury Residences LLC have mutually agreed to relocate a portion of the line to an alternate alignment using a 31.5-inch diameter steel pipe. The increased diameter will offset hydraulic losses associated with the extended length of 260 feet and additional horizontal bends, thereby maintaining the feeder's existing hydraulic capacity. A majority of the new alignment will be located within a fire lane along the west side of BH Luxury Residences LLC's property adjacent to the Los Angeles Country Club. Metropolitan will obtain a new 15-foot-wide permanent easement for this portion within the private property. The remaining portions of the new alignment will be located within public right-of-way along Wilshire Boulevard and Santa Monica Boulevard. BH Luxury Residences LLC requested that the relocation be expedited to prevent delays to its development project.

Following board authorization, staff plans to execute an agreement amendment with BH Luxury Residences LLC for design and inspection-related activities, including a review of the design drawings and specifications for the relocation. BH Luxury Residences LLC retained a consultant to prepare the design drawings and specifications and retained a contractor to relocate the Santa Monica Feeder using the construction documents reviewed by Metropolitan. Staff has reviewed the design, inspected pipe fabrication and installation, reviewed submittals, performed construction inspection, and conducted all shutdown-related activities. Metropolitan's costs for the relocation are estimated to range from approximately $750,000 to $900,000. No funds are required to be appropriated, as all costs incurred by Metropolitan will be fully reimbursed by BH Luxury Residences LLC.

This action authorizes the General Manager to execute an agreement amendment with BH Luxury Residences LLC, substantially on the terms outlined in this letter and in a form approved by the General Counsel, for relocation of a portion of the Santa Monica Feeder.

See **Attachment 1** for the Location Map.

Project Milestone

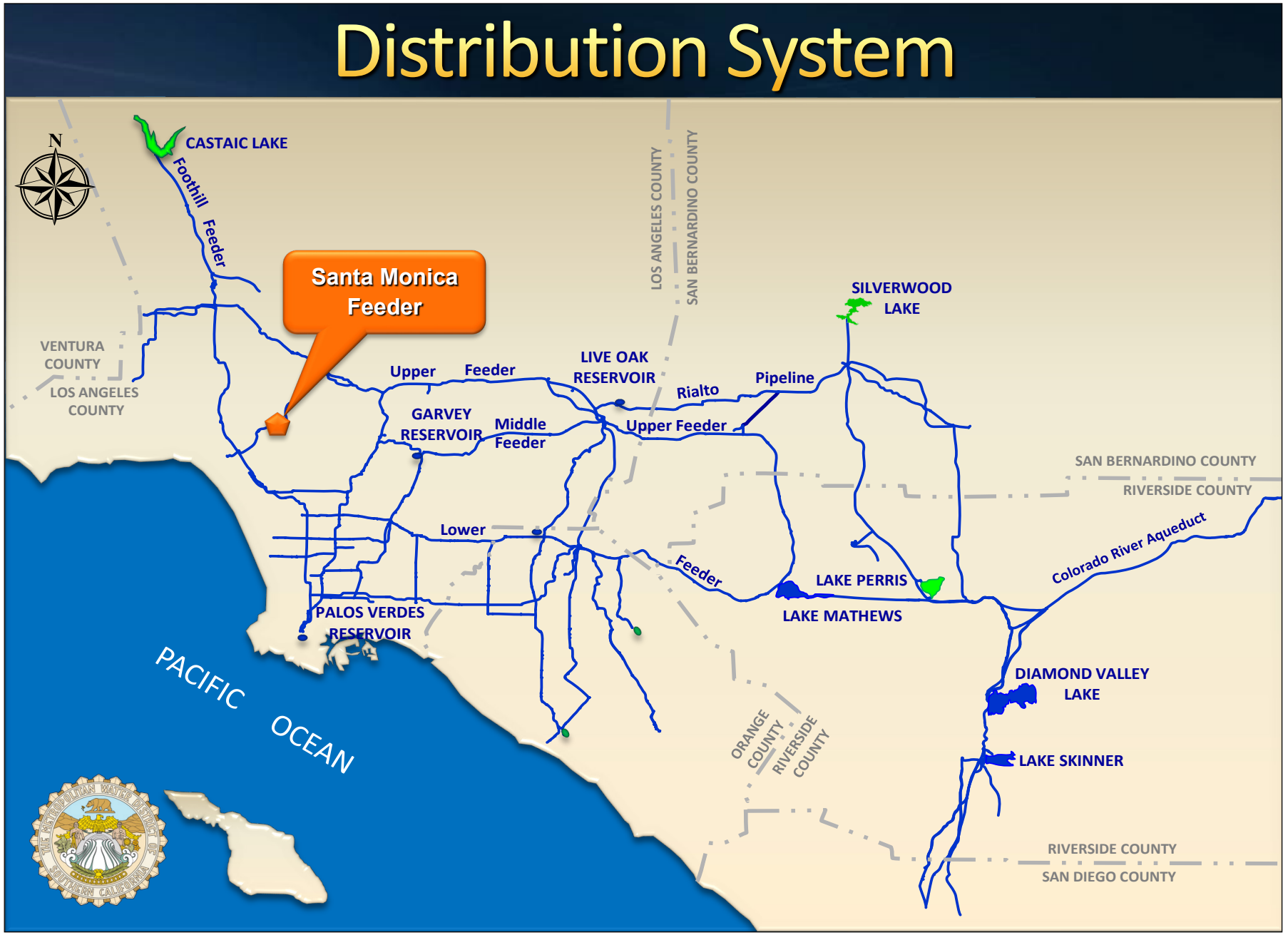
March 2025 – Relocated Santa Monica Feeder pipeline returned to service

Mai Hattar 3/24/2025
Mai Hattar *Date*
Interim Chief Engineer
Engineering Services

Deven Upadhyay 3/24/2025
Deven Upadhyay *Date*
General Manager

Attachment 1 – Location Map

Ref# es12705682


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

THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

Board Action

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

4/8/2025 Board Meeting

8-1

Subject

Adopt the CEQA determination that the proposed action was previously addressed in the certified 2024 Program Environmental Impact Report and authorize an increase of $12.4 million to an agreement with La Cañada Design Group Inc. for a new not-to-exceed total amount of $16.8 million for final design to upgrade the Michael J. McGuire Water Quality Laboratory

Executive Summary

Metropolitan's Michael J. McGuire Water Quality Laboratory (Water Quality Laboratory) at the La Verne site conducts over 300,000 water quality analyses yearly to comply with treated water standards, support emerging contaminants studies, assess future treatment technologies, and optimize treatment and distribution system processes. Upgrades to the building are needed to increase its seismic resiliency and to efficiently address new and evolving water quality issues and regulations, by enhancing the reliability of Metropolitan's sample processing and water quality research functions.

This action authorizes an increase to an existing agreement with La Cañada Design Group Inc. (La Cañada Design Group) for final design services to upgrade Metropolitan's Water Quality Laboratory. See **Attachment 1** for the Allocation of Funds, **Attachment 2** for the List of Subconsultants, and **Attachment 3** for the Location Map.

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

Staff Recommendation: Option #1

Option #1

Adopt the CEQA determination that the proposed action was previously addressed in the certified 2024 Final Environmental Impact Report and related documentation, and that no further environmental analysis or documentation is required and authorize an increase of $12.4 million to an agreement with La Cañada Design Group Inc. for a new not-to-exceed total amount of $16.8 million for final design to upgrade the Michael J. McGuire Water Quality Laboratory.

Fiscal Impact: Expenditure of $16.0 million in capital funds. Approximately $6.5 million in capital funds will be incurred in the current biennium and have been previously authorized. The remaining capital expenditures will be funded from the next Capital Investment Plan budget.
Business Analysis: This option will enhance the reliability and extend the functional service of the Water Quality Laboratory.

Option #2

Do not proceed with the project at this time
Fiscal Impact: None
Business Analysis: This option would forgo an opportunity to address the functional performance and seismic resiliency of this essential facility. Several future improvements would be required in the near future

to keep the facility's functionality up to modern industry standards which would increase costs and may diminish Metropolitan's ability to comply with water quality and laboratory requirements.

Alternatives Considered

Upon completion of preliminary design for the Water Quality Laboratory upgrades, staff reassessed the availability and capability of in-house Metropolitan staff to conduct final design, considering: (1) current work assignments for in-house staff to determine the potential availability of staff to conduct this work; and (2) specialized technical expertise needs.

After assessing the current workload for in-house staff, the relative priority of this project, and the specialized technical expertise required, staff recommends the use of professional services to perform final design of the subject project. This approach will allow for the completion of this project and other capital work within their current schedule and ensure the work is conducted in the most efficient manner possible.

Applicable Policy

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

Metropolitan Water District Administrative Code Section 11104: Delegation of Responsibilities

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

By Minute Item 51073, dated January 9, 2018, the Board authorized final design of seismic upgrades and building improvements to the Water Quality Laboratory and the Field Engineering Building.

By Minute Item 52702, dated February 8, 2022, the Board authorized two agreements to provide preliminary design to upgrade Metropolitan's Water Quality Laboratory, and environmental support services for the planned facility upgrades at the La Verne site.

By Minute Item 52778, dated April 12, 2022, the Board appropriated a total of $600 million for projects identified in the Capital Investment Plan for fiscal years 2022/2023 and 2023/2024.

By Minute Item 53590, dated April 9, 2024, the Board certified the Final Program Environmental Impact Report for the F.E. Weymouth Water Treatment Plant and La Verne Site Improvements Program and awarded three procurement contracts to furnish water quality equipment for Metropolitan's Water Quality Laboratory.

Summary of Outreach Completed

Metropolitan staff has conducted several meetings with the city of La Verne to discuss building codes and other requirements applicable to the design of this project. Input provided by the city of La Verne has been incorporated into the current design.

California Environmental Quality Act (CEQA)

CEQA determination for Option #1:

On April 9, 2024, the Board adopted the F.E. Weymouth Water Treatment Plant and La Verne Site Improvements Program (Program Environmental Impact Report), Mitigation Monitoring and Reporting Program, associated CEQA environmental documentation (Findings, Statement of Overriding Considerations), made the necessary findings for the Weymouth Water Quality Laboratory Seismic Upgrades Project, and approved the project itself. The present board action does not involve any changes to the approved project. Therefore, the environmental documentation previously prepared and adopted in connection with the project fully complies with CEQA, and no further environmental analysis or documentation is required.

CEQA determination for Option #2:

None required

Details and Background

Background

The Michael J. McGuire Water Quality Laboratory is located on the grounds of the F.E. Weymouth Water Treatment Plant in the city of La Verne. The building houses Metropolitan's central laboratory that conducts over 300,000 water quality analyses each year to comply with treated water standards, support studies of emerging contaminants, assess future treatment technologies, and optimize treatment and distribution system processes.

The Water Quality Laboratory was constructed in two phases. The south wing of the building was constructed in 1985, and the north wing was added in 1998. Each wing was designed and constructed in accordance with the building code requirements and water quality needs of their time. Within the last 30 years, water quality requirements for safe water delivery have evolved significantly. Additionally, industry knowledge of earthquakes has greatly improved leading to the development of today's more stringent seismic design requirements. As a result, the building's internal configuration no longer meets current or future laboratory needs, and under the current seismic code, the building is vulnerable to damage in the event of a major earthquake.

In February 2022, Metropolitan's Board authorized an agreement with La Cañada Design Group for preliminary design to upgrade the Water Quality Laboratory, including laboratory functional capabilities, seismic resiliency, and expansion of the existing building footprint. During preliminary design, staff assessed required modifications of the existing structure, developed structural design criteria for the building as an essential facility, completed inspections of supporting infrastructure, and worked with the consultant to develop a layout for the expanded building footprint which incorporates enhancement of key laboratory features, including increased sample processing efficiency, reduced risk for sample cross-contamination, added laboratory space modularity, and improvements to building traffic for samples, staff, and visitors. Staff also developed a comprehensive staged approach to replace the most critical instruments for regulatory compliance, which were approaching the end of their service life.

Preliminary design activities to upgrade the Water Quality Laboratory are complete, and staff recommends proceeding with final design at this time. Temporary staff and equipment relocation is required to ensure that critical laboratory operations are not interrupted during construction. Planning activities for temporary relocations will be undertaken by staff as part of the final design phase.

Michael J. McGuire Water Quality Laboratory Upgrades – Final Design

Planned upgrades for the Water Quality Laboratory include building expansion with an approximately 60 percent footprint increase; strengthening of the existing structure to meet current criteria for essential facilities; building amenities and utilities improving laboratory space modularity and configuration potential; sustainability upgrades and revised landscaping; parking and accessibility improvements; and new specialized laboratory equipment.

Final design phase activities include: (1) development of a staff relocation plan; (2) preparation of drawings and technical specifications with a supporting 3D model and detailed renderings; (3) development of a construction cost estimate; (4) constructability review; and (5) advertising and receipt of competitive bids. Final design will be performed by La Cañada Design Group under an existing agreement described below. Metropolitan staff and La Cañada Design Group will collectively develop the relocation plan that will be implemented while the construction is underway. Metropolitan staff will also perform project management, technical oversight, and review of the consultant's work.

A total of $16.0 million is required for this work. Allocated funds include $12.4 million for the final design activities by La Cañada Design Group described above. Other allocated funds for professional services include $100,000 for value engineering, which will be performed by an on-call consultant. Allocated funds for Metropolitan staff activities include $1.9 million for technical oversight and design review of consultant's work; $800,000 for environmental support, project management, relocation planning, permitting, and project controls; and $800,000 for remaining budget. **Attachment 1** provides the allocation of the required funds.

As described above, final design will be performed by La Cañada Design Group Inc. Engineering Services' performance metric target range for final design of projects with a construction cost of more than $3 million is

9 to 12 percent. For this project, the performance metric goal for final design is 9.5 percent of the total construction cost. The total estimated cost for design is $14.3 million, which includes $12.4 million for La Cañada Design Group and $1.9 million for Metropolitan design activities. The estimated cost of construction to upgrade Metropolitan's Water Quality Laboratory is anticipated to range from $150 million to $170 million.

Engineering Services (La Cañada Design Group Inc.) – Amendment of Existing Agreement

In February 2022, Metropolitan's Board authorized an agreement with La Cañada Design Group for preliminary design to upgrade Metropolitan's Water Quality Laboratory. La Cañada Design Group was prequalified through Request for Qualifications No. 1182 and was selected based on the firm's expertise in the discipline-specific technical aspects of this project, and its extensive experience with new laboratories, retrofit of laboratories, and other essential facilities of comparable size.

This action authorizes an increase of $12.4 million to the existing agreement with La Cañada Design Group for a new not-to-exceed total of $16.8 million to perform the final design to upgrade Metropolitan's Water Quality Laboratory. For this agreement, Metropolitan has established a Small Business Enterprise participation level of 25 percent. La Cañada Design Group is a certified SBE firm and thus achieves 100 percent SBE participation. The planned subconsultants for this work are listed in **Attachment 2**.

Project Milestone

March 2028 – Completion of final design to upgrade the Water Quality Laboratory

3/25/2025
Mai Hattar *Date*
Interim Chief Engineer
Engineering Services

3/25/2025
Deven Upadhyay *Date*
General Manager

Attachment 1 – Allocation of Funds

Attachment 2 – Listing of Subconsultants

Attachment 3 – Location Map

Ref# es12699264

Allocation of Funds for Upgrades to the Michael J. McGuire Water Quality Laboratory

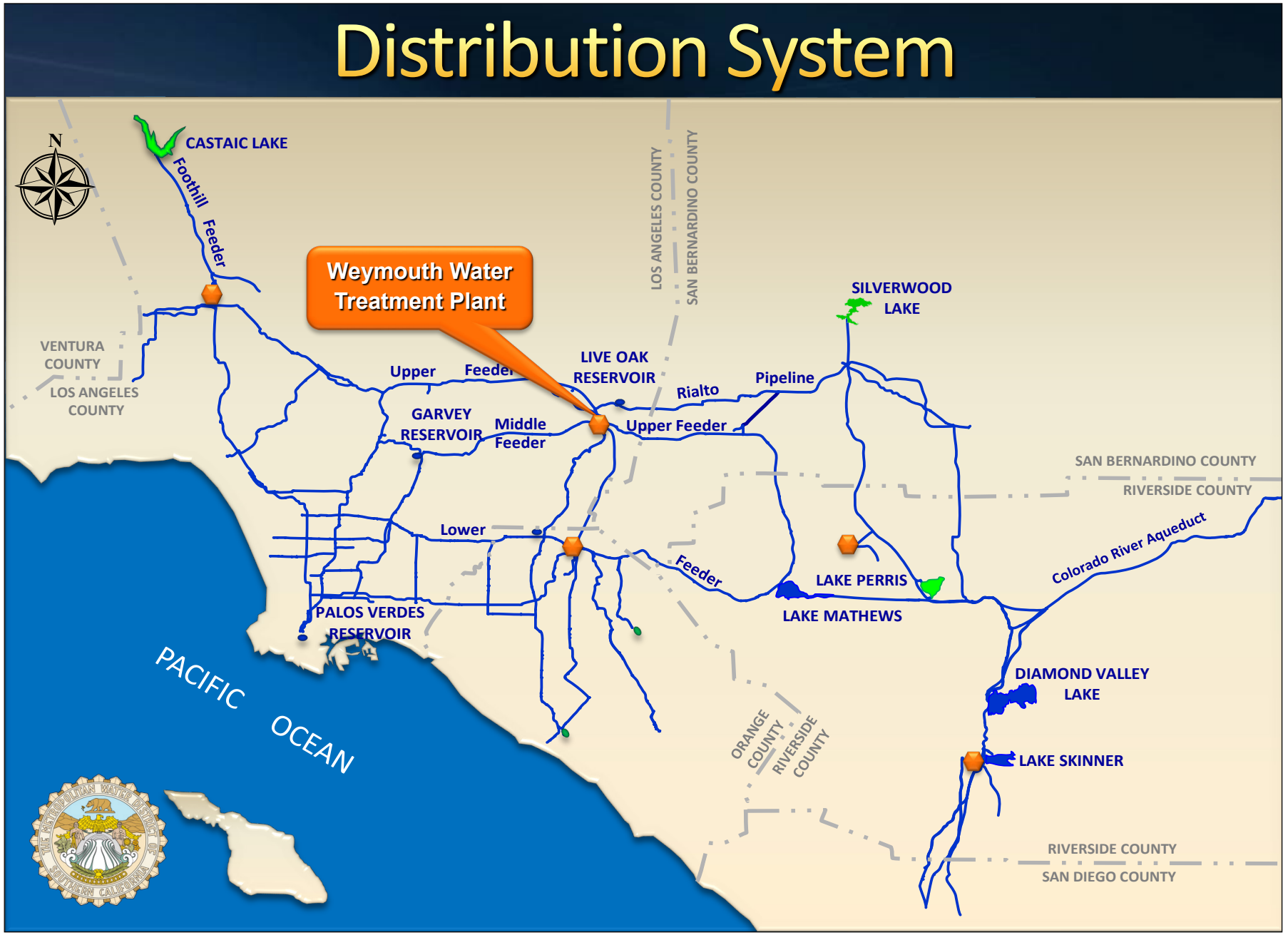
	Current Board Action (Apr. 2025)
Labor	
Studies & Investigations	$ -
Final Design	1,900,000
Owner Costs (Program mgmt., envir. monitoring)	800,000
Submittals Review & Record Drwgs.	-
Construction Inspection & Support	-
Metropolitan Force Construction	-
Materials & Supplies	-
Incidental Expenses	-
Professional/Technical Services	
La Cañada Design Group Inc.	12,400,000
Value Engineering	100,000
Right-of-Way	-
Equipment Use	-
Contracts	-
Remaining Budget	800,000
Total	**$ 16,000,000**

The total amount expended to date is approximately $10.8 million. The total estimated cost to upgrade the Michael J. McGuire Water Quality Laboratory, including the amount appropriated to date, funds allocated for the work described in this action, and future construction costs, is anticipated to range from $210 million to $225 million.

The Metropolitan Water District of Southern California

Subconsultants for Agreement with La Cañada Design Group Inc.
Agreement No. 207660

Subconsultant and Location	Service Category; Specialty
Hazen & Sawyer Los Angeles, CA	Laboratory Planning
Brandow & Johnston Inc. Los Angeles, CA	Civil and Structural Engineering
P2S Inc. Long Beach, CA	Mechanical Engineering, Electrical Engineering, Plumbing, Design, Low Voltage System Design, Audio-Visual Design
Cumming Group Cost Estimating Los Angeles, CA	Cost Estimating
MIG Inc. Los Angeles, CA	Landscape Architecture and Irrigation
AWC West Winter Park, FL	Specifications
ZC Sustainability Santa Monica, CA	Sustainable Design
Krai Charuwatsuntorn Long Beach, CA	3D Visualization
Oculus Light Studio Culver City, CA	Lighting
Coffman Engineers Inc. Los Angeles, CA	Fire Protection and Code
SKA Design Pasadena, CA	Signage / Wayfinding
Rowan Williams Davies & Irwin Inc. (RWDI) Culver City, CA	Acoustic Engineering
D7 Consulting Inc. Newport Beach, CA	Building Envelope / Waterproofing
Jacobs Engineering Irvine, CA	Security


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

THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

Board Report

Engineering Services Group

- **Engineering Services Monthly Activities for March 2025**

Summary

This monthly report provides a summary of Engineering Services Group activities for March 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
- Engineering's Career Launch Program
- Inland Empire Construction Career and Apprenticeship Resource Fair
- Engineering Cooperative Education Program Fiscal Year (FY) 2024-2025

Purpose

Informational

Attachments

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

Date of Report: April 7, 2025

Engineering Services Group's Monthly Activities for March 2025

Engineering Services manages and executes projects within the Capital Investment Plan (CIP) to maintain infrastructure resiliency, ensure regulatory compliance, enhance sustainability, and provide flexibility in system operations to address uncertain water supply conditions. In addition, Engineering Services provides technical services to enhance reliable system operation and real property planning, valuation, acquisition, and disposition services to protect Metropolitan's assets. Engineering Services empowers our staff and partners with our business partners and the communities we serve to accomplish Metropolitan's mission.

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

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

Colorado River Aqueduct (CRA) Program

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

- **CRA Domestic Water Treatment System** —This project upgrades the domestic water treatment systems at all five CRA pumping plants, including the replacement of the water treatment units. The contractor has installed the temporary treatment skid system at Intake Pumping Plant, and water quality testing is underway. The temporary skid will remain in operation until installation, testing, and commissioning of the new system is complete. Demolition of the existing system will start in April 2025 after the annual CRA shutdown. Construction is 45 percent complete and is scheduled to be completed in March 2026.
- **CRA Storage Buildings** —This project furnishes and installs storage buildings at Hinds, Eagle Mountain, and Iron Mountain pumping plants and constructs associated site improvements. Construction at all sites is temporarily paused during the 2025 CRA annual shutdown. The contractor will resume all work in April 2025 and plans to complete the sitework at Eagle Mountain Pumping Plant, continue constructing the building at Hinds Pumping Plant, and receive the building structural components at Iron Mountain Pumping Plant. Construction is 66 percent complete and is scheduled to be completed in April 2026.

- **CRA Flow Level Monitoring Stations** – This project will install 12 flow monitoring stations at remote locations along the Colorado River Aqueduct. The contractor has completed all construction work.
- **Black Metal Mountain Electrical Upgrades** —This project replaces the existing single-phase 2.4 kV power line delivering power to the Black Metal Mountain communication site with a more robust three-phase power line rated for 4.16 kV usage. The project will also enhance the main access road to the communications sites. Final design is 35 percent complete and is scheduled to be completed in August 2025.

CRA Domestic Water Treatment System —Temporary Treatment Skid at Intake Pumping Plant

CRA Flow Level Monitoring Stations – Installation of Solar/Antenna Pole

CRA Storage Buildings —Contractor Installing Conduit, Light Fixtures and Wire Pulling at the Maintenance Storage Buildings

Dams & Reservoirs Program

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

- **Garvey Reservoir Rehabilitation** —This project will replace the aging reservoir floating cover and liner, structurally strengthen the outlet tower, upgrade the on-site water quality laboratory building, rehabilitate the junction structure, and replace the existing standby generator and a portion of the security perimeter fence. Final design is approximately 68 percent complete and is scheduled to be completed in November 2025.

Distribution System Program

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

- **Perris Valley Pipeline Tunnels** —This project will complete the construction of the Perris Valley Pipeline and provide service connections to Eastern and Western Municipal Water Districts. This

project installs 3,000 linear feet of tunnel that crosses the Interstate 215 freeway. The contractor has completed all tunneling and is preparing to make the final connection during a planned April 2025 shutdown. Overall construction is 95 percent complete and is scheduled to be completed in mid-2025.

- **Foothill Hydroelectric Plant and Control Building Seismic Upgrade** —This project strengthens the Foothill Hydroelectric Plant and Control Building to withstand a significant earthquake by removing and replacing the roofing system, adding encasements to enlarge and strengthen concrete columns, and reinforcing shallow foundations. The contractor has completed the work on the building's roof and the concrete columns and will continue constructing the walkway on the south side of the hydroelectric building. Construction is approximately 97 percent complete and is scheduled to be completed in May 2025.
- **Rialto Pipeline Rehabilitation** —This project replaces a 35-foot-long, 121.5-inch diameter section of welded steel pipe on the Rialto Pipeline in the city of Upland, where the mortar lining has failed. This project also replaces the deteriorating pipe spool and isolation valve at the CB-11 service connection. The contractor has completed all shutdown work during the allotted shutdown window and will continue with installation of the manhole vault, backfill, and restoring the pipe access site after the Rialto Pipeline is returned to service. Construction is approximately 80 percent complete and is scheduled to be completed in April 2025.
- **San Diego Canal Concrete Rehabilitation** —This project will replace damaged concrete lining at one location on the San Diego Canal near the interconnection with the Casa Loma Canal. The shutdown for the San Diego Canal started on February 22. The contractor has completed demolition of the existing concrete panels and abatement of the asbestos-containing joint material. Currently, the contractor is completing the over-excavation of the canal subgrade, placement of aggregate base backfill, and installing pipe for the weepholes. Construction is approximately 50 percent complete and is scheduled to be completed in April 2025.
- **Hollywood Tunnel North Portal Valve Replacement** —The project will replace the existing worn valves with two new 24-inch sleeve valves operated by electric actuators for pressure control and two 24-inch bonneted knife gate valves for flow isolation at the Hollywood Tunnel North Portal along the Santa Monica Feeder. The valve procurement contract was awarded at the March 2025 board meeting. Final design for the valve installation is 30 percent complete and scheduled to be complete in December 2025.

Foothill Hydroelectric Plant and Control Building Seismic Upgrade — Installing Painted Gutters onto the Building

Rialto Pipeline Rehabilitation – Welding of Valve Stem Cap at CB-11

Rialto Pipeline Rehabilitation – Installation of Access Structure

Additional Facilities and Systems Program

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

- **La Verne Shops Improvements** —This project improves the La Verne Shops building and installs Metropolitan-furnished shop equipment. The contractor completed installation of the plasma cutter, roof access ladders, air compressor equipment, and new waterjet system. The contractor continued installation of the new Unit Power Center and grading for the band saw foundation. Construction is approximately 97 percent complete and is scheduled to be completed in August 2025.

- **Diamond Valley Lake Wave Attenuator Replacement** —This project adds a second attenuator to the existing wave attenuating system at the East Marina in Diamond Valley Lake. The second attenuator will protect the boats and launch ramp from excessive wave action. As part of the improvements, the existing floating wave attenuator (FWA) will be relocated to a new location and the new attenuator will be installed in its place. The contractor began fabrication of the north FWA modules, is installing the concrete anchors on the North side, has begun removal of existing anchor cables and chains, and has begun installation of interconnecting chains for tying the existing anchor blocks to the new anchor blocks for the new wave attenuator. The project is 46 percent complete, and construction is scheduled to be completed in May 2026.
- **Colorado River Aqueduct Kitchens and Lodging Replacement** —This project will replace the existing kitchens and lodges at Eagle and Iron Mountain pumping plants and construct a second lodge at the Gene Pumping Plant. Conceptual design is 15 percent complete and is scheduled to be completed in July 2025.

La Verne Shops Improvements —Slab Demolition for Vertical Band Saw Foundation at the La Verne Fabrication Shop

Diamond Valley Lake Wave Attenuator Replacement – Installation of Concrete Anchor Blocks

Prestressed Concrete Cylinder Pipe (PCCP) Program

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

- **Second Lower Feeder 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 second shutdown to complete the relining and replace three 42-inch valves with three 48-inch sectionalizing valves commenced on December 2, 2024. The contractor completed installation of the three 48-inch valves. Work continues at the valve vaults in preparation for commissioning in early April. Construction is 85 percent complete and is scheduled to be completed in September 2025.
- **Allen-McColloch Pipeline (AMP) Urgent PCCP Relining** —This project performs urgent relining of approximately three miles of distressed PCCP segments of the AMP that were discovered during an inspection in 2023. The urgent relining of the AMP is being performed in stages. Stage 1 includes carbon fiber reinforced polymer (CFRP) lining of four segments and steel relining of approximately 4,500 feet of pipeline. Stage 1 work is complete. Stage 2 work consists of 12,600 feet of steel liner installation and appurtenant work. Stage 2 work was completed in March 2025.
- **Sepulveda Feeder PCCP Rehabilitation Reach 9** —This project will rehabilitate approximately 19,400 linear feet of 120-inch to 96-inch diameter PCCP with a combination of solid steel and coiled steel liner systems. Reach 9 is located on Havenhurst Avenue from about State Route 118 to just

north of the Van Nuys Airport in the city of Los Angeles. Additionally, a new 54-inch sectionalizing valve and valve structure will be installed on the Sepulveda Feeder near the intersection of Havenhurst and Chatsworth Street. Final design for Reach 9 is 60 percent complete and is scheduled to be completed in December 2025.

Allen-McColloch Pipeline Urgent Relining —Removing the Existing Sidewalk

Water Treatment Plants Program

The Water Treatment Plants Program is composed of CIP projects to replace or refurbish facilities and components at Metropolitan's five water treatment plants and the chemical unloading facility to continue to reliably meet treated water demands.

- **Weymouth Basins 5–8 and Filter Building No. 2 Rehabilitation** —This project rehabilitates major mechanical and structural components of Basins 5–8 and Filter Building No. 2 at the Weymouth plant, including the flocculation/sedimentation equipment, sludge pumps, baffle boards and walls, launders, inlet gates, and outlet drop gates. Rehabilitation work also includes seismic upgrades of basin walls and inlet channel, hazardous material abatement, and replacement of filter valves and actuators in Filter Building No. 2. The contractor completed all rehabilitation work in Basins 7 and 8, including structural wall modifications, mechanical piping, and began startup testing of equipment in Basins 5 and 6 and Filter Building No. 2. Construction is approximately 92 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 as well as accessibility and fire/life safety improvements, architectural modifications near the areas of structural upgrades, and improvements associated with the preservation of historic architectural features. Final design is approximately 97 percent complete and is scheduled to be completed in May 2025.
- **Diemer Filter Rehabilitation** —This project rehabilitates the 48 filters at the Diemer plant to enhance filter performance, minimize filter media loss, and rehabilitate or replace aging components. Planned upgrades include replacing filter media, filter valve actuators, and instruments; modifying the filter upstream influent weir and surface wash laterals; and improving the coal grit removal facilities for the east and west sides of the plant. Final design is approximately 98 percent complete and is scheduled to be complete in April 2025.
- **Mills Electrical Upgrades, Stage 2** —This project upgrades the electrical system with dual-power feeds to key process equipment to comply with current codes and industry practices, improve plant reliability, and enhance worker safety. Stage 1 construction is complete. Stage 2 improvements will add a second incoming 12 kV service from Riverside Public Utilities, reconfigure the existing 4.16 kV switchgear, and replace the standby generator switchgear and the emergency generator programmable logic controller. Riverside Public Utilities energized the second incoming service to the plant. The contractor completed the SGN-1A/1B switchgear upgrades inside the Ozone Switchgear Building and is upgrading the SGE emergency switchgear inside the Standby Generator building. Construction is approximately 82 percent complete and is scheduled to be completed in August 2025.

Weymouth Basins 5–8 and Filter Building No. 2 Rehabilitation —Filling Basin 6 for Performance Testing

Pure Water Southern California

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

- **Environmental Planning** —The environmental planning phase began in 2020. Technical studies have been completed to support the effort. The draft EIR is currently scheduled for publication in May 2025, with board certification of the document in early 2026.
- **Program Management** —PWSC program management efforts lead the planning for the PWSC Program, including project controls, scheduling, budget development, risk management, coordination with program partners and stakeholders, grants and funding, and preparation of various plans and studies.
    - In December 2024, the Board authorized entering into an agreement with USBR to accept up to $125,472,855 in funding under the U.S. Bureau of Reclamation (USBR) Large-Scale Water Recycling Program (LSWRP) grant. The agreement was executed on January 10, 2025. The first two invoices were submitted in March, and USBR promptly paid Metropolitan approximately $15.6 million.
    - Program internal governance and program plans are currently being developed. The first workshop was held on October 29. Technical studies are underway to support planning of DPR implementation, EIR analysis on per- and polyfluoroalkyl substances compounds, and development of program phasing options, including treated water augmentation.
    - Metropolitan and LACSD are developing a work plan and gathering information to pursue certification for PWSC under State Senate Bill 149. This certification makes critical projects, which are necessary for the State to meet its climate and clean energy goals, eligible for expedited judicial review. A meeting with the State on January 23, 2025, further identified the next steps to pursue the certification. Additional background information on PWSC was sent to the State in March.
- **Advanced Water Purification Facility** —The AWPF will purify treated wastewater from LACSD's A.K. Warren Water Resource Facility using membrane bioreactors (MBRs), reverse osmosis, and ultraviolet/advanced oxidation. With its expertise in biological wastewater treatment, LACSD will assume the responsibility of implementing the AWPF pretreatment, including the MBR facilities.
    - A draft conceptual facilities plan has been prepared to document key assumptions of AWPF components. The final draft plan is currently being prepared.

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

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

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

  - **Reach 1** —This reach is approximately 6.3 miles long, primarily within public rights of way in the city of Carson, with service connections for LADWP and West Basin MWD. Current work includes utility field investigation and geotechnical work and designing to incorporate more tunneling into this project to minimize construction risks and impacts to the public.
  - **Reach 2** —This reach is approximately 7.5 miles long, primarily within public rights of way in the cities of Long Beach and Lakewood, with a service connection for Long Beach Utilities. Current work includes utility field investigation and geotechnical work, development of a preliminary design report and drawings, as well as coordination with the City of Long Beach, Long Beach Utilities, Caltrans, Army Corps, and other permitting entities for the major tunnel crossing of the I-710 and Los Angeles River.

Drought Mitigation—State Water Project Dependent Areas

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

- **Inland Feeder Rialto Pipeline Intertie** —This project installs an interconnection pipeline and isolation valve structure between the Inland Feeder and Rialto Pipeline so that water can be delivered from DVL to the Rialto Pipeline. The contractor has completed construction of the isolation valve vault structure, installed the 96-inch pipe from the valve vault to the Rialto Pipeline and Inland Feeder, and constructed most of the pipe incasement. Installation of the pipe inside the valve vault was completed during the February shutdown of the Rialto Pipeline and Inland Feeder. Construction is approximately 82 percent complete and is scheduled to be completed in June 2025.
- **Inland Feeder-Badlands Tunnel Surge Protection** —This project installs a new open-to-atmosphere surge tank at the south portal of the Badlands Tunnel, which will protect the Inland Feeder from hydraulic transients when pumping water from Diamond Valley Lake to the Rialto Pipeline. The contractor has completed the valve vault structure and the surge tank foundations. Currently, the contractor is connecting the bypass pipeline to the valve vault structure. The surge tank will be tied in during the March pipeline shutdown. Construction is approximately 72 percent completed and is scheduled to be completed in June 2025.
- **Wadsworth Bypass** —This project installs a bypass pipeline and an isolation valve to interconnect the Wadsworth Pumping Plant with the Eastside Pipeline. The contractor completed installation of all piping during the April 2024 shutdown and is currently installing electrical conduits inside the valve vault structure. The 84-inch butterfly valve will be installed during the April 2025 shutdown. Construction is approximately 93 percent complete and is scheduled to be completed in July 2025.

Inland Feeder Rialto Pipeline Intertie – Inland Feeder Demolition Layout

Value Engineering Program

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

Headquarters Building Zero Emission Vehicle Infrastructure Upgrades - Stage 1

In March, Engineering held a combined Value Engineering (VE) and Constructability Review (CR) workshop for the Headquarters Building Zero Emission Vehicle (ZEV) Infrastructure Upgrades – Stage 1 project. This project involves installing 65 Level-2 and four Level-3 Electric Vehicle (EV) chargers in the Headquarters Building parking structure. Establishing this charging infrastructure is a critical step in Metropolitan's mandated ZEV transition, aligning with its Climate Action Plan (CAP). These upgrades mark the beginning of a district-wide ZEV transition.

The workshop focused on constructability, biddability, lessons learned from pilot projects, construction sequencing, and risk assessment and mitigation. Participants included Metropolitan staff from Engineering, Facilities, Fleet, Rideshare, IT, and Sustainability, Resiliency, and Innovation (SRI), as well as design consultants, value engineering consultants, and subject matter experts specializing in EV charging systems and cost estimating.

Headquarters ZEV workshop participants

Existing EV charging station at Headquarters

San Jacinto Diversion Structure Slide Gates Rehabilitation

Engineering completed a Constructability Review (CR) Workshop for the San Jacinto Diversion Structure Slide Gates Rehabilitation Project in late March. The project includes the installation of three new stainless steel slide gates, operators, associated electrical equipment, and structural platforms for the new equipment at the San Jacinto Diversion Structure. The new slide gates are in fabrication under a separate contract and will be provided to the installation contractor as Metropolitan Furnished Equipment (MFE). Construction work is anticipated to be conducted during the 2026 CRA shutdown. The CR workshop focused on evaluating the construction work required during the CRA shutdown and validating the construction cost estimate. The VE Team included Metropolitan staff from Engineering, Operations, and SRI, as well as value engineering and subject matter expert consultant staff.

San Jacinto Diversion Structure

Empower the workforce and promote diversity, equity, and inclusion

Engineering's Career Launch Site Visit to the Weymouth Plant

Engineering's twelfth Annual Career Launch Program cohort toured the F. E. Weymouth Treatment Plant on Tuesday, February 25th with a total of 23 participants. The tour started with a Water Quality Overview and a tour of the Water Quality Lab. This was followed by an overview of water treatment and a tour of the administration building and plant. Participants were able to see where water is treated and stored, visit the old control room, and get a bird's eye view of the plant from the roof. Afterward, the group toured the Fabrication and Machine shop, the Corrosion Engineering Lab, and the Soils and Concrete Lab. The tour concluded with a survey demo where staff showcased the team's use of innovative survey tools. This tour introduced new employees in Engineering to Metropolitan's water treatment process and what it takes to ensure the safety of the public's drinking water. This was the fourth module in this six-month program. The next event will cover Engineering's organizational structure and functions in more detail.

2024/2025 Career Launch Cohort on a field trip at the Weymouth Treatment Plant

ESG Career Launch Site Visit– Introduction to Water Quality Section by Unit Manager George Di Giovanni

Engineering Career Launch – Tour of Water Quality Lab

Partner with interested parties and the communities we serve

Inland Empire Construction Career and Apprenticeship Resource Fair

As part of outreach efforts related to the project labor agreement, Metropolitan held its second Inland Empire Construction Career and Apprenticeship Resource Fair in February. This year's event was in partnership with the San Bernardino and Riverside Building and Construction Trades Council, San Bernardino County Superintendent of Schools, and the San Bernardino Workforce Development Department. The event provided high school students and members of the public an opportunity to explore well-paying careers in the building and construction trades while connecting with industry professionals, apprenticeship readiness programs, trade union apprenticeship programs, and employers. Over 390 high school students enrolled in building and construction career technical or pre-apprenticeship programs attended from 10 high schools in Riverside and San Bernardino Counties. Additionally, over 200 members of the public registered to attend.

Attendees at the Inland Empire Construction Career & Apprenticeship Resource Fair, hosted by Metropolitan Water District (from left to right) Jennifer Kinley, Yvette Roque, Johanna Clemens, Olivia Sanchez, Mai Hattar, Alyna Fusaro, Christine Chuang, and Tedman Tran

Attendees at the Inland Empire Construction Career & Apprenticeship Resource Fair, hosted by Metropolitan Water District

High School Students Attending *Being a Construction Worker* Workshop at the Inland Empire Construction Career & Apprenticeship Resource Fair

Engineering Cooperative Education Program Fiscal Year (FY) 2024-2025

In March, Engineering's 11 college interns for FY 2024-2025 concluded their cooperative education program. Their internship included working alongside staff to support Metropolitan's capital programs, participating in a field trip at the Weymouth plant and other individual project site visits, presenting at an event for ASCE Engineers Week, and assisting with Engineering's student outreach webinar to promote the next FY 2025-2026 cooperative education program. Since 2002, approximately 284 students have participated in the program. We are excited to welcome the next cohort of college interns on July 1, 2025

Engineering Cooperative Education Program Students – First Day at Headquarters Building

Cooperative Education Program - Culmination Event