



THE METROPOLITAN WATER DISTRICT
OF SOUTHERN CALIFORNIA

Board Report

Engineering Services Group

- **Engineering Services Group Monthly Activities Report for March 2026**

Summary

This monthly report provides highlights and a summary of Engineering Services Group activities for March 2026 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 Services Career Launch Program Tour – F.E. Weymouth Water Treatment Plant
- California State University Long Beach Student Outreach Tour at the Weymouth Plant

Purpose

Informational

Attachments

Detailed Report – Engineering Services Group’s Monthly Activities for March 2026

Engineering Services' Monthly Activities for March 2026

Highlights

In support of the General Manager's Business Plan goal of providing organizational stability and delivering operational excellence, Engineering Services manages and executes projects within the adopted 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 includes CIP projects to replace or refurbish facilities and components of the CRA system to reliably convey water from the Colorado River to Southern California.

- **CRA 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 the Intake Pumping Plant. The temporary skid will remain in operation until installation, testing, and commissioning of the new system are complete. Installation of the electrical and mechanical systems to support the new equipment is underway at the Intake Pump Plant. Installation of the temporary skid at Gene Pumping Plant is nearing completion, and a 14-day water quality test will be conducted. Construction is 55 percent complete and is scheduled to be completed by April 2027.
- **Intake Main Motor Protection Relay Panels 1R and 3R** – This project replaces the existing main transformer bank protection relay panels 1R and 3R and associated annunciator panels that protect the transformer from electrical fault events at the Intake Pumping Plant. Construction was performed during the 2026 annual CRA shutdown. Installation and functional testing of the new equipment is complete.

- **Gene Transformer Bank Protection Annunciator Panels** — This project replaced the existing main transformer bank annunciator panels inside the Gene Pumping Plant Control Room. Construction was performed during the 2026 annual CRA shutdown. Installation and functional testing of the new equipment is complete.
- **CRA Pump Plant Sumps Rehabilitation** — This project rehabilitates the sump and circulating water systems at all five CRA pumping plants. The scope of work also includes replacement of the structural support systems, piping, valves, motors, and electrical equipment. Final design is complete, and the project will be advertised in April 2026. A board action to award a construction contract is planned for July 2026.



CRA Domestic Water Treatment System — New Sample Lab at Intake



CRA Domestic Water Treatment System – Gene Temporary Skid Commissioning

Dams & Reservoirs Program

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

- **Garvey Reservoir Rehabilitation** – This project will replace the aging reservoir floating cover and liner; strengthen the structure of the reservoir outlet tower to reduce the risk of damage following a major seismic event; and upgrade the reservoir's rainwater collection, pumping, and subdrain systems. The Board awarded a construction contract in December 2025, and the Notice to Proceed was issued to the contractor in January 2026. The contractor continued preparing submittals and has begun mobilization. Construction is planned to be completed by June 2028.
- **Copper Basin Discharge Valve** – This project installs a new 54-inch fixed cone valve and actuator at the base of the dam, refurbishes a slide gate and the existing valve house, and upgrades all associated electrical systems and access ladders at the Copper Basin Reservoir. This project will also include the replacement of access ladders at the Gene Wash Dam. Final design and acquisition of environmental permits are complete. A board action to award a construction contract is planned for August 2026.
- **Lake Mathews Pressure Control Structure (PCS) and Electrical System Upgrades** – This project will replace the aging Lake Mathews discharge facility and electrical system. The project includes the construction of a new PCS with a bypass pipeline alongside the existing forebay, a new chlorination facility, and upgrading the electrical system to accommodate future power needs. This project utilizes a progressive design-build (PDB) project delivery method. The procurement process for the design-build entity is underway. A board action to authorize the Phase 1 agreement is planned for August 2026. The project is anticipated to be completed by 2032.



Garvey Reservoir Rehabilitation – Performing Layout for the Existing Access Bridge Demolition, Looking West

Distribution System Program

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

- **Wadsworth Sleeve Valve Refurbishment** – This project refurbishes seven sleeve valves at the Wadsworth Pumping Plant. All seven valves have been refurbished, tested, and commissioned with the last valve completed on 12/18/2025. The project is complete.
- **San Jacinto Diversion Structure Gate Replacement** – This project will replace three cast-iron slide gates at the San Jacinto Diversion Structure with stainless steel slide gates designed for throttling. Construction was recently completed as part of the annual 2026 CRA shutdown. The new slide gates and actuators were successfully installed and are now operational as of February 2026.
- **Service Connection LA-17 Meter Procurement** – The project will replace two flow meters, adjoining thimble pieces, coupling assemblies, gaskets and studs and bolts that are in the same vault at the Eagle Rock Operations Control Center. A procurement contract was awarded in December 2025, and the flow meters are scheduled to be delivered by September 2, 2026. The meter fabricator is currently preparing submittals for Metropolitan staff review.
- **Hollywood Tunnel North Portal Rehabilitation** – The project will replace the existing worn valves with two new 24-inch sleeve valves operated by electro-hydraulic 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 in March 2025. The valves are in fabrication and are 70 percent complete with delivery expected in summer 2026. Final design for the

valve installation is complete and the construction contract is scheduled for board award in June 2026.



San Jacinto Diversion Structure Gate Replacement — Slide Gate V-02 Installation

Additional Facilities and Systems Program

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

- **Diamond Valley Lake (DVL) Wave Attenuator Replacement** — This project adds a second attenuator to the existing wave attenuating system at the East Marina in Diamond Valley Lake. As part of the improvements, the existing floating wave attenuator (FWA) will be relocated to a new location, and the new attenuator will be installed in its place. The contractor completed fabrication and installation of the new north FWA modules and completed relocation of the existing FWA to the new south location. Construction is complete.
- **Colorado River Aqueduct District Housing Improvements** — This project will replace aging housing after decades of use in the harsh desert environment with new townhomes, implement village enhancements and amenities, and replace kitchens and lodges at the CRA pumping plants. The District Housing Improvements will be completed in four stages. Conceptual design of an alternative housing model layout is complete at four pumping plants (Hinds, Eagle Mountain, Iron Mountain, and Gene). Stage 1 improvements will be implemented in three sub-stages with Eagle Mountain Pumping Plant as the pilot to evaluate the success of the alternative housing. Based on the success of the pilot, design for the remaining three plants will then be implemented. Final design for Eagle Mountain Pumping Plant is 5 percent complete and is scheduled to be completed by spring 2027.



Diamond Valley Lake Wave Attenuator Replacement — New Floating Wave Attenuator and Relocated Existing Floating Wave Attenuator

Prestressed Concrete Cylinder Pipe (PCCP) Program

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

- **Sepulveda Feeder PCCP Rehabilitation Reach 1** — This project rehabilitates PCCP segments of the Sepulveda Feeder. Reach 1 of the Sepulveda Feeder spans 4.7 miles through several cities, including the cities of Hawthorne, Inglewood, and Los Angeles. Final design is approximately 75 percent complete and is scheduled to be completed in August 2027.
- **Electromagnetic Inspection** — Regular inspections of the PCCP feeders are a critical step in evaluating the condition of each pipeline and assist staff in prioritizing the relining work on each feeder. This project conducts the fifth cycle of electromagnetic and visual inspections of Metropolitan’s approximately 146.4 miles of PCCP pipelines. Inspections of the Jensen Washwater Return and Balboa Bypass were completed in February 2026, and inspections of the AMP/Diemer Bypass and South Coast Feeder were completed in March 2026.

Water Treatment Plants Program

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

- **Weymouth Administration Building Upgrades** — This project upgrades the Weymouth Administration Building to withstand a significant earthquake. The planned upgrades include structural strengthening consistent with current seismic standards for essential facilities, accessibility, and fire/life safety improvements, architectural modifications near the areas of structural upgrades, and improvements associated with the preservation of historic architectural features. Final design is complete, and the project was advertised for bids. Board award of a construction contract is planned for May 2026.
- **Diemer Chemical Feed Facility Improvements** — This project rehabilitates the Diemer plant’s chemical feed facility to maintain operational reliability, meet Metropolitan’s current chemical safety standards, and enhance worker safety. The Board awarded a construction contract in October 2025. The

contractor has begun mobilization and underground utility verification. Construction is 10 percent complete and is scheduled to be completed in October 2027.

- **Water Quality Lab Building Upgrades** – This project upgrades the Michael J. McGuire Water Quality Laboratory in La Verne to increase its seismic resiliency and to efficiently address new and evolving water quality issues and regulations. Planned improvements include strengthening of the existing structure to meet current seismic criteria for essential facilities; building expansion and functional layout improvements; replacement of specialized laboratory equipment; and implementation of technology upgrades to support current and future water quality regulations. Final design is approximately 14 percent complete and is scheduled to be completed in spring 2028.
- **Mills Finished Water Reservoir Rehabilitation** – This project will replace the aging floating covers and liners at the Mills Plant’s finished water reservoirs; upgrade the rain removal system, piping, and valving to enhance reservoir operational flexibility and mixing improvements; refurbish the reservoir slide gates; and install a new drop gate. Final design is approximately 25 percent complete and is scheduled to be completed in spring 2027.
- **Jensen Mechanical Dewatering Facility** – This project will construct a new mechanical dewatering facility at the Jensen plant, including associated solids conveyance piping, chemical feed, and electrical and control systems, to improve the plant’s residual solids processing and address the plant’s long-term solids handling needs. Final design is approximately 8 percent complete and is scheduled to be completed in spring 2027.



Adapt to changing climate and water resources

Pure Water Southern California

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

- **Program Management** – Program management activities include project controls, scheduling, budget development, risk management, coordination with program partners and stakeholders, grants and funding, and preparation of various plans and studies. The Pure Water program management team was engaged in the following activities during this reporting period:
 - Continued coordination and grant reporting efforts with the United States Bureau of Reclamation for the \$125,472,855 Large-Scale Water Recycling Program grant and the \$5 million WaterSmart Title XVI Planning Grant. Metropolitan has received a total of approximately \$25.5 million to date.

- The \$80 million state grant is also used to support the current phase of program work; approximately \$56 million is spent as of end of February. Continued to coordinate with the Climate Adaptation Master Plan for Water (CAMP4W) assessments.
- **Environmental Planning** – In February 2026, Metropolitan’s Board certified the program’s final Environmental Impact Report and approved Pure Water Southern California (PWSC) for California Environmental Quality Act purposes. The notice of determination was also filed with the State’s Office of Planning and Research and the County Clerk to initiate a 30-day statute of limitations for legal challenges.
- **Advanced Water Purification Facility** –The AWPF will purify treated wastewater from the Los Angeles Sanitation Districts’ (Sanitation Districts) A.K. Warren Water Resource Facility using membrane bioreactors (MBR), reverse osmosis, and ultraviolet/advanced oxidation. With its expertise in biological wastewater treatment, the Sanitation Districts will be responsible for implementing the AWPF pretreatment, including the MBR facilities. A final draft of the Conceptual Facilities Report has been prepared. This document records key assumptions of AWPF components and would be used for the upcoming Request for Qualifications for the PDB contracts to design and construct the full-scale AWPF.
- **Demonstration Testing** – Staff continued testing the IPR processes. Five equipment procurement packages were advertised for DPR testing, including membrane filtration/reverse osmosis, UV/AOP, ozone with granular and biological activated carbon, lime stabilization system, and carbon dioxide system. Staff is evaluating the bids received and plans to return to the Board this summer to award one or more of these procurement contracts. Construction and installation are anticipated to commence in 2027. Information from this DPR testing will allow Metropolitan to assess both treated-water augmentation and raw-water augmentation alternatives.
- **Conveyance System** – The PWSC Conveyance Facilities Conceptual Design Report for the entire conveyance system has been completed and is available on Metropolitan’s public website: <https://www.mwdh2o.com/building-local-supplies/pure-water-southern-california/technical-resources/>. In addition, preliminary design of Reaches 1 and 2 through the cities of Carson, Long Beach, and Lakewood is underway. Preparation of bid documents for one or more Construction Manager/ General Contractor (CM/GC) projects for the first two reaches is also underway. Staff would be ready to advertise these packages after the CAMP4W assessments have been completed, and if the Board decides to proceed with the design of the initial stage of PWSC.

Drought Mitigation – State Water Project Dependent Areas

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

- **Wadsworth Bypass Pipeline** – This project installs a bypass pipeline and an isolation valve to interconnect the Wadsworth Pumping Plant with the Eastside Pipeline. This project is one of the four Rialto Pipeline service area supply reliability improvement projects. The contractor is currently installing electrical and Supervisory Control and Data Acquisition (SCADA) control components. Construction is 99 percent complete and is scheduled to be completed in June 2026.

- **Inland Feeder Rialto Pipeline Intertie** — This project installs an interconnection pipeline and isolation valve structure between the Inland Feeder and Rialto Pipeline so that water can be delivered from DVL to the Rialto Pipeline. This project is one of the four Rialto Pipeline service area supply reliability improvement projects. The contractor has completed the SCADA and power duct bank and is currently performing electrical work in preparation for the Motor Control Center electrical equipment delivery in April 2026. Construction is 99 percent complete and scheduled to be completed in July 2026.
- **Sepulveda Feeder Pump Stations** — This project installs new pump stations at the existing Venice and Sepulveda Canyon pressure control facilities, providing the ability to reverse flow in the Sepulveda Feeder and deliver 30 cubic feet per second from the Central Pool to portions of the western State Water Project exclusive area. This project will utilize the PDB project delivery method. Construction of the Venice Pump Station is approximately 15 percent complete. The concrete foundation for the electrical building has been placed, and the contractor is currently drilling piles for the suction piping shoring. Negotiations for construction of the Sepulveda Canyon Pump Station work have begun, and a final negotiated value is anticipated in the middle of April.



Inland Feeder Rialto Pipeline Intertie
Valve Vault and Insulating Joint Test Station – Looking West



Sepulveda Feeder Pump Stations — J.F. Shea Installing Rebar for Basement Wall at Venice Pump Station



Sustain Metropolitan's mission with a strengthened business model

Value Engineering Program

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

State Water Project (SWP) Invasive Mussel Mitigation and Control

Engineering Services, through its VE Program, delivered a scoping workshop to examine Metropolitan's SWP Invasive Mussel Mitigation and Control Initiative. This initiative was recently developed to coordinate Metropolitan's response to the discovery of golden mussels in California's waterways, and to bolster its monitoring and control program initiated in 2007 upon the discovery of invasive quagga mussels in Lake Mead.

The four-day workshop was held at Metropolitan's Water Quality Lab in La Verne, and was executed to achieve several objectives, including an assessment of control and mitigation measures; confirmation of planned CIP efforts including development of planning-level cost estimates for facilities believed to be impacted by golden mussels; and development of prioritized near- and long-term Operations & Maintenance activities.

Workshop participants included staff from Water Quality, Engineering, and Operations; external subject matter experts in the fields of invasive mussel eradication and the selection, design, and installation of control technology; US Bureau of Reclamation staff experienced in this topic; and CA DWR staff reporting strategies undertaken and planned to implement control and mitigation of mussels within the SWP.



Empower the workforce

Engineering Services Career Launch Program Tour – F.E. Weymouth Water Treatment Plant

On February 14, 2026, participants in the Fiscal Year 2025/26 Engineering Services Career Launch Program toured the F.E. Weymouth Water Treatment Plant at La Verne. This workforce development initiative is designed to support new staff during onboarding and provide a deeper understanding of Engineering Services. Fourteen participants visited the Water Quality Laboratory, where they observed the evaluation processes used to assess taste, odor, and regulatory compliance, and then toured the treatment plant to see water entering the facility, the pumping systems, flocculation tanks, and other key infrastructure involved in delivering clean, reliable drinking water.

The cohort also toured the Machine and Fabrication Shops to learn about production planning and coatings and viewed demonstrations from the Soils and Corrosion Laboratories and the Field Survey Team. The 2025/26 Career Launch Program is nearing completion of its six-module curriculum, with an Engineering Services manager's session scheduled for April and a final celebration planned for May. This program helps connect new staff to the mission, operations, and teams that support Engineering Services.



Participants Touring the Machine and Fabrications Lab



Field Survey Team Demo on Use of Drone Technology



Partner with interested parties and the communities we serve

California State University Long Beach Student Outreach Tour of the Weymouth Plant

Engineering recently provided an opportunity for students from California State University, Long Beach (CSULB) to tour the Weymouth plant. This followed two events at CSULB in November 2025, with Unit Manager Jorge Alvarado sharing valuable insights into water infrastructure and career opportunities within the water industry, as well as Team Manager Javier Garcia's participation as a keynote speaker for his current intern's civil engineering club. This Weymouth plant tour was led by Weymouth Operations Team Manager Jonathan Brown, with special coordination by Plant Engineer Charles Chen. According to student intern Jayson Serrano, the educational tour at the Weymouth plant provided a highly informative experience for the CSULB students, with the overall objectives of gaining practical knowledge and interacting with industry professionals. The students expressed how beneficial these tours are for the future generation of engineers and encourage Engineering staff to continue offering these tours during the year to support student academic and professional development.



CSULB Students Touring the F.E. Weymouth Water Treatment Plant