



THE METROPOLITAN WATER DISTRICT
OF SOUTHERN CALIFORNIA

Board Report

Engineering Services Group

- **Engineering Services Group Monthly Activities Report – May 2026**

Summary

This monthly report provides highlights and a summary of Engineering Services Group activities for May 2026 in the following key areas:

- Colorado River Aqueduct Program
- Dams & Reservoirs Program
- Distribution System Program
- Additional Facilities and Systems Program
- Prestressed Concrete Cylinder Pipe Program
- Water Treatment Plants Program
- Pure Water Southern California
- Drought Mitigation – State Water Project Dependent Areas
- Value Engineering Program
- California Division of Safety of Dams (DSOD) Field Visit
- Engineering Services Career Launch Program

Purpose

Informational

Attachments

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

Engineering Services' Monthly Activities for May 2026

Highlights

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

Goal: Complete Follow Through on Business Model Refinement Recommendations
Outcome: Follow Through on Business Model Refinement Recommendations
<ul style="list-style-type: none"> Integrated Strategy for Infrastructure Reliability Workshop #5 is scheduled for June 12, 2026. The announcement memo to member agencies is being routed for approval.

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

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



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

Colorado River Aqueduct (CRA) Program

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

- 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 the new system is installed, tested, and commissioned. 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 57 percent complete and is scheduled to be completed by April 2027.

- **CRA Main Pump Transformers Procurement** – This project replaces thirty-five 230 kV and 69 kV step-down transformers that are used to operate the main pumps at all five of Metropolitan’s Colorado River Aqueduct pumping plants. The Board awarded a procurement contract and authorized a consulting agreement for final design in May 2025. Submittal reviews are currently underway for procurement. Transformer deliveries are scheduled to begin in late 2028 and conclude by 2030. Final design for the transformer installation is 12 percent complete and anticipated to be complete by December 2026.
- **Iron Mountain and Gene Utilities Replacement** – This project replaces the potable water, sewer, and irrigation water distribution systems at Iron Mountain and Gene pumping plants. Final design is 30 percent complete and scheduled to be completed by September 2027.
- **CRA Erosion Control Improvements** – This project will install erosion control features along the CRA conveyance system at 26 conduit locations that are vulnerable to major erosion damage during storm events. Hydraulic and scour analyses are underway to confirm that the proposed erosion control technologies are appropriate for each site. Final design is 25 percent complete and is scheduled to be completed by September 2027.



CRA Domestic Water Treatment System – Contractor Installing Reinforcing Steel at Duct Bank at Hinds

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 contractor finished mobilization and began demolition of the existing floating cover and rain collection system. Construction is 7 percent complete and is scheduled to be completed by September 2028.
- **Copper Basin Discharge Valve Replacement & Access Improvements** — This project includes installation of a new 54-inch fixed cone valve and actuator at the base of the dam, refurbishment of the existing slide gate and valve house, road improvements, and upgrades to associated electrical systems and access ladders at Copper Basin Reservoir. This project will also include replacing access ladders at the Gene Wash Dam. Final design and acquisition of environmental permits is complete. A board action to award a construction contract is planned for September 2026.
- **Replacement of Lake Mathews Outlet Tower 2 Valves** — This project will replace thirty 60-inch butterfly valves and actuators at Lake Mathews Outlet Tower #2 with new stainless-steel triple-offset butterfly valves. The existing hydraulic power unit will be either rehabilitated or replaced, depending on the results of the study. Appurtenant piping replacements and other upgrades to the tower may also be necessary. The project study is currently 30 percent complete and is scheduled to be completed by April 2027.



Garvey Reservoir Rehabilitation — Removing Floating Cover from the Outlet Tower Facing South

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.

- **Service Connection LA-17 Meter Procurement** — The project will replace two flow meters, adjoining thimble pieces, coupling assemblies, and gaskets that are located in the same vault near 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. Staff is coordinating shutdown activities with the Los Angeles Department of Water and Power. A shutdown is tentatively scheduled for November 2026.
- **Covina Pressure Control Structure (PCS) Valve Procurement** — This project includes removing and replacing six globe valves with actuators on six of the ten Covina PCS lines to improve the reliability of the PCS. The globe valves will be advertised in the summer of 2026, with the award of the procurement contract anticipated in the fall of 2026.
- **San Diego Canal Radial Gates** — This project will replace the V-06 and V-08 radial gates along the San Diego Canal. In addition to replacing the gates, the project will also make electrical, security, and controls upgrades to the sites. Final design is complete, and award of a construction contract is planned for July 2026.

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.

- **Lake Mathews Above-Ground Diesel Storage Tank** — A new 6,000-gallon diesel fuel tank and fuel management system will be installed at the existing fuel island at Lake Mathews. The construction contract was awarded in February 2026. The contractor is currently completing required submittals prior to mobilizing on site, which is planned for the fall of 2026. Construction is approximately 2 percent 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 a sequential manner over four stages. Conceptual design of an alternative housing model layout is complete. 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 10 percent complete and is scheduled to be completed by the summer of 2027.

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 Hawthorne, Inglewood, and Los Angeles. Final design is approximately 75 percent complete and is scheduled to be completed in August 2027.
- **Calabasas Feeder PCCP Rehabilitation** — This project will rehabilitate 9.3 miles of PCCP segments with steel liner through the city of Los Angeles. Subsurface investigations are ongoing to support the evaluation of potential pipe access sites. Preliminary design is 80 percent complete and is scheduled to be completed by October 2026.
- **Electromagnetic Inspections** — 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 Line, L.A. Aqueduct Interconnection, Diemer/AMP Bypass, South Coast Feeder, and Irvine Cross Feeder were completed between February and April 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, competitive bids were received, and a construction contract was awarded by the Board in 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 completed demolition of the existing dry polymer tank farm area and has begun the form and foundation work for the multipurpose feed facility. Construction is 20 percent complete and is scheduled to be completed by 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 25 percent complete and is scheduled to be completed in the spring of 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 35 percent complete and is scheduled to be completed in the spring of 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 15 percent complete and is scheduled to be completed in the spring of 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 drinking 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 (USBR) 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 \$28.7 million to date. Staff is working with USBR to amend the grant agreement to realign project scope and extend the period of performance.
 - The \$80 million state grant is also used to support the current phase of program work; approximately \$58.5 million is spent as of end of March.
 - Continued to coordinate with the CAMP4W assessments.
- **Environmental Planning** – In February 2026, Metropolitan’s Board certified the program’s final EIR and approved PWSC for CEQA purposes. Staff is planning to prepare a NEPA document to address the realigned project scope to be funded by USBR’s Large-Scale Water Recycling Program grant.

- **Advanced Water Purification Facility** –The AWPf will purify treated wastewater from the Los Angeles Sanitation District’s (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 RFQs for the progressive design-build 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. Construction and installation are anticipated to commence in 2028. Information from this DPR testing will allow Metropolitan to assess both treated-water 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 Managers/General Contractors 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 SCADA control components, and Southern California Edison will install a new transformer next to the new intertie facility. 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 MCC electrical equipment delivery in May 2026. Construction is 99 percent complete and scheduled to be completed in July 2026.
- **Foothill Pump Station Intertie and 132-inch Butterfly Valve Procurement** – This project will connect Metropolitan’s Inland Feeder to San Bernardino Valley Municipal Water District’s Foothill Pump Station. The project is one of four Rialto Pipeline service area supply reliability improvement projects. Foothill

Pump Station will provide the hydraulic lift needed for direct water delivery from Diamond Valley Lake to the Rialto Pipeline. The project will install supply and discharge bypass pipelines, isolation valves, and their vault, and a surge protection system. Final design is 90 percent complete and scheduled to be completed in August 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 progressive design-build project delivery method. Construction of the Venice Pump Station is approximately 21 percent complete. The contractor has completed installing the shoring system for the suction piping and has installed the reinforcing steel for the electrical building deck. Negotiations for the guaranteed maximum price for Sepulveda Canyon Pump Station work have begun, and a final negotiated value is anticipated by June 2026, with board authorization of Phase 2 planned for July 2026.



Sepulveda Feeder Pump Stations —
Contractor Demolishing Box Beams on Top of Sepulveda Canyon Tank



Wadsworth Bypass Pipeline – Eastside Pipeline Intertie
Completed Disconnect Switch at the Southern California Edison Switchboard



Sustain Metropolitan's mission with a strengthened
business model

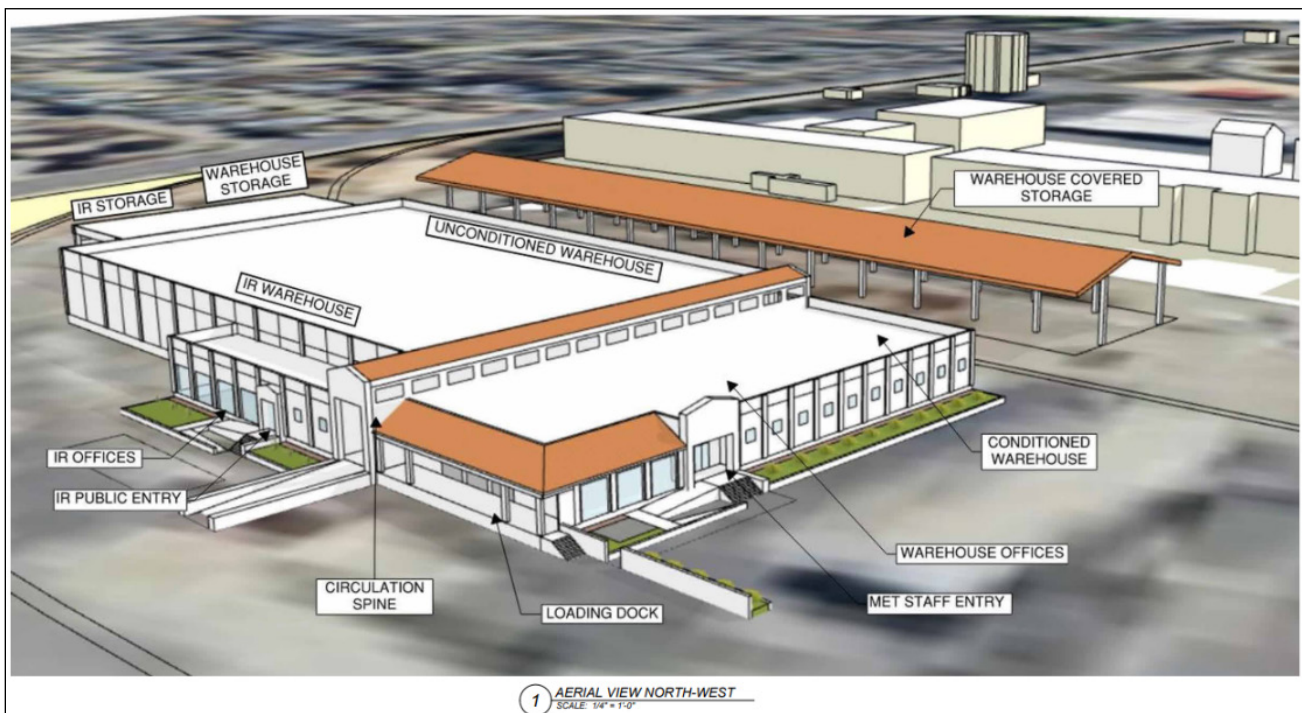
Value Engineering Program

Engineering Services manages 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.

La Verne Warehouse Facilities

Engineering Services, through its VE Program, delivered a VE workshop for the new La Verne Warehouse Facilities project in May 2026. The project involves designing and constructing a new reinforced concrete tilt-up warehouse, loading dock, and outdoor storage canopy to replace existing warehouse facilities. Replacing existing warehouse facilities involves the demolition of two existing warehouse structures (Buildings 30 and 31). This project will modernize storage systems and provide office and conference space, and public counters for the Warehouse and Investment Recovery teams.

The four-day hybrid VE workshop evaluated design alternatives, construction planning and execution, project management, and cost. The VE workshop team, almost 42 people, included Metropolitan staff from Engineering, Operations, Warehouse, and Inventory Control teams, Environmental Planning, Metropolitan's design consultants, and our workshop Facilitator and consultant Subject Matter Experts. The VE workshop team reviewed a range of subjects, including, but not limited to, constructability, contracting options, construction coordination and sequencing, and evaluation of the construction cost estimate.



La Verne Warehouse Conceptual 3D Drawing



Partner with interested parties and the communities we serve

California Division of Safety of Dams (DSOD) Field Visit

In early April, Metropolitan hosted a three-day field tour of its major dams and reservoirs. The new DSOD Division Manager, along with the Design and Field Branch Managers, attended the field visit. The facilities included Garvey Reservoir, Diemer Plant, Lake Skinner, Lake Mathews, and Diamond Valley Lake.

Metropolitan staff provided updates on several ongoing projects, including the Garvey Reservoir Rehabilitation Project and the Lake Mathews Outlet Tower 2 Valve Replacement.



DSOD and Metropolitan Teams at Diamond Valley Lake



Empower the workforce

Engineering Services Career Launch Program

The Career Launch Program marked the conclusion of its 14th year with a visit to the Grace F. Napolitano Pure Water Southern California Innovation Center in Carson, where participants gained exposure to Metropolitan's leadership in water innovation and long-term sustainability initiatives. The tour highlighted the Pure Water Southern California program and its role in supporting a resilient and reliable regional water future.



Career Launch's Technical Lead, Tyler Grossheim,
Presenting to the 14th Career Launch Participants at the Culmination Event



Career Launch Participants
Touring the Grace F. Napolitano Pure Water Southern California Innovation Center