



# The Metropolitan Water District of Southern California General Manager's Monthly Activity Report for March 2019

This report identifies the actions and activities taking place during the month that support the objectives of the General Manager's Fiscal Year 2018/19 Strategic Priorities and the Core Business of the GM's work groups.

MARCH 31, 2019

## WATER RESOURCE MANAGEMENT

### GM STRATEGIC PRIORITY: Maximize Local Resources

Staff will begin work with the Board and member agencies on a review of the institutional issues associated with the Regional Recycled Water Program and its relationship to Metropolitan's ongoing Local Resources Program.

### Objective: Support development of Regional Recycled Water Program

Staff participated in the 2019 California WateReuse Annual conference. Metropolitan sponsored the conference and exhibited information on innovative technologies, the Local Resources Program, and the Regional Recycled Water Program. Staff moderated a groundwater recharge session that included several well-received presentations on groundwater partnerships, implementation, and one-water approaches. Assistant General Manager /COO Upadhyay was elected to the WateReuse California Board of Trustees and participated in a panel discussion on the future of recycled water in California. (see photo below)



COO Upadhyay and Metropolitan staff shared information about Metropolitan and Regional Recycled Water Program at the WateReuse Conference.

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# ADMINISTRATIVE SERVICES SECTION

## CORE BUSINESS: Business Processes

Advance value-added business process improvements to increase effectiveness and efficiency while striving for innovation, flexibility, and integration with technology.

Objective: Innovate and promote sustainability efforts in business practices including, Our Legacy E-Newsletter, the Rideshare program, energy conservation, and recycling efforts.

The third quarter Our Legacy e-newsletter, which aimed to provide tips on celebrating the Spring season in innovative and sustainable ways was distributed to employees. This quarter's "Spring Green" issue rolled out the virtual welcome mat and highlighted eco-friendly Metropolitan programs and activities, such as:

- Spring Gardening with Native Plants
- Photography Club's Virtual Spring Exhibit
- New Landscape Turf Replacement Program
- Virtual Spring Garden Workshop
- Be Water Wise Portal
- Solar Cup™ Student Event



THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA  
Employee Newsletter | March 29, 2019

### The Spring Green Issue

Our Legacy has featured Metropolitan's Spring Green Expo for the past 11 years. Because of seismic upgrade at the Los Angeles headquarters building and the close of our courtyard, this year's Expo will be virtual and still provide innovative and inspiring ideas to celebrate a sustainable living.

## BAY-DELTA INITIATIVES GROUP

### GM STRATEGIC PRIORITY: Ensure Imported Supply Reliability

Southern California's foundational water supply remains the Colorado River and the State Water Project and their ongoing reliability is critical for the region. Important decisions on both supplies need to be made over the next two years.

**Objective:** Provide leadership on scientific studies that further opportunities to sustain and support native species and habitat.

Staff participated in the Interagency Ecological Program 2019 Annual Workshop on March 5-7, which is an annual science conference focused on studies in the Bay-Delta. Staff also organized and moderated the Anadromous Fishes session at the workshop. Science conducted or supported by Metropolitan and the State Water Contractors was well represented in the conference, including studies addressing salmon predation and impacts of water project operations:

- Steve Zeug (Cramer Fish Sciences). Experimental Quantification of Piscivore Density and Habitat Effects on Juvenile Chinook Salmon Survival.
- Mike Tillotson (ICF). A Machine Learning Model for Predicting Salmonid Take at the State Water Project (SWP) and Central Valley Project in Real-Time.

### CORE BUSINESS: Bay-Delta Solutions

Develop and pursue near- and long-term solutions that will ensure improved water quality and water supply reliability. Efforts include providing leadership for proposed Delta improvements, participating in on-going federal and state Bay-Delta regulatory processes, effectively managing studies and research activities that promote collaborative science, identifying opportunities for Delta Islands land management, and monitoring Delta levees performance to ensure long-term levees integrity.

**Objective: NEAR-TERM DELTA ACTIONS**—Develop and implement near-term measures, compatible with long-term Delta solutions to support regulatory processes that improve water quality and water supply reliability. Near-Term Actions include important efforts such as Regulatory, Planning, and Legislative Support; Science Development, and Emergency Preparedness Planning and Implementation.

Regulatory, Planning, and Legislative Support

#### State Water Resources Control Board

The State Water Resources Control Board is in the process of developing and implementing updates to the Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary (Bay-Delta Plan), and on December 12, 2018, the SWRCB adopted Bay-Delta Plan updates addressing San Joaquin River flows and south Delta salinity. Phase 2 of the Bay-Delta Plan update is focused on the Sacramento River and its tributaries, Delta eastside tributaries, Delta outflows and interior Delta flows. Voluntary Agreement discussions continue to progress. On March 1, the California Natural Resources Agency provided the SWRCB with a Project Description that would support its environmental and biological objectives through flow and non-flow actions, adaptive management, and funding commitments. The Voluntary Agreement package also includes a planning agreement that outlines necessary terms still needed and an approach for the additional work to be completed. Staff is participating in the Voluntary Agreement process to provide technical input on the evaluation of the proposed voluntary actions. By June 2019, the Voluntary Agreement parties will provide the SWRCB with further refinements to the Project Description related to governance and a science program.

As reported previously, the Delta Science Program organized an Independent Scientific Advisory Panel (Panel) at the request of the SWRCB to develop recommendations on scientifically defensible methods for formulating biological

## BAY-DELTA INITIATIVES GROUP

### CORE BUSINESS: Bay-Delta Solutions continued...

#### Objective: NEAR-TERM DELTA ACTIONS—Regulatory, Planning, and Legislative Support continued...

goals that can be used to assess progress toward achieving the Bay-Delta Water Quality Control Plan's narrative objectives. The draft Panel report was released February 4, 2019, and staff reviewed the report and coordinated with the SWC to submit comments on the report on February 26. On March 4, staff participated in the SWRCB Bay-Delta Biological Goals Scientific Advisory Panel meeting to provide input on the draft Panel recommendations.

#### Objective: NEAR-TERM DELTA ACTIONS—Science Development

Staff participated in the Sutter Bypass workgroup and toured the Sutter Bypass to visit the ongoing fish, zooplankton, and hydrology studies that are taking place to better identify how juvenile salmon use this habitat and what restoration actions are needed to improve salmon use and survival. Metropolitan is a funding partner on this project.

Staff is participating in the Central Valley Salmon Habitat Partnership, a multi-agency group made up of state and federal agencies, water districts, and non-profit organizations working together to advance recovery and maintenance of viable, self-sustaining salmon populations. At the science meeting the group discussed options for online platforms to track salmonid related restoration projects and the proposal submitted to the Delta Stewardship Council Delta Science Program/California Department of Fish and Wildlife Prop 1 solicitation in the fall of 2018. The proposal would develop the habitat objectives of the Central Valley Salmon Habitat Partnership Implementation Plan for the Sacramento-San Joaquin-Delta and five key Delta tributaries. The group discussed options on how to move this work forward but decided to wait until a funding decision on Prop 1 is made before moving forward with work (funding announcements will be made in April 2019).

Starting in 2017, the Delta Stewardship Council Delta Science Program worked with researchers at University of California, Davis to conduct a drought management and science synthesis study. The purpose of the study was to evaluate the drought actions of 2014-2015, the data used for decision-making, major uncertainties, and drought-specific studies, and to develop recommendations to better prepare for future droughts. Staff participated on a planning committee to provide input to the project, and in March staff reviewed the revised draft project report and submitted comments.

Staff continued participating in the Collaborative Science and Adaptive Management Program (CSAMP), including participation on the Collaborative Adaptive Management Team (CAMT). In March, CSAMP and CAMT received updates on Delta smelt and Salmon Resiliency Strategy actions including: project status, initial findings from action implementation and funding needs. The California Department of Water Resources reported on a project underway to test using net pens in the field to rear Delta smelt away from the hatchery. Initial results from the field test were promising with Delta smelt survival in the net pens being similar to Delta smelt in the hatchery. DWR is considering next steps to use the net pens in the field, which could be a very promising way to evaluate Delta smelt response to management actions. CAMT also discussed next steps in the CSAMP Structured Decision Making project for Delta smelt and considered options for integrating with the Delta Science Program/US Bureau of Reclamation Structured Decision Making process. CAMT received the Delta Smelt Science Plan revised report in March and staff is reviewing the report. CAMT is discussing next steps, including an approach to test implementation of the plan this year, which includes identification of who is responsible; planned monitoring and studies; identification of knowledge gaps for Delta smelt evaluation and proposals to address the gaps; and development of plans for communication.

## BAY-DELTA INITIATIVES GROUP

**CORE BUSINESS:** Bay-Delta Solutions continued...

**Objective:** NEAR-TERM DELTA ACTIONS—Emergency Preparedness Planning and Implementation

### Delta Flood Emergency Management Plan

The Final Delta Flood Emergency Management Plan (DFEMP) was approved by the Director of DWR in February 2019. This culminates many years of work by the state to develop an actionable plan to respond to catastrophic events that could significantly affect SWP operations in the Delta. In the Forward to the DFEMP, the Director states, “The DFEMP provides a concise, but flexible blueprint for guiding Delta flood emergency management. It serves as a checklist to ensure that important flood management elements are not overlooked, and a manual to help set priorities and allocate resources under emergency conditions when there is not enough time to conduct detailed fact-finding and economic analyses from scratch. Finally, the DFEMP provides reference information and specific procedures that can be incorporated into training programs and then used effectively in Delta flood emergencies.” DWR has indicated that the DFEMP would be revised from time to time as needs dictate.

The DFEMP defines the emergency freshwater pathway as a corridor traversing the Delta to the export pumps, in which the repair of levees would be prioritized and channel barriers installed to isolate the pathway from the rest of the Delta. In the most robust response strategy, fresh water reservoir releases from north of Delta reservoirs would be directed toward the central Delta where the pathway would capture and convey fresh water to the southern Delta.

## CHIEF FINANCIAL OFFICER GROUP

**CFO STRATEGIC PRIORITY:** Maintain Strong Financial Position

Provide timely and discerning financial analyses, planning, and management to ensure that forecasted revenues are sufficient to meet planned expenses and provide a prudent level of reserves consistent with Board policy.

**Objective:** Manage risk to protect Metropolitan’s assets against exposure to loss.

The Risk Management Unit completed 65 incident reports communicating instances of Metropolitan property damage, liability, workplace injuries, regulatory visits, and spills.

Risk Management completed 59 risk assessments on contracts, including professional service agreements, construction contracts, entry permits, special events, and film permits.

## CHIEF FINANCIAL OFFICER GROUP

### CORE BUSINESS: Financial Management

Manage Metropolitan’s finances in an ethical and transparent manner and provide consistent, clear, and timely financial reporting.

Objective: Prudently manage the investment of Metropolitan’s funds in accordance with policy guidelines and liquidity considerations.

As of February 28, 2019, the balance in Metropolitan’s investment portfolio was \$1.11 billion; for the month of February 2019, Metropolitan’s portfolio managers executed 65 trades.

During the month of February 2019, Treasury staff processed 1,668 disbursements by check, 17 disbursements by Automated Clearing House (ACH), and 62 disbursements by wire transfer. Treasury staff also processed 73 receipts by check, 27 receipts by ACH, and 34 receipts by incoming wires and bank transfers.

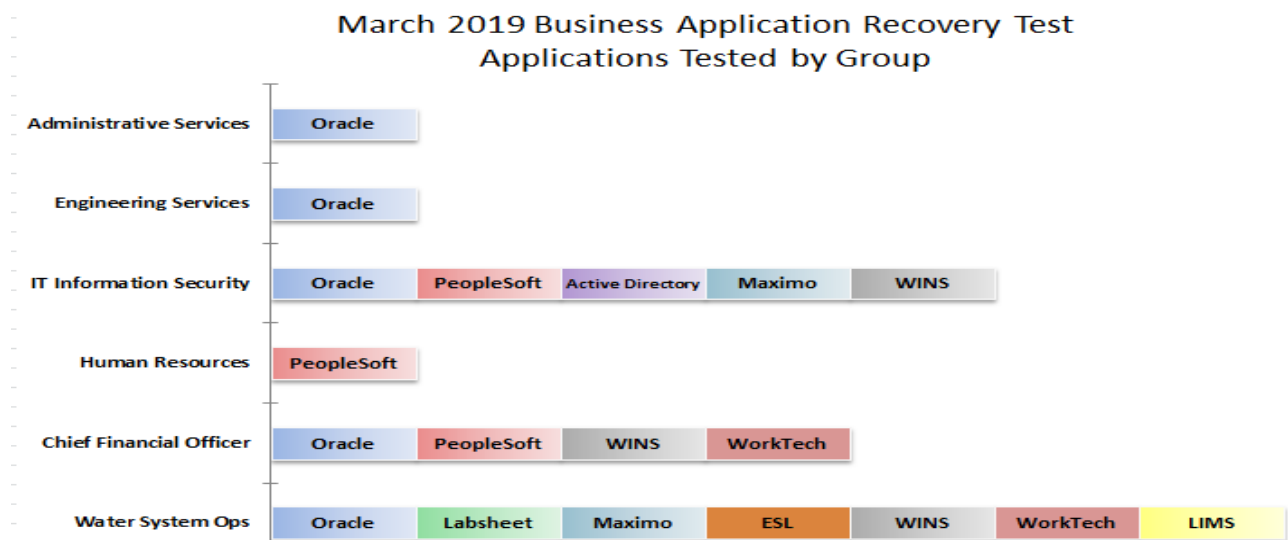
### CORE PRIORITY: Business Continuity

Metropolitan will continue its longstanding practice of operating in a productive, cost-effective, transparent and efficient manner to ensure sound financial stability.

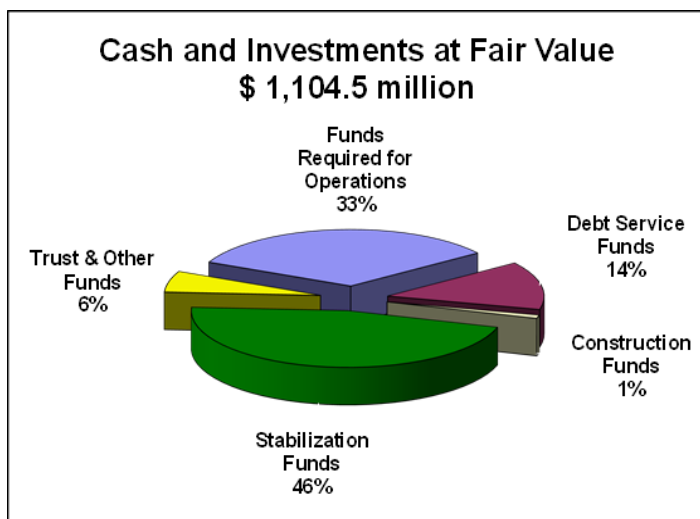
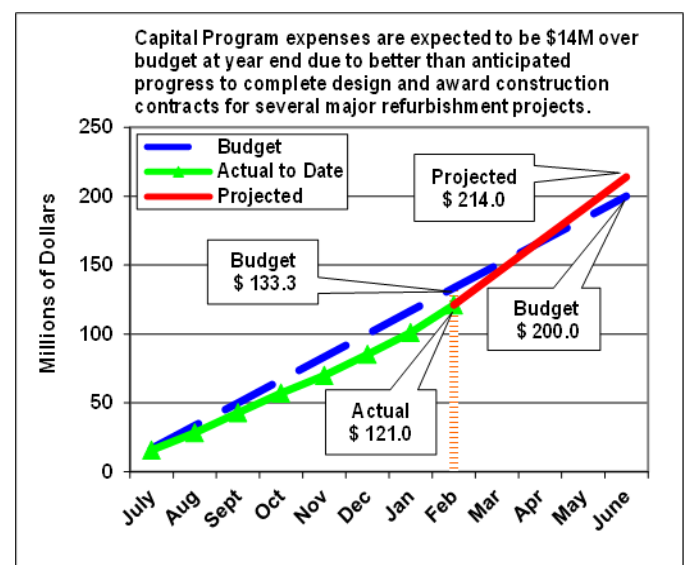
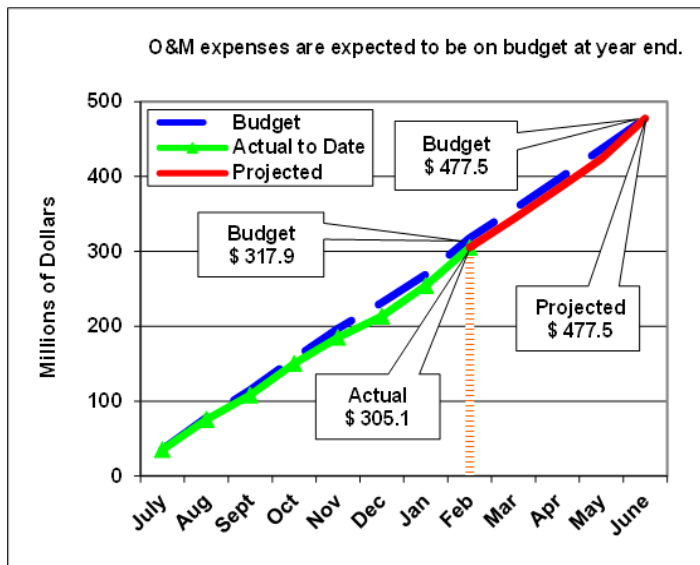
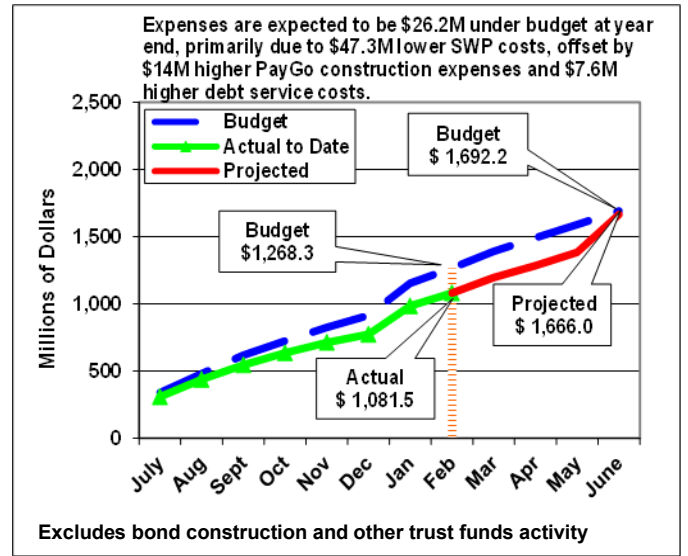
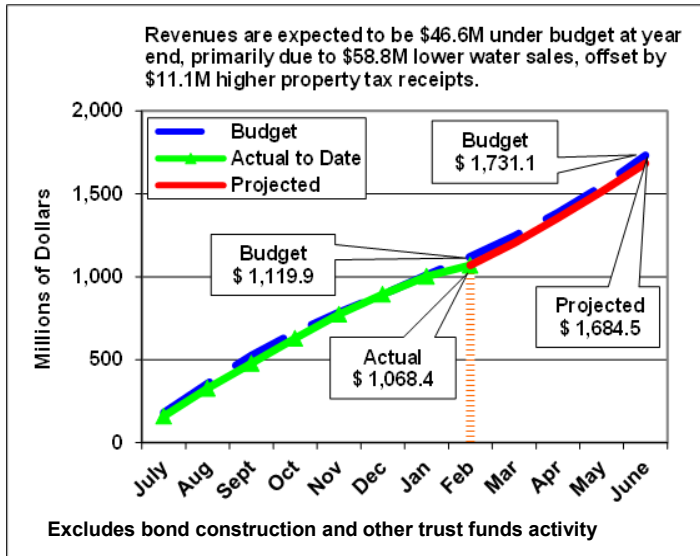
Objective: Manage the Business Continuity Management Program in accordance with Operating Policy A-06.

On March 14 and 15, 2019, an application recovery test was conducted to ensure the accessibility and functionality of critical applications and continuity of business operations. Backup systems were brought up at the Lake Mathews Disaster Recovery Facility to simulate an outage of production systems at Headquarters.

Over 60 business users from various groups and facilities participated in testing applications recently deployed to the upgraded Lake Mathews facility. Nine critical applications were tested. Using test scripts to document objectives and results, business users validated their ability to recover data, access critical applications, and continue critical operations following an event that disrupts normal production systems. Lessons learned will be used to streamline future testing. [\(see chart below\)](#)



FINANCIAL SUMMARY AS OF FEBRUARY 28, 2019



### Summary Financial Statistics

	Target	Year-End Projected
Fixed Charge Coverage	≥ 1.20 x	1.46 x
Revenue Bond Coverage	> 2.00 x	1.59 x
Revenue Bond Debt / Equity Ratio	< 100.0%	61.5 %

### Senior Lien Revenue Bond Credit Ratings

	Target	Year-End Projected
- Moody's Investors Service	Aa2	Aa1
- Fitch Ratings	AA	AA+
- Standard & Poor's	AA	AAA

## ENGINEERING SERVICES GROUP

### GM STRATEGIC PRIORITY: Enhance Infrastructure Safety, Security and Resiliency

**Objective:** Manage and execute Board-authorized projects within the Capital Investment Plan (CIP) to ensure the reliable delivery of water to Metropolitan's member agencies.

#### Distribution System Reliability Program

This program maintains reliable water deliveries through specific repair and rehabilitation projects on Metropolitan's pipelines, reservoirs, and control structures. Recent activities include the following:

- Jensen Finished Water Reservoir No. 2 Cover Replacement—This project replaces the floating cover and liner at the Jensen plant's Reservoir No. 2 and improves the existing inlet configuration for the reservoir. Preliminary design is 87 percent complete and is scheduled to be complete by July 2019.
- Mills Finished Water Reservoir Rehabilitation—This project rehabilitates the Mills plant's two finished water reservoirs, including replacement of the floating covers and liners, refurbishment or replacement of existing shutoff gates, installation of a new drop gate, and installation of enhanced security features. Preliminary design is 87 percent complete and is scheduled to be complete by July 2019.
- Valley View Hydroelectric Power Plant Rehabilitation—This project refurbishes deteriorated components of the generator at Valley View Hydroelectric Plant and rehabilitates auxiliary systems at the facility. Rehabilitation is proceeding in two stages: Stage 1 performs immediate repairs to the generator to enable the plant to return to operation, and Stage 2 will address long-term improvements needed for auxiliary systems at the plant. The Stage 1 work is 92 percent complete and is scheduled to be complete by May 2019. Preliminary design of the Stage 2 improvements is 45 percent complete and is scheduled to be complete by July 2019.
- Red Mountain Hydroelectric Plan—This project refurbishes and/or replaces the turbine's mechanical components. Final design is 60 percent complete and is scheduled to be complete by May 2019.
- Lake Perris Seepage Water Conveyance Pipeline—This project installs a 3,100-foot-long, 24-inch diameter pipeline to convey Lake Perris seepage water to the Colorado River Aqueduct. Preliminary design is 60 percent complete and is scheduled to be complete by May 2019.
- Wadsworth Pumping Plant Yard Piping Lining Repairs—This project replaces the existing deteriorated coating within the yard piping at Wadsworth Pumping Plant. Construction is complete.
- Casa Loma Siphon Upgrades—This project replaces Casa Loma Siphon Barrel No. 1 at a fault crossing utilizing Earthquake Resistant Ductile Iron Pipe. Design is 35 percent complete and scheduled to be complete by January 2020.
- Lake Mathews Sodium Hypochlorite Tanks Replacement—This project replaces two sodium hypochlorite tanks. Recent inspections of Lake Mathews' sodium hypochlorite storage tanks identified significant degradation of the interior corrosion barrier. Final design for this project is complete and a Board for award of the construction contract is planned for May 2019.
- West Valley Feeder De Soto Valve Replacement—This project replaces the existing 42-inch butterfly valve at the De Soto valve structure. Final design is 30 percent complete and is scheduled to be complete by August 2019.
- Orange County Region Service Center—This project constructs a new 12,000 sq. ft. permanent service center for the Orange County operating region. The existing service center was removed in 2008 to provide space for the Oxidation Retrofit Project construction. Existing temporary facilities, installed at that time, consist of three construction trailers for staff, four shipping containers for equipment, and an old warehouse for shop fabrication. Construction is 50 percent complete and is scheduled to be complete by December 2019. [\(see photos next page\)](#)



## ENGINEERING SERVICES GROUP

### GM STRATEGIC PRIORITY: Enhance Infrastructure Safety, Security and Resiliency

Orange County Region Service Center – Structural steel frame erection in office area of building and Installation of slab forms for office area



#### Prestressed Concrete Cylinder Pipe (PCCP) Reliability Program

This program was established to enhance the reliability of Metropolitan's water distribution system and to reduce the risk of costly emergency repairs of PCCP pipelines. The priority pipelines included in the program are the Second Lower Feeder, Sepulveda Feeder, Calabasas Feeder, Rialto Pipeline, and the Allen-McColloch Pipeline. Recent activities include the following:

- Second Lower Feeder PCCP Rehabilitation—This project rehabilitates the remaining 28 miles of PCCP segments within the Second Lower Feeder. Long-term rehabilitation of the Second Lower Feeder will be staged over a period of eight to ten years, with multiple construction and procurement contracts. The scope of the second construction contract for Reach 4 includes lining approximately 2 miles of existing PCCP segments with a steel liner. Construction for Reach 4 is 10 percent complete and is scheduled to be complete by November 2019. Final design of Reach 2 was completed and a request to the Board for award of construction is planned for April 2019. Final design of Reach 3 is 87 percent complete and is scheduled to be complete by September 2019.
- Second Lower Feeder Pipe Fabrication—Fabrication of steel liner pipe for Reaches 2 and 4 is underway and will provide approximately 21,100 feet of 75-inch-diameter welded steel liner pipe. Pipe fabrication is 50 percent complete and

the initial delivery of pipe for Reach 4 was completed.

- Second Lower Feeder Shutoff Valve Procurement—This contract provides 216 shutoff valves that will replace deteriorated valves along the length of the Second Lower Feeder. These valves range in diameter from 4 inches to 16 inches, and are used to control and isolate flow at air release/vacuum valve locations, dewatering vaults, and blowoff structures. The first 150 valves were received and inspected and are in protective storage. The remaining 66 valves will be delivered by September 2019.
- Second Lower Feeder Isolation Valve Procurement—This contract provides 13 conical plug isolation valves for the Second Lower Feeder rehabilitation. These valves range in diameter from 48 to 54 inches and provide primary isolation for maintenance activities, inspections, and repairs required to maintain reliable water deliveries with Metropolitan's distribution system. Fabrication activities are underway with the initial kick-off meeting held in February 2019 and receipt of initial vendor fabrication drawings in March 2019.
- Sepulveda Feeder, Calabasas Feeder, Rialto Pipeline, and the Allen-McColloch Pipeline—These projects rehabilitate the four other priority PCCP lines. Preliminary design activities for the four priority lines are being conducted simultaneously and are 14 percent complete and scheduled to be complete by mid-2020.

## ENGINEERING SERVICES GROUP

### GM STRATEGIC PRIORITY: Enhance Infrastructure Safety, Security and Resiliency

Objective: Manage and execute Board-authorized projects within the Capital Investment Plan (CIP) to ensure the reliable delivery of water to Metropolitan's member agencies. **Continued...**

#### Colorado River Aqueduct (CRA) Reliability Program

This program maintains the reliability of Metropolitan's CRA conveyance system. Recent activities include the following:

- Intake Power Line and Communication Replacement—This project relocates a power transmission line that serves Intake Pumping Plant and several remote CRA facilities. Construction is 22 percent complete and is scheduled to be complete by September 2019.
- CRA UPS Replacement—This project replaces the uninterruptible power supply (UPS) systems at the five CRA pumping plants. Each plant has a UPS system to prevent fluctuations in power quality and to serve as a backup in case of loss of power. Construction is 20 percent complete and is scheduled to be complete by November 2019.
- CRA Radial Gate Replacement—This project replaces eight deteriorated radial gates along the aqueduct in two stages. Construction of Stage 1 to replace a radial gate at Eagle Mountain Pumping Plant is 72 percent complete and is scheduled to be complete by April 2019. Final design of Stage 2 to replace the remaining seven gates is 90 percent complete and is scheduled to be complete by June 2019.
- CRA Discharge Isolation Couplings—This project consists of fabricating and installing 44 isolation sleeve couplings with flow-through spool pieces in 6-foot- diameter water discharge pipes, fabricating nine removable bulkheads, re-lining 6-foot discharge pipes with mortar lining, demolition and installation of concrete piers. Final design is 99 percent complete and is scheduled to be complete by April 2019.
- CRA Conduit Structural Protection—This project adds protection over the aqueduct's conduits at 24 locations where there is vulnerability to heavy vehicle and equipment loading. Final design is 70 percent complete and is scheduled to be complete by December 2019.
- CRA Gene Wash and Copper Basin Discharge Valve Rehabilitation—This replaces the existing deteriorated valves at Copper Basin and Gene Wash Reservoirs on the Colorado River Aqueduct. This project will be completed in two stages. Stage 1 replaced the valve at Gene Wash Reservoir. Final design for Stage 1 is 90 percent complete and is scheduled to be complete by April 2019. The valve at Copper Basin Reservoir will be replaced under Stage 2. Final design for Stage 2 is 30 percent complete and is scheduled to be complete by June 2020.

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#### Treatment Plant Reliability Program

This program was initiated to maintain reliability and improve the operating efficiency of Metropolitan's water treatment plants through specific improvement projects. Recent activities include the following:

##### Diemer Plant

- West Basin and Filter Building Rehabilitation—This project performs rehabilitation of the west flocculation/ sedimentation basins and filter building at the Diemer plant, including replacement of treatment basin equipment and filter valves, abatement of hazardous materials, and seismic strengthening of the filter building. Construction is 12 percent complete and is scheduled to be complete by December 2020.
- Diemer Water Sampling System Improvements—The project upgrades the existing Diemer water sampling system. The sample pump, piping and field analyzers will be upgraded at each of the system's 13 sample locations. Construction is seven percent complete and is scheduled to be complete by January 2021.

## ENGINEERING SERVICES GROUP

### GM STRATEGIC PRIORITY: Enhance Infrastructure Safety, Security and Resiliency

Objective: Manage and execute Board-authorized projects within the Capital Investment Plan (CIP) to ensure the reliable delivery of water to Metropolitan's member agencies. **Continued...**

#### Treatment Plant Reliability Program continued...

##### Diemer Plant

- West Basin and Filter Building Rehabilitation—This project performs rehabilitation of the west flocculation/sedimentation basins and filter building at the Diemer plant, including replacement of treatment basin equipment and filter valves, abatement of hazardous materials, and seismic strengthening of the filter building. Construction is 12 percent complete and is scheduled to be complete by December 2020.
- Diemer Water Sampling System Improvements—This project upgrades the Diemer water sampling system. At each of the 13 sample locations, the sample pump, piping, and field analyzers will be upgraded. Construction is seven percent complete and is scheduled to be complete by January 2021.

##### Jensen Plant

- Jensen Water Quality Enclosure—This project constructs a new enclosure to house water quality instrumentation and equipment. Construction is 51 percent complete and is scheduled to be complete by July 2019.
- Jensen Module 2 and 3 Flocculator Rehabilitation—This project rehabilitates the Modules 2 and 3 flocculators at the Joseph Jensen Water Treatment Plant. The flocculators in Modules 2 and 3 have been in service since 1995 and require refurbishment to improve reliability and extend their service life. Final design is complete and a Board award of the construction contract is planned for May 2019.
- Jensen Electrical Upgrades, Stage 2—This project upgrades the electrical system with dual power feed to key process equipment in three stages to achieve conformity with current codes and industry practices. Stage 2 improvements will upgrade UPC-7, UPC-9, and their associated motor control centers to support critical process equipment. These include the washwater pumps, service water pumps, washwater return pumps, filters, thickeners, sludge pumps, and ammonia facilities. Stage 3 improvements will upgrade the remaining components of the electrical system at the eastern portion of the plant. Construction of Stage 1 is complete. Final design of Stage 2 is 99 percent complete and is scheduled to be complete by April 2019.

##### Weymouth Plant

- Weymouth West Washwater Tank Seismic Upgrades—This project performs seismic strengthening and refurbishment of the west washwater tank at the Weymouth plant. Construction is 53 percent complete and is scheduled to be complete by May 2019. *(see photos below)*



F.E. Weymouth Water Treatment Plant, West Washwater Tank Seismic Upgrades – Removal of center roof support and Removal of center roof support



## ENGINEERING SERVICES GROUP

### GM STRATEGIC PRIORITY: Maximize Local Resources

Staff will begin work with the Board and member agencies on a review of the institutional issues associated with the Regional Recycled Water Program and its relationship to Metropolitan's ongoing Local Resources Program

Objective: Develop and support opportunities to collaborate with other agencies to enhance local water supplies.

### Regional Recycled Water Program

Regional Recycled Water Program – This program includes the design and construction of an Advanced Water Treatment Demonstration Plant, which represents the initial step in development of a potential regional recycled water system for recharge of groundwater basins within Southern California.

- Advanced Water Treatment Demonstration Plant—This project constructs a 0.5 mgd demonstration facility on the grounds of the Los Angeles County Sanitation District's Joint Water Pollution Control Plant in Carson.

## ENVIRONMENTAL PLANNING SECTION

### GM STRATEGIC PRIORITY: Enhance Infrastructure Safety, Security and Resiliency

Metropolitan's vast network of aqueducts, pipelines, pumps and treatment facilities are the backbone of Southern California's regional water system. However, this vital infrastructure is aging and heightened reinvestment in this system is essential to ensure Metropolitan can continue to deliver on its promise of reliability in the coming decades.

Objective: Provide planning, CEQA/NEPA (National Environmental Policy Act), and regulatory permitting support for enhancement of infrastructure, safety, security, and resiliency.

### CEQA/NEPA

- Completed revisions to PCCP Addendum No. 3 for Second Lower Feeder Reach 2.

### Regulatory Permitting Support and Compliance

- Continued to prepare California Department of Fish and Wildlife (CDFW) long-term routine maintenance Streambed Alteration Agreement (SAA) notifications for dewatering activities across Metropolitan's service area.
- Obtained SAA for the shutdown and dewatering of Box Springs Feeder to support Prestressed Concrete Cylinder Pipe inspections.
- Obtained the Federal Incidental Take Permit (ITP) for the February Foothill Feeder Shutdown.
- Monitored the Foothill Feeder Shutdown for biological resources and compliance with the State ITP, Federal ITP, and SAA, and in accordance with mitigation measures in the Supplemental Environmental Impact Report.
- Attended site visit with CDFW to assess permitting requirements for the Colorado River Aqueduct Structural Protection Program.

## ENVIRONMENTAL PLANNING SECTION

### GM STRATEGIC PRIORITY: Promote Environmental Stewardship and Sustainability

Metropolitan will continue to lead with programs that promote actions that support sustainable practices, reduce greenhouse gas emissions and protect natural habitat and water quality.

**Objective:** Support External Affairs in development and implementation of interpretive, public outreach, and public access programs to promote appreciation for and understanding of the benefits of conservation lands to Metropolitan, the public, and the environment.

Coordinated with External Affairs, Security, Real Property, Water System Operations, and the East Marina concessionaire to prepare for the March 2019 opening of the DVL Wildflower Trail. Maintenance on the trail was completed, including installation of temporary fencing to keep visitors on the trail. (see photo right)



Preparing the DVL Wildflower trail to protect the wildflowers

**Objective:** Develop reclamation plans for Metropolitan-operated borrow pits in Riverside and San Bernardino counties.

Finalized Request for Proposal for the development of reclamation plans.

**Objective:** Continue cultural resources planning and education to protect and preserve the historic legacy of Metropolitan.

- Completed mapping known cultural resources along 19 pipelines in Los Angeles County.
- Provided cultural resource guidance for the Prestressed Concrete Cylinder Pipe Reliability Program.
- Began coordination with Cal Fire regarding cultural resources protection for prescribed burns at Lake Mathews Reserve and the Southwestern Riverside County Multi-Species Reserve.

### CORE BUSINESS: Business Processes

**Objective:** Provide timely and professional planning services and CEQA and regulatory support to Engineering Services, Water System Operations, Water Resource Management, External Affairs, and Real Property.

#### CEQA Clearances

Provided environmental planning clearances for 11 WSO projects, 7 Real Property actions, and 9 board letters.

## ENVIRONMENTAL PLANNING SECTION

### CORE BUSINESS: Business Processes

**Objective:** Provide timely and professional planning services and CEQA and regulatory support to Engineering Services, Water System Operations, Water Resource Management, External Affairs, and Real Property.

#### Engineering Services Support

- Reviewed Preliminary Design Report for the Sepulveda-East Valley Feeder (EVF) Interconnection Structures Electrical Upgrades project.
- Reviewed drawings and prepared specifications for Etiwanda Pipeline North, Garvey Reservoir Drainage Improvements, and Diemer Conveyance and Distribution Facility Landscaping projects.
- Met with City of Los Angeles staff regarding West Valley Feeder No. 1 Stage 3 Improvements project in support of the Mitigated Negative Declaration.
- Continued coordination for assessment and protection of biological resources and CEQA compliance for Slope Strengthening at Diemer Basin 8.
- Continued coordination for assessment and protection of historic architectural resources and CEQA compliance for Weymouth Administration Building seismic upgrades.

#### Water System Operations Support

- Completed wildlife surveys and biological resources memos in support of SAA for the San Diego Pipeline Nos. 1 and 2 shutdowns.
- Participated in and provided environmental support during CRA Shutdown coordination meetings.
- Conducted biological surveys in support of various operations and maintenance activities, including vegetation maintenance and road grading at various facilities.

#### Legislative Support

- Prepared March Board committee presentation and participated in development of comment letter on the proposed Waters of the U.S. regulation under the Clean Water Act, which were published in the Federal Register on February 15.
- Reviewed and provided analysis on 7 state bills.
- Continued to coordinate with internal and external industry groups on the State Water Resources Control Board's proposed Wetland Riparian Area Protection Policy.

#### External Project Review

- Commented on 14 CEQA notices for various external projects that may impact Metropolitan facilities and/or operations.

#### Miscellaneous

- Coordinated with Administrative Services to organize electronic storage and filing system under the Digital Asset Optimization.
- Conducted Desert Tortoise Awareness and Endangered Species Compliance Training to over 50 staff members in preparation for the 2019 CRA Shutdown.
- Working with Engineering Services Group, Water System Operations, Water Resources Management, and consultants to provide environmental expertise to update the 2009 Energy Management and Reliability Study.

#### Construction Monitoring

- Continued environmental monitoring of construction activities at Palos Verdes Reservoir. Supported External Affairs at public outreach meeting with adjacent property owners and City of Palos Verdes personnel.
- Began construction monitoring for PCCP Second Lower Feeder Reach 4.
- Continued construction mitigation monitoring for the Diemer Filter Outlet Conduit Seismic Upgrades Project, Orange County C&D Team Maintenance Building, Weymouth Plant West Wash Water Tank Seismic Upgrades, Weymouth Plant Domestic Water System Improvements, Weymouth Plant Chlorine System Upgrades, Orange County Feeder Relining Reach 2, and the 2.3 kV Powerline Replacement Project located at Gene Camp.
- Completed final mitigation monitoring reports for the Whitewater CRA Erosion Protection Project.

## EXTERNAL AFFAIRS GROUP

### EXTERNAL AFFAIRS PRIORITY: Advance Initiatives to Educate and Inform the Public, Elected Officials and Stakeholders on Water Supply Conditions and Important Water Management Decisions.

External Affairs will develop and maintain relationships with the public, legislative leaders, government officials, non-governmental organizations, and other stakeholders, and implement effective and diverse communication and outreach strategies on the value of water, current water supply conditions, innovative strategies to address current and future challenges, and the importance of Metropolitan actions and leadership to promote stewardship, planning and investments to benefit the region.

**Objective:** Recognizing there is a new normal that is directly impacting California water conditions, driven in part by more volatile supply conditions due to climate change, inform key stakeholders, news media, businesses and the public on the need for sustained conservation actions, support for new water supply projects and continued investment in imported water systems to maintain water supply reliability and protect the environment.

- General Manager Kightlinger and Chairwoman Gray participated at press conference/celebration to recognize the agreement to deliver water to the Sycuan Band of the Kumeyaay Nation in San Diego County. (March 4) (see photo right)
- With a major super bloom of wildflowers underway at Diamond Valley Lake, Metropolitan staff helped to market the event, assist visitors, and provide bilingual signs and brochures to inform the public of the need to stay on designated trails to avoid harming native species and habitats in the Southwest Riverside County multi-species reserve protected area.
- Assistant General Manager/COO Upadhyay and Metropolitan staff were among the keynote speakers and workshop presenters at the California WaterReuse Conference, introducing the Regional Recycled Water Program and other initiatives to more than 500 attendees. (March 17-19)



Commemorating an agreement of the first stable water supply to the Sycuan Tribe

### CORE BUSINESS: Legislative, Communications, Community Relations, Public and Business Outreach

**Objective:** LEGISLATIVE SERVICES - Develop and implement local, state and federal legislative and regulatory strategies consistent with Board-adopted policies. Promote interaction between Metropolitan leadership and various stakeholders, including elected officials, to facilitate support for, and garner greater understanding of, water policy issues.

#### Federal

- Metropolitan staff and the Valley Industry Commerce Association (VICA) delegation met Representative Sherman (D-Sherman Oaks), Matt Weiner, Executive Director of the California Democratic Congressional Delegation; Terri McCullough, Chief of Staff to Speaker Pelosi (D-San Francisco), Emily Burns, Chief of Staff for Representative Hill (D-Agua Dulce) and with Miguel Franco, Chief of Staff for Representative Cardenas (D-Panorama City) to discuss legislative priorities for 2019. (March 11)

## EXTERNAL AFFAIRS GROUP

**CORE BUSINESS:** Legislative, Communications, Community Relations, Public and Business Outreach continued...

**Objective:** LEGISLATIVE SERVICES - continued...

- Metropolitan sponsored and participated in the Los Angeles Chamber of Commerce's annual ACCESS DC advocacy trip to Washington, D.C. Staff met with Rep. Garamendi (D-Walnut Grove) and Rep. Barragan (D-Los Angeles) to discuss Metropolitan's policy priorities. Senator Feinstein (D-CA), Rep. Gomez (D-Los Angeles) and Rep. Hill (D-Agua Dulce) also addressed the delegation. (March 11-13)
- Metropolitan staff participated in the Inland Action Group advocacy trip to Washington D.C which included discussions on Metropolitan's legislative federal policy priorities with Reps. Aguilar (D-Redlands), Cook (R-Yucaipa), Torres (D-Pomona), Calvert (R-Corona) and Ruiz (D-Imperial). (March 11-13)
- Director Barbre attended and Metropolitan provided a tour of the Diemer plant for Congressman Cisneros (D-Fullerton) and his staff on World Water Day. (March 22)
- Metropolitan staff attended Senate and House Resource Committee oversight hearings on the Colorado River Drought Contingency Plan where Colorado River Board Chairman Peter Nelson testified on behalf of the state. Metropolitan submitted comments in support of the DCP, urging Congress to introduce and pass authorizing legislation directing the Department of the Interior to implement the DCP.

### State

Nearly 2,500 bills were introduced this legislative session, the vast majority of which were "spot" or placeholder bills. Among the top legislative issues affecting Metropolitan are:

#### *Delta Conveyance*

The Senate Natural Resources and Water Committee heard SB 204 by Senator Dodd (D-Napa), a bill that would delay implementation of state water contract amendments and construction of California WaterFix. Metropolitan opposes the bill and is seeking amendments that would further transparency without delaying or increasing the cost of the project.

#### *Recycled Water*

SB 332 by Senator Hertzberg (D-Van Nuys) would require wastewater treatment plants and their water suppliers to reduce ocean discharges 50 percent by January 2030 and 95 percent by January 2045. While Metropolitan supports policies to advance recycled water, there are concerns about setting mandates that may not be achievable.

#### *Water Conservation Rebates*

Metropolitan is co-sponsoring AB 533 authored by Assemblymember Holden (D-Pasadena), with the California Water Efficiency Partnership and WaterNow Alliance. The bill would make rebates for turf replacement and storm water runoff programs permanently exempt from state and corporate income tax.

Director Solorio and Metropolitan staff attended and sponsored the Orange County Business Council's annual legislative trip to Sacramento. The group met with Lt. Governor Kounalakis, Legislative Secretary Anthony Williams, Secretary Brian Annis, the Orange County legislative caucus and other legislators outside of Orange County including Senators Holly Mitchell (D-Los Angeles) and Bob Hertzberg (D-Van Nuys). Staff provided a water update that included California WaterFix and Metropolitan's legislative priorities for 2019.

### Local

- Metropolitan staff and leadership from the San Fernando City Chamber met with the district director and field representative for Assembly Member Luz Rivas (D-Arleta) to discuss partnership opportunities. (March 5)



## EXTERNAL AFFAIRS GROUP

**CORE BUSINESS:** Legislative, Communications, Community Relations, Public and Business Outreach

**Objective:** LEGISLATIVE SERVICES - continued...

### Local

- Metropolitan staff attended the Los Angeles County Division Board Meeting of the League of California Cities Association at which 50 mayors and other local elected officials were in attendance. (March 7)
- Metropolitan staff presented about Metropolitan's water supply and water use efficiency program to the Greater San Diego Association of Realtors. (March 7)
- Metropolitan staff met with several legislative staff in their district offices to discuss state legislative priorities, conservation rebate programs, and current water conditions. The following offices were visited this month: Assembly members Cervantes (D-Corona), Reyes (D-San Bernardino), and Senator Leyva (D-Chino). (March 5, 7, 19)
- Metropolitan staff attended Ventura's Council of Government (COG) meeting. Their board adopted its legislative agenda for the year which included a statement on supporting a safe, reliable supply of water. (March 14)
- Metropolitan staff attended the United Chambers of Commerce's Governmental Affairs Committee. Attendees included representatives from the office of Los Angeles County Supervisor Barger and Los Angeles City Council members Koretz and Blumenfield. (March 18)
- Metropolitan staff participated in Valley Industry Commerce Association's monthly lobbying trips to Sacramento. The 10-member delegation met to discuss business and water policy issues, including water conditions with Senators Hertzberg (D-Van Nuys), Wilk (R-Santa Clarita) and Bates (R-Laguna Niguel), and Assembly members Rivas (D-Arleta), Patterson (R-Fresno), Lackey (D-Palmdale), Kamlager (D-Los Angeles) and O'Donnell (D-Long Beach). (March 19)
- Metropolitan staff participated in the Southern California Contractors Association's annual Legislative Day in Sacramento and discussed the importance of California WaterFix and other legislative matters. Meetings included Debbie Lumpkin, Caltrans Inspector General; Senators Wilk (R-Santa Clarita), Morrell (R-Rancho Cucamonga), Stone (R-La Quinta), Jones (R-El Cajon), Bates (R-Laguna Niguel) and Umberg (D-Garden Grove); and Elise Gyore, Chief of Staff to Senator Roth (D-Riverside). (March 19-20)
- Metropolitan staff attended the California Contracting Cities Board Meeting at Los Angeles City Hall. More than 50 mayors and city council representatives attended. (March 20)
- Metropolitan staff attended Valley Industry Commerce Association's Leaders Forum Luncheon with Los Angeles County Supervisor Kuehl. (March 22)
- Metropolitan sponsored the United Chambers of Commerce of the San Fernando Valley's Annual Legislative Aide Celebration and Board Installation meeting. (March 26)
- Metropolitan staff provided an update on California WaterFix to the Los Angeles Business Council's Legislative Committee. (March 27)
- Metropolitan sponsored and staff attended the Santa Ana River Watershed Conference. Participants heard presentations on the pressing issues facing the watershed and a discussion of the California Water Plan update. (March 29)

## EXTERNAL AFFAIRS GROUP

**CORE BUSINESS:** Legislative, Communications, Community Relations, Public and Business Outreach

**Objective: MEDIA AND COMMUNICATIONS** - Communicate Metropolitan's policy priorities, actions and initiatives through various means to raise public awareness, enhance Metropolitan's visibility and cultivate support for Metropolitan priorities. Update and develop new communications tools, materials and platforms to ensure Metropolitan information reaches diverse audiences throughout its service area in a cost-effective, timely, relevant manner that reflects current communications trends.

### Media Activities and Interviews

- Arranged interviews regarding Drought Contingency Plan between General Manager Kightlinger and CNBC Reporter Jeff Daniels, E&E reporter Jeremy Jacobs, *Bloomberg Environment* reporter Emily Dooley, KUNC reporter Luke Runyon, *Los Angeles Times*' Bettina Boxall, and KPCC's Susanne Whatley.
- Director Record attended and staff helped organize a press conference at the Western Science Center to announce the discovery of a new species recently identified from Ice Age fossils unearthed during excavation of Diamond Valley Lake. Metropolitan was recognized for its commitment to protect cultural and native artifacts during the construction of the reservoir. (March 27)
- Coordinated interview between Water Use Efficiency Manager McDonnell and *Los Angeles Times* gardening columnist Jeanette Marantos regarding turf replacement program and sustainable landscaping classes.
- Set up interview between Chief Engineer Bednarski and *Persons of Infrastructure* reporter Brooks McKinney on Regional Recycled Water Project.
- Arranged interview with Assistant General Manager Patterson on KQED's Forum program regarding California WaterFix.
- Coordinated appearance by Colorado River Resources Manager Hasencamp on Las Vegas PBS show Nevada Week to discuss Colorado River issues.

### Communication Activities

Metropolitan's 365 Save Water Every Day advertising campaign won three LA Addy awards from the American Advertising Association, recognizing creative excellence. (March 21)

### Press Releases/Statements

- Metropolitan Board Steps Up to Support Drought Contingency Plan, Protects Southland's Stored Water in Lake Mead
- Three New Directors Seated on Metropolitan's Board
- General Manager statement on Colorado River Basin states asking Congress for approval of the Colorado River Drought Contingency Plan

### Social Media

- Focused on turf replacement rebate in social media posting as the advertising bridge campaign for the rebate program continues on Facebook, with the goal of driving people to the rebate application on socialwatersmart.com.
- Posted pictures of the wildflower bloom at Diamond Valley Lake, garnering significant interest on Instagram; posts have received nearly 500 likes combined (and counting).
- Paid tribute to Metropolitan's engineers by profiling two employees Mike Rojas and Rachel Irwin, on social media as part of National Engineer's Week. (see photo right)



## EXTERNAL AFFAIRS GROUP

**CORE BUSINESS:** Legislative, Communications, Community Relations, Public and Business Outreach continued...

**Objective: PUBLIC OUTREACH AND MEMBER SERVICES -** Conduct public outreach to increase awareness and input on Metropolitan projects and initiatives and ensure impacted communities are aware of Metropolitan construction and maintenance activities. Enhance public awareness of Metropolitan’s systems and facilities and the role they play in regional supply reliability while protecting environmental resources. Serve as liaison to Metropolitan’s member agencies and facilitate their engagement with Metropolitan.

- Metropolitan notified 400 residences and businesses regarding the Second Lower Feeder Shutdown. (March 4-5)
- Metropolitan met with staff from the city of Long Beach Department of Parks, Recreation and Marine to discuss the Second Lower Feeder PCCP project (Reach 9) and potential improvements in Cerritos Park. (March 4)
- Metropolitan provided a tour of the Diemer treatment plant for the Yorba Linda Planning Commission and city planning staff. (March 7)
- Metropolitan briefed planning staff from the City of Rolling Hills Estates on the status of the Palos Verdes Reservoir and the Second Lower Feeder PCCP project (Reach 3). (March 11)
- Metropolitan met with a group of Harvard graduate students to discuss local water resource issues. (March 20)
- Metropolitan provided a tour of the Mills treatment plant for University of California, Riverside engineering students. (March 28)
- Metropolitan hosted more than 40 technology entrepreneurs, resource partners, business leaders, and innovation influencers on an inspection trip of the State Water Project and Delta. Participants included representatives from the WaterStart Innovation Incubator, LARTA Technology Accelerator, Imagine H2O Accelerator, and American Water Works Association. (March 29-30)
- Metropolitan provided seven inspection trips to the State Water Project, Colorado River Aqueduct, Lower Colorado River, and Diamond Valley Lake for directors. (multiple dates)

### Member Agency Support

Met separately with the conservation program staff from the cities San Marino, Pasadena, Anaheim, and Oxnard, and with the Inland Empire Utilities Agency, Three Valleys Municipal Water District and Calleguas Municipal Water District to discuss the Multi-Family Regional Pilot Program and local disadvantaged community programs. Provided outreach and marketing support as well as opportunities to co-brand advertising materials.

**Objective: EDUCATION AND COMMUNITY RELATIONS -** Facilitate public engagement in and understanding of water resource issues through community relations activities and education projects.

Metropolitan contacted more than 180 community-based organizations about current and new conservation programs and provided bi-lingual materials on rebates, encouraging them to help raise awareness about ways to save water and money. (see photo right)

Metropolitan’s new rebate card promoting new conservation programs



## EXTERNAL AFFAIRS GROUP

**CORE BUSINESS:** Legislative, Communications, Community Relations, Public and Business Outreach continued...

**Objective:** EDUCATION AND COMMUNITY RELATIONS continued...

### General Education

Staff met with more than 900 teachers and students on field trips, events, activities, and class presentations including LACOE Girls in STEM, Sumac Elementary School, Paloma Valley High School, White Oak Elementary School, Cole Canyon Elementary School, McBride Engineering Expo, Lupin Hill Elementary School, LADWP Science Bowl, Cottonwood Canyon Elementary School, Menifee Valley Middle School, Lakeland Village School, and CSUCI Career Mentoring.

### Diamond Valley Lake Education Program

Metropolitan staff hosted 637 visitors at the Visitor Center and guided nearly 700 visitors to the Clayton Record viewpoint.

### Event Sponsorships and Community Partnering Program

Metropolitan sponsored the following events and in many cases staff participated to promote water education, conservation, and sustainability initiatives:

- San Diego Audubon Bird Festival (March 3)
- San Diego River Park Foundation's Kids Discovery Days (March 8-9)
- Biocom's San Diego Festival of Science and Engineering (March 9)
- Climate Resolve's Coolest in LA Fight Against Climate Change (March 13)
- LA Sentinel's "The Power, Leadership, & Influence of the Black Woman" Event (March 22)
- Elsinore Valley Municipal Water District's "Splash Into Spring Family" Event (March 23)
- The Samburu Project's "10th Annual Walk for Water" Event (March 24)
- National Water Research Institute's Children's Water Education Festival at UC Irvine (March 27-28)
- Downtown San Diego Partnership's "Installation Dinner" (March 28)
- LA County Science & Engineering Fair's "69th Annual LAC Science & Engineering Fair" (March 28)
- Water Education For Latino Leaders (WELL)'s "2019 Water Conference" (March 28-29)
- Water Education Foundation's "Santa Ana River Watershed Conference" (March 29)

Metropolitan staff attended and sponsored the CicLAvia event in Culver City. More than 1,000 participants attended and received information about water conservation and rebates. (March 3) ([see photo below](#))



Metropolitan staff distributed BPA- free reusable water bottles to CicLAvia participants and shared information on Metropolitan and the importance of water conservation

## EXTERNAL AFFAIRS GROUP

**CORE BUSINESS:** Legislative, Communications, Community Relations, Public and Business Outreach continued...

**Objective:** BUSINESS OUTREACH AND INNOVATION - Facilitate opportunities for small businesses to work with Metropolitan. Help position Metropolitan as a leader in water innovation.

Metropolitan supported small businesses throughout the region through its participation and sponsorship of the following programs, conferences, and events:

- Director Hall and staff attended the National Association of Women Business Owners, Inland Empire Chapter Amazing Women awards and scholarship dinner. (March 8)
- Attended the Greater Los Angeles African American Chamber of Commerce (GLAAACC) awards dinner with more than 1,000 businesses represented. (March 8)
- Presented at the U.S. Veterans Business Alliance-Orange County’s meeting “How to Do Business Workshop.” Owners of 30 veteran-owned businesses were in attendance. (March 21)
- Presented and participated in matchmaking sessions at City National Bank’s Meet the Buyers outreach. Approximately 100 businesses were in attendance. (March 26)
- Participated in matchmaking during the Council Sourcing Summit. Approximately 20 businesses were in attendance. (March 27)

At the invitation of Los Angeles Department of Water and Power, Metropolitan staff attended a presentation at the LA Cleantech Incubator for a new water drone for rapid bacterial testing. (March 1)

The Technology Approval Group evaluated presentations on asset management, water quality, smart pipes, and communication systems with more than 50 attendees from member agencies, Denver Water, East Bay Municipal Utility District, Southern Nevada Water Authority, and technology companies (March 13)

Metropolitan’s Innovation Team participated in an inspection trip of the State Water Project and Sacramento-San Joaquin Delta, which included over 40 technology entrepreneurs, resource partners, technology experts, and innovation influencers from Metropolitan’s H2O TECHCONNECT Community. (March 29-30)

Staff planned and launched an innovation survey to all Metropolitan employees to assess how the organization incorporates ideas and technologies at work. [\(see photo below\)](#)

Staff launched the Innovation Survey to encourage great ideas and incorporating new innovations.

**INNOVATION SURVEY – DEADLINE MARCH 22  
AVAILABLE ON THE INTRANET**

**GREAT IDEAS  
FROM METROPOLITAN EMPLOYEES**

Help Metropolitan  
incorporate new innovations  
in everything we do.

**H<sub>2</sub>O**  
MWD INNOVATION & TECHNOLOGY  
DISCOVER • CONNECT • IGNITE

## HUMAN RESOURCES

### GM STRATEGIC PRIORITY: Foster Leadership and Strengthen Workforce Capabilities

More than half of Metropolitan's workforce has reached retirement age, including many members of Metropolitan's executive management team. This is a challenge to Metropolitan's capacity to adequately train and prepare its workforce but is also an opportunity to build a workforce geared for the challenges of the future.

**Objective:** Partner with Metropolitan leadership to support learning, development and workforce planning initiatives.

The kick-off of the Administrative Services Training series was held at Headquarters. The purpose of this program is to provide job-classification-specific training to staff in the Administrative Assistant and Administrative Analyst job families. The training will equip staff in these classifications with the knowledge, skills, and abilities to maximize their strengths and readiness for promotional opportunities while enriching their current contributions.

The eighth session of the MWD Management Academy for prospective managers was held at the Orange County Water District. The session included a tour, a round table discussion with three Team Managers, and a session on *Stress Management*.

Staff also facilitated the third session of the WSO Management Academy at Weymouth, which included a case study and topics on the *Science of Motivation*, *Motivating the Generations*, and an overview of management administrative duties.

Training classes were delivered on the following topics:

- *Time Management*
- *Success Signals: Color Styles for Effective Communication*
- *Everyday Business Writing*
- *PowerPoint: Inserting Graphics and Multimedia Workshop*
- *Excel an Intermediate Workshop*
- *Visio an Intermediate Workshop*
- *Excel: Pivot Tables*
- *Excel: Performing Calculations*
- *Accelerating Teamwork*

**Objective:** Seek diverse, high-quality talent, and establish partnerships to discover additional outreach opportunities that aid in staffing positions.

Recruitment filled 18 positions for the month of March and received 28 new staffing requisitions, resulting in 166 positions currently in recruitment.

Continued to work with recruitment firm on the Ethics Officer and Chief Financial Officer recruitments.

**Objective:** Implement employee engagement programs to ensure Metropolitan is a competitive organization.

Continued preparation for the upcoming Service Awards Luncheon and Employee Appreciation Events.

## HUMAN RESOURCES

### HR PRIORITY: Ensure Effective People Management

Partner with management to ensure that employees are appropriately managed, evaluated, engaged, motivated, developed, and recognized. Provide opportunities for career development, skills training, and knowledge capture in order to prepare for the future.

**Objective:** Ensure Metropolitan managers have foundational knowledge, on-going support to effectively manage employees, and the tools to prepare for a changing workforce.

- The third session of Metropolitan Management University was held at Headquarters for 17 new and existing Team Managers, covering topics on *Motivating and Engaging Employees*, *Delegation Skills*, and *Conflict Resolution*.
- The Organization Development and Training Unit conducted and coordinated one-on-one developmental coaching sessions for 27 managers.
- The Employee Relations Section worked with the bargaining units to make revisions to certain policies and procedures, including the Electric Vehicle Recharging Station procedures, the Rideshare Transit procedures, and the Travel Guide.

### HR PRIORITY: Strengthen Partnerships with HR Customers

Collaborate and partner with customers at all levels to support strategic decisions on workforce planning, hiring strategies, advancement and learning opportunities, disciplinary issues, and other challenges as they arise

**Objective:** Establish partnerships focused on strategic solutions to various Human Resource management challenges.

Classification and Compensation continues to work on the Supervisors Association's Class Study, with a goal of being finalized by August 2019.

Continue to partner with Real Property, Water System Operations, and bargaining units as part of the Desert Housing Working Group. The responsibility of Desert Housing has transitioned from WSO to Real Property with Real Property focusing on policy development and long-term project planning.

### CORE BUSINESS: Prepare to Meet Challenges of Future Workforce Changes

Human Resources can provide a wide range of services and support to ensure that Metropolitan positions itself for future workforce changes, by maintaining a collaborative and inclusive work environment, as well as a diverse workforce.

**Objective:** Promote an inclusive and collaborative workplace, maintain robust policies and procedures to ensure diversity, and prevent harassment and discrimination.

Continued to develop strategies in support of the new DICE (Diversity Inclusion Culture Equity) – Belonging initiative. Partnering with the Employee Resource Groups to implement strategies, including an upcoming event at the National Society for Black Engineers.

# HUMAN RESOURCES

## CORE BUSINESS: Comply with Employment Laws and Regulations

Ensure all policies, programs, and practices comply with ever-changing laws and regulations. Compliance with applicable laws and policies requires monitoring and analyzing changing requirements, determining impact on Metropolitan management and staff, and implementing any changes necessary to maintain compliance. In addition, these changes must be clearly communicated to all customers as necessary, with any needed training provided, as appropriate.

**Objective:** Effectively administer all Human Resources policies, programs, and practices in compliance with applicable federal and state laws and Metropolitan’s Administrative Code, Operating Policies, and Memorandum of Understanding.

A review aimed at enhancing and streamlining Metropolitan’s Workers’ Compensation function is ongoing. Discussions with the bargaining units are being initiated to discuss potential process changes designed to make the process work more smoothly and to ensure that injured workers receive care in as timely a manner as possible.

In March, six new Workers’ Compensation claims were received and 18 claims were resolved. Currently, four employees remain off of work due to an industrial injury or illness. This reflects Metropolitan’s continued efforts to accommodate injured workers, while enabling them to remain productive and on the job.

Activities of the Workers’ Compensation/Medical Screening Unit are summarized as follows:

- Submitted six new claims to Metropolitan’s Workers’ Compensation Claim Administrator
- Closed 18 Workers’ Compensation Claim Files
- Arranged eight medical evaluations (DMV, medical surveillance, hearing conservation, etc.)
- Coordinated three random drug/alcohol tests
- Addressed three Accommodation issues.
- Coordinated one Medvan visit for Headquarters (Vanpool DMV Certification)

## HR PRIORITY: Provide Excellent Human Resources Services

Human Resources provides a wide range of services and support from pre-hire to post-retirement care. HR policies, procedures, and practices will be reviewed and revised as appropriate. HR will continually improve service and better utilize technologies.

**Objective:** Administer all HR services with efficiency and a focus on customer service excellence, consistency, and flexibility.

HR Benefits completed the required Affordable Care Act (ACA) 1094-C IRS electronic report that requires employers to upload all information from the 1095-C statements that were issued in February to all employees. This is an important follow-up administrative process to ensure complete compliance with the ACA.

HR Benefits staff attended the annual Pension and Investment Conference and accepted the 2019 Eddy Pensions and Investments Award for its communication campaign during the conversion from TIAA Financial to Empower Retirement. The Eddy Award recognizes organizations from across the nation for using best practices in financial and investment education by demonstrating various communication methods and outreach efforts to ensure employees, retirees, and beneficiaries were all notified at every phase of the transition to the new Empower Retirement record keepers. *(see photos right)*





## INFORMATION TECHNOLOGY

### CORE BUSINESS: Information Technology

Collaboratively work with customers to deliver information technology options, services, and solutions in the areas of enterprise and business applications, Engineering Services and Water System Operations applications, data analytics, mobile/wireless computing, telecommunications, network services, information security, and personal computing..

**Objective: Strengthen Metropolitan's cybersecurity capabilities by deploying new and emerging technologies, and implementing enhanced security countermeasures.**

On-going efforts include operational initiatives and capital projects to upgrade and protect Metropolitan against evolving cyber threats:

- IT Cybersecurity staff worked in collaboration with key stakeholders to enhance network security capabilities for Metropolitan's SCADA System.
- Continued on-going monitoring of federal, state, and local cybersecurity legislation applicable to Metropolitan. Recent legislative reviews include AB 1242, which is a bill that would create an Office of Cybersecurity in the Office of the Governor.
- Initiated Cybersecurity II Project to enhance Metropolitan's cybersecurity posture. Efforts include new centralized privilege role and policy management capabilities.
- IT Cybersecurity Management providing leadership:
  - Participated as advisory board member for Southern California Cybersecurity Symposium and CISO Academy.
  - Presented at California State University, Los Angeles on March 21 to Computer Science and Engineering students about career paths in cybersecurity and cybersecurity job outlook.

**Objective: Provide IT services in support of the Headquarters Improvements Program.**

Continued to collaborate with Engineering Services Group on IT services in support of the Headquarters Improvement Program:

- Headquarters Wi-Fi (Low-Rise) Project—This project scope is to design and install network equipment (i.e., switches) and WiFi infrastructure within the five-floor wing portion of the Headquarters Building to support staff relocation. Work is proceeding according to plan as staff continues to acquire, configure, and test wireless equipment needed to establish a robust wireless infrastructure for the low-rise portion of the Headquarters Building.
- Headquarters Improvement Program—Continued planning efforts related to upcoming relocation of staff from Headquarters high-rise to low-rise to support the next phase of the program. IT resources and services include Networking, Telecommunications, Server Administration, and Service Desk.
  - IT Staff coordinated with Facility and Engineering staff on the construction of a segregation barrier in the PC-Tech work space located in US1-202. The installation of the interior construction wall is needed to separate the construction zone and the work space used by PC Technicians who provide day-to-day IT services supporting business operations. In March, Information Technology's Service Desk Team relocated staff and equipment impacted by the interior wall construction.

**Objective: Manage Information Technology Projects within the Capital Investment Plan to ensure reliability of IT Systems and Infrastructure.**

Maximo Mobile Computing Project—This project scope is to replace existing mobile devices used in Water System Operations with the latest tablet technology (iPads). This effort will enhance access to business information and vastly increase the functionality of the existing Maximo mobile devices while reducing the need for desktop computers at field sites.

- The project team continued to work with WSO stakeholders in preparation for a Maximo Mobile pilot to confirm use-cases utilizing tablet technology. The scope of the pilot is to deploy a limited number of tablets to field staff to evaluate user requirements, performance, and functionality. In conjunction with the technology aspect, staff is working on processes and procedures required to support this project, including the development of a mobile policy.

## INFORMATION TECHNOLOGY

### CORE BUSINESS: Information Technology continued...

#### Objective: Modernize Operational Technology and Control System Upgrades as part of the Capital Investment Plan.

Automated Meter Reading (AMR) Upgrade—The AMR System is a critical component for transmitting flow information from meters for billing of member agency water deliveries and analysis of meter instrumentation by staff. This project will address equipment obsolescence as the communications equipment used in the system is approaching end-of-life (initially installed in 2008/09). The purpose of the pilot is to determine features and benefits of potential technology solutions and how well each technology operates within Metropolitan's AMR environment (e.g., radio communication, security, and integration).

Supervisory Control and Data Acquisition (SCADA) Network Fiber Optic Switch Replacement Project—This project replaces end-of-life switches critical to Metropolitan's control system. IT staff continued to work with stakeholders on this project to replace older equipment with current technology, providing greater infrastructure reliability and ensuring vendor support / maintenance.

Control System Phase III (Demonstration Testing)—This project is comprised of a multi-phased approach to replacing/upgrading the Control System critical to Metropolitan's operations, water delivery, water quality, and infrastructure monitoring. Staff recently initiated phase III of the project. As a part of this phase, staff will continue with the procurement strategy, which includes demonstrations of proposed control system equipment.

#### Objective: Improve Metropolitan's IT Disaster Recovery and Response Capability.

IT Disaster Recovery Project—This project scope is to upgrade server, storage capacity, and backup devices at the IT Disaster Recovery Facility data center to provide sufficient capacity to run critical systems in a High Availability architecture mode in the event of a disaster.

- During the period, the project team successfully completed the ITDR Business User Acceptance Testing (UAT) for Phase I of the IT Disaster Recovery Project. As part of UAT, the network was isolated and systems/applications/databases were replicated to remote servers within the Recovery Time objective defined by Metropolitan's BIA Plan. All Tier I critical applications were tested, including Oracle, HRMS (PeopleSoft), MAXIMO, LIMS, WINS, Metropolitan's Business Network and the Microwave Network.

#### Objective: Provide leadership, planning, and solutions in support of Metropolitan's Strategic Priorities.

- As part of the IT Strategic Roadmap, staff continued installation and testing activities at CoreSite (off-site datacenter) to improve network reliability and capabilities as part of preparing for Metropolitan's migration to cloud processing.
- Attended Gartner CIO Leadership Forum comprised of IT Executives exploring leadership strategies, trends, and technologies shaping the future of Information Technology
- Continued to evaluate cloud computing and processing within Metropolitan's computing environment. Conducted assessment on technical and operation requirements for PeopleSoft HCM 9.2 Migration to Oracle Cloud.

## INFORMATION TECHNOLOGY

### CORE BUSINESS: Information Technology continued...

**Objective:** Deploy innovative solutions to improve operations, promote collaboration, and provide business value.

Learning Management System Replacement—This project scope is to replace the end-of-life PeopleSoft Enterprise Learning Management System (MyLearning). This system is used to manage Metropolitan’s training curriculum, course approvals, enrollment, and notifications. It serves as a training delivery system in addition to tracking mandatory training required by Water System Operations (environmental, safety, technical and operations training, and test requirements).

- Consultants continue to work on installation and configuration services. Work is proceeding according to plan, with user acceptance testing scheduled for May. Upon successful completion of the test phase, staff will begin the rollout of the new cloud-based software.

PC Replacement Project (PCRP)—This project will replace end-of-life computers for all Metropolitan staff and operations (instrumentation, testing, modeling, etc.) throughout Metropolitan. During the period:

- IT continued to coordinate with group liaisons
- Evaluated current vs future state inventory, requirements, and cost options
- Continued testing and evaluating technology options to enhance security capabilities
- Began QA/QC testing the new Windows image for the new PCs

**Objective:** Enhance workforce productivity by simplifying access to business information and deploy technologies to support customers in business decisions.

- Continued mobile pilot testing (mobile device management) by expanding the pilot to selected group managers. In conjunction with the pilot, staff is working on the development of a mobile policy. Once fully deployed, simplifying access to information via mobile devices (i.e., tablet and smartphones) will enhance workforce productivity.
- Continued to implement and build an Enterprise Data Warehouse and Analytics platform to support operational and strategic decision-making at Metropolitan (i.e., dashboard reporting). IT Staff continued working with Water Quality on the IESWTR application and Administrative Services on a dashboard for the Rideshare Mileage and Fuel Reporting. Once fully implemented, the dashboard will simplify access to business information to support customers in business decisions.

# REAL PROPERTY

**GM STRATEGIC PRIORITY: Enhance Infrastructure Safety, Security and Resiliency**  
Metropolitan's vast network of aqueducts, pipelines, pumps and treatment facilities are the backbone of Southern California's regional water system. However, this vital infrastructure is aging and heightened reinvestment in this system is essential to ensure Metropolitan can continue to deliver on its promise of reliability in the coming decades.

**Objective:** Provide right-of-way planning and real property acquisition services for infrastructure.

Executed an encroachment permit with the city of Fontana for storage and laydown area in support of the Etiwanda Pipeline North Liner Repair Project.

**GM STRATEGIC PRIORITY: Foster Leadership and Strengthen Workforce Capabilities**

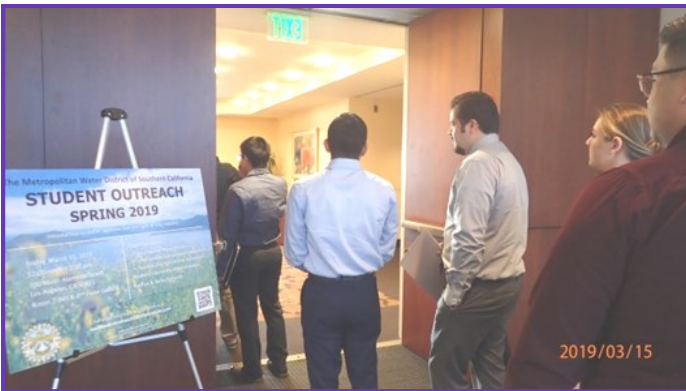
More than half of Metropolitan's workforce has reached retirement age, including many members of Metropolitan's executive management team. This is a challenge to Metropolitan's capacity to adequately train and prepare its workforce but is also an opportunity to build a workforce geared for the challenges of the future.

**Objective:** Foster staff training and development.

Staff completed the following sponsored courses:

- International Right of Way Association course: Residential Relocation Assistance.
- CoStar training course: CoStar Property Module
- Appraisal Institute online course: General Appraiser Market Analysis & Highest and Best Use

The Real Property Group hosted the Student Outreach Spring 2019 Program to introduce college students to public agencies and the right-of-way industry. The event included industry panelists from Metropolitan, Metropolitan Transportation Authority, and the International Right of Way Association discussing industry careers and student internship opportunities. *(see photos below)*



Students checking in to the Student Outreach Spring 2019 Program; and attending panel discussion.



## REAL PROPERTY

### CORE BUSINESS: Real Property Acquisition, Management and Revenue Enhancement

Manage Metropolitan's real property assets with a focus on enhancement of returns while ensuring that Metropolitan's core operations are protected. Acquire real property rights for future operational business needs.

**Objective:** Manage Metropolitan's real property assets to support water system operations and water supply needs, and seek maximum revenue and reduce costs where possible.

- A lease was granted to the Western Science Center for the construction, operation, and maintenance of a double-faced illuminated monument sign on the southwest corner of Domenigoni Parkway and Searl Parkway. The term is coterminous with the existing ground lease, which expires in 2103 and has two 25-year extensions. The sign's frame will bear Metropolitan's name and the digital display cycle will have water related topics included.
- An entry permit was granted to the city of Los Angeles to allow temporary construction activities and access for vehicles and equipment to be used during construction on the city's adjacent San Fernando Road widening at Balboa Boulevard Project, in Granada Hills, northeast of the Jensen treatment plant.
- A license was granted to California State Parks to use a portion of Metropolitan's access road along the Colorado River Aqueduct in Indio to access their adjacent State Parks property. The license is on a year-to-year renewal and provides benefit to Metropolitan by having additional law enforcement patrols along a remote area of the Colorado River Aqueduct.

**Objective:** Pursue development and improvement of the Diamond Valley Lake area, including the DVL Visitor Center and marina facilities, in support of recreation, additional leasing and revenue opportunities.

During the first two weekends of March, over 8,000 visitors, 2,600 cars, and two tour buses visited the Marina to view the wildflower super bloom along the trails around Diamond Valley Lake. Metropolitan provided additional security to ensure all visitors stayed on designated trails. ([see photos on page 45](#))

**Objective:** Efficiently maintains and operates Metropolitan's Headquarters Building, Diamond Valley Lake Visitor Center, and District Housing.

Staff performed several tasks in preparation for the HQ building improvement project:

- Completed the setup of US1-North conference room located at Metropolitan's Headquarters office. Setup included a new 75" monitor with CPU and installation of dedicated phone line for conferencing capabilities. This conference room will provide much needed additional space for internal meetings during the seismic project.
- Scheduled and completed the replacement all four parking gate arms and operators. The new gate arms feature a highly visible LED lighted arm and resilient bumpers to protect vehicles and pedestrians. In case of vehicle strike, the arm breaks away and any further motion is stopped, protecting pedestrians, the facility, and the operator/arm.
- Relocated six existing electric vehicle chargers and added 4 new stations. The relocation was required to provide continual access to chargers for the duration of the seismic project.
- Staff completed maintenance tasks on the wildflower trail at Diamond Valley Lake in preparation for the "Super Bloom" trail opening in early March. Additional signage was installed and water erosion issues were addressed.

## WATER RESOURCE MANAGEMENT

### GM STRATEGIC PRIORITY: Prepare for More Extreme Hydrology

Staff will work closely with the Board to assess Metropolitan's storage capabilities, current strategies and review future needs to identify whether new strategies and/or new investments are needed.

**Objective: Monitor development of climate science and incorporate updated information into the Integrated Water Resources Planning approach.**

Metropolitan staff and RAND Corp. conducted a half-day workshop to go over the initial results of the Robust Decision-Making Analysis of the 2015 IRP. The analysis examines how the 2015 Integrated Resources Plan performs across a range of plausible climate and demographic futures and identifies under what future scenarios the IRP is vulnerable (when the IRP does not meet its reliability goals). By identifying these vulnerabilities, Metropolitan can use signposting to determine when a specific variable (e.g., temperature, demographics) is exceeding an identified threshold, and appropriate management action can be taken. The project is expected to be completed by the end of April, with a white paper to follow.

**Objective: Implement Conservation Program.**

Alliance for Water Efficiency—Water Efficiency Team Manager McDonnell attended and served as Metropolitan's representative to the Alliance for Water Efficiency Board of Directors Meeting.

Los Angeles Better Building Challenge—Water Efficiency Team Manager judged the water and energy challenge contest and presented the award to the winning entry at the Annual Awards Ceremony at the California Endowment.

Disadvantaged Community Program (DAC)—Metropolitan launched the Board-approved higher incentive for 10,000 high-efficiency toilets in pre-1994 multi-family housing units. The approved budget of \$2.5 million for the program was reserved within the first half-hour of launching. Staff will be reviewing field inspections and other data and reporting on the success of the Program in the future.

DAC Member Agency Support—Metropolitan staff is meeting with member agencies to provide local support to agencies interested in implementing programs in disadvantaged communities. The following agency meetings took place in March: City of Anaheim, Upper San Gabriel Municipal Water District, City of Fullerton, Inland Empire Utilities Agency, Three Valleys Municipal Water District, City of Pasadena, Calleguas Municipal Water District, San Diego County Water Authority, and City of San Marino.

Turf Replacement Program—Water Efficiency Team Manager McDonnell was interviewed by *Los Angeles Times* writer about Metropolitan's new Turf Replacement Program and landscape classes.

### GM STRATEGIC PRIORITY: Ensure Imported Supply Reliability

Southern California's foundational water supply remains the Colorado River and the State Water Project and their ongoing reliability is critical for the region. Important decisions on both supplies need to be made over the next two years.

**Objective: Ensure a cost-effective and reliable State Water Project.**

State Water Project Allocation Increased—On March 20, the California Department of Water Resources increased the calendar year 2019 State Water Project allocation to 70 percent, which is equivalent to 1.4 million acre-feet of contract supplies for Metropolitan. During the month of March, DWR continued to make Article 21 surplus supplies available to contractors that can increase demands for SWP deliveries. Since the Article 21 program began in February, Metropolitan has been allocated approximately 60 thousand acre-feet of Article 21 supplies.

## WATER RESOURCE MANAGEMENT

### GM STRATEGIC PRIORITY: Ensure Imported Supply Reliability

Southern California's foundational water supply remains the Colorado River and the State Water Project and their ongoing reliability is critical for the region. Important decisions on both supplies need to be made over the next two years.

**Objective:** Ensure access to sufficient water supplies to operate a full Colorado River Aqueduct in times of drought.

2018 Colorado River Supplies Accounting—The Quantification Settlement Agreement parties, including Metropolitan, Imperial Irrigation District, San Diego County Water Authority, and United States Bureau of Reclamation, held a coordination meeting to discuss the accounting of 2018 Colorado River Supplies. Topics included a hydrologic update on both the Colorado River and State Water Project basins, as well as Metropolitan's operations for both 2018 and 2019, and IID's ongoing conservation activities and its impacts on the accounting of Metropolitan's 2018 Colorado River Supplies, which will be reviewed and finalized in USBR's 2018 Water Accounting Report later in the year.

### GM STRATEGIC PRIORITY: Maximize Local Resources

Staff will begin work with the Board and member agencies on a review of the institutional issues associated with the Regional Recycled Water Program and its relationship to Metropolitan's ongoing Local Resources Program.

**Objective:** Implement Future Supply Actions Funding Program.

Future Supply Actions Funding Agreements—Staff sent draft Future Supply Actions Funding Agreements (Draft Agreements) to the 11 member agencies awarded Metropolitan match funds. The Draft Agreements include invoicing and reporting changes designed to improve agreement administration for both the member agencies and Metropolitan. The member agencies are in the process of developing the full scopes of work for the studies as well as making the necessary institutional arrangements. Metropolitan anticipates receiving the agreements back from the member agencies in April with the goal of having all agreements executed and implemented by July.

**Objective:** Collaborate with member agencies, water agencies and associations, and provide leadership for policy development, advocacy, outreach and education.

The Climate Registry Comment Letter—Staff submitted a comment letter to The Climate Registry (TCR) regarding the Draft Protocol for California's voluntary Water-Energy Nexus Registry (Registry). The Draft Protocol contains the proposed greenhouse gas (GHG) reporting requirements for water agencies participating in the new Registry. Metropolitan's letter supported the development of the Draft Protocol and addressed:

- The unique characteristics of wholesale water agencies,
- Verification of water supply data, and
- Fugitive GHG emissions from water supply reservoirs.

Metropolitan staff participated in the development of the Registry over the past year. This included briefing TCR on water-related GHG reporting challenges and coordinating with water agency stakeholders such as CMUA and ACWA. TCR is holding a final public meeting on May 13 in Sacramento before launching the new Registry in late May.

## WATER RESOURCE MANAGEMENT

### GM STRATEGIC PRIORITY: Maximize Local Resources continued...

**Objective:** Collaborate with member agencies, water agencies and associations, and provide leadership for policy development, advocacy, outreach and education.

Model Water Efficient Ordinance Training—Water Resource Management hosted two Model Water Efficient Ordinance Training classes in partnership with Long Beach Water Department and Eastern Municipal Water District. Classes were well attended by city planning personnel, landscape contractors, and water agency conservation staff.

### GM STRATEGIC PRIORITY: Foster Leadership and Strengthen Workforce Capabilities

More than half of Metropolitan's workforce has reached retirement age, including many members of Metropolitan's executive management team. This is a challenge to Metropolitan's capacity to adequately train and prepare its workforce but is also an opportunity to build a workforce geared for the challenges of the future.

**Objective:** Promote learning and increased technical capacity of staff.

California Environmental Education Foundation Workshop—Staff delivered a presentation on the Water-Energy Nexus and Southern California's Water Future at a California Environmental Education Foundation workshop at Los Angeles Department of Water and Power facility on March 9. The interactive workshop consisted of 40 teachers from Southern California engaged in environmental education. Staff's presentation covered:

- Water planning in a Mediterranean climate
- California's and Metropolitan's water systems
- Climate change and the Water-Energy Nexus

Staff guided the teachers through a stark visualization of what "Day Zero" would have meant to the people in Cape Town, South Africa. External Affairs co-sponsored and participated in the event, which included a tree planting along with other sustainability activities.



## WATER SYSTEM OPERATIONS

### GM STRATEGIC PRIORITY: Enhance Infrastructure Safety, Security and Resiliency

Metropolitan's vast network of aqueducts, pipelines, pumps and treatment facilities are the backbone of Southern California's regional water system. However, this vital infrastructure is aging and heightened reinvestment in this system is essential to ensure Metropolitan can continue to deliver on its promise of reliability in the coming decades.

#### Objective: Provide Reliable Water Deliveries.

Metropolitan delivered approximately 62,000 acre-feet of water to member agencies in March. March deliveries averaged approximately 2,000 AF per day, an increase of 200 AF per day from February deliveries. Treated water deliveries for March totaled 36,000 AF or 58 percent of total deliveries for the month. This was an increase of about 10,000 AF from February treated water deliveries. On March 5, the Colorado River Aqueduct was shut down for 24 days for scheduled maintenance. The CRA

was placed back into service on March 29 at a 3-pump flow or 1,400 AF per day. A total of 5,600 AF of Colorado River water was pumped in March. State Water Project imports averaged 2,500 AF per day, totaling 78,000 AF for the month. The target SWP blends for March were 50 percent at the Weymouth and Diemer plants and up to 75 percent at the Skinner plant.

#### Objective: Ensure Water Quality Compliance, Worker Safety, and Environmental Protection.

- Metropolitan complied with all water quality regulations and primary drinking water standards during the month of February 2019.
- Staff submitted Metropolitan's annual quagga mussel activity report to the California Department of Fish and Wildlife, as required under invasive species regulations. The report includes quagga mussel monitoring data and describes continuing mussel control activities throughout Metropolitan's system.
- On March 1, staff submitted the 2018 Annual Report to the State Water Resources Control Board for the Statewide General National Pollutant Discharge Elimination System Permit for Drinking Water System Discharges (General Permit). The General Permit allows water agencies to perform short-term planned and emergency (unplanned) discharges for essential operations and maintenance activities, such as shutdown dewatering and flushing. The Annual Report includes information on the number of discharges over 50,000 gallons, total volume discharged, and total volume directed for reuse or beneficial use.

#### Objective: Actively Engage in Capital Project Planning and Execution.

Staff continued repairs and refurbishment of the generator at the Valley View Hydroelectric Plant in the city of Yorba Linda. This month, staff aligned the refurbished turbine bearings to prepare for reassembling the generator. This turbine and generator rehabilitation project is expected to be complete in April 2019. [\(see photo right\)](#)

Staff performing alignment on turbine bearings at the Valley View Hydroelectric Plant



## WATER SYSTEM OPERATIONS

**GM STRATEGIC PRIORITY: Enhance Infrastructure Safety, Security and Resiliency**  
Continued....

**Objective: Actively Engage in Capital Project Planning and Execution**

Staff dewatered a 12-mile portion of the Second Lower Feeder in the city of Long Beach to support the Prestressed Concrete Cylinder Pipe (PCCP) Rehabilitation capital program. On March 18, a contractor began installing approximately two miles of steel liner due to increasing wire breaks identified in this section that could potentially weaken the pipe wall. During this shutdown, staff inspected another 6.5 miles of PCCP as a proactive assessment to ensure system reliability. The relining work is scheduled to be completed in September 2019. *(see photos below)*



Staff removing flanges and equipment to support PCCP relining of the Second Lower Feeder



Staff removing equipment to access the Second Lower Feeder]

Staff installed a new circuit breaker in a motor control center (MCC) at the Weymouth plant. This work supports the Weymouth Domestic Water System Improvements capital project. This new circuit breaker allows a contractor to replace a separate MCC without interruption to the plant's domestic water system. The contractor connected two domestic water pumps to the new circuit breaker without any impact to plant operations. The plant's domestic water system provides fire protection, transport water for chlorine disinfection, and potable water service throughout the site.

**Objective: Optimize Maintenance**

The annual Colorado River Aqueduct shutdown took place between March 5 and 29. This annual shutdown provides an opportunity to perform key maintenance and system improvements that cannot be performed while the CRA is in operation. During the 24-day outage, staff repaired concrete panels in several locations along the CRA canal and Iron Mountain reservoir, installed internal bands at two locations to seal minor cracking in the CRA conduit, replaced valves and metering equipment, inspected and tested high-voltage equipment, performed coating and equipment inspections, and repaired surge chambers and head gates at the pumping plants. Additionally, staff used a specialized machine to clean over 100 miles of tunnel and inspected and removed debris from siphons. The tunnel cleaning machine, designed and built by Metropolitan staff, uses articulating arms that conform to tunnel walls, allowing steel bristles to remove built-up scale on the concrete. The CRA outage also allows the aqueduct to desiccate, a key strategy for controlling quagga mussels within the system. During the CRA shutdown, the San Diego Canal was also shut down for eight days, returning to service on March 15. Staff removed sand and debris and performed minor concrete panel repairs along the canal. *(see photos next page)*

# WATER SYSTEM OPERATIONS

**GM STRATEGIC PRIORITY: Enhance Infrastructure Safety, Security and Resiliency**  
Continued....

Objective: Optimize Maintenance continued...



Staff fabricating inlet flow diffuser at Gene pumping plant



Staff repairing concrete panels along the Colorado River Aqueduct



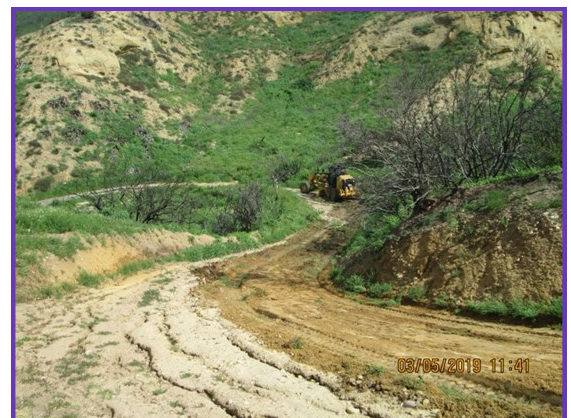
Staff inspecting a tunnel at Copper Basin



Staff removing a slide gate at the West Portal of the CRA San Jacinto Tunnel

A series of recent heavy rainstorm events caused erosion damage on patrol roads along San Diego Pipeline No. 1. Repairing the patrol roads was critical to allow staff to perform key maintenance and inspection activities during the CRA shutdown. Staff placed 1,200 tons of crushed aggregate base and graded roadways to allow safe access for staff and equipment during the shutdown. Staff also performed similar repairs to the Santiago Lateral patrol roads following the recent rain events. [\(see photo right\)](#)

Grading patrol road along the Santiago Lateral pipeline

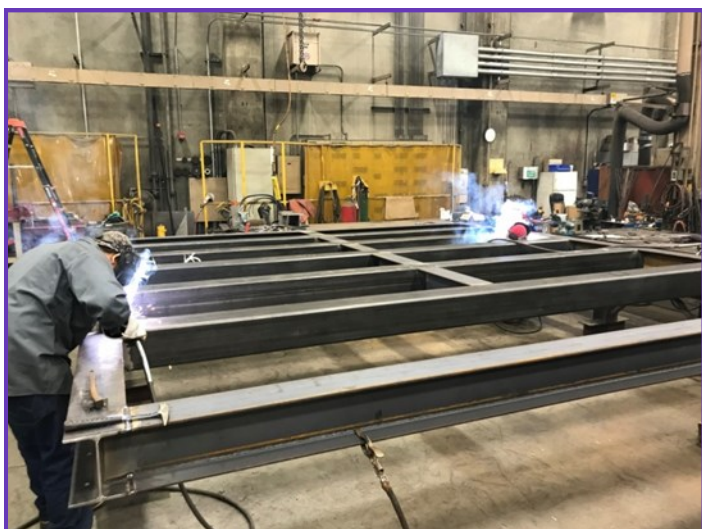


# WATER SYSTEM OPERATIONS

**GM STRATEGIC PRIORITY: Enhance Infrastructure Safety, Security and Resiliency**  
Continued....

**Objective: Optimize Maintenance continued...**

The La Verne Shops manufactured a carbon steel drop gate and stainless steel gate guides for two structures along the Casa Loma Canal. The drop gate was installed during the CRA shutdown to allow staff to inspect the condition of a radial gate along the canal. Following the inspection, the drop gate was removed and returned to the La Verne Shops for coating and storage for future use. The stainless steel gate guides were installed just downstream of the San Jacinto Pipeline diversion structure. Operations staff coordinated with the survey team who performed 3D scanning of the installed guides, which provided detailed measurements used to design and fabricate a new gate for this structure. The new gate improves operational flexibility by allowing staff to isolate flow closer to the San Jacinto Pipeline diversion structure. *(see photos below)*



Staff manufacturing a drop gate at the La Verne Shops



Staff installing a newly manufactured drop gate along the Casa Loma Canal



Staff installing new gate guides at the Casa Loma Canal

# WATER SYSTEM OPERATIONS

**GM STRATEGIC PRIORITY: Enhance Infrastructure Safety, Security and Resiliency**  
Continued....

**Objective: Optimize Maintenance continued...**

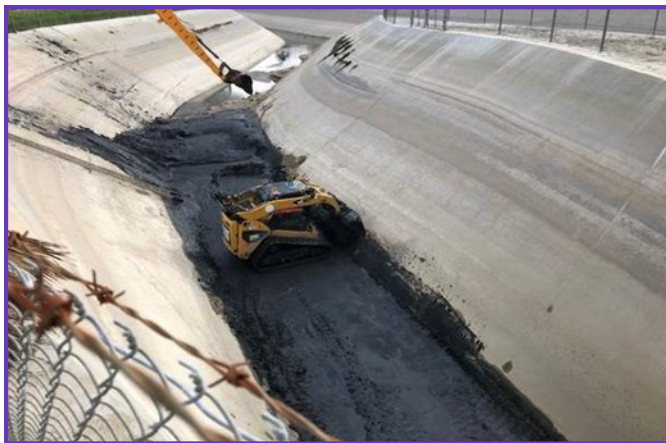
A series of heavy rainstorms in February eroded cover material above the Casa Loma Siphon Barrel 1 and San Jacinto Pipeline as they cross below the San Jacinto River. Staff responded by installing steel plates and k-rail within the river bed to provide temporary weight and protect the dewatered pipelines during the CRA shutdown. This required extensive internal and external coordination to ensure the work was successfully performed and met all environmental and safety requirements. Staff removed the steel plates and k-rail after the shutdown was complete and the pipelines were returned to service. *(see photos below)*



Staff placing k-rail and steel plates to protect pipelines within the San Jacinto River

Staff performed maintenance along the Casa Loma Canal and the San Diego Canal during the CRA shutdown. Work included removing silt and debris from the canals and siphons and cleaning sand traps utilizing a long reach excavator. *(see photo below)*

Staff performed scheduled maintenance and testing of high-voltage equipment on transformers at Gene and Intake pumping plants. This maintenance was performed during the CRA shutdown while the system was de-energized. The testing provides data used to evaluate the condition of the transformers, helping to ensure reliability of the CRA system. *(see photo below)*



Staff removing silt and debris along the Casa Loma and San Diego Canals



Staff performing electrical testing on transformers

# WATER SYSTEM OPERATIONS

**GM STRATEGIC PRIORITY: Enhance Infrastructure Safety, Security and Resiliency**  
Continued....

**Objective: Optimize Maintenance continued...**

The San Diego County Water Authority requested a 10-day shutdown of San Diego Pipeline Nos. 1 and 2 to install a bulkhead. The bulkhead allows the pipeline to remain in service at a reduced flow capacity while SDCWA performs lining repairs and other work within its system. Metropolitan staff used this outage to inspect San Diego Pipeline Nos. 1 and 2 upstream of the agency jurisdictional boundary. Staff also performed coating repairs on ventilation structures and replaced three isolation valves that reached the end of their service life. *(see photo right)*

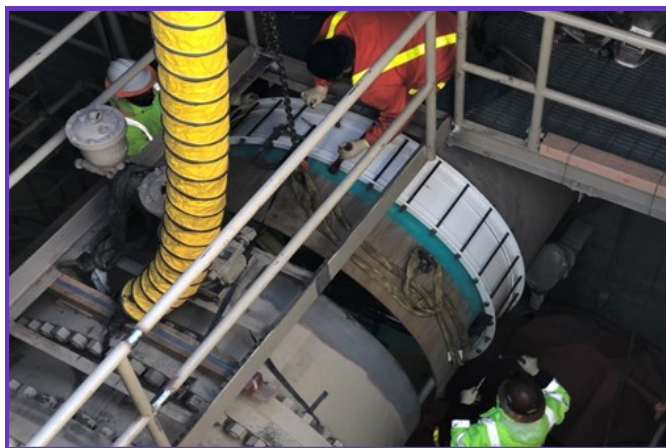


Staff removing an air release vacuum valve assembly to access San Diego Pipeline No. 2



The La Verne Shops manufactured and coated a 79-inch replacement spool for the Red Mountain Hydroelectric Plant (HEP). This spool was installed at the HEP to replace a sleeve coupling that was leaking. Staff also repaired a dresser coupling that was leaking. These repairs help to ensure reliable operations at the HEP. *(see photos left and below)*

Newly manufactured 79-inch diameter replacement spool



Staff installing a new dresser coupling (l) and pipe section (r) at Red Mountain HEP

## WATER SYSTEM OPERATIONS

### GM STRATEGIC PRIORITY: Enhance Infrastructure Safety, Security and Resiliency Continued....

#### Objective: Manage the Power System.

On February 20, staff participated in the Western Electricity Coordinating Council (WECC) Operating Committee and Reliability Assessment Committee meetings. The Operating Committee helps to maintain system reliability through coordinated operation and security of the Western Interconnection transmission system. The Reliability Assessment Committee guides coordinated reliability assessments of the transmission system over a longer-term planning horizon. Both WECC committees establish reliability policies and practices affecting Metropolitan's CRA 230 kV high-voltage transmission system.

#### Objective: Improve Security and Emergency Response.

Staff at the Mills, Diemer, and Jensen plants, as well as the Water Quality Laboratory, performed emergency exercises during February and March. Metropolitan maintains multiple incident command posts at key sites, and staff regularly conducts exercises to practice responding to emergencies. Metropolitan also maintains a central Emergency Operations Center that manages responses to larger disasters.

#### Objective: Optimize Water Treatment and Distribution.

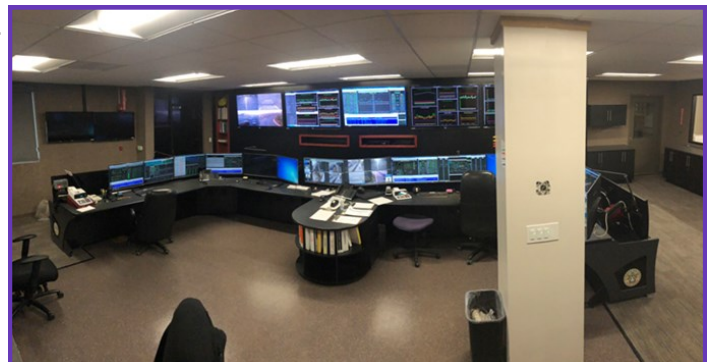
Flow-weighted running annual averages for total dissolved solids from February 2018 through January 2019 were 525, 518, and 517 mg/L for Weymouth, Diemer, and Skinner plants, respectively.

A half-plant shutdown at the Diemer plant began on March 20 and will continue through April 26. The shutdown supports the Diemer West Basin Rehabilitation and Filter Building Seismic Upgrades capital projects. These two projects will rehabilitate the flocculation and sedimentation basins on the west side of the treatment plant, and upgrade the plant's west filter building to improve seismic reliability. During the shutdown, a contractor will construct support walls within the filter backwash sump, replace filter valves, and install isolation gates to support the rehabilitation work. Both projects are anticipated to be complete by the end of 2020 and will enhance reliability at the Diemer plant.

The Mills plant was shut down between March 25 and March 28 to support the Mills Electrical Upgrades capital project. During the shutdown, staff relocated electrical equipment while a contractor redistributed power to chemical feed systems and pumps. Due to the comprehensive scope of the project, two full-plant shutdowns and several partial outages were needed to switch over to the new electrical equipment. Staff performed SCADA system integration, equipment start-up and testing, electrical system shutdowns and component tie-in, and installation of temporary electrical systems. This capital project is scheduled to be complete in mid-2020 and will further enhance safety and reliability at the Mills plant.

Staff completed upgrades to the primary control room at the Diemer plant. Improvements were made to the control room console, computer equipment and instrumentation, and staff work areas. These upgrades further enhance operations at the Diemer plant.

*(see photo right)*



Refurbished control room at the Diemer plant

## WATER SYSTEM OPERATIONS

**GM STRATEGIC PRIORITY: Enhance Infrastructure Safety, Security and Resiliency**  
Continued....

**Objective: Optimize Water Treatment and Distribution continued...**

Staff performed annual preventative maintenance on the chlorinators within the chlorine containment facility at the Weymouth plant. To ensure reliable service, staff calibrated valves that regulate chlorine flow. Vacuum switches were also replaced and tested to ensure adequate vacuum to convey chlorine from the chlorinator to the injection locations within the treatment process.

Staff replaced the caustic soda and ammonia mixing pump in the combined filter effluent (CFE) channel at the Jensen plant. The existing pump had failed due to its old age. This pump is used to convey water from the CFE channel to the caustic soda and ammonia injection lances, thereby improving mixing. It also helps to reduce scale buildup on the injection lances and improve treatment operations.

An apprentice fabricated new bases for air vent stacks that are located at the Weymouth plant's finished water reservoir. The original bases had deteriorated over time and were in need of replacement. These bases provide support for the air vent stacks that are in place to ensure optimal pressure conditions within the covered reservoir.

Staff performed annual maintenance on one of four treatment modules at the Skinner plant. During this routine maintenance, staff identified that the wheels of the sedimentation basin's traveling bridge were out of alignment and in need of repair. The traveling bridge is used to remove solids that have settled to the bottom of the sedimentation basin as part of the water treatment process. The wheels were removed and sent to the La Verne Shops for repairs. Following the repairs, staff reinstalled the traveling bridge wheels and placed the module back in service.

Staff replaced the caustic soda and ammonia mixing pump in the combined filter effluent (CFE) channel at the Jensen plant. The existing pump had failed due to its old age. This pump is used to convey water from the CFE channel to the caustic soda and ammonia injection lances, thereby improving mixing. It also helps to reduce scale buildup on the injection lances and improve treatment operations. *(see photos below)*



Staff removing the caustic soda and ammonia mixing pump at the Jensen plant



Newly installed caustic soda and ammonia mixing pump in the CFE channel at the Jensen plant



## WATER SYSTEM OPERATIONS

### Objective: Prepare for Future Legislation and Regulation

On February 22, the California Air Resources Board (CARB) released a second discussion draft of the Regulation for Reducing Sulfur Hexafluoride (SF6) Emissions from Gas Insulated Switchgear. The proposed SF6 regulation sets out a tiered phase-out schedule for SF6 in switchgear starting January 2025. The draft also provides for exceptions if viable non-SF6 alternatives are not available by the phase-out dates. Metropolitan utilizes SF6 in select switchgear equipment and staff is working with the Joint Utilities Group and California Municipal Utilities Association to provide comments on the draft regulation. Final adoption of the SF6 regulation is anticipated in late 2020.

On February 22, Metropolitan signed onto a letter led by the Las Virgenes Municipal Water District (LVMWD) requesting that the South Coast Air Quality Management District (SCAQMD) amend Rule 1470 (Requirements for Stationary Diesel-Fueled Internal Combustion and Other Compression Ignitions Engines) to ensure that emergency backup generators can be adequately tested and maintained in accordance with National Fire Protection Association standards. LVMWD experienced challenges during the 2018 Woolsey Fire, when emergency generators failed when placed under extended load conditions. Rule 1470 limits the annual maintenance and testing of diesel-fueled compression ignitions engines to as little as 20 hours, depending on the age and emissions of the engine. Metropolitan staff, in conjunction with LVMWD and several other water utilities, will meet with SCAQMD in April 2019 to discuss the proposed Rule 1470 amendment intended to ensure reliable operations during emergencies.

### Objective: Provide Technical Support to Member Agencies.

Staff prepared the 2018 Water Quality Report, which provides results of Metropolitan's required monitoring for the year. This report documents Metropolitan's compliance with drinking water regulations. It is distributed to member agencies for use in preparing their own individual water quality reports for their customers.

### GM STRATEGIC PRIORITY: Promote Environmental Stewardship and Sustainability

Metropolitan will continue to lead with programs that promote actions that support sustainable practices, reduce greenhouse gas emissions and protect natural habitat and water quality.

### Objective: Protect Source Water Quality.

On March 20, staff participated in an annual stakeholders meeting regarding perchlorate cleanup at the former Tronox site in Henderson, Nevada. The Nevada Environmental Response Trust and the Nevada Division of Environmental Protection updated stakeholders on the feasibility study development, project budget, and site management activities. The Trust also presented findings of the ongoing remedial investigation and an overview of various treatability studies that will inform the long-term groundwater remedy development.

### Objective: Manage Power Resources and Energy Use in a Sustainable Manner.

Metropolitan's hydroelectric plants generated an average of 5.6 megawatts per hour for approximately 3,750 megawatt-hours in February 2019, with revenues of over \$237,000. Metropolitan's solar facilities, totaling 5.5 megawatts of capacity, generated 544 megawatt-hours in February.

## WATER SYSTEM OPERATIONS

### GM STRATEGIC PRIORITY: Prepare for More Extreme Hydrology

Staff will work closely with the Board to assess Metropolitan's storage capabilities, current strategies and review future needs to identify whether new strategies and/or new investments are needed.

#### Objective: Manage Water Reserves

State Water Project imports into the service area in March accounted for about 85 percent of Metropolitan's deliveries. Storage at Diamond Valley Lake is at 745,000 AF or 92 percent full. DWR continued to make Article 21 supplies available in March. Article 21 represents water supplies in excess of SWP Table A allocations that were made available due to recent high storm flows in northern California. Metropolitan continued to maximize SWP deliveries to capture Article 21 supplies and minimize loss of Metropolitan's SWP Carryover supplies in San Luis Reservoir. Water reserves continued to be managed according to Water Surplus and Drought Management principles and the 2019 Annual Operating Plan, while considering the current 70 percent SWP allocation. There were no deliveries made to the Advanced Delivery Account with Desert Water Agency and Coachella Valley Water District this month due to the mid-February storms that impacted their facilities. Staff continues to manage storage in 2019 to meet anticipated demands and end-of-year operational targets.

### GM STRATEGIC PRIORITY: Maximized Local Resources

Staff will begin work with the Board and member agencies on a review of the institutional issues associated with the Regional Recycled Water Program and its relationship to Metropolitan's ongoing Local Resources Program

#### Objective: Support the Regional Recycled Water Program.

Staff continued working with the Los Angeles County Sanitation Districts to prepare for start-up operations at the demonstration facility in Carson. Work this month included assessing sample collection locations and devices and evaluating and refining the microbiological methods that will be used to demonstrate pathogen removal by the membrane bioreactors. Staff is also developing procedures for ultraviolet light collimated beam testing to support the demonstration project. This work utilizes a bench-scale test apparatus that will determine the required UV dose to ensure trace chemical compounds such as nitrosamines are removed to below regulatory target levels.

### GM STRATEGIC PRIORITY: Foster Leadership and Strengthen Workforce Capabilities

More than half of Metropolitan's workforce has reached retirement age, including many members of Metropolitan's executive management team. This is a challenge to Metropolitan's capacity to adequately train and prepare its workforce but is also an opportunity to build a workforce geared for the challenges of the future.

#### Objective: Manage Vacancies.

WSO filled 21 vacant positions, which includes 16 new pre-apprentices, in February 2019.

## WATER SYSTEM OPERATIONS

### GM STRATEGIC PRIORITY: Foster Leadership and Strengthen Workforce Capabilities continued...

#### Objective: Prepare Employees for New Opportunities.

The WSO Apprentice and Technical Training Programs help develop and train personnel to become qualified mechanics and electricians responsible for maintaining Metropolitan's water treatment and distribution systems. The Classes of 2020 and 2021 mechanics and electricians completed mid-term exams this month. On March 7, the Class of 2020 electricians participated in an off-site training class on LED lamps provided through Southern California Edison.

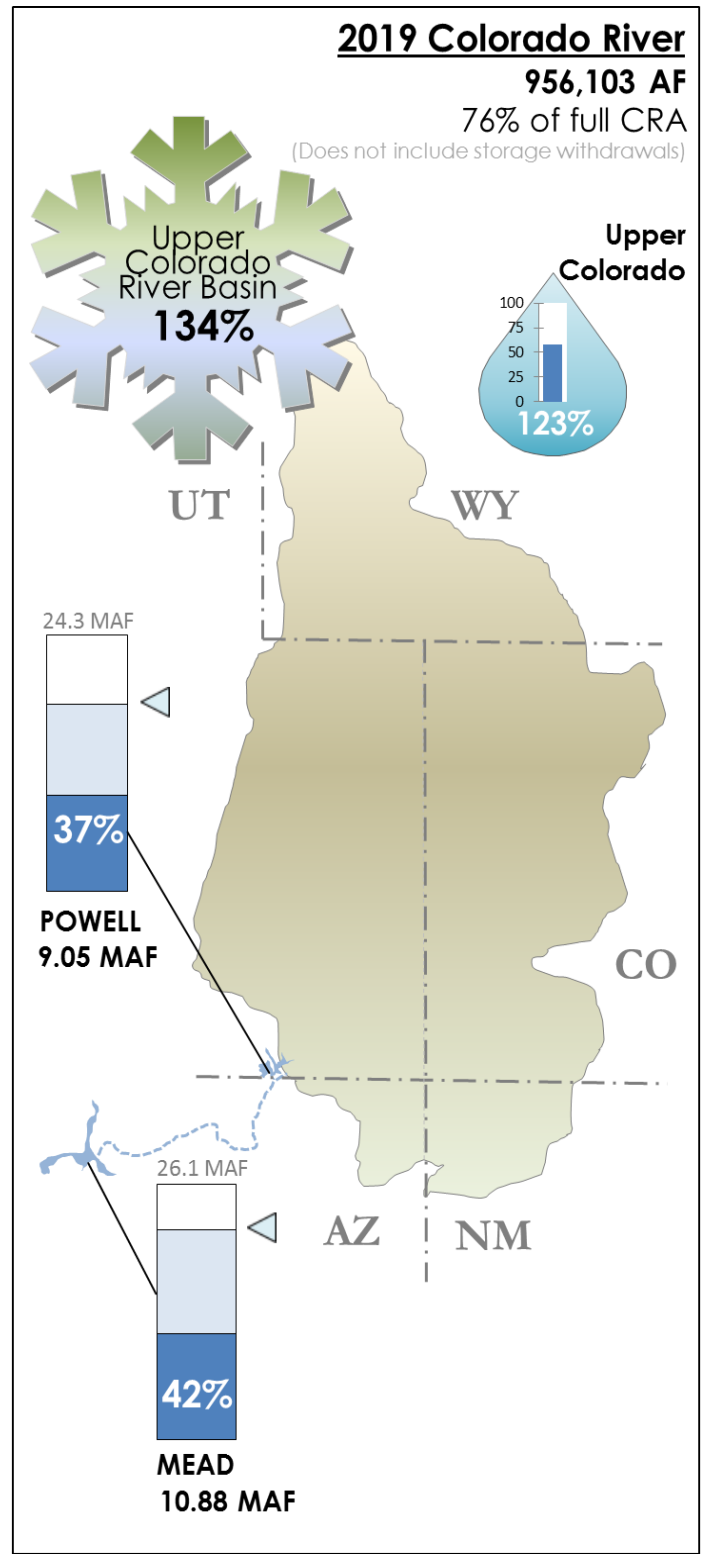
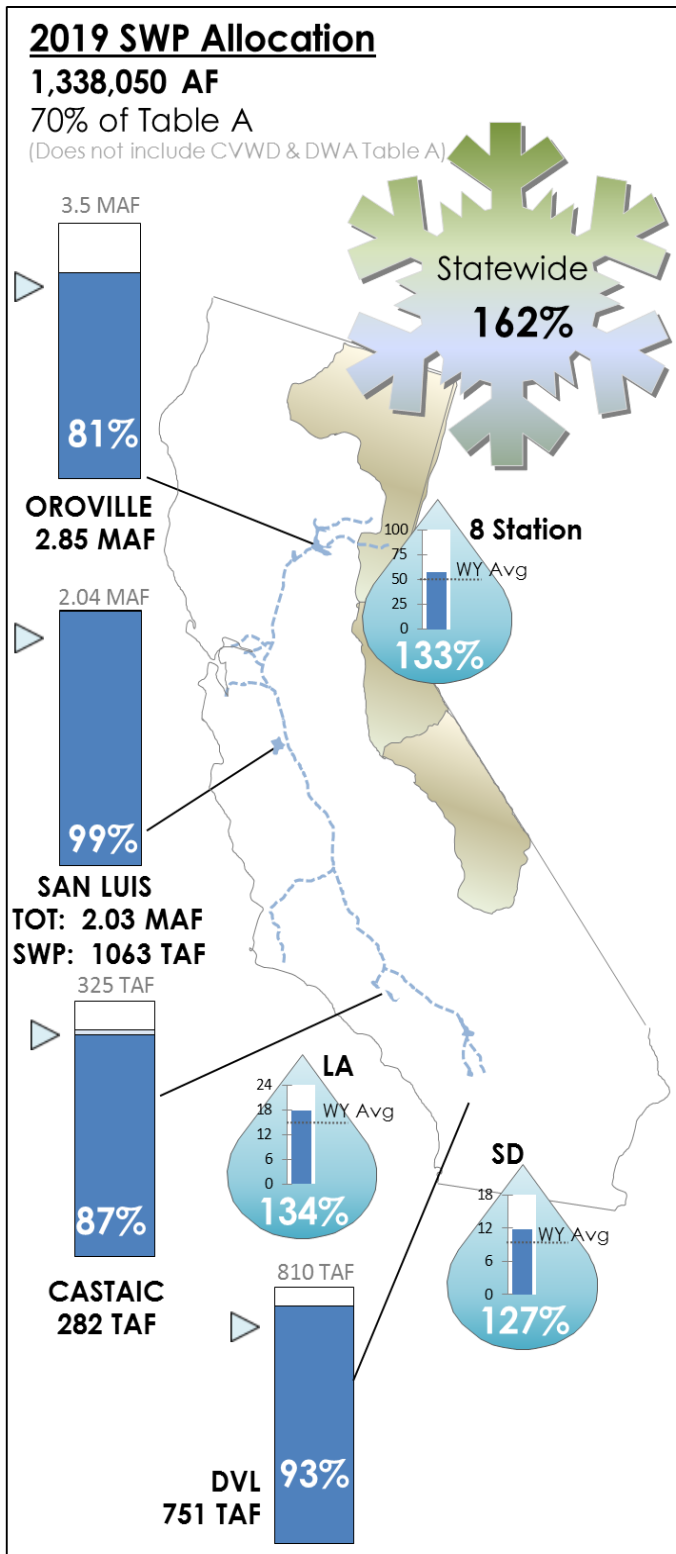
The third session of the WSO Management Academy was held at the Weymouth plant this month. Topics focused on employee motivation and administrative processes. WSO guest speakers provided a tour of the La Verne Shops and an overview of the Operations Support Services Section. Participants also began preparing for a series of short presentations designed to reinforce skills learned during Academy sessions. Ten, one-day sessions of the Academy are scheduled through October 2019.

#### Objective: Support Education and Outreach Initiatives.

On March 29, staff provided a tour of the Water Quality Laboratory and the Weymouth plant for a member agency delegation as the first stop on an inspection trip of the Colorado River Aqueduct system.

On March 28, University of California, Riverside engineering students toured the Mills plant. Staff provided an overview of Metropolitan's water treatment facilities, water quality and treatment issues, and plant operations and maintenance activities.

WATER SUPPLY CONDITIONS AS OF MARCH 31, 2019



- Regional Snowpack
- Rainfall to Date (in) WY Avg % Normal
- Capacity
- Average EOM Storage
- Current Storage (% Capacity)
- Snow pack % Normal

Super Bloom at Diamond Valley Lake

Photos below for story on page 28



Storage	As of 3/31/19	% of Capacity
DVL	750,691 AF	93
Lake Mathews	159,079 AF	87
Lake Skinner	36,729 AF	83

Metropolitan’s Mission 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.

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