



The Metropolitan Water District of Southern California General Manager's Monthly Activity Report for February 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.

FEBRUARY 28, 2019

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: Optimize Water Treatment and Distribution

Staff performed several electrical upgrades at the Mills plant. Upgrades included replacement of obsolete equipment, redistribution of power feed, and installation of a new unit power center. The new center provides a secondary power source to the potable water system, which is part of the chlorine system. (see photos below)



Staff installing electrical cables for surface wash pumps at the Mills plant



Content by Work Group

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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: Use technology and best practices to implement innovative solutions in business processes that will benefit customers.

The Technical Writing Team held the first training session for Operating Policy Central with current operating policy coordinators. OPC is a SharePoint collaborative workspace that efficiently tracks and updates new and existing operating policies. Additional training sessions have been scheduled in March. *(see photo below)*

On February 12, Metropolitan’s Board approved a contract to begin converting Metropolitan’s paper files to searchable digital files. This important phase of the Electronic Content Management project will ultimately provide a more effective online user search and retrieve functionality.

Miscellaneous

The Warehouse Team partnered with the Mills facility to host a Warehouse Showcase and Tool Show. The primary purpose of the event was to familiarize District end-users with Metropolitan’s warehouse tools and suppliers. *(see photo below)*

The Inventory Management Team completed the District-wide Class B Fixed Asset cycle count. Class B assets are cycle counted every 18 months; the count includes equipment such as vehicles, trailers, and pumps as well as laboratory, safety, survey and test equipment. Thus far, the team has accounted for 99 percent of assigned assets.



Training session for Operating Policy Central



Warehouse Showcase and Tool Show

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: Collaborate with the state and other state and federal water agencies in pursuing the implementation and construction of California WaterFix.

California WaterFix

On February 12, Governor Gavin Newsom announced in his State of the State Address a policy shift in the state's support for the current configuration of California WaterFix from a twin-tunnel project to a single tunnel conveyance facility. Governor Newsom recognized the challenges facing California to secure safe, reliable water—climate change, population growth, earthquakes, and sea level rise—for agricultural, municipal, and environmental benefits, and expressed his commitment to foster solutions to these challenges. The timing and cost implications on this new direction have yet to be determined.

Joint Powers Authorities

The Delta Conveyance Design and Construction Authority (DCA) held a special meeting on January 31, 2019, and approved executing a contract for the services of Kathryn Mallon as Executive Director. The DCA did not meet in February. The Delta Conveyance Finance Authority (Finance Authority) held a meeting on February 21, and at the meeting the Finance Authority approved extending the contract for the Interim Executive Director. It also approved contracts for Bond Counsel and Disclosure Counsel.

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 (SWRCB) 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). On December 12, 2018, the SWRCB adopted Phase 1 Bay-Delta Plan updates addressing San Joaquin River flows and south Delta salinity. Phase 2 of the Bay-Delta Plan update is focused on Sacramento River and its tributaries, Delta eastside tributaries, Delta outflows and interior Delta flows. Voluntary Settlement Agreement discussions continue and the SWRCB has indicated a willingness to consider the Voluntary Settlement Agreement proposal in the future.

SWRCB staff has requested recommendations from the Independent Scientific Advisory Panel (Panel) on developing scientifically defensible methods for formulating biological goals that can be used to assess progress toward achieving the Bay-Delta Plan's narrative objectives. The request for recommendations includes how to formulate quantifiable biological goals to assess the status and trends of representative salmonids, other native fishes, and ecosystem

BAY-DELTA INITIATIVES GROUP

CORE BUSINESS: Bay-Delta Solutions continued...

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

processes in the Bay-Delta and its watershed. The draft Panel report was released February 4, 2019. Staff reviewed the report and coordinated with other State Water Contractors to prepare comments submitted by the February 25 deadline. Staff is also preparing to participate in the Bay-Delta Biological Goals Scientific Advisory Panel meeting on March 4, 2019.

Objective: NEAR-TERM DELTA ACTIONS—Science Development

Staff continued participating in the Collaborative Science and Adaptive Management Program (CSAMP), including participation on the Collaborative Adaptive Management Team (CAMT). In February, CAMT focused on defining next steps for the Delta smelt structured decision-making process and Delta smelt science plan, and on development of a coordinated salmon science plan. CAMT is working with consulting experts to advance each of these processes forward this year. The California Department of Water Resources staff reported on status of Salmon Resiliency Strategy actions in the Yolo Bypass and Delta, and provided preliminary results for Delta Smelt Resiliency Strategy actions implemented in 2018.

Staff is working with University of California, Santa Cruz and National Oceanic and Atmospheric Administration Fisheries to develop the scientific methods that will be used to study predator hot spots in the Bouldin Island area in March 2019, as part of a study addressing salmon predation.

CHIEF FINANCIAL OFFICER GROUP

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.

- In preparation for the upcoming application recovery test, continued working with the business units and Information Technology on test coordination, staffing, and test objectives.
- Facilitated the Fusion Business Continuity Software Southern California user group quarterly meeting, allowing for sharing of best practices and vendor support.
- Initiated discussions with Fusion to upgrade to the latest version.

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: Record and report the financial activities of Metropolitan in a timely, accurate, and transparent manner to the Board, executive management, member agencies, and the financial community.

In January 2019, Accounts Payable processed 4,100 vendor invoices and took advantage of approximately \$5,600 in discounts.

Objective: Update capital financing plans and work with rating agencies and investors to communicate financial needs and capabilities, ensure cost-effective access to capital markets, and maintain long-term bond ratings of AA or better.

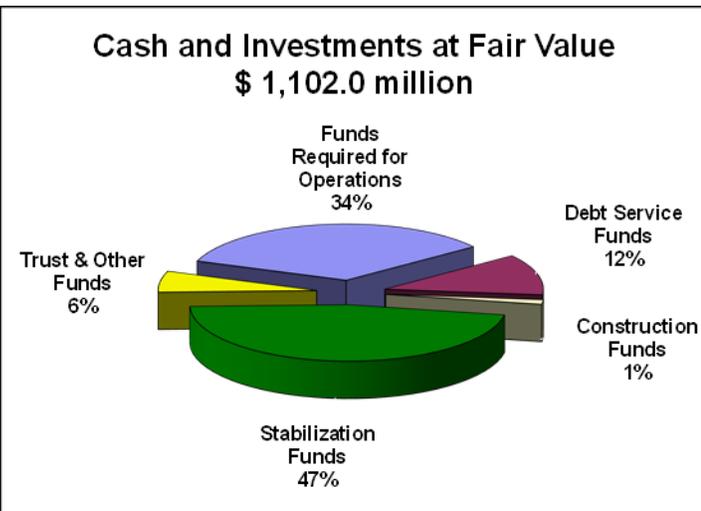
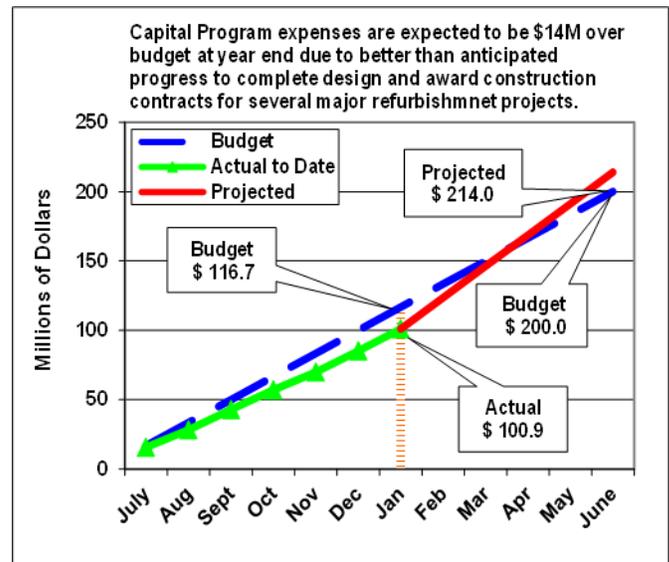
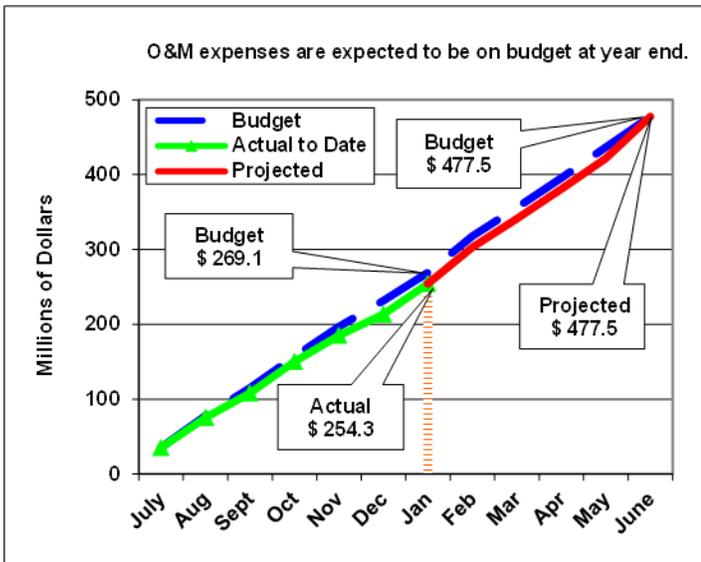
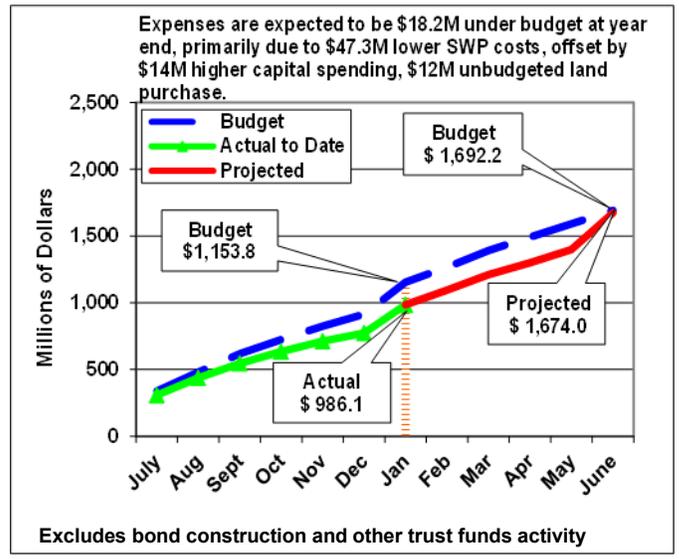
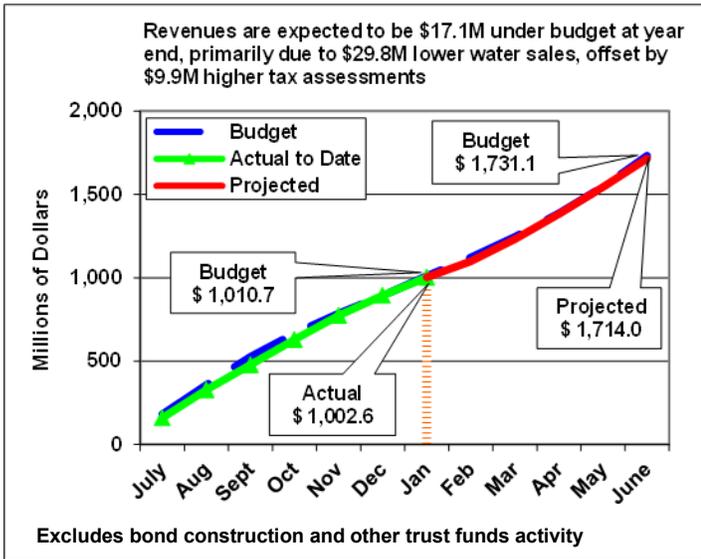
January 2019: Federal Funds Rate: 2.40% SIFMA Index: 1.43%

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

As of January 31, 2019, the balance in Metropolitan's investment portfolio was \$1.10 billion and Metropolitan's portfolio managers executed 92 trades in January.

During the month of January 2019, Treasury staff processed 1,694 disbursements by check, 16 disbursements by Automated Clearing House (ACH), and 75 disbursements by wire transfer. Treasury staff also processed 85 receipts by check, 31 receipts by ACH, and 42 receipts by incoming wires and bank transfers.

FINANCIAL SUMMARY AS OF JANUARY 31 2019



Summary Financial Statistics

	Target	Year-End Projected
Fixed Charge Coverage	≥ 1.20 x	1.53 x
Revenue Bond Coverage	> 2.00 x	1.67 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 85 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 85 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 78 percent complete and is scheduled to be complete by April 2019. Preliminary design of the Stage 2 improvements is 40 percent complete and is scheduled to be complete by July 2019.
- Yorba Linda Hydroelectric Power Plant Completion Project—This project fabricates and installs an enclosure for rain protection for the plant generator, procures spare parts, and upgrades various facility subsystems. Final design is 30 percent complete and is scheduled to be complete by December 2019.
- Red Mountain Hydroelectric Plan—This project refurbishes and/or replaces the turbine's mechanical components. Final design is 50 percent complete and is scheduled to be complete by May 2019.
- Lake Mathews Wastewater System Replacement—This project replaces the on-site wastewater

collection system and connects the new system to a nearby municipal sewer line. Final design is 55 percent complete and is scheduled to be complete by June 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 50 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 95 percent complete and is scheduled to be complete by April 2019.
- Casa Loma Siphon Upgrades—his project replaces Casa Loma Siphon Barrel No. 1 at a fault crossing utilizing Earthquake Resistant Ductile Iron Pipe. Field investigations were completed and the project is in the Preliminary Design phase, which is 25 percent complete and scheduled to be complete by January 2020.
- Foothill Feeder Castaic Valley Blow-Off Valve Replacement Project—This project will replace aging blow-off valves and modify the structure to facilitate maintenance activities in the future. The replacement valves were procured and installed during the planned Foothill Feeder shutdown. Construction of the remaining structure modifications is 15 percent complete and is scheduled to be complete by June 2019.
- Carbon Creek Pressure Control Structure Seismic Upgrade—This project provides seismic upgrade to the structure, including strengthening non-structural components such as elevated walkways and platforms, crane rails, and supports for equipment. Also, included in the project are hazardous material abatement of the concrete covers and replacement of the concrete covers with removable metal lids. The seismic upgrade portion of the project is complete. The overall improvements on the structure are 70 percent complete. Installation of the new metal lids is scheduled to be complete by May, 2019.

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...**

Distribution System Reliability Program continued...

Palos Verdes Reservoir Rehabilitation—This project replaces the reservoir's existing floating cover and liner, and modifies the existing spillway, control tower, and outlet structures. Construction is 97 percent complete and is scheduled to be complete by March 2019.

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.
- **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.
- **Sepulveda Feeder Urgent Relining**—The scope of the construction contract includes lining approximately 400 feet of existing PCCP segments with a steel liner along Del Amo Blvd in the city of Torrance. Construction is completed.

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:

- Employee Housing Rehabilitation—These projects perform comprehensive improvements to Metropolitan-provided employee housing at the CRA pumping plants. Project No. 1 constructs 10 new houses: two each at Hinds, Eagle Mountain, and Gene; and four houses at Iron Mountain. Construction was completed in June 2018. Project No. 2 refurbishes 89 houses that require minor or moderate levels of renovation. The initial construction is focusing on 11 houses under a pilot program. This pilot program work is 90 percent complete and is scheduled to be complete by April 2019.
- 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 20 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 60 percent complete and is scheduled to be complete by March 2019. Final design of Stage 2 to replace the remaining seven gates is 90 percent complete and is scheduled to be complete by May 2019.
- CRA Cranes Rehabilitation—This project replaces the overhead crane systems within each pump house and the portable pump-bay crane systems, including bridges, trolleys, hoists, drive trains, and system controls. Final design is 50 percent complete and is scheduled to be complete by August 2019.
- CRA Domestic Water Treatment System—This project replaces the membrane filtration system and associated water treatment equipment at all five of Metropolitan's Pumping Plants. Design is 30 percent complete and is scheduled to be complete by July 2019.

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

- Diemer Filter Outlet Conduit Seismic Upgrade Project—This project constructs seismic restraints for the Diemer Filter Outlet Conduit. Construction is 98 percent complete and is scheduled to be complete by July 2019.
- 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 nine 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 five 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...

Mills Plant

- Electrical Upgrades, Stage 1—This project replaces electrical equipment, provides dual power feed to key process equipment, and upgrades the Mills electrical system to be consistent with current codes and industry practices. The work will be completed in three stages. Construction of Stage 1 is 58 percent complete and is scheduled to be complete by June 2019. *(see photo below)*

Jensen Plant

- Jensen Water Quality Enclosure—This project constructs a new enclosure to house water quality instrumentation and equipment. Construction is 45 percent complete and is scheduled to be complete by July 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 35 percent complete and is scheduled to be complete by May 2019. *(see photo below)*



Weymouth – Placement of concrete in the new tank foundation



Mills – Placement of grout in the second lift of concrete masonry wall

ENGINEERING SERVICES GROUP

GM STRATEGIC PRIORITY: Maximize Local Resources

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

Regional Recycled Water Program

- **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. The demonstration facility will collect data for regulatory acceptance of the proposed process train for a full-scale recycling plant and will enable testing that will optimize the treatment process. Construction is complete and the contractor is now starting the contract-required testing and commissioning of the facility. It is anticipated that the contractor will complete all of its required activities and turn over the facility to Metropolitan in March 2019.
- **Conceptual Planning Studies**—This work effort builds upon the findings of the 2016 Feasibility Report. The current studies include the development of approaches to implementing a potential full-scale Regional Recycled Water Program. The studies and accompanying report were completed and were distributed to the Board. (see photos below)



Advanced Water Treatment Demonstration Plant – Process area for the reverse osmosis feed tanks

Advanced Water Treatment Demonstration Plant - Canopy over the process equipment



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

- Finalized Paleontological Resource Impact Mitigation Program and biological and cultural resources reports for the PCCP Reliability Program - Sepulveda Feeder.
- Initiated technical studies for Reach 9 of the PCCP Reliability Program - Second Lower Feeder.
- Provided CEQA documentation for South Coast Air Quality Management District permits to operate equipment at Metropolitan facilities.

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.
- Continued negotiations with CDFW on the Orange County Right of Way and Infrastructure Protection Program SAA.
- Finalized CDFW permit conditions and mitigation costs and secured the State Incidental Take Permit for the 2019 Foothill Feeder shutdown. Provided Worker Environmental Awareness training for shutdown staff.
- Obtained SAA for dewatering the Box Springs Feeder to support Prestressed Concrete Cylinder Pipe inspections.
- Obtained revised emergency permit from U.S. Army Corps of Engineers for the Colorado River Aqueduct emergency repairs to extend the work limits and the permit duration.
- Submitted reports to CDFW in accordance with the Bull Creek Long-Term Routine Maintenance SAA.
- Submitted annual report to CDFW in accordance with the Cajalco Creek Dam and Detention Basin and Lake Mathews Long-Term Routine Maintenance SAA.

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: Continue to actively manage Metropolitan's conservation lands through cooperative relationships with public agencies and non-governmental conservation organizations.

Coordinated with participating agencies and executed a cost-share agreement for participation in the Upper Santa Ana River Habitat Conservation Plan.

Objective: Integrate principles and practices of resource and habitat protection into capital projects, operations and maintenance activities, and management and maintenance of Metropolitan's lands.

Completed updates to Planting Specifications (Section 02950) to include new concepts, such as hydroseeding sequencing for a higher probability of revegetation success, and exclusion fencing for protection of new plantings.

ENVIRONMENTAL PLANNING SECTION

GM STRATEGIC PRIORITY: Promote Environmental Stewardship and Sustainability continued...

Objective: Identify current greenhouse gas (GHG) reduction measures and climate change planning and adaptation efforts underway throughout the organization for the purpose of developing a Metropolitan Climate Action Plan (CAP).

- Led Climate Action Plan (CAP) Working Group in development of Metropolitan's emissions inventory.
- Participated in the development of CAP webpage for Metropolitan's website.

Objective: Work with Water System Operations to develop landscaping practices to promote aesthetically pleasing sustainable landscapes at Metropolitan facilities to conserve water and support wildlife, as appropriate.

- Provided environmental support for the development of a Safety of Dams guidance manual for maintenance at all Metropolitan dams and reservoirs.
- Finished restoration for Jensen Inlet Water Quality Instrumentation Enclosure Project. Extended native desert landscaping at the Jensen plant.
- Finished replanting (Ceanothus) cultivars at Jensen plant stormwater capture project.

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 7 Water System Operations projects, 8 Real Property actions, and 5 board letters.

Construction Monitoring

- Continued environmental monitoring of construction activities at Palos Verdes Reservoir. Attended public outreach meeting with adjacent property owners and External Affairs office.
- Preparing final mitigation monitoring reports for the Whitewater CRA Erosion Protection Project.
- Completed monitoring and prepared mitigation monitoring report for Rialto Feeder Valve Replacement Project.
- Continued construction mitigation monitoring for the Diemer Filter Outlet Conduit Seismic Upgrades Project, Orange County Conveyance and Distribution Team Maintenance Building, Weymouth Plant West Wash Water Tank Seismic Upgrades, Weymouth Plant Domestic Water System Improvements, Orange County Feeder Relining Reach 2, and the 2.3 kV Powerline Replacement Project located at Gene Camp.
- Completed construction monitoring for Sepulveda Feeder PCCP Del Amo Boulevard Urgent Repair.

Engineering Services Support

- Provided review and preparation of specification and drawing packages for Etiwanda Pipeline North Project, Garvey Reservoir Drainage Improvements, and Diemer Conveyance and Distribution Facility Landscaping.
- Participated in coordination meetings regarding CRA Structural Repair Program; site visit with California Department of Fish and Wildlife scheduled for February to assess permitting requirements.

ENVIRONMENTAL PLANNING SECTION

CORE BUSINESS: Business Processes continued....

Water System Operations Support

- Completed wildlife surveys and biological resources memos in support of CDFW Streambed Alteration Agreements for the Box Springs Feeder, CRA Casa Loma Siphon, and San Diego Canal shutdowns.
- Conducted biological surveys in support of various operations and maintenance activities, including vegetation maintenance and road grading at various facilities.

External Project Review

- Commented on 15 CEQA notices for various external projects that may impact Metropolitan facilities and/or operations.
- Coordinated meeting with Real Property, WRM staff, and Ten West Link project proponent to discuss power line project to be constructed through Palo Verde properties.

Diamond Valley Lake

- Coordinated with External Affairs, WSO, and Real Property in preparation for the opening of the Wildflower Trail in March.

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.

Chairwoman Gray attended and was honored this month at multiple events including the Metropolitan Black Employees Association reception, the Los Angeles Chamber of Commerce Annual Dinner, the California Black Chamber of Commerce policy event in Sacramento, the Los Angeles City Council Black History Month celebration, and Upgrade LA's Meet the Decision Makers event. Chairwoman Gray was also honored by the West Basin and Moulton Nigel Water Districts.

Media interest in California WaterFix was high following Governor Newsom's announcement that he supports a one-tunnel project. Interviews were arranged for General Manager Kightlinger to speak with reporters from the *Sacramento Bee*, *Los Angeles Times*, *Bloomberg Environment*, *Voice of San Diego*, *Associated Press*, and KNX radio. General Manager Kightlinger also participated in a live interview on Take Two, a KPCC public affairs and news program.

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. continued...

General Manager Kightlinger was the keynote speaker at the Southern California Partnership for Jobs quarterly meeting where he provided an update on California WaterFix, the developing Drought Contingency Plan, and the Regional Recycled Water Program. (February 26)

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

- Staff monitored legislative activity and coordinated with Congressional staff on key legislative issues including those addressing the Colorado River, Mohave Desert Conservation Plan, infrastructure investment programs, and the Waters of the United States rule.
- Staff met with Majority Staff Director of the House Natural Resources Subcommittee on Water, Oceans, Fisheries, and Wildlife to discuss a variety of Metropolitan's 2019 federal priority policy objectives. (February 8)
- Staff met with staff of Representative Jimmy Gomez (D-CA) to discuss Metropolitan's federal priority objectives. (February 20)
- Chairwoman Gray, Directors Ackerman and Peterson, and Metropolitan staff participated in the Association of California Water Agencies annual Washington DC conference to brief members of Congress on California WaterFix, the Colorado River Drought Contingency Plan and other Metropolitan federal policy objectives, including Drought Contingency Plan enabling legislation, water efficiency tax parity legislation, Title XVI amongst others. Chairwoman Gray met with Representatives Napolitano (D-El Monte), Bass (D-Los Angeles), and Kathleen Sengstock, legislative director for the Office of Representative Waters (D-Los Angeles). (February 26-28, 2019)

State

In his first State of the State speech, Governor Newsom announced his support for a one-tunnel California WaterFix project and spoke of the need to upgrade the state's water infrastructure to prepare for the impacts of climate change. He referenced Metropolitan's Regional Recycled Water Facility as a positive example of a portfolio approach to meeting future water needs. Governor Newsom also named Joaquin Esquivel as chair of the State Water Resources Control Board and Laurel Firestone as a new board member, and called for completion of the voluntary settlement agreements for the Sacramento-San Joaquin Bay Delta. The Governor also intends to support programs and funding to ensure safe drinking water in all communities.

The Newsom Administration introduced a budget trailer bill that would create a state-managed safe drinking water fund with fees on water, fertilizer, and dairies. At a February 6 informational hearing, State Water Board Chair Esquivel and Secretary of Natural Resources Crowfoot discussed the Governor's budget proposal that includes new appropriations for infrastructure, emergency supplies, and technical assistance.

EXTERNAL AFFAIRS GROUP

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

Objective: LEGISLATIVE SERVICES - continued...

Local

- Staff participated in the Los Angeles County Business Federation roundtable with Los Angeles County Supervisor Hilda Solis. (February 1)
- Director Blois and Metropolitan staff attended the Ventura County Special District Association's Annual Meeting, where Director Blois received the "Director of the Year" award for his service on Metropolitan's Board and the Delta Conveyance Design and Construction Authority. (February 5)
- Staff made a presentation to the San Diego Chapter of the Southern California Rental Housing Association on current water supply conditions and conservation activities. (February 7)
- Staff attended the San Bernardino County State of the County and Regional Business Summit, which included a call for collaboration on water supply management. More than 600 community leaders from the public and private sectors attended. (February 12)
- Staff joined a delegation from Valley Industry and Commerce Association to meet with Assemblymembers Calderon (D-Whittier), Levine (D-San Rafael), Mathis (R-Visalia), and Mayes (R-Yucca Valley); Senate President pro Tem Atkins (D-San Diego); and Senators Bradford (D-Gardena), Morrell (R-Rancho Cucamonga), Stern (D-Canoga Park), and Wilk (R-Santa Clarita) to discuss various regional issues, including current water conditions and California WaterFix. (February 13)
- Directors Ackerman, Lefevre, and Ortega along with staff attended the Municipal Water Districts of Orange County's 2019 Water Policy Forum and Dinner, which covered Bay-Delta Initiatives and water supply in California's three unique water regions (Northern, Central, and Southern California). The featured speakers were Kathy Cole and Curt Schmutte. (February 21)
- Sponsored the Valley Industry and Commerce Association's State Officeholders dinner, which was attended by more than 600 business leaders from the San Fernando Valley. (February 22)
- Staff attended and sponsored the Los Angeles County Business Federation's advocacy day in Sacramento, which included meetings with legislators and the Newsom Administration. (February 27)
- Director Dick attended and Metropolitan sponsored the Urban Water Institute Spring Conference. Director Dick participated on a panel discussion, Bay Delta – Where Are We Now? More than 300 water industry professionals gathered and discussed emerging water issues. (February 27-March 1)

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 various interviews regarding Colorado Drought Contingency Plan on January 31 between General Manager Kightlinger and reporters from the *Arizona Daily Star*, *Associated Press*, *E&E*, and *Los Angeles Times*.
- Arranged interview with Water Resource Management Group Manager Coffey and *Long Beach Post* reporter Kelly Puente on how water agencies are working to conserve water in the face of climate change.
- Arranged interview between Assistant General Manager Upadhyay and Water Education Foundation's Gary Pitzer regarding the Los Angeles region's efforts to reduce reliance on imported water.
- Arranged interview between Water System Operations Assistant Group Manager Yamasaki and Benjamin Purper of KVCR, the Inland Empire NPR radio affiliate, regarding seismic risks to Southern California's water supply and Metropolitan's emergency planning efforts.

EXTERNAL AFFAIRS GROUP

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

Objective: MEDIA AND COMMUNICATIONS continued...

Communication Activities

Issued statement from General Manager Kightlinger regarding Governor Newsom's comments on California WaterFix.

Press Releases:

- Three New Directors Join Metropolitan Board
- Metropolitan Increases Rebates for Popular Turf Program to Promote Water Savings Outdoors

Social Media

- Posted graphics to drive consumers to apply for rebates as part of a bridge campaign between summer/fall advertising campaign and next round of creative elements. *(see photo right)*
- Created a Valentine's Day-related post featuring a rebate message. *(see photo right)*
- Nearly 22,000 visited the English, Spanish, and Chinese versions of the bewaterwise.com page.
- Highest performing social media posts were those promoting recycled water and events honoring the Chairwoman.



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.

- Staff met with West Basin Municipal Water District, Central Basin Municipal Water District, and Long Beach Water to discuss outreach efforts for the Regional Multifamily Pilot Program. Staff is also partnering with agencies to provide local outreach support along with outreach to apartment associations, contractors and property owners within our service area to increase water savings in disadvantaged communities through a collaborative and civically engaged approach. – figure #4
- Staff met with Santa Ana Unified School District to discuss outreach to staff, parents, and students for the Orange County Feeder and Extension Relining – Reach 2. (February 1)
- Metropolitan held a community meeting at the Wardlow Community Center in Long Beach to inform residents of the upcoming Second Lower Feeder Relining Project – Reach 4. (February 6)
- Provided 110 notices to the Riverglen Homeowner Association in Santa Ana regarding the installation of a Cathodic Protection System on the Orange County Feeder and 4,500 notices to local businesses and residents near the first six worksites for the Orange County Feeder and Extension Relining – Reach 2. (February 7)

EXTERNAL AFFAIRS GROUP

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

Objective: PUBLIC OUTREACH AND MEMBER SERVICES continued...

- Notified 140 residences in Newport Beach and Costa Mesa regarding the dewatering activities for the Orange County Feeder Shutdown and 130 notices to local businesses for the first phase of the Orange County Feeder and Extension Relining – Reach 2. (February 12)
- Provided a tour of the Weymouth water treatment plant and Water Quality Lab for the Foundation for Advancing Science in America. (February 12)
- Met with the City of Los Angeles Parks and Recreation Department to discuss the West Valley Feeder Improvements in South Chatsworth Park. (February 13)
- Met with the Member Agency managers to discuss water operations and supply conditions, Water System Operations Annual Operating Plan, deliveries of water in Metropolitan's system in an emergency, a proposed credit to enhance in-lieu deliveries to cyclic storage under limited conditions, and Colorado River issues. (February 15)
- Met with Metro to discuss coordination for the Second Lower Feeder Relining - Reach 9 project, which may require tunneling under the Metro Blue Line in Long Beach. (February 21)
- Provided an update on the Colorado River and Drought Contingency Plan for the Three Valleys Municipal Water District Leadership Breakfast. The update was provided by Colorado River Resources Manager Hasencamp. (February 28)
- Provided a tour of the Whitsett Intake Pumping Plant and Colorado River infrastructure for the Water Education Foundation. (February 28)
- Conducted two inspection trips to the State Water Project and Colorado River Aqueduct for directors. (February 1-2, February 22-23)

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

General Education

Staff met with and supported more than 640 teachers and students on field trips, events, activities, and class presentations to Ysabel Barnett Elementary School, Mountain View Elementary School, Rancho Elementary School, and Camino Nuevo Miramar High School.

Diamond Valley Lake Education Program

Metropolitan staff hosted 674 visitors at the Visitor Center and guided more than 270 visitors to the Clayton Record Viewpoint.

Solar Cup

The second technical workshop for Solar Cup 2019 was held at Occidental College. Students involved worked on their circuit building, battery installations, and technical reports. [\(see photo right\)](#)



Students working on their circuit building and battery installations during the second technical workshop for Solar Cup 2019

EXTERNAL AFFAIRS GROUP

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

Objective: EDUCATION AND COMMUNITY RELATIONS continued...

Event Sponsorships and Community Partnering Program

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

- Science Saturday – Western Science Center – (February 2)
- Gold Coast Science Network Conference – Oxnard College (February 9)
- GIRLS IN STEM – Los Angeles County of Education (February 13)
- Engineers Week – American Society of Civil Engineers (February 19-23)
- Leaders on the Move event (February 21)
- Annual Regional Science Bowl with LADWP (February 23)
- San Diego Bird Festival – San Diego Audubon Society (February 27)

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:

- Presented to the Building Operators and Maintenance Association on the importance of conservation and shared information about Metropolitan's conservation rebates program. (February 7)
- Exhibited at The Minority Business Opportunity Day Event. More than 350 were in attendance. (February 12)
- Attended the Los Angeles World Airports' Small Business Summit with more than 40 small businesses in attendance. (February 19)
- Exhibited at the Annual Veteran and Small Business Summit in Moreno Valley and Metropolitan was recognized with an award for its commitment to Veterans. Approximately 200 were in attendance. (February 26)
- Participated in the California Hispanic Chamber of Commerce Elevate: Procurement Symposium at the SoCal Gas Energy Resource Center. (February 28)

Metropolitan hosted a delegation from Eau de Paris, the publicly owned company responsible for the public water supply and waste water collection for the city of Paris. The delegation along with Metropolitan and Los Angeles Department of Water and Power's innovation teams also participated in a tour of Metropolitan's water quality lab. (February 12)

Staff participated in the Murrieta Innovation Center's water hackathon to encourage entrepreneurs to understand the role of innovation and technology in water. (February 19)

Metropolitan hosted the Achievement Rewards for College Scientists Foundation, including a panel discussion of current water issues and a tour of Metropolitan's Weymouth water treatment plant and Water Quality Lab. (February 21)

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.

- Staff partnered with the Engineering Services Group and hosted a kick-off luncheon for this year's Engineering Mentoring Program and provided training to those who will be participating as mentors and mentees.
- Staff facilitated a Metropolitan Management Academy session for prospective managers, covering topics on SMART Goals, Giving Performance Feedback, Creating Staff Training Plans, Employee Relations, and Equal Employment Opportunity.
- The second session of Water System Operations Management Academy was held, covering the transition that employees make from individual contributor to a first-time manager.
- Staff presented a workshop entitled *So You Want to Be a Manager* at the Southern California Public Relations Labor Council 2019 Annual Conference.

Training classes were delivered on the following topics:

- Success Signals (Colors)
- Word: Beginning
- Excel: Macros Workshop
- Access: Basic Queries Workshop
- Word: Professional Reports
- Word: Tips and Tricks
- Excel: Pivot Tables
- PowerPoint Tips & Tricks
- Outlook: Increasing Productivity
- Customer Service Skills
- Managing Emotions in the Workplace

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

Recruitment filled 29 positions for the month of February and received 23 new staffing requisitions, resulting in 146 positions currently in recruitment.

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

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: Continue to upgrade HR's technological capabilities by seeking out technological advancements that will best serve HR's customers.

Continuing the configuration and set-up of the new MyLearning learning management system planned for implementation later this year.

HUMAN RESOURCES

HR PRIORITY: Provide Excellent Human Resources Services continued...

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

HR Benefits provided the Affordable Care Act (ACA) 1095-C statements to all employees that meet the ACA threshold of 30 hours of work per week

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.

- Staff facilitated Metropolitan Management University session 2, which covered the topics of Handling Leave/Benefits, Worktech for Managers, Contracts & Procurement, and Avoiding Litigation Landmines.
- Employee Relations staff presented a training session to prospective managers as part of Metropolitan's Management Academy. The training covered the basics of public sector employment law; the obligation to meet and confer, grievance handling, and Equal Employment Opportunity complaint procedures.
- Eighteen Metropolitan managers continued to receive one-on-one management development coaching sessions.

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 Polices, and Memorandum of Understanding.

HR Benefits conducted Quarter One 2019 Deferred Compensation Advisory Committee meeting on February 20 and included a Fiduciary Training led by HYAS Group for all members. The training explained the roles and responsibilities of being a member of the committee and the fiduciary responsibility of providing recommendations to the Plan Administrator on investment line up, plan options, and features.

A review aimed at enhancing and streamlining Metropolitan's Workers Compensation function continued. As of February, only three employees were off work due to industrial injuries. This reflects Metropolitan's efforts to accommodate injured workers, while at the same time helping them to remain productive and on the job.

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

- Submitted 11 new claims to Metropolitan's Workers' Compensation Claim Administrator
- Closed 16 Workers' Compensation Claim Files
- Arranged 9 medical evaluations (DMV, medical surveillance, hearing conservation, etc.)
- Coordinated 0 random drug/alcohol tests
- Addressed 3 Accommodation issues.
- Coordinated 4 Medvan visits for Mills, Lake Mathews, and Skinner (DMV, Medical Surveillance, Hearing Test)

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:

- Staff worked with key business partners and stakeholders to enhance IT cybersecurity capabilities. IT continued the implementation process of multi-factor authentication (MFA) for contractors that access Metropolitan's systems remotely. The plan is to expand MFA capabilities to all remote users.
- Staff continued to evaluate cybersecurity products by conducting Proof of Concepts to demonstrate performance and effectiveness within Metropolitan's computing environment.

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 began acquiring the wireless equipment needed to establish a robust wireless infrastructure. Next steps include equipment configuration and testing while working in close collaboration with ESG on the required IT services.
- 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.

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

Maximo Upgrade Project—The project team continued to work in collaboration with stakeholders on the upgrade of Metropolitan's enterprise-wide maintenance management software application from version 6.2 to 7.6. Maximo is used for the planning, scheduling, and reporting of required maintenance of equipment deployed throughout the treatment plants and the conveyance and distribution system. During the period, the team established remote access for consultants. The key elements of this project, include the upgrade to the Transportation module and converting custom interfaces to the standard Maximo Integration Framework.

Enterprise GIS Project—This project upgrades Metropolitan's Enterprise GIS infrastructure to accommodate increasing demand for big data services and improve system performance to support three-dimensional and time series data requirements. Staff previously completed the procurement phase of the project and work is proceeding according to plan. Current activities include the installation and configuration of the hardware and software to allow multiple virtual server machines to run the ArcGIS Pro software application. Next steps include implementing VMware Horizons tools to allow for integration with future security initiatives.

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

Automated Meter Reading (AMR) Upgrade—The team is preparing to conduct pilot testing to evaluate alternative solutions for upgrading Metropolitan’s Automatic Meter Reading System. The purpose of the pilot is to determine features and benefits of potential technology solutions and how well each option operates within Metropolitan’s computing environment (i.e., radio communication, security, and integration).

System-wide Control System Upgrade—This project includes replacement of Metropolitan’s primary control system and is currently in the conceptual design phase. During the period, IT staff continued to collaborate with Engineering Services and Water System Operations on RFQ-DH-1191 as part of Metropolitan’s search for a control system that best meets hardware and software requirements. The Request for Qualification is scheduled to close in March.

Supervisory Control and Data Acquisition (SCADA) Network Fiber Optic Switch Replacement Project—This project is to replace 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. During the period, staff continued with the procurement phase of the project.

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.

- In preparation for March user-acceptance testing (UAT), staff continued internal testing of critical applications to determine Recovery Time Objectives (RTO) and Recovery Point Objectives (RPO). RTO /RPO are key measures in determining Metropolitan’s ability to restore business operations in the event of a disaster.
- During the period, staff conducted final preparations by reviewing the new Disaster Recovery procedures for the upcoming UAT testing scheduled for March. This test is an internal validation by the business stakeholders on the enhanced high-availability DR architecture and final acceptance of the software against the business requirements.

Metropolitan Remote Disaster Recovery Facility



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.

- Staff worked with the consultant on installation and configuration services. User-acceptance testing is 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:

- Continued to coordinate with group liaisons to reconcile current PCs (desktop vs laptop) along with future requirements as part of the Project.
- Initiated testing of tools (i.e., software/hardware) to evaluate technology options to enhance PC security capabilities (encryption).
- Continued development of a standard Windows image for the new PCs essential to establishing computing standards consisting of the operating system, applications, hardware configuration, and security required to operate within Metropolitan’s computing environment.

Leveraged innovative technologies such as unmanned aerial vehicles (UAVs) to capture important information that goes towards supporting Metropolitan’s key business objectives, including infrastructure and property inspections, environmental land monitoring, and videos for educational/promotional events.

- Recent UAV aerial missions in support of Metropolitan’s business units:
 - Performed two missions at Palos Verdes Reservoir, including a mapping flight with the field survey team to create an aerial mosaic and a 3D image of the reservoir.
 - Conducted a mission to document construction at the Regional Recycle Water Advance Purification Center (Carson, CA). ([see photos below](#))



INFORMATION TECHNOLOGY

CORE BUSINESS: Information Technology continued...

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

Water Ordering and Energy Scheduling System—The scope of this project is to implement a system that allows member agencies to submit flow change requests via a secure web application. In addition, it will replace existing Energy Management software, providing key functionalities for operational schedule management. Recent activities include:

- Continued the Design phase of the project by evaluating the architectural configuration options for this cloud-based application. Current endeavors include integrating the client with the Water Information System (WINS) and the Electronic System Logs (ESL) by the end of the fiscal year.

Service Manager System—Continued to evaluate service desk software to centralize and modernize service management within the Information Technology Group. Staff is currently using an interim tool to evaluate functionalities to better determine key requirements of a new system. Once fully deployed, the service desk tool will provide a self-service portal for work requests to improve operational reporting capabilities.

Access to Business Information—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). An example of a dashboard currently in development is the Interim Enhanced Surface Water Treatment Rule Dashboard. Once completed, this will be used by Metropolitan's water treatment plants and Water Quality Operations Compliance Teams to support monthly compliance reporting by allowing staff quick access to information to support decision making.

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

- Continued to hold IT Executive Council meetings with key stakeholders. As an advisory council to the General Manager, the IT Executive Council ensures alignment of IT priorities with business goals, as well as provides review and approval of IT priorities, strategic plans, projects, and policy.
- IT staff continued to install, configure, and test equipment associated with CoreSite (off-site datacenter) to improve network reliability and prepare for migration to cloud processing. Once the infrastructure is fully tested and operational, staff will begin migration of selected applications to improve redundancy and enhance capabilities. Planning activities are underway to begin testing of the new infrastructure.

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 Letter of Non-Objection and License Agreement with Los Angeles Department of Water and Power for excavation, access, staging, and storage rights related to the Second Lower Feeder Pre-Stressed Concrete Cylinder Pipe Program – Reach 4; and acquired Right of Entry permit with Union Pacific Railroad within the Alameda Railroad Corridor to facilitate the installation of a concrete liner for the Second Lower Feeder.

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.

- Staff completed Metropolitan's required training: High Rise Safety Program, Cybersecurity Program, and Defensive Driver Program, Agreement Administrator Certification Program Professional.
- Staff completed the following Metropolitan-sponsored courses: Excel Macros Workshop, MS Project Level I Workshop, and Procurement Card (P-Card) Program.
- Staff attended the American Society of Farm Managers and Rural Appraisers Water Quality Seminar.
- Staff completed online International Right of Way Association training *Alternative Dispute Resolution and Principles of Real Estate Negotiation* and attended the International Right of Way Association-sponsored courses: *Property Descriptions, Valuation Seminar, Eminent Domain Law Basics, and Introduction of Property/Asset Management*.

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: 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.

In collaboration with the DVL Visitor Center, the Western Science Center held a half-day workshop in early February entitled *The Science of Water* to educate and entertain the public. There were 115 families that attended this seminar. [\(see photo on page 27\)](#)

The Western Science Center currently has an exhibition on Main Street California, which is displaying artifacts discovered during the excavation of Metropolitan's Headquarter Building.

REAL PROPERTY

CORE BUSINESS: Real Property Acquisition, Management and Revenue Enhancement continued...

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.

- An easement was granted to the United States Bureau of Reclamation to design, create, maintain, and monitor cottonwood/willow and honey mesquite land cover on approximately 635 acres of Metropolitan-owned land in the Palo Verde Valley as part of the Lower Colorado River Multi-Species Conservation Program (LCR MSCP). Transfer of this easement to Reclamation helps fulfill habitat restoration obligations for the LCR MSCP and ensures reliable, long-term Colorado River water supplies.
- An entry permit was granted to the California Department of Fish and Wildlife to allow access to Bay-Delta Islands (Bacon Island, Holland Tract, and Webb Tract) for the detection and eradication of invasive nutria on Metropolitan fee-owned property.
- An entry permit was granted to Energeo Resources, LLC to allow access to a portion of Bay-Delta's Bouldin Island to test an existing gas well for its reserves' potential. The entry permit implements access rights by Energeo under a pre-existing underlying oil and gas lease, and it provides Metropolitan with additional, focused insurance coverage and hold-harmless protections.
- An amendment was granted to Red Rivers Farms Inc. to extend its current Operation and Management Agreement, to allow continued maintenance of crop and land management on Metropolitan fee-owned land in the Palo Verde Irrigation District. The amendment provides additional time to complete the Request for Statements of Interest process for the same fee property.

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

Repairs were performed on ten District houses at the desert pumping plant facilities in preparation for housing graduates of the apprenticeship program. The apprentices report for shift the first week of April.



Attendees at Western Science Center, story page 26

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: Identify storage policies to improve response to extreme hydrology.

Evaluation of Regional Storage Portfolio (ERSP)—Metropolitan staff continues to collaborate with the member agencies on the Evaluation of Regional Storage Portfolio. On January 31, staff held the 4th ERSP member agency workshop to discuss the draft white paper and potential recommendations for Metropolitan's Emergency Storage Objective. A total of 18 representatives from 15 member agencies attended the workshop. Additional ERSP workshops will be scheduled in the coming months to continue the collaborative efforts on increasing efficiencies and maximizing opportunities for regional storage.

Objective: Implement Conservation Program.

California Irrigation Institute Annual Conference—Metropolitan representative Bill McDonnell, President of the California Irrigation Institute's Board, kicked off their 57th annual conference by moderating a panel with Dr. Glenda Humiston (Vice President of University of California – Davis, School of Agriculture and Natural Resources), Andrea Mackenzie (General Manager of the Santa Clara Open Space Authority), Meghan Hertel (Director at the National Audubon Society), and A.G. Kawamura (Co-Chair of Solutions from the Land).

Metropolitan staff continued to advance the Disadvantage Communities Program that was adopted by the Board in December 2018. These activities included:

- Presented at the West Basin Municipal Water District Quarterly Purveyor Workshop on Water Use Efficiency.
- Presented at the San Diego Chapter Southern California Rental Housing Association, Legislative Committee Meeting. The presentation included water supply conditions and the commercial rebates program with emphasis on the Regional Pilot Program for Pre-1994 Multifamily Housing.
- Met with four member agencies to provide local support for implementing programs in Disadvantage Communities.

Commercial Rebates—Water Use Efficiency staff presented on commercial rebates - including the Water Savings Incentive Program - at the Los Angeles County Sanitation District, Metal Finishing Symposium at Los Angeles Trade Tech College.

Model Water Efficient Ordinance Training—Metropolitan staff hosted two Model Water Efficient Ordinance Training classes in partnership with Calleguas Water and Chino Basin Water Conservation District. Classes were well attended by city planning personnel, landscape contractors, and water agency conservation staff.

Earn  saving water.

Get rebates at
bewaterwise.com

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 a cost-effective and reliable State Water Project.

Article 21 Supplies - On February 19, California Department of Water Resources made Article 21 supplies available to State Water Project contractors. These supplies are made available on a weekly basis when DWR's capacity to export water from the delta exceeds scheduled demands and capacity to store water in San Luis Reservoir. Metropolitan has increased delivery of SWP water to take advantage of these surplus supplies and was allocated 14,000 acre-feet for the first week.

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 Program—Metropolitan staff initiated negotiations with 11 lead member agencies for the 15 Future Supply Actions Funding Program (FSA Program) agreements approved by the Board earlier this year. Staff adjusted the FSA Program agreement terms to streamline administration in response to member agency feedback. Metropolitan will host a concluding regional symposium after the studies are completed in 2021 to share the results.

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

WateReuse Association - Metropolitan staff and WateReuse Association President Raymond Jay gave a legislation and regulatory update to the Los Angeles Chapter of the WateReuse Association. He also provided a summary of national activities and discussed potable reuse projects under development.

WATER SYSTEM OPERATIONS

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

Objective: Actively Engage in Capital Project Planning and Execution.

Staff completed construction of new blow-off and discharge piping for the Palos Verdes Reservoir. The work is part of a capital project and allows for more efficient dewatering of the reservoir. Work included relocating the existing reservoir underground dewatering system, installing 500 feet of 18-inch high density polyethylene pipe, installing an 18-inch control valve and piping inside the existing valve vault, and constructing an energy dissipater. [\(see photo below\)](#)

Following completion of the Palos Verdes Reservoir rehabilitation work, staff began preparing to return the reservoir to service. This work involved removing two temporary bulkheads at the end of the Second Lower Feeder that were installed as a safety measure during construction. Staff disinfected the reservoir utilizing the reservoir’s new sodium hypochlorite feed system. Once the reservoir was full with chlorinated water meeting disinfection targets, the water was dechlorinated and slowly released to a local storm drain. The reservoir is anticipated to be placed back into service by the end of March, which will improve Metropolitan’s operational flexibility and reliability within the Central Pool distribution system. [\(see photo below\)](#)



Staff installing discharge piping at Palos Verdes Reservoir



Staff removing bulkhead on the Second Lower Feeder

Staff continued repairs and refurbishment at the Valley View Hydroelectric Plant in the city of Yorba Linda. The work is part of a capital project that was approved by the Board last year. This month, staff completed installation of two needle valves and deflectors. This turbine and generator rehabilitation project is expected to be completed in April 2019. [\(see photo right\)](#)

Staff installing refurbished needle valve at the Valley View Hydroelectric Plant



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 50,000 acre-feet of water to member agencies in February, which is the lowest February delivery in 40 years. February deliveries averaged approximately 1,800 AF per day, a decrease of 1,900 AF per day from January deliveries. Treated water deliveries for February totaled 30,000 AF, or 60 percent of total deliveries for the month. This was a decrease of about 26,000 AF from January treated water deliveries. The Colorado River Aqueduct decreased to a 5-pump flow starting on February 2. The CRA further decreased to a 3-pump flow on February 7 and ultimately to a 1-pump flow on February 21. Reduced CRA pumping allowed Metropolitan to manage storage while maximizing delivery of Article 21 supplies. Article 21

represents water supplies that are in excess of State Water Project Table A allocations and were made available by the Department of Water Resources this month due to the high storm flows in Northern California. A total of 39,000 AF of Colorado River water was pumped in February, averaging 1,400 AF per day. Metropolitan also maximized Inland Feeder flows to Diamond Valley Lake and increased State Water Project blends from 0 to 25 percent at the Weymouth and Diemer plants, and to 100 percent to Lake Skinner, to maximize capture of Article 21 supplies. SWP imports averaged 1,090 AF per day, totaling 30,500 AF for February.

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 January 2019.

Metropolitan has an ongoing program to increase the number of available water quality sampling sites for compliance with the federal and state Total Coliform Rules. An additional sampling site was added in February, bringing the total to 73. More sites will be established over the next few months and submitted to the State Water Resources Control Board's Division of Drinking Water to be included in Metropolitan's sample siting plan for bacteriological monitoring, ensuring continued compliance with regulatory requirements.

From February 26 to 28, staff received training from Tufts University on Flavor Profile Analysis (FPA). FPA is a sensory analysis method used to describe and identify the taste and odors in drinking water, which helps Metropolitan manage and comply with aesthetic qualities defined by state and federal secondary drinking water standards. Staff completing 30 hours of this comprehensive training become certified FPA testers and participate in routine evaluations of Metropolitan's source and treated water supplies.

Staff submitted a California Occupational Safety and Health Administration permit to operate diesel equipment inside the Colorado River Aqueduct and San Jacinto Tunnels. The permit application included a Ventilation Health and Safety Plan. This permit will support planned inspections of the tunnels during the upcoming CRA shutdown in March.

On January 31, staff met with the Mojave Desert Air Quality Management District to identify potential locations at the Gene and Iron Mountain facilities to install particulate matter monitoring sensors. These sensors will provide non-regulatory, real-time data that will help monitor regional smoke and dust pollution.

WATER SYSTEM OPERATIONS

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

Objective: Optimize Maintenance.

From February 2 to 22, the Foothill Feeder was taken out of service to perform electromagnetic testing of prestressed concrete cylinder pipe, repair valves at the Foothill Pressure Control Structure (PCS), and inspect the Magazine Canyon Structure. This shutdown required dewatering of 16 miles of the Foothill Feeder between Castaic Lake and the Jensen plant. Staff weld-repaired 13 cracks in the stainless steel liner of nine conical plug valves at the Foothill PCS. Staff also replaced four 24-inch butterfly valves; three of the valves were located at the CLWA-01T service connection, and one was located at the San Fernando Tunnel. Two 16-inch plug valves at a blow-off structure and several air release/vacuum valves along the Foothill Feeder were also replaced. During the outage, staff coordinated with DWR for installation of a newly refurbished 78-inch butterfly valve and removal of a 132-inch butterfly valve.

As the Foothill Feeder supplies water to the Jensen plant, the plant was also shut down during this period. During the shutdown, staff was able to perform work that could not be done while the plant is in service. This work included upgrading key chemical system safety components, replacing valves within the solids handling system, modifying chemical piping, and inspecting and maintaining chemical feed systems to ensure operational reliability. The plant was returned to service on February 22. [\(see photos below\)](#)



Chemical piping modifications at the plant effluent conduit of the Jensen plant

Staff entering the Magazine Canyon shaft



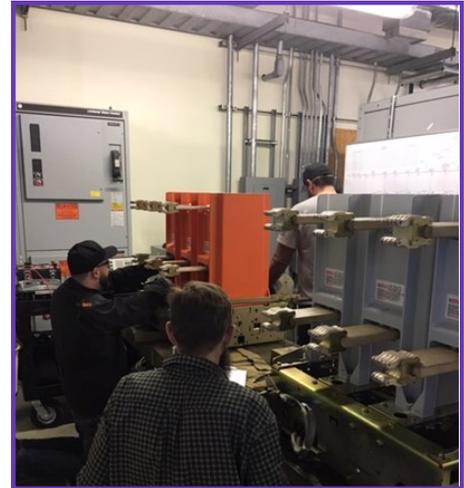
WATER SYSTEM OPERATIONS

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

Objective: Optimize Maintenance continued...

Staff performed scheduled maintenance on high-voltage equipment at the Jensen plant during the Foothill Feeder shutdown. This included cleaning, inspecting, and testing 4,160-volt circuit breakers to ensure that the equipment continues to operate properly. *(see photo right)*

Staff performing electrical tests on circuit breakers at the Jensen plant



Regular maintenance of CRA pump motors includes periodic testing to evaluate their condition. Tests involve disconnecting the motors and running a series of diagnostic tests using specialized equipment. Test results are compared to historical data to identify any potential changes or trends that may indicate future problems. These large motors operate at 6,900 volts, with output ranging from 4,300 to 12,500 horsepower each. Early detection of performance changes can prevent costly repairs and unplanned outages. *(see photo left)*

Disconnection of cables for motor testing at Hinds pumping plant

As part of Metropolitan’s prestressed concrete cylinder pipe program, staff dewatered and performed visual and electromagnetic inspection of a 2.4-mile section of the Perris Bypass Pipeline. The 120-inch diameter pipeline connects California Department of Water Resources’ Santa Ana Valley Pipeline to Metropolitan’s Perris Hydroelectric Plant and Perris Pumpback facility. In addition to the inspection, staff utilized this planned outage to replace a 24-inch butterfly valve and perform equipment maintenance at the Perris Pumpback facility. *(see photo right)*

Staff replacing 24-inch butterfly valve at the Perris Pumpback facility



WATER SYSTEM OPERATIONS

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

Objective: Optimize Maintenance continued...

Staff performed repairs to the Lake Mathews Forebay outlet tower cathodic protection system this month. Cathodic protection helps protect steel in pipelines, valves, gates and other structures in the distribution system from typical corrosion. During routine maintenance, staff discovered that the cathodic protection system for the large steel gates on the outlet tower was not working properly. The forebay elevation was lowered to allow staff to access the equipment and make the necessary repairs.

(see photo right)

Staff repairing cathodic protection conductors on the Lake Mathews Forebay outlet tower



- Staff installed communications equipment at the service connection CB-12 meter structure on the Rialto Pipeline in the city of Upland. This equipment will monitor conditions and provide remote notifications to system operators when there is a change in system conditions, such as a flood alarm or changed valve position. Staff installed equipment cabinets, communication cables and antenna, and an uninterruptible power supply.
- Staff installed new LED light fixtures near the ozone facilities at the Jensen plant. These new fixtures provide twice as much light (lumens) as the previous fixtures while using less power.
- Staff performed upgrades on control panels at the Santiago Creek PCS located on the East Orange County Feeder No. 2. The work involved re-wiring to meet current electrical code requirements, replacing existing lighting with LED lights, and establishing digital readout capability for valve positions at the facility. These improvements help on-site operators evaluate current operating conditions and make changes as needed, further improving system reliability.

Staff performed high-voltage switching to isolate a 4,160-volt emergency generator system at the Skinner plant for maintenance. This is done annually to ensure generators are maintained according to National Fire Protection Association requirements. The emergency generators provide power to the Skinner plant to maintain reliable operations in the event of a loss of utility power. (see photo right)

Staff performing electrical lockout for maintenance of emergency generators at the Skinner plant



WATER SYSTEM OPERATIONS

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

Objective: Manage the Power System.

Staff participated in the Boulder Canyon Project Engineering and Operating Committee quarterly meeting to discuss an update to the project's 10-year plan. This plan includes estimated Hoover power operations, maintenance, and replacement costs in accordance with the new 50-year Hoover contracts. The U.S. Bureau of Reclamation removed a project to replace 17 butterfly valves, estimated to cost \$128 million over seven years, based on further engineering studies that demonstrated the adequacy of the existing valves.

Metropolitan and California Independent System Operator staff jointly completed technical assessments on Metropolitan's CRA 230 kilovolt high-voltage transmission system as part of an Annual Transmission Reliability Assessment (ATRA). These assessments involved various technical studies to ensure reliability of the electric transmission system serving CRA pumping operations. Metropolitan staff prepared the 2018 ATRA report and distributed it to interconnected Transmission Planners, Balancing Authorities, and the regional Reliability Coordinator as required.

Staff updated the National Electric Reliability Corporation Reliability Standards Internal Compliance Program (ICP) to reflect changes in the regional compliance monitoring plan and Metropolitan's organizational structure.

Objective: Improve Security and Emergency Response.

- Staff met with emergency managers and first responders from the city of Hemet, county of Riverside, and other agencies at the Hemet Fire Department headquarters to discuss Metropolitan's Emergency Action Plan for the dams at Diamond Valley Lake.
- On January 31, staff attended the Mutual Aid Regional Advisory Committee meeting in the city of Norwalk. This regular meeting, hosted by the California Office of Emergency Services (Cal OES), brings together emergency managers from counties, cities, special districts, and other agencies to review current emergency management topics.
- On February 6, staff attended the Los Angeles County Operational Area Training and Exercise Steering Committee meeting. This committee is made up of representatives from the county, cities, special districts, and other organizations to jointly develop emergency training and exercise programs.
- On February 14, staff visited the Los Angeles Unified School District's Emergency Operations Center. Although LAUSD and Metropolitan have different missions, they are both large special districts with facilities covering multiple jurisdictions. Observing other Emergency Centers that are at a similar scale to Metropolitan helps staff learn valuable lessons that can be used for emergency response planning and expand Metropolitan's emergency network and capabilities.

Objective: Optimize Water Treatment and Distribution.

Flow-weighted running annual averages for total dissolved solids from January 2018 through December 2018 were 501, 496, and 502 mg/L for Weymouth, Diemer, and Skinner plants, respectively.

Staff completed repairs on the finished water reservoir inlet sample pump at the Weymouth plant. The sample pump supplies water to the plant laboratory where the water quality is tested. The failing pump was causing false turbidity readings and needed replacement. Staff used a crane to place a scissor lift onto the deck of the finished water reservoir. This eliminated the use of ladders and allowed safer work conditions for the pump repairs.

Staff performed cleaning and repairs of the coal removal system at the Skinner plant. This system separates anthracite coal from filter media that is lost during the water treatment process. The coal is abrasive and can wear out parts within other processes if not removed. Periodically, the coal removal structure will accumulate other solids that need to be removed. Staff utilized a crane and miners bucket to remove solids from the structure.

WATER SYSTEM OPERATIONS

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

Staff conducted a scheduled five-year inspection of the sodium hypochlorite and hydrogen peroxide tanks at the Diemer plant. The purpose of the inspection is to identify any problems with the tanks to avoid a potential failure. The tanks were thoroughly cleaned and the air inside the tanks was tested prior to inspection. The inspection found the tanks to be in good working condition. Staff performed minor repairs to the piping on the sodium hypochlorite system before returning the tanks to service.

Objective: Prepare for Future Legislation and Regulation

Based on concerns from multiple water agencies and utilities, the South Coast Air Quality Management District (SCAQMD) is planning to delay the adoption of the amended Rule 1403, Asbestos Emissions from Demolition/Renovation Activities. Metropolitan and other water agencies have met with SCAQMD staff to express concerns, particularly involving on-site survey, notification, and approval requirements for smaller underground asbestos pipe projects. SCAQMD will be holding workshops where Metropolitan and other water agencies and utilities will participate in reviewing and potentially reworking the amendments.

Objective: Provide Technical Support to Member Agencies.

Staff provided construction support for Santa Clarita Valley Water Agency's service connection CLWA-01/01T. Construction this month included coating and mortar repairs on the piping for CLWA-01T and replacement of three 24-inch butterfly valves. Tie-in for CLWA-01 was completed during the Foothill Feeder shutdown.

Staff continues to provide support to member agencies during planning and design of new or modified service connections. Activities this month included initial planning for West Basin Municipal Water District's WB-23 modifications, which include relocating the existing service connection from the Culver City Feeder to the Sepulveda Feeder, and Municipal Water District of Orange County's CM-12 modifications, which include changing the meter type, as requested by the agency, to increase the flow range.

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 February 26, staff participated in a technical workgroup meeting regarding perchlorate cleanup at the former Tronox site in Henderson, Nevada. The Nevada Environmental Response Trust presented findings from a bioremediation treatability study and provided an update of ongoing treatment 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 9.4 megawatts per hour for approximately 7,000 megawatt-hours in January 2019, with revenues of over \$400,000. Metropolitan's solar facilities, totaling 5.5 megawatts of capacity, generated 502 megawatt-hours in January.

Staff installed equipment for four new electric vehicle charging stations at the Weymouth plant site. Staff installed electrical conduit and conductors, duct banks, bollards, and a load center that provides the necessary electrical power to the charging stations. This project, expected to be completed in March, will allow employee electrical vehicles to be charged in less than four hours. [\(see photos next page\)](#)

WATER SYSTEM OPERATIONS

GM STRATEGIC PRIORITY: Promote Environmental Stewardship and Sustainability continued...

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

Electrical conduit installation for EV charging stations at the Weymouth site



Staff installing a new electrical duct bank for EV charging stations

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 February accounted for about 50 percent of Metropolitan’s deliveries. Due to high storm flows in Northern California, DWR made Article 21 supplies available during the second half of February. These are water supplies in excess of SWP Table A allocations. To maximize capture of Article 21 supplies, Metropolitan shifted operations from maximizing Colorado River deliveries to maximizing SWP deliveries. This revised operation included maximizing flows on the Inland Feeder, which filled Diamond Valley Lake to 722,000 AF or 89 percent full. Metropolitan also reduced CRA pumping to a 1-pump flow; increased State Water Project blends at the Weymouth, Diemer, and Skinner plants; coordinated with DWR on capacity limitations on the East Branch of the SWP; and maximized SWP West Branch deliveries. Water reserves continue to be managed according to Water Surplus and Drought Management principles, the Annual Operating Plan, and the current 35 percent SWP allocation. Deliveries to the Advanced Delivery Account with Desert Water Agency and Coachella Valley Water District were maximized prior to the mid-February storms that impacted their facilities and temporarily halted these deliveries.

WATER SYSTEM OPERATIONS

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: Support Imported Supply Reliability

The La Verne Shops manufactured a 132-inch diameter spool piece for DWR for the outlet valve structure at Castaic Lake. The spool piece was installed in place of the existing valve while the valve is out for refurbishment, which allows continued water deliveries to Metropolitan. The spool piece consists of an 86½-inch long pipe, flange, and coupling. Staff created project-specific shop drawings, as DWR's 132-inch valve is not a standard design. The La Verne Shops machined the 132-inch diameter flange to match the bolt patterns of the existing butterfly valve. Once coated, the spool piece was delivered to Castaic Lake for installation by DWR staff. (see photos below)



Staff machining the 132-inch flange for DWR



Staff welding the 132-inch spool piece



DWR staff inspecting the coating on the 132-inch spool



Loading for delivery to Castaic Lake

WATER SYSTEM OPERATIONS

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 the Regional Recycled Water Program.

On February 21, Metropolitan received approval from the State Water Resources Control Board, Division of Drinking Water, for the testing and monitoring plan for the upcoming demonstration project at the Regional Recycled Water Advanced Purification Center in Carson. Metropolitan, along with the Los Angeles County Sanitation Districts, have been meeting with key regulators since early 2016 as part of the development of the Regional Recycled Water Program. Approval of the testing and monitoring plan is a major milestone and will allow Metropolitan and the Sanitation Districts to soon begin testing at the facility and generate data that will be used to seek regulatory acceptance of the membrane bioreactor process, and ultimately provide data that would support permitting of a potential full-scale program. Testing at the demonstration facility is expected to start in spring 2019.

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: Prepare Employees for New Opportunities.

The WSO Apprentice and Technical Training Programs help develop and train personnel to become qualified electricians and mechanics responsible for maintaining Metropolitan's water treatment and distribution systems. On February 4, the program's Class of 2023 began employment as pre-apprentices with Metropolitan. During the first week, the 16 pre-apprentices attended the Apprenticeship Program orientation and a series of health and safety classes to prepare them for work in the field. The pre-apprentices serve a six-month probationary period before registering with the State's Division of Apprenticeship Standards as apprentices and beginning academic training. [\(see photos page 41\)](#)

The fourth cohort of the WSO Management Academy continued this month. This session addressed the transition into management, leveraging leadership strengths, importance of delegation, and included an assignment to interview a WSO manager. WSO guest speakers also discussed their paths into management. Ten one-day sessions of the Academy are scheduled through October 2019. [\(see photo page 41\)](#)

Staff continued an electrical cross-training program for mechanical Operations and Maintenance Technician IV classifications in the Desert Region. This program provides training for Desert Region mechanics to help prepare staff for future job opportunities. This month, participants studied power quality troubleshooting, programmable logic controllers, variable frequency drives, and the National Electrical Code.

Objective: Support Education and Outreach Initiatives.

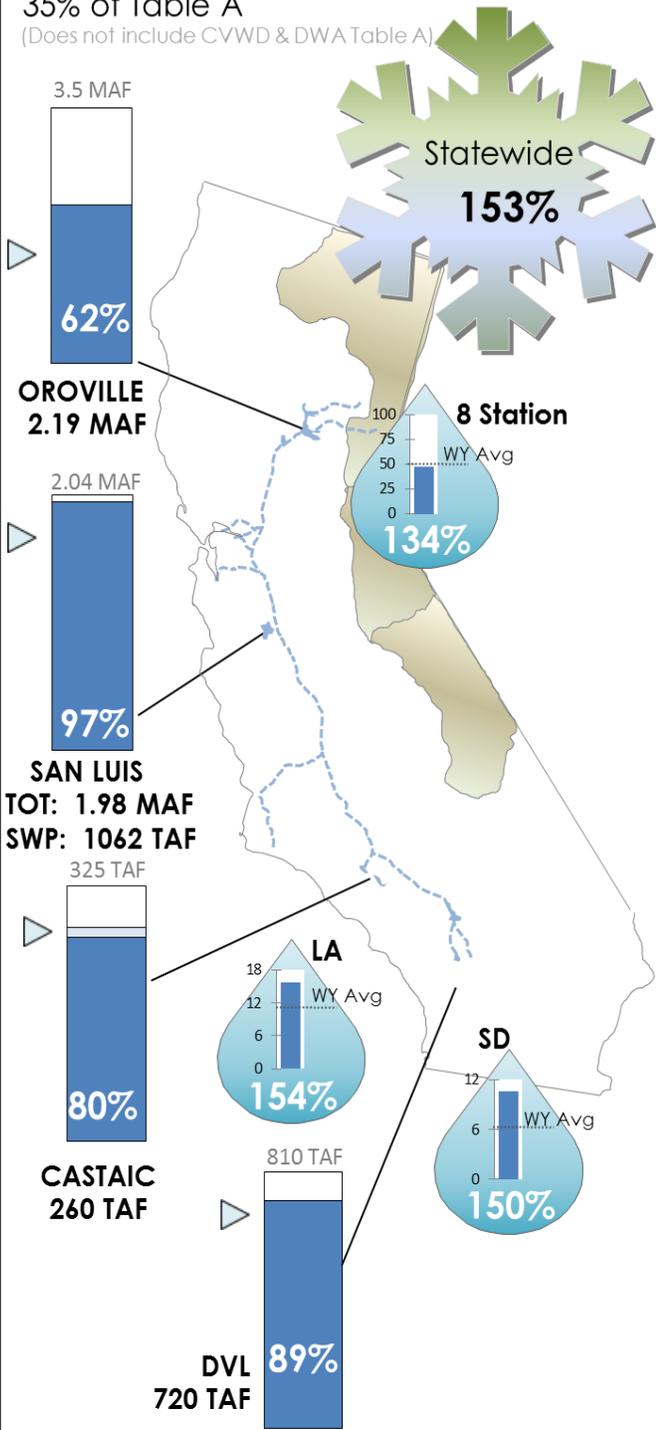
On February 21, staff provided a tour of the Water Quality Laboratory for the ARCS (Achievement Rewards for College Scientists) Foundation, which is a national organization that provides graduate and undergraduate scholarships to students in science, engineering, and medical research.

The Foundation for Advancing Science in America toured the Weymouth plant and Water Quality Laboratory in La Verne.

WATER SUPPLY CONDITIONS AS OF FEBRUARY 28, 2019

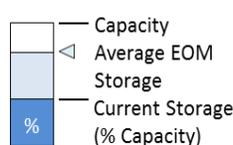
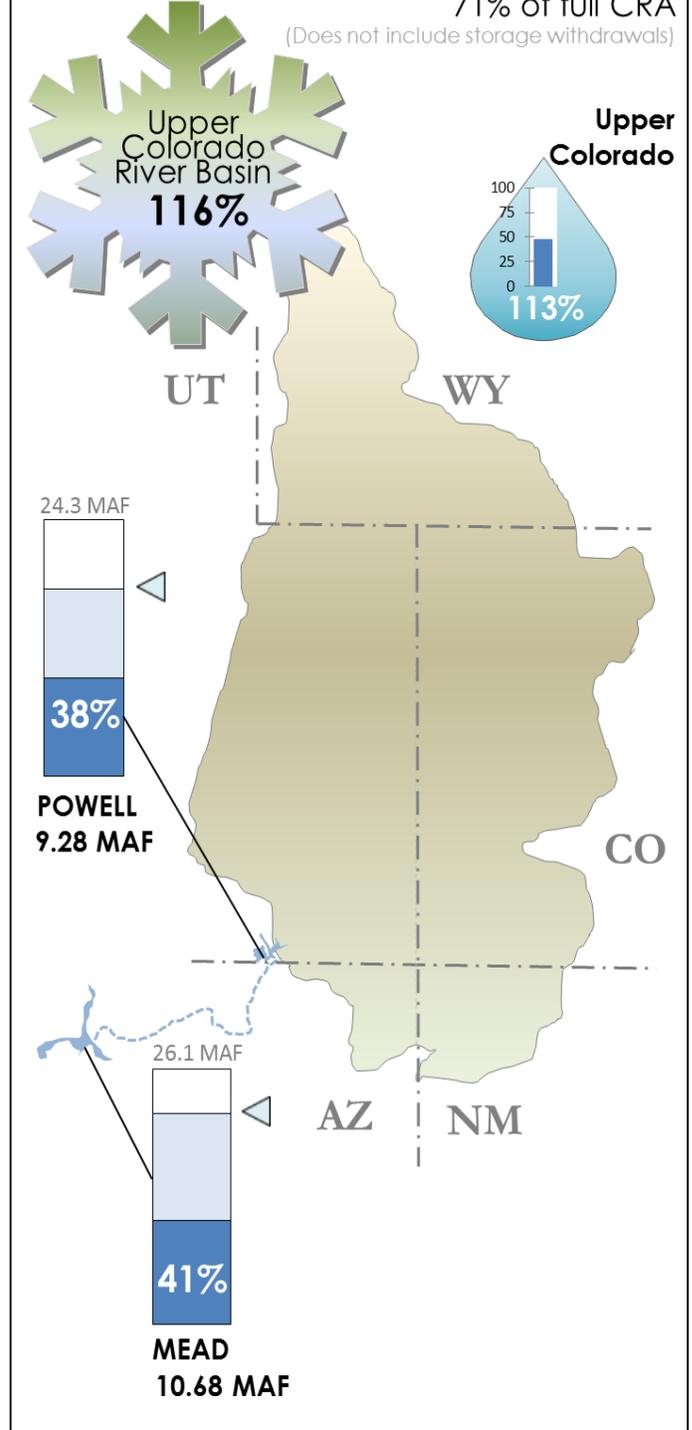
2019 SWP Allocation

669,025 AF
35% of Table A
(Does not include CVWD & DWA Table A)



2019 Colorado River

889,231 AF
71% of full CRA
(Does not include storage withdrawals)



Water System Operations

Photos below for stories on page 39

Class of 2023 Mechanical and Electrical Pre-Apprentices



WSO Group Manager Green addressing Class of 2023 Pre-Apprentices



WSO Section Manager Boyd presenting during WSO Management Academy.

Storage	As of 2/28/19	% of Capacity
DVL	719,866, AF	89
Lake Mathews	165,952, AF	91
Lake Skinner	41,271, AF	94

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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