



The Metropolitan Water District of Southern California General Manager’s Monthly Activity Report for April 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.

APRIL 30, 2019

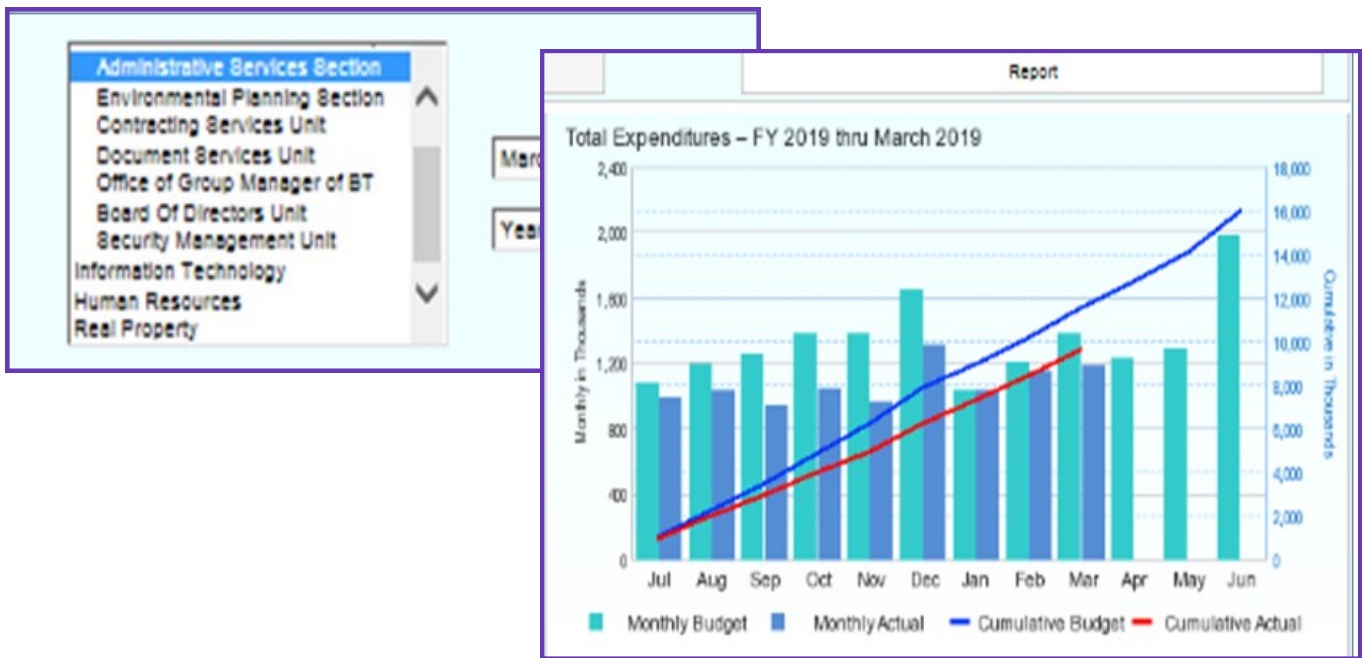
INFORMATION TECHNOLOGY

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

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). IT continued to partner with business units to simplify access to financial and operational data to enhance workforce productivity.



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

To further sustainability efforts and in support of the General Manager’s objectives, Administrative Services Rideshare Services team partnered with the Weymouth filtration plant staff to install two dual-electric vehicle charging stations at the Weymouth filtration plant. *(see photos below)*



Weymouth—Electrical Team and Staff



Weymouth—New Electric Vehicle Charging Stations

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

The Records Management and Imaging Services Team helped officially kickoff the Back-File Conversion project. This project seeks to identify relevant paper, film, and historical documents and convert them to digital, easily searchable files. All areas of Metropolitan will be covered, but initial efforts will begin at the Headquarters building to limit the moving of file cabinets during the Seismic Upgrade Project.

Administrative Services Professional Services staff facilitated eight solicitations resulting in ten executed agreements and drafted ten agreements for various services in support of Delta Conveyance Design and Construction Authority initiatives. In aggregate, staff’s efforts have led to the successful initiation of 28 DCA work units.

Objective: Implement comprehensive workforce succession planning and employee development program

As part of the General Manager’s strategic initiatives, Administrative Services partnered with Human Resources to launch a staff development program in support of succession planning. The program is designed to further enhance staff skillsets. Twenty-one Administrative Services journey-level staff members participated in a three-day program focusing on key areas such as time management, communication, customer service, and teamwork. *(see photo next page)*

ADMINISTRATIVE SERVICES SECTION

CORE BUSINESS: Business Processes continued...



Administrative Services Succession Planning Participants story on page 2

Miscellaneous

Three Administrative Services employees, Senior Administrative Analyst Omar De Leon Medina, Buyer II Nery Watson, and new Team Manager II David Price, graduated from the second cohort of the Metropolitan Management Academy's nine-month program. The academy prepares participants for future managerial opportunities.

Due to the super bloom and the *Los Angeles Times* listing the Diamond Valley Lake facility as one of the top ten places to see the wildflowers, External Affairs submitted a rush order of 12,000 brochures. The Imaging Services Team produced the material in record time while maintaining the high standards of both External Affairs and Imaging Services. Metropolitan was able to maintain continuity in its community education and outreach efforts with these brochures.

The Wildflowers of DVL brochure

The brochure includes the following sections:

- Indian Paintbrush:** Fall to partial sun, Sandy soil, groundcover, 6"-12", Blooms February through June. Found on dry, brushy, or rocky hill-sides. The small flowers form dense clusters among largely obscured, scarlet bracts. May be partially perennial on roots of other plants. *Crotonia affinis*
- Tidy Tips:** Fall sun, Sandy soil, 4"-12", Blooms March through June. A member of the sunflower family. Distinct white-tipped yellow flowers found in grassland areas. Although widespread, this species is declining due to increasing urbanization. *Leucophaea pinnatifida*
- Forget-me-not:** Fall sun, Sandy to rocky soil, 6"-20", Blooms March through July. Forms large white patches within openings on hill-sides. Annual wildflower with stiff hairs on stems and leaves. *Cyanus latifolius*
- Red Maids:** Fall sun, Sandy to heavy soil, 2"-8", Blooms February through May. Following good winter rains, this common early spring wildflower can be found on grassy slopes, bank areas and outwashed fields. *Ceanothus ciliatus*

The map shows the SEASONAL WILDFLOWER TRAIL with landmarks: PEAK OVERLOOK, GRAND TRAIL, 1.5 MILE, 2.5 MILE, 3.5 MILE, TRAIL HEAD, BOAT RAMP, LANDVIEW TRAIL, and NORMAL MEDIUM WATER SURFACE @ 1750. A 'PARKING AREA' is also indicated.

Additional text on the brochure includes: "Please do not pick the flowers.", "THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA", and contact information: "(951) 928-7201 www.dvlake.com".

At the bottom, it reads: "Diamond Valley Lake... The Jewel of California Lakes" and "The Metropolitan Water District of Southern California".

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: Pursue environmental restoration project opportunities that meet the goals of California EcoRestore and identify land use opportunities for Metropolitan's Delta Islands.

California EcoRestore

California EcoRestore was launched in 2015 by the California Natural Resources Agency to accelerate the restoration of 30,000 acres of habitat across the Delta by 2020. The initiative's primary focus is coordinating state-led habitat restoration projects to accelerate on-the-ground results. In 2018, five restoration projects broke ground, which will create new tidal wetlands, establish new riparian upland habitats, and address fish passage barriers. Many more restoration projects are in the planning phase. In an effort to communicate EcoRestore accomplishments, the Natural Resources Agency released a video on April 17 highlighting the benefits of the EcoRestore projects. The video includes speakers from state agencies and stakeholders. Alison Collins, Senior Resource Specialist in Bay-Delta Initiatives, is one of the speakers in the video. The video can be found at the following link: <http://resources.ca.gov/ecorestore/2019/04/ecorestore-restoring-californias-great-estuary-video-released/>.

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

In January 2019, the Independent Scientific Advisory Panel (Panel) that was organized at the request of the SWRCB to develop recommendations concerning biological goals produced a draft report. The Panel's charge was to provide recommendations on scientifically defensible methods for formulating biological goals that can be used to assess progress toward achieving the proposed Bay-Delta Water Quality Control Plan narrative objectives. Staff provided comments on the report through the State Water Contractors and participated in the Bay-Delta Biological Goals Scientific Advisory Panel meeting on March 4, 2019. The final Panel report was released on April 26. Staff is reviewing the Panel's final report.

Objective: NEAR-TERM DELTA ACTIONS—Science Development

Staff met with the Centerville Schoolhouse Workgroup, a diverse group of stakeholders committed to ensuring the future of Butte Creek's population of spring-run Chinook salmon. The group discussed habitat restoration projects on the lower river with local water users and provided suggestions on how to advance implementation of habitat restoration projects. The group also met with DWR representatives who are interested in considering actions that can be taken on Butte Creek to ensure delivery of cold water for spawning spring-run adult Chinook salmon.

BAY-DELTA INITIATIVES GROUP

CORE BUSINESS: Bay-Delta Solutions continued...

Objective: NEAR-TERM DELTA ACTIONS—Science Development

Science Activities continued...

Staff participated in the U.S. Fish and Wildlife Service (USFWS) Species Status Conservation Assessment for Longfin smelt. The Assessment will be used by USFWS to inform a federal listing decision for longfin smelt in 2020.

Staff continued participating in the Collaborative Science and Adaptive Management Program, including participation on the Collaborative Adaptive Management Team (CAMT). In April, CAMT focused on science governance issues, Delta Smelt Science Plan implementation, and structured decision-making for the Delta.

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

Delta Flood Emergency Management Plan

In April, DWR and the U.S. Army Corps of Engineers (Army Corp) conducted a full-scale exercise under the Delta Flood Emergency Management Plan and related federal and state plans to practice response to simulated significant levee erosion and levee breach scenarios in the Delta. The exercise involved an Army Corp project levee at Middle Roberts Island forming part of the State Plan of Flood Control, and at a non-project levee at Metropolitan-owned Bacon Island forming a critical link to the emergency freshwater pathway and water export operations.

The exercise mobilized the State-Federal Flood Operations Center (FOC), the U.S. Army Corps of Engineers EOC at the Joint Operations Center in Sacramento, and DWR and Army Corp mobile command centers at the DWR Stockton materials storage and warehousing facility, and the exercise also included participation by the California Office of Emergency Services.

The event was activated under a Unified Command in anticipation of simulated storms and deteriorating levee conditions observed by Reclamation Districts at the specified islands, with anticipation that a full levee breach could occur. In the exercise, both County and DWR resources were found to be exceeded and Army Corp was requested to provide flood fight assistance. Requests for assistance progressed through Reclamation Districts, County and DWR levels to Army Corp, resulting in flood fight responses at the field level. Construction contract procurement and services would occur on a highly expedited basis.

In the exercise, the DWR Emergency Response Tool (ERT) was used to test various levee erosions and potential breach scenarios, as well as identify the required material and equipment resources mix to respond to the emergency and potential water quality effects in the Delta region.

Field operations included the testing of a joint communications plan, consisting of communications equipment at FOC, EOC, field command, and incident locations, including portable repeaters, satellite, radio, cell phone, and laptop communications. Common communications briefing techniques were utilized to bring all elements together. DWR and Army Corp will complete a de-briefing identifying lessons learned following the exercise.

CHIEF FINANCIAL OFFICER GROUP

CFO STRATEGIC PRIORITY: Maintain Strong Financial Position

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

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

The Risk Management Unit completed 46 incident reports communicating instances of Metropolitan property damage, liability, workplace injuries, regulatory visits, and spills.

Risk Management completed 58 risk assessments on contracts, including professional service agreements, construction contracts, entry permits, special events, and film permits.

Objective: Establish rates and charges to maintain moderate overall rate increases, minimize variability, and recover costs consistent with Board policy.

In preparation for June 2019 financing activities, Debt Management staff provided the Finance and Insurance Committee with an update on the status of Metropolitan's \$4.1 billion revenue bond debt.

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.

- Worked with vendor to finalize the Fusion Business Continuity software upgrade scope and Statement of Work.
- Collaborated with Information Technology on deployment of Phase 2 critical applications to the Lake Mathews Disaster Recovery facility.

CORE BUSINESS: Manage Finances for Long-Term Stability and Sustainability

Maintain moderate water rate increases, manage costs within the adopted budget, and attain or maintain Board policies for all key financial ratios. To meet these objectives, Metropolitan will continue to focus on achieving cost reductions and efficiencies in all areas of its business with primary focus on staffing levels and capital program costs to ensure that these areas are sustainable and sufficient to meet long-term service area demand forecasts.

Objective: Effectively manage costs and communicate the results of Metropolitan's budget to meet Board policies and objectives.

The Board adopted Readiness-to-Serve Charges and Capacity Charges for Calendar Year 2020 for each member agency.

CHIEF FINANCIAL OFFICER GROUP

CORE BUSINESS: Financial Management

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

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

As of March 31, 2019, the balance in Metropolitan's investment portfolio was \$1.15 billion; for the month of March 2019, Metropolitan's portfolio managers executed 59 trades.

During the month of March 2019, Treasury staff processed 1,692 disbursements by check, 16 disbursements by Automated Clearing House (ACH), and 71 disbursements by wire transfer. Treasury staff also processed 65 receipts by check, 22 receipts by ACH, and 41 receipts by incoming wires and bank transfers.

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.

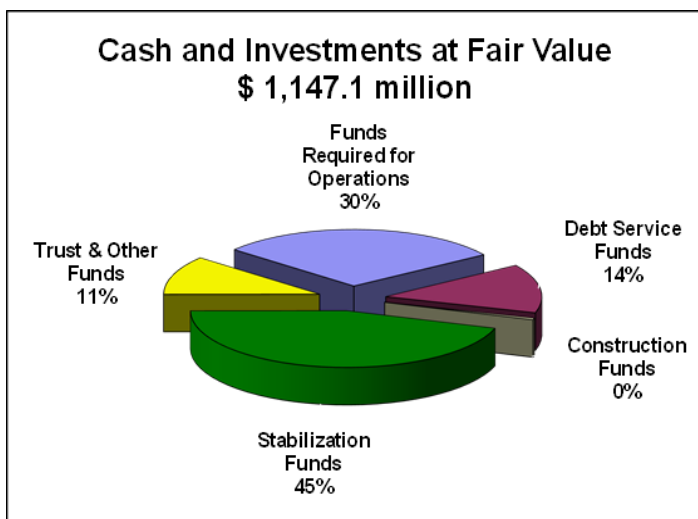
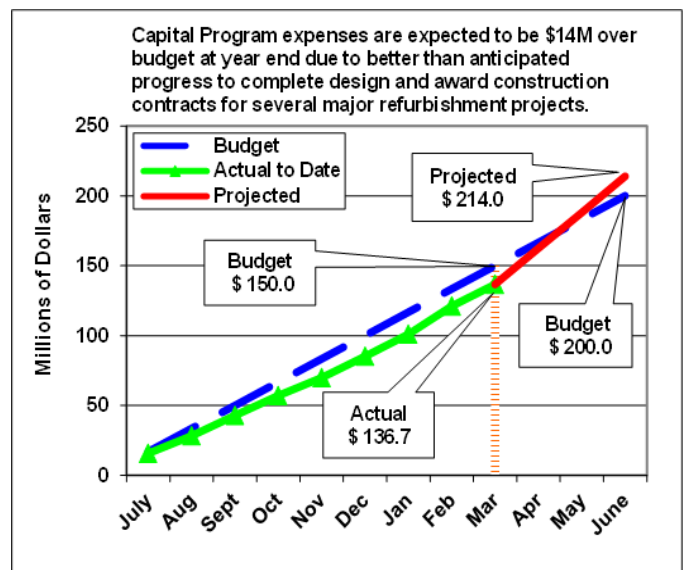
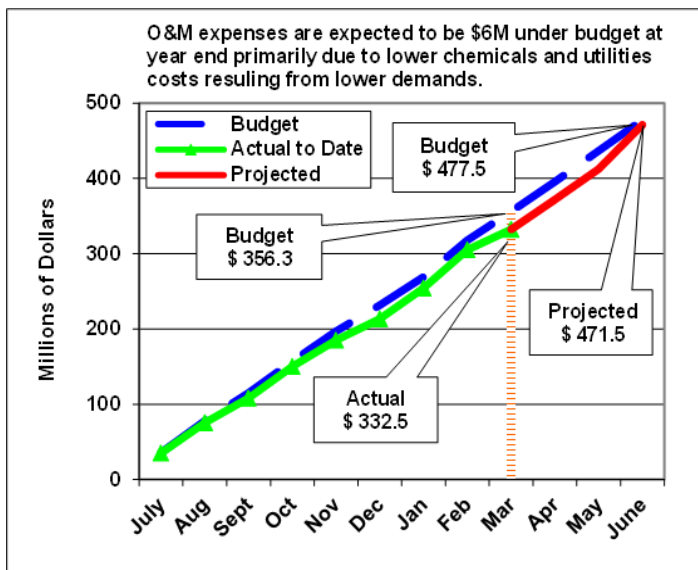
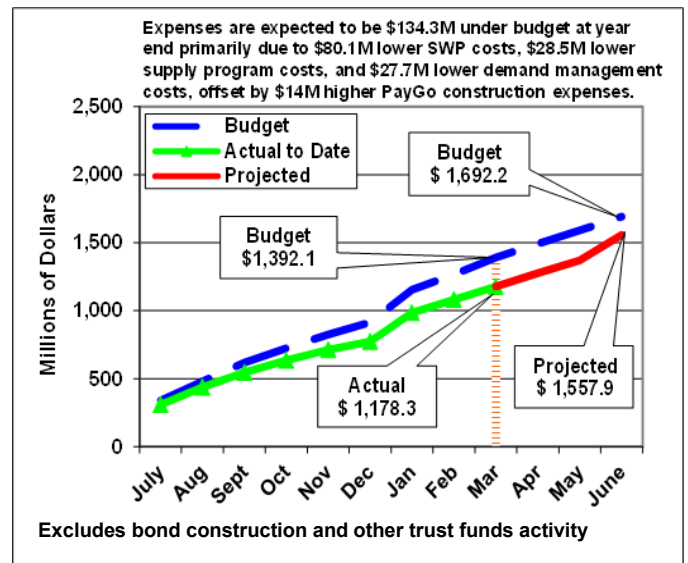
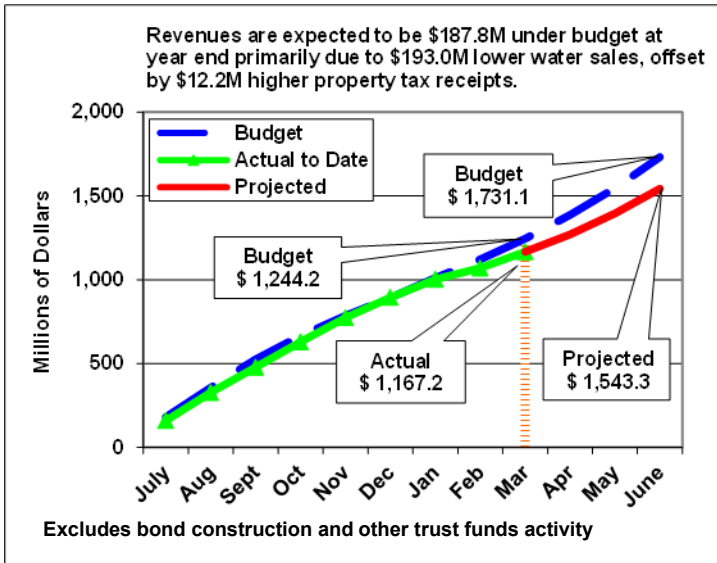
On April 8, 2019, the third quarter financial results and projections for Fiscal Year 2018/19 were presented at the Finance and Insurance Committee. In March 2019, Accounts Payable processed 3,600 vendor invoices and took advantage of approximately \$8,300 in discounts.

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.

March 2019

Federal Funds Rate: 2.40% Securities Industry and Financial Markets Association (SIFMA) Index: 2.30%

FINANCIAL SUMMARY AS OF MARCH 31, 2019



Summary Financial Statistics

	Target	Year-End Projected
Fixed Charge Coverage	≥ 1.20 x	1.36 x
Revenue Bond Coverage	> 2.00 x	1.46 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

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 88 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 88 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 95 percent complete and is scheduled to be complete by May 2019. Preliminary design of the Stage 2 improvements is 50 percent complete and is scheduled to be complete by July 2019.
- Lake Perris Seepage Water Conveyance Pipeline—This project installs a 3,100-foot-long, 24-inch diameter pipeline to convey Lake Perris seepage water to the Colorado River Aqueduct. Preliminary design is 60 percent complete and is scheduled to be complete by August 2019.
- 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. The reservoir is now in service. Construction is 99 percent complete and is scheduled to be complete by June 2019.
- Wadsworth Pumping Plant Control and Electrical Protection Upgrade—This project replaces the obsolete turbine/pumping unit controls and electrical protection systems for the Wadsworth Pumping Plant and Pressure control structure. Installation and check out of the new controls and control system is 67 percent complete.
- Orange County Feeder Lining Repairs—This project replaces the deteriorated internal lining along an 11-mile portion of the Orange County Feeder within the cities of Santa Ana, Costa Mesa, and Newport Beach. Rehabilitation is proceeding along four reaches. Construction of Reach 1 is complete. Construction of Reach 2 is 25 percent complete and is scheduled to be complete by September 2019. Final design for the remaining two reaches is 75 percent complete and is scheduled to be complete by November 2019.
- Rialto Pipeline CB-12&16—This project replaces two service connection valves on the Rialto Pipeline. Construction is 70 percent complete and is scheduled to be complete by October 2019.
- Carbon Creek Pressure Control Structures (PCS) Seismic Upgrade—This project upgrades non-structural components at Carbon Creek PCS which include strengthening of elevated walkways and platforms, crane rails, and supports for equipment and conduits. The project also abates polychlorinated biphenyl that has leached into the concrete surrounding the concrete lids. The concrete lids have been removed and new steel covers will be placed. The construction and abatement is complete. *(see photo below concrete areas where chemical abatement was utilized)*



ENGINEERING SERVICES GROUP

GM STRATEGIC PRIORITY: Enhance Infrastructure Safety, Security and Resiliency

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 May 2019. Final design of Reach 3 is 89 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 60 percent complete and the initial delivery of pipe for Reach 4 was completed.
- Second Lower Feeder Shutoff Valve Procurement—This contract provides 216 shutoff valves that will replace deteriorated valves along the length of the Second Lower Feeder. These valves range in diameter from 4 inches to 16 inches, and are used to control and isolate flow at air release/vacuum valve locations, dewatering vaults, and blowoff structures. The first 150 valves were received and inspected and are in protective storage. The remaining 66 valves will be delivered by September 2019.
- Second Lower Feeder Isolation Valve Procurement—This contract provides 13 conical plug isolation valves for the Second Lower Feeder rehabilitation. These valves range in diameter from 48 to 54 inches and provide primary isolation for maintenance activities, inspections, and repairs required to maintain reliable water deliveries with Metropolitan's distribution system. Fabrication of the first three 48-inch conical plug valves is five percent complete and the valves are scheduled to be delivered by June 2020.
- Sepulveda Feeder, Calabasas Feeder, Rialto Pipeline, and the Allen-McColloch Pipeline—These projects rehabilitate the four remaining priority PCCP lines. Preliminary design activities for the four priority lines are being conducted simultaneously and are 20 percent complete and scheduled to be complete by mid-2020. Staff will return to the Board in early 2021 with a detailed plan for phasing the long-term rehabilitation of all feeders included in the program.

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 92 percent complete and is scheduled to be complete by May 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 24 percent complete and is scheduled to be complete by September 2019.

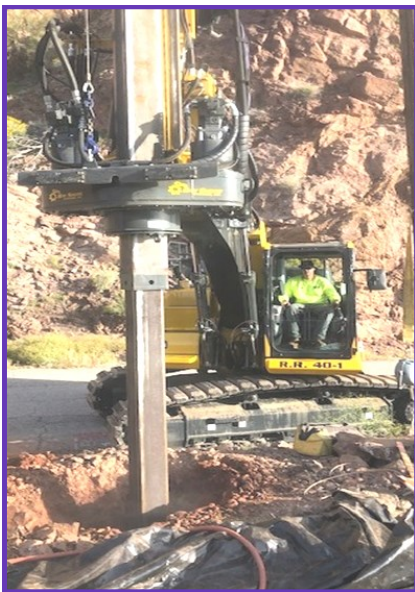
ENGINEERING SERVICES GROUP

GM STRATEGIC PRIORITY: Enhance Infrastructure Safety, Security and Resiliency

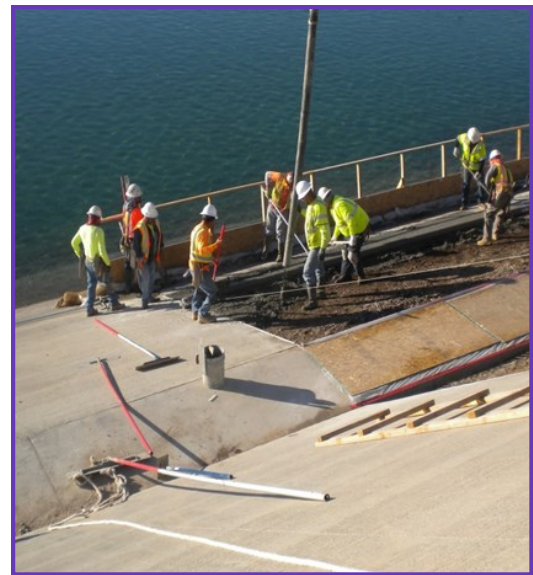
Objective: Manage and execute Board-authorized projects within the Capital Investment Plan (CIP) to ensure the reliable delivery of water to Metropolitan’s member agencies. **Continued...**

Colorado River Aqueduct Reliability Program

- CRA and Iron Mountain Reservoir Panel—This project replaces distressed and cracked concrete canal panels at Iron Mountain Reservoir and along several reaches of the canal between Mile Markers 22 and 122. Construction is 70 percent complete and is scheduled to be complete by June 2019.
- CRA Discharge Isolation Couplings—This project consists of fabricating and installing 44 isolation sleeve couplings with flow-through spool pieces in 6-foot diameter water discharge pipes, fabricating nine removable bulkheads, re-lining 6-foot discharge pipes with mortar lining, demolition and installation of concrete piers. Final design is complete and a request to the Board for award of construction contract is planned for August 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 90 percent complete and is scheduled to be complete by May 2019. Final design of Stage 2 to replace the remaining seven gates is 90 percent complete and is scheduled to be complete by June 2019.
- CRA Conduit Structural Protection—This project adds protection over the aqueduct’s conduits at 24 locations where there is vulnerability to heavy vehicle and equipment loading. Final design is 75 percent complete and is scheduled to be complete by December 2019.
- CRA Gene Wash and Copper Basin Discharge Valve Rehabilitation—This project replaces the existing deteriorated cone valves at Copper Basin and Gene Wash Reservoirs on the Colorado River Aqueduct. The project will be completed in two stages. Stage 1 will replace the valve at Gene Wash Reservoir, while Stage 2 will replace the valve at Copper Basin Reservoir. Final design for Stage 1 is 95 percent complete and is scheduled to be complete by May 2019. Final design for Stage 2 is 30 percent complete and is scheduled to be complete by June 2020.
- CRA Surge Chamber Slide Gates—This project installs slide gates at the surge chamber bypass lines at Metropolitan’s five CRA pumping plants. This project will enhance worker safety during maintenance and repair of the pumping plant delivery lines. Construction is 95 percent complete and is scheduled to be complete by June 2019.



Intake Power Line and Communication Replacement – Power poles drilling



CRA and Iron Mountain Reservoir Panel – Reservoir line repair

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

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

Diemer Plant

- West Basin and Filter Building Rehabilitation—This project performs rehabilitation of the west flocculation/sedimentation basins and filter building at the Diemer plant, including replacement of treatment basin equipment and filter valves, abatement of hazardous materials, and seismic strengthening of the filter building. Construction is 15 percent complete and is scheduled to be complete by December 2020.
- Diemer Water Sampling System Improvements—This project upgrades the Diemer water sampling system. At each of the 13 sample locations, the sample pump, piping, and field analyzers will be upgraded. Construction is 15 percent complete and is scheduled to be complete by January 2021.

Jensen Plant

- Jensen Water Quality Enclosure—This project constructs a new enclosure to house water quality instrumentation and equipment. Construction is 53 percent complete and is scheduled to be complete by July 2019.
- Jensen Module 2 and 3 Flocculator Rehabilitation—This project rehabilitates the Modules 2 and 3 flocculators at the Joseph Jensen Water Treatment Plant. The flocculators in Modules 2 and 3 have been in service since 1995 and require refurbishment to improve reliability and extend their service life. Final design is complete and a request to the Board for award of a construction contract is planned for May 2019.
- Jensen Electrical Upgrades, Stage 2—This project upgrades the electrical system with dual power feed to key process equipment in three stages to achieve conformity with current codes and industry practices. Stage 2 improvements will upgrade UPC-7, UPC-9, and their associated motor control centers to support critical process equipment. These include the washwater pumps, service water pumps, washwater return pumps, filters, thickeners, sludge pumps, and ammonia facilities. Stage 3 improvements will upgrade the remaining components of the electrical system at the eastern portion of the plant. Construction of Stage 1 is complete. Final design of Stage 2 is complete and a request to the Board for award of a construction contract is planned for August 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 60 percent complete and is scheduled to be complete by June 2019. (see photo right)

Weymouth West Washwater Tank Seismic Upgrades – Curb concrete formwork



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

Objective: Provide planning, CEQA/NEPA (National Environmental Policy Act), and regulatory permitting support for enhancement

Regulatory Permitting Support and Compliance

- Received the Coastal Development Permit from the California Coastal Commission for the Upper Newport Bay Blow-off Structure Rehabilitation Project.
- Obtained emergency permits from the U.S. Army Corps of Engineers, Regional Water Quality Control Board, and California Department of Fish and Wildlife for the Casa Loma Siphon Hazard Mitigation Project.
- Prepared post-activity permit compliance reports for the Foothill Feeder Shutdown CDFW Streambed Alteration Agreement and Incidental Take Permit.

GM STRATEGIC PRIORITY: Ensure Imported Supply Reliability

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

Objective: Provide environmental planning, technical and regulatory services to protect water supplies.

Reviewed technical studies for California Department of Water Resources' EIR for the Lake Perris Seepage Recovery Project, and met with DWR and the City of Perris for project scoping.

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.

Orange County Central-Coast Natural Community Conservation Plan /Habitat Conservation Plan

Worked with Orange County Fire Authority to facilitate development of a draft community fuel management zone revegetation template that will help communities improve fire protection and lower costs of installation and maintenance while increasing improved habitat adjacent to the Reserve.

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

Organized kick-off meeting for the development of a trails plan to connect the DVL North Hills trail to the Lake Skinner Recreation Area and interpretive trails.

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).

- Completed draft Greenhouse Gas Emissions Inventory and Conservation Forecast Technical Memo.
- Collaborated with External Affairs to develop the Climate Action Plan webpage for Metropolitan's website.
- Staff prepared a proposal to develop an Electric Vehicle Master Plan to study the efficacy of electrifying fleet vehicles.

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

Staff attended California Division of Mines Surface Mining and Reclamation Act Inspector Training Workshop.

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

Staff prepared and provided a presentation on cultural resources for Metropolitan's H2O University.

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: Emphasize employee development, recruitment, knowledge capture, cross-training, management training and succession planning.

- Continued recruitments for Principal Environmental Specialist and Assistant Environmental Specialist I.
- Staff enrolled in certificate programs in sustainability through UCLA Extension and leadership through Cornell University.
- Staff is participating in Metropolitan Management University.
- Staff attended the Association of Environmental Professionals conference.
- Staff attended the Santa Ana River Watershed conference.
- Prepared and provided training for Engineering Services staff on CEQA and Metropolitan's roles and responsibilities as a CEQA Lead Agency.

ENVIRONMENTAL PLANNING SECTION

CORE BUSINESS: Business Processes

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

CEQA Clearances

Provided environmental planning clearances for 6 WSO projects, 1 Real Property action, and 21 board letters.

Engineering Services Support

- Provided environmental specifications for the Yorba Linda Hydroelectric Plant Cover Installation Project and the Etiwanda Phase 3 Relining Project.
- Continued coordination for assessment and protection of biological resources and CEQA compliance for Slope Strengthening at Diemer Basin 8.
- Continued coordination for assessment and protection of historic architectural resources and CEQA compliance for Weymouth Administration Building seismic upgrades.

Water System Operations Support

- Completed wildlife surveys in support of Casa Loma canal shutdown.
- 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 10 CEQA notices for various external projects that may impact Metropolitan facilities and/or operations.

Construction Monitoring

- Provided environmental monitoring for Colorado River Aqueduct shutdown. *(see photos below)*
- Continued construction mitigation monitoring for the Palos Verdes Reservoir Upgrades, Orange County Conveyance and Distribution Team Maintenance Building, Weymouth Plant West Washwater Tank Seismic Upgrades, Weymouth Plant Domestic Water System Improvements, Weymouth Plant Chlorine System Upgrades, Orange County Feeder Relining Reach 2, Prestressed Concrete Cylinder Pipe Second Lower Feeder Reach 4, and the 2.4 kV Powerline Replacement Project located at Gene Camp.
- Completed Mitigation Monitoring and Reporting Program for Sepulveda Feeder Urgent Repairs.



Eagle and eaglet at Copper Basin and young tortoise spotted during CRA shutdown

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.

- Arranged dedication of 635-acre Dennis Underwood Conservation Area event in Palo Verde Valley, which was attended by family members of Dennis Underwood, Chairwoman Gray, General Manager Kightlinger, U.S. Bureau of Reclamation Commissioner Burman, and Metropolitan staff. The land is part of the Colorado River Multi-Species Conservation Project, a federal/state partnership to recover threatened and endangered species and create new habitat. *(see photo below)*
- Metropolitan sponsored the event and staff attended the Pacoima Beautiful Environmental Justice Awards, where Chairwoman Gray was honored along with Senator Hertzberg (D-Van Nuys) and Los Angeles World Airports CEO Deborah Flint. (April 25)
- To promote the new turf replacement program, Metropolitan launched a new advertising and community outreach marketing campaign featuring multi-lingual 15- and 30-second spots for radio, online, and mobile devices and more than 200 digital billboards at shopping malls, movie theaters, and grocery stores across the region. The campaign features the tagline: *Ditch Your Grass. Claim Your Rebate.* *(see photo below)*



Underwood Dedication: Water Resource Manager Donhoff, Palo Verde Irrigation District Board Member Bart Fisher, Chairwoman Gray, Colorado River Board Chairman Peter Nelson, and General Manager Kightlinger



Spring 2019 Water Conservation Advertising and Outreach Campaign graphic

EXTERNAL AFFAIRS GROUP

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

- Chairwoman Gray, Directors Kurtz and Cordero, General Manager Kightlinger, and Metropolitan staff met with the offices of Senator Feinstein and Harris, and Representatives Levin (D-Oceanside), Torres, (D-Rancho Cucamonga), McClintock (R-Roseville), Lowenthal (D-Long Beach), Cook (R-Yucaipa), Napolitano (D-El Monte), Roybal-Allard (D-Commerce), Waters (D-Los Angeles), Calvert (R-Corona), Costa (D-Fresno) and Congressional committee staff on federal legislative and appropriations priorities including the Colorado River Drought Contingency Plan, State Water Project, water supply reliability and infrastructure investments. (April 1-3)
- Metropolitan worked with House and Senate offices to advocate for support of implementing legislation for the Drought Contingency Plan, which was passed and signed into law.
- Staff provided a Congressional staff tour of Metropolitan's Colorado River Aqueduct system, including a special on-site briefing at Hoover Dam. (April 22-26)

State

Water Conservation Rebates

A Metropolitan-sponsored bill, AB 533 Holden (D-Pasadena), which would make turf rebates exempt from state and corporate income tax, passed out of the Assembly Revenue and Taxation Committee on April 22 and was referred to the Assembly Appropriations Committee.

Water Usage Data

AB 654, authored by Assemblymember Rubio (D-Baldwin Park), which would allow water agencies to exchange customer water use information data used for scientific, research, or educational purposes, has been turned into a two-year bill. California Municipal Utilities Association and California Special Districts Association, co-sponsors of the Bill, agreed that more time was needed to see if an agreement could be reached with the news publishers.

California WaterFix

AB 1194, by Assemblymember Frazier (D-Antioch), which would have expanded the membership of the Delta Stewardship Council by six additional members from the Delta region, was held in Assembly Water, Parks and Wildlife Committee with no recommendation to advance the bill. Amendments to SB 204 by Senator Dodd (D-Napa) to increase legislative oversight of California WaterFix failed to address concerns of Metropolitan and other water agencies. The bill will be heard in Senate Appropriations Committee in May.

Safe Drinking Water

Discussions about how to create a sustainable funding source and new policies to ensure access to safe drinking water continue. California Municipal Utilities Association and Eastern Municipal Water District's bill, SB 414, authored by Senator Caballero (D-Salinas), has been referred to Senate Appropriations for a hearing. Senator Caballero's other drinking water bill, SB 669, co-sponsored by CMUA and Association of California Water Agencies to create a safe drinking water trust, passed out of the Environmental Quality Committee on April 23 and has been referred to Senate Appropriations.

EXTERNAL AFFAIRS GROUP

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

Objective: LEGISLATIVE SERVICES - continued...

Local

- Metropolitan's government representatives met with legislative district staff from the offices of Representatives Cardenas (D-Panorama City), Brownley (D-Thousand Oaks), and Sherman (D-Sherman Oaks); Senators Hertzberg (D-Van Nuys), Stern (D-Calabasas), Jackson (D-Santa Barbara); and Assemblymembers Nazarian (D-Van Nuys), Gabriel (D-Van Nuys), Irwin (D-Camarillo), and Limon (D-Santa Barbara) to provide information about Metropolitan, its operations, and legislative priorities.
- Special Projects Manager Westford made a presentation to Pitzer College on 21st Century water management strategies. (April 1)
- Metropolitan staff attended Simi Valley Chamber of Commerce's Annual State of the City Address. (April 3)
- Metropolitan sponsored and staff attended the California Water Policy Conference. Chairwoman Gray, Chief Operating Officer Upadhyay, and Water Resource Management Group Manager Coffey were among the featured speakers at the event. (April 4-5)
- Metropolitan staff attended the Oxnard Chamber of Commerce's Business Advocacy Committee and provided an update on weather conditions, California WaterFix, Drought Contingency Plan, bills of interest, and Metropolitan's potential sale of 20 acres at Ormond Beach. (April 4)
- Metropolitan sponsored the El Monte/South El Monte Chamber of Commerce's South El Monte State of the City Address featuring Mayor Gloria Olmos. Metropolitan staff provided opening remarks before 150 attendees on various regional issues, including current water conditions. (April 4).
- Metropolitan sponsored and General Manager Kightlinger participated in a panel on water conservation, resources, and technology at the Los Angeles Business Council's annual Sustainability Summit. (April 5)
- Metropolitan sponsored and staff attended the National Latinas in Business Awards Dinner. Metropolitan hosted Rancho Cucamonga city council member Kristine Scott and several community and business leaders from the Inland Empire region. (April 5)
- Metropolitan staff met with district staff in their offices to discuss Metropolitan's state legislative priorities. The following offices were visited: office of Assembly member Freddie Rodriguez (D-Chino) (April 2), office of Senator Richard Roth (D-Riverside) (April 3), office of Assembly member Jose Medina (D-Riverside) (April 3), and office of Assembly member James Ramos (D-Rancho Cucamonga) (April 10).
- Metropolitan staff attended Ventura County Economic Development Association's Policy Committee and worked with its staff to develop a comprehensive policy paper on water issues. (April 10)
- Staff presented on Metropolitan's reliability strategies and water-use efficiency programs to the South Bay Irrigation District. (April 10)
- Metropolitan staff participated in a Los Angeles County Business Federation roundtable with Los Angeles County Supervisor Mark Ridley-Thomas (D-Los Angeles). (April 10)
- Special Projects Manager Westford participated in a meeting of the San Diego Downtown Partnership Policy Committee and gave presentations on Metropolitan's reliability and water use efficiency programs. (April 11)
- Metropolitan sponsored the National Association of Women-Owned Business of Ventura County Annual Bravo Awards. More than 500 members attended the event, including Senator Jackson (D-Santa Barbara) who was presented the Legislator of the Year award. (April 12)
- Director Trevino and Metropolitan sponsored the joint San Gabriel Valley Economic Partnership Legislative Luncheon featuring Assembly Majority Leader Ian Calderon (D-Whittier). Director Trevino provided introductory remarks and introduced Majority Leader Calderon. The following day, Directors De Jesus, Kurtz, Morris, Trevino, and Metropolitan staff attended the organization's networking reception featuring Representatives Chu (D-Monterey Park), Torres (D-Pomona), and Cisneros (D-Yorba Linda) and Los Angeles County Board Supervisors Barger and Solis. (April 16-17).

EXTERNAL AFFAIRS GROUP

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

Objective: LEGISLATIVE SERVICES - continued...

Local

- Metropolitan staff attended the Ventura County Coalition of Labor, Agriculture and Business's Water, Housing, Energy, Environment and Land Use committee meeting. (April 17)
- Metropolitan staff attended the California Contracting Cities Association's Board Meeting and discussed with local elected officials California WaterFix and legislative issues. (April 17)
- Special Projects Manager Westford presented to the San Diego State University Environmental Engineering Seminar class on state and regional water issues, including California WaterFix. (April 19)
- Staff joined a delegation from Inland Action on a state legislative advocacy trip to Sacramento. Inland Action's policy platform was focused on water and included Metropolitan's legislative priorities. Briefings were provided to Senators Roth (D-Riverside), Stone (R-Temecula), and Leyva (D-Chino) and Assemblymembers Ramos (D-Rancho Cucamonga), Reyes (D-San Bernardino), Medina (D-Riverside) and Obernolte (R-Big Bear Lake). (April 22-23)
- Staff along with Directors De Jesus and Hall attended the Metropolitan sponsored Pomona Chamber of Commerce's Legislative Luncheon featuring state Senator Leyva (D-Chino Hills), Assembly Member Rodriguez (D-Pomona), Los Angeles County Supervisor Solis, and Pomona Mayor Sandoval. (April 26).
- Directors Blois and Peterson and staff attended the Association of Water Agencies of Ventura County's Annual Water Symposium with more than 300 water leaders. Water Resource Management Unit Manager Goshi was a guest speaker. (April 18)
- General Counsel Scully attended and Metropolitan sponsored the Pat Brown Institute for Public Affairs annual dinner honoring Ambassador Gaddi Vasquez, former state Treasurer Kathleen Brown, and Angela Glover Blackwell, Founder in Residence at Policy Link. (April 25)
- Metropolitan hosted a Community Leaders Water Briefing in Long Beach with Director Cordero featuring Congressman Lowenthal (D-Long Beach) and Assemblymember O'Donnell (D-Long Beach). General Manager Kightlinger provided an update on Metropolitan's statewide efforts on water policy. (April 26)
- Metropolitan staff participated in a Los Angeles County Business Federation roundtable with Senator Mitchell (D-Los Angeles). (April 26)
- Metropolitan staff attended Ventura County Coalition of Labor, Agriculture and Business's Annual Spring Conference. (April 27)
- Metropolitan staff attended the Valley Industry and Commerce Association's Candidates Forum for Los Angeles City Council District 12. (April 30)

EXTERNAL AFFAIRS GROUP

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

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

Public Outreach for Metropolitan Projects

- Metropolitan provided tours of the Regional Recycled Water Advanced Purification Center to more than 100 employees. (April 3 and 10) *(see photo below)*
- Metropolitan provided information to community and local agencies regarding construction activities for the following projects:
- Notified 200 residences and businesses near the Greg Avenue Pump Station of upgrades and construction activities
- Met with city of Long Beach staff on the Second Lower Feeder – Reach 4 project
- Notified 250 residences in Beverly Hills about the Santa Monica Feeder shutdown

Metropolitan provided a tour of the Water Quality Lab for Los Angeles Department of Water and Power Water Quality staff. (April 9)

Metropolitan provided a tour of the Operations Control Center and discussed planning approach for climate change resiliency for participants of the North American Carbon World Conference. (April 23)

Member Agency Support

Provided a tour of the Regional Recycled Water Advanced Purification Center to the Foothill Municipal Water District Board of Directors. (April 26)

Metropolitan provided eight inspection trips to the State Water Project, Hoover Dam and Colorado River Aqueduct, Diamond Valley Lake, and Regional Recycled Water Advanced Purification Center for directors, federal legislative staff, and the San Bernardino Valley Municipal Water District. (multiple dates)



Metropolitan employees touring the new Regional Recycled Advanced Purification Center

EXTERNAL AFFAIRS GROUP

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

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

Media Activities and Interviews

- Hosted seven reporters representing ethnic media on a Colorado River Aqueduct inspection trip. The trip included reporters from *La Opinion*, ABS-CBN The Philippine Channel, Skylink TV (Chinese language), *India Currents*, *Nguoi Viet*, *Asian Journal*, and *Black Voice News*. Briefings were provided by Chief Operating Officer Upadhyay, Colorado River Resources Manager Hasencamp, Water System Operations Manager Chaudhuri, and Water Quality Manager Stewart.
- Arranged interviews on the Drought Contingency Plan between General Manager Kightlinger and *Los Angeles Times* reporter Bettina Boxall and with *Bond Buyer* reporter Keeley Webster.
- Arranged interview between Chairwoman Gray and *LA Focus* magazine for a profile of the Chairwoman.
- Set up separate interviews with Water Use Efficiency Manager McDonnell and reporters from KPCC radio and H2O Radio for stories on the launch of Metropolitan's new turf rebate program.
- Director Record participated and Metropolitan staff assisted the Western Science Center in coordinating a press conference announcing discovery of a new mastodon species discovered during the construction of Diamond Valley Lake.
- Arranged interview between Assistant General Manager Patterson and ChicoSol reporter David Waddell on Sites reservoir.
- Arranged interview between Assistant General Manager Patterson and Debtwire Municipals reporter MaryEllen Tighe regarding California WaterFix.

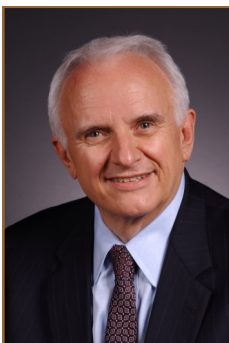
Communication Activities

Press Releases/Statements

- Popular Cash-For-Grass Incentive Returns
- New Groundwater Programs Boost Metropolitan's Water Storage Capacity to Capitalize On Wet Years
- New Conservation Area Provides Habitat to Protect Endangered Fish and Wildlife Along Colorado River
- Statement on Legal Challenge From Imperial Irrigation District on Drought Contingency Plan

Social Media

- Social media posts on new turf rebate reached more than 730,000 people and drove more than 7,750 users to the rebates page on bewaterwise.com.
- Coordinated with water agencies across the country to celebrate Fix a Leak week with posts and tips.



The late Dennis Underwood



EXTERNAL AFFAIRS GROUP

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

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 1,700 teachers and students on field trips/events/activities and outreach/class presentations throughout the month that included: DIY Girls, Bolsa Grande High School, Lupin Hill Elementary, Western Water TAG 21, Children's Science & Career Fair, STEAMposium at West LA College, STEA2M Festival at Pomona Fairplex, Elsinore Valley MWD, CSU Los Angeles, LACOE Science Fair, LAEEF Enviro Fair, and Orange County Children's Water Festival.

Diamond Valley Lake Education Program

Metropolitan staff hosted 1,300 visitors at the Visitor Center and guided nearly 1,100 visitors to the Clayton Record viewpoint.

Solar Cup

Teams competing in the 2019 Solar Cup participated in the final technical inspection event. (April 27)

Community Partnering Program

Metropolitan sponsored the following events and staff participated to promote water education, conservation, and sustainability initiatives: [\(see photos below\)](#)

- California Water Policy Conference in San Diego (April 4– 5)
- City of Hawthorne Earth Day (April 13)
- Bolsa Chica Conservancy Earth Day (April 13)
- Sustainable Claremont Earth Day (April 13)
- Los Angeles County Sanitation District (April 13)
- Niguel Botanical Preserve Earth Day (April 20)
- Palos Verdes Peninsula Land Conservancy (April 20)
- North American Carbon World's Climate Action Reserve Conference in Los Angeles (April 23– 26)
- Consortium For Early Learning Services' Day of the Young in Murrieta (April 27)



Promoting water education, conservation, and sustainability initiatives

EXTERNAL AFFAIRS GROUP

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

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

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

- Presented at California Water Environment Association Conference on Metropolitan's Regional Recycled Water Program. (April 10)
- Attended the California Public Utilities Commission Joint Utilities Small and Disabled Veteran's Business Expo. More than 800 businesses firms attended the conference. (April 10)
- Attended the DBE + SB Summit hosted by SANDAG in San Diego. Approximately 85 public agency representatives were in attendance. Workshops included discussions on various small business topics, best practices, legal updates, and compliance. (April 10-11)
- Attended the Woman of Excellence Awards brunch hosted by the *Diversity Professional Magazine*. Approximately 175 businesses were in attendance. (April 28)
- Exhibited at the Mayor's Small Business Summit with 300 businesses in attendance. (April 29)

Staff also attended/participated in the following events:

- Sustain Southern California Innovation conference at University of California, Irvine. The theme was Energy Infrastructure: Innovating Toward Sustainability. (April 11)
- Ignite 22 challenge pitch competition in Long Beach. The event showcased 30 startups in the aquaculture, digital tech, robotics, IoT, biotech, and clean energy sectors. (April 11)
- P3 Water Summit in San Diego, in which local, state and federal water officials evaluate the use of P3s (public private partnerships) with industry leaders to discuss project opportunities and infrastructure investments. (April 23-24)

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

Recruitment successfully filled 19 positions for the month of April and received 14 new staffing requisitions, resulting in 161 positions currently in recruitment.

HUMAN RESOURCES

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

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

This month, 22 participants completed Administrative Services Training series. The two and a half-day program was designed to augment training to staff in Administrative Assistant and Administrative Analyst job families. The training enhanced job skills in customer service, effective communication, and teamwork as well as skills to equip attendees to plan for their own professional development with their manager.

The second cohort of the MWD Management Academy for prospective managers completed the five-day program for employees considering careers in management. As a final part of the series, each of the 27 participants gave a presentation on what he/she had learned and had put into practice on the job. Popular content from the program included topics on Communication, SMART goals, Stress Management, Providing Feedback, and Team Member Engagement. Chief Operating Officer Upadhyay spoke on leadership and responded to questions during the graduation event. ([see photo page 26](#))

The fourth cohort of Water System Operations' Management Academy was held at Metropolitan's desert facilities at Gene Camp, where the focus of the session was on communication, conflict resolution and presentation skills. Section Manager Boyd guided the class through a case study that described Metropolitan's response to the recent Santa Monica pipe break.

Training classes were delivered on the following topics:

- *MS Project*
- *Excel*
- *Conflict Resolution*
- *Dealing with Difficult People*
- *Effective Presentations Excel: Pivot Tables*
- *Excel: Performing Calculations*
- *Accelerating Teamwork*

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

Day 2 of New Hire Orientation occurred on April 30 with 45 participants. This second day of orientation is focused on benefits eligibility, communication styles training, and networking among new employees.



HUMAN RESOURCES

HR PRIORITY: Ensure Effective People Management

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

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

- The fourth session of Metropolitan Management University was conducted at Weymouth for 18 new and existing Team Managers. The day's agenda included Handling Problem Employees, Employee Relations/EEO, and Effective Performance Conversations.
- The Organization Development and Training Unit conducted and coordinated one-on-one developmental coaching sessions for 18 managers and 13 employees.

HR PRIORITY: Provide Excellent Human Resources Services

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

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

HR Benefits, in coordination with Empower Retirement, launched a new dedicated customer service phone number for all 401(k) and 457(b) plan participants, including retirees. The goal is to provide better services from highly trained staff who are adept on the details of Metropolitan's custom plans and features. The new phone number was announced to all participants via email blast and is posted on the dedicated Plan website, www.mwdplans.com. Additionally, HR Benefits worked with Empower Retirement to develop a new deferred compensation enrollment kit designed to attract, educate, and retain participants in the Plans.

On April 30, HR Benefits hosted its all-day *Stepping Into Retirement* workshop designed for employees eligible to retire. On the same day, HR Benefits hosted its *Intro to Investing* financial education webinar for all employees regardless of their career stage to educate them on the investment options and resources available in the Metropolitan plans.

HR Benefits conducted presentations at the Day 2 New Hire Orientation regarding benefits that take effect following probation, tips to staying informed, CalPERS pension, and the optional benefits that are included.

HR Benefits designed two additional New Hire kits for temporary employees, similar to the New Hire kits launched in March for regular employees for continued improved efficiency and greater appeal.

HUMAN RESOURCES

CORE BUSINESS: Comply with Employment Laws and Regulations

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

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

Digitizing HR records has begun and will continue in preparation for the office moves due to the seismic upgrade.

Currently, six employees remain off of work due to an industrial injury or illness. This reflects Metropolitan’s continued efforts to accommodate injured workers, while enabling them to remain productive and on the job.

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

- Submitted eight new claims to Metropolitan’s Workers’ Compensation Claim Administrator
- Closed 14 Workers’ Compensation Claim Files
- Currently six employees remain off work due to industrial injury or illness
- Arranged 11 medical evaluations (DMV, medical surveillance)
- Coordinated two random drug/alcohol tests
- Addressed five Accommodation issues.
- Coordinated six Medvan visits for LaVerne, and all four Desert Sites. (Respirator Exams, Hearing Tests, Commercial and Vanpool Driver exams.



Career and Internship Fair at the University of La Verne



The Second Cohort of Metropolitan Management Academy Graduates.

INFORMATION TECHNOLOGY

CORE BUSINESS: Information Technology

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

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

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

- IT Cybersecurity continued to collaborate with key stakeholders to enhance network security capabilities for Metropolitan's computing environments against evolving cyber threats.
- Continued to plan and execute the Cybersecurity II Project to enhance Metropolitan's security posture by deploying new and emerging technologies and implementing enhanced cybersecurity countermeasures.
- Apprised the Board of efforts to strengthen Metropolitan's cybersecurity capabilities as part of the April Organization, Personnel, and Technology Committee meeting (closed session).
- Monitored on-going federal, state, and local cybersecurity legislation applicable to Metropolitan and provided cybersecurity leadership by participating in regional security symposiums and acting in an advisory capacity.
- Staff continued to research innovative cybersecurity tools by conducting Proof of Concepts to evaluate performance and effectiveness within Metropolitan's computing environment. Current efforts include encryption, multi-factor authentication, enhanced firewall capabilities, and the development of a security operation center for Metropolitan.
- Performed on-going monitoring, testing, and deployment of software patch updates to mitigate risk of software vulnerabilities (i.e., Microsoft updates). IT notification alerts are used to communicate system outages to allow for updates and are performed during off-hours (where possible) to mitigate impact to users

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 Wi-Fi infrastructure within the five-floor wing portion of the Headquarters building to support staff relocation. Work is proceeding according to plan as staff continues to acquire, configure, and test wireless equipment needed to establish a robust wireless infrastructure for the low-rise portion of the Headquarters building.
- Headquarters Improvement Program—Continued planning efforts related to upcoming relocation of staff from Headquarters high-rise to low-rise areas to support the next phase of the program. IT resources and services include Networking, Telecommunications, Server Administration, and Service Desk.
 - During the period, the installation of the interior construction wall/ segregation barrier continued in the PC-Tech work space located in US1-202. This work space is used by PC Tech's who provide day-to-day IT services supporting business operations.

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.

- Key accomplishments to date include the successful completion of Phase I User Acceptance Testing (UAT). As part of UAT, the network was isolated and systems/applications/databases were replicated to remote servers within the Recovery Time Objective defined by Metropolitan's Business Impact Analysis Plan. All Tier I critical applications were tested including Oracle, HRMS (PeopleSoft), MAXIMO, LIMS, WINS, Metropolitan's Business Network and the Microwave Network.

INFORMATION TECHNOLOGY

CORE BUSINESS: Information Technology continued...

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

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

Wadsworth Pumping Plant (DVL) Control System Upgrade Project—This project includes replacement of the control and communications systems, protection relay system, vibration monitoring system, and pump/turbine drive controls. Activities for this quarter include control software and electrical protection system testing for pumping units 2, 3, and 4, in addition to continuing to upgrade controls and protection equipment on the remaining pumping units.

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. The design phase is underway and is scheduled to complete by the end of this fiscal year.

Board and Committee Room Upgrade—The Board previously authorized staff to proceed with the design phase to upgrade the audiovisual (AV) systems at Metropolitan's Headquarters Building. The project team recently initiated the 30 percent design review phase.

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

- Conducted kickoff meeting as part of instituting an IT Architecture Review process with IT Managers. Given the critical role of technology, the purpose of the review is ensuring IT initiatives align with Metropolitan's architecture and ultimately with the General Manager's strategic priorities.
- As part of the IT Roadmap, staff continued installation and testing activities at CoreSite (off-site datacenter) to improve network reliability, capability, and redundancy as part of preparing for Metropolitan's migration to cloud processing. Commissioning of the CoreSite network is scheduled to begin in May as staff initiates the process of internet cutover. Once the cut-over is complete, this key milestone allows IT staff to begin migration of selected applications to the cloud environment.

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

- Modernize operations by refining and expanding the use of Pager Duty (IT incident response tool) to support outage notifications. System outages may occur when IT hardware/software issues arise or telecommunications services to Metropolitan are interrupted, resulting in poor system performance or a loss of connectivity. The use of Pager Duty enhances IT response capabilities by sending automated notifications to key personnel, resulting in more efficient and effective response during system outages.
- Continued mobile pilot testing (mobile device management) by expanding the rollout to executive management, group managers, and managers. In conjunction with the pilot, IT continued to partner with Legal on the development of a Metropolitan mobile policy and guidelines.

INFORMATION TECHNOLOGY

CORE BUSINESS: Information Technology continued...

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

mwdh2o.com Upgrade—IT continued to work in collaboration with External Affairs on Metropolitan’s main website (mwdh2o.com) upgrade project. The replacement of mwdh2o.com will provide for a user-friendly content management system, mobile-responsive user interface, and search engine optimization leveraging current technology.

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

- The team completed a qualitative and quantitative review of the Tier I vendors and the final selection process is underway.
- Continued QA/QC testing and evaluating technology options to enhance security capabilities of the new Windows image for the new PC’s in conjunction with Information Security.
- The project team continued to test applications and the working environment as part of developing the Metropolitan Windows-based image for all deployments. In April, rollout of Microsoft Office Professional Plus 2016 was initiated to staff within IT, replacing Office Professional Plus 2010 on Windows 7 computers as part of the testing effort.

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.

Staff acquired a six-month lease agreement for access and storage of construction materials on lessor’s property in support of the Greg Avenue Pressure Control Structure rehabilitation.

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.

Over the past six weeks, more than 25,000 people visited Diamond Valley Lake to view the wildflower super bloom along the trails around the lake.

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.

- A five-year entry permit was granted to Eagle Crest Energy Company to allow non-exclusive access to collect groundwater levels and water quality data for the proposed Eagle Mountain Pumped Storage Project. Any water extracted from the wells will be removed off-site and disposed of by the permittee. All groundwater study data will be shared with Metropolitan.
- A 12-month entry permit was granted to Southern California Edison for access and a temporary work area for the staging of equipment and materials for maintenance of an adjacent high power transmission line. The site is approximately one mile north of the Jensen treatment plant.

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

At Headquarters, staff replaced four cooling tower make-up water valves. These valves allow water to flow into the cooling towers to make up for water loss due to evaporation.

Staff completed the annual certification of fire life safety system for the DVL Visitor Center facility. The certification ensures that the system is fully functional and is a requirement of the building's occupancy permit.

General contracting service contracts were established for each of the Colorado River Aqueduct residential villages. The contracts will ensure maintenance and repairs are completed expeditiously.

GM STRATEGIC PRIORITY: Foster Leadership and Strengthen Workforce Capabilities

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

Objective: Foster staff training and development.

- Staff completed the following Metropolitan-sponsored courses: *Personal Security Awareness Training*, *Drug and Alcohol Awareness Training*, and *Excel Formulas and Functions*.
- Staff attended the International Right of Way Association-sponsored courses: *Principles of Real Estate Law*, *Conflict Management*, *Principles of Real Estate Negotiation*, and *Principles of Real Estate Appraisal*.
- Staff attended the American Society of Farm Managers & Rural Appraisers-sponsored meetings/classes: *Agribusiness Valuation Seminar* and *Valuing Rural America Seminar*.
- Staff attended a University of California, Davis Delta Restoration and Biomass Project Workshop.
- Staff led a Metropolitan-sponsored *Annexation Process, Procedure, and Implementation* training for Western Municipal Water District staff.

SECURITY MANAGEMENT

Objective: Improve Security and Emergency Response

Greg M. Staar was hired as the new Security Unit Manager. Greg brings extensive experience from managing all aspects of law enforcement and security operations at Los Angeles World Airports. As the new Unit Manager, his priorities include enhancing the safety, security, and resiliency of Metropolitan in a cost-effective manner through building both internal and external partnerships, enhancing staff awareness through training and outreach, and leveraging technology. The new Security Management Unit activities include:

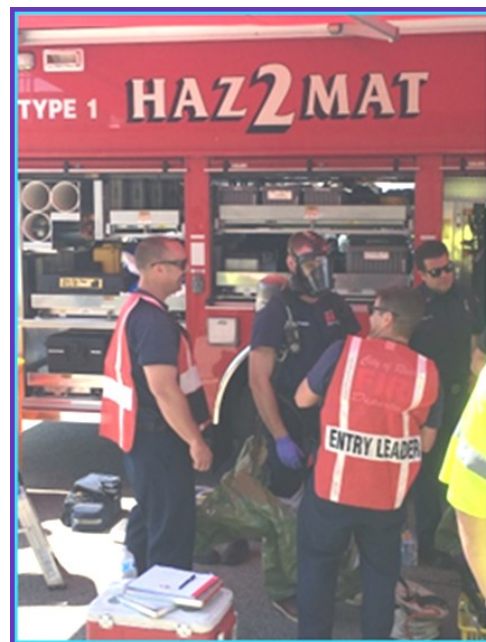
- Initiated an internal Task Force to address compliance with AWIA (America's Water Infrastructure Act).
- Initiated a working group to install Bleeding Control kits district-wide in conjunction with the Emergency Management Program.
- Held a multi-agency Table-Top Exercise evaluating security response to a large scale emergency at the Mills treatment plant, involving The National Guard, The California Office of Emergency Services and State, as well as local first responders. *(see photo below)*
- In conjunction with Water System Operations, participated in a multi-agency hazardous materials and bomb response training exercise at the Mills treatment plant. *(see photo below)*

Objective: Strengthen Internal and External Partnerships

- Met with the La Verne Police Chief to discuss inter-agency coordination at the F. E. Weymouth Water Treatment Plant.
- Developed a relationship with National Guard to secure military support in extreme emergencies when local agency resources are exhausted or unavailable.
- Hosted visits by local fire departments to pump plants to improve coordination, provide orientations, and strengthen resilience of these critical facilities.



Multi-Agency Tabletop Exercise at Mills Plant



Hazardous Materials Functional Exercise at Mills Plant

WATER RESOURCE MANAGEMENT

GM STRATEGIC PRIORITY: Prepare for More Extreme Hydrology

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

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

Colorado River Climate and Hydrology Work Group—Staff attended the Colorado River Climate and Hydrology Work Group. Topics discussed included a variety of ongoing research efforts for improving climate and hydrologic modeling in the Colorado River basin.

Objective: Implement Conservation Program.

Turf Replacement Program—Conservation staff presented at the U.S. Green Building Council's Municipal Green Building Conference and Expo on the energy and water savings potential of the turf replacement program.

Conservation staff participated in an interview with local radio station KPCC at the home of a consumer who utilized the Turf Replacement Program and answered questions about Metropolitan's new program changes, lessons learned, history of the program, and more.

San Diego County Water Authority and their retail agencies met with Metropolitan to discuss the new Turf Replacement Program, Disadvantaged Communities Program, and Member Agency Administered Program.

2019 AWWA Sustainable Water Management Conference—Staff attended the 2019 AWWA Sustainable Water Management Conference. This annual, national conference was held in Tucson, Arizona, and is designed to help water professionals find solutions for balancing the benefits of conservation with the costs, managing water resources, developing sustainable utilities and infrastructure, and improving urban planning and design, energy efficiency, water conservation, stormwater and reuse.

Water Savings Incentive Program—Director McKenney hosted an inspection trip that included a stop at Hitex Dyeing & Finishing Inc. (Hitex) in the City of Industry to inform agency, municipal staff, and local elected officials about regional water infrastructure, efficiency, and recycling projects. Hitex installed a recycling system to reuse process water on-site and is receiving Metropolitan's Water Savings Incentive Program incentives for the project. *(see photo below)*

Tour at Hitex Dyeing and Finishing Plant



WATER RESOURCE MANAGEMENT

GM STRATEGIC PRIORITY: Ensure Imported Supply Reliability

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

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

Reclamation Workshop—Metropolitan staff attended the U.S. Bureau of Reclamation stakeholder workshop April 16-17. Topics discussed included Economic Benefits and Cost Estimates in Reclamation Planning Studies; Improving the Environmental Review Process; the WaterSMART Program, Cultural Resources Compliance on Transferred Works; and Identifying, Designing and Executing Repairs, Replacements, and Additions at Transferred Works Facilities.

GM STRATEGIC PRIORITY: Maximize Local Resources

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

Objective: Support development of Regional Recycled Water Program (RRWP).

WaterReuse—Metropolitan staff participated in the National Water Policy Fly-In on Capitol Hill with other WaterReuse member agencies to discuss how communities can incorporate water reuse into their water supplies and advocate for additional infrastructure funding. Martha Tremblay, Los Angeles County Sanitation Districts Technical Services Department Head, provided a presentation of water reuse in Los Angeles and discussed the partnership with Metropolitan to develop the Regional Recycled Water Program.

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

Colorado River Salinity Control Forum—Metropolitan staff participated in a workgroup meeting of the Colorado River Salinity Control Forum (Forum) in Salt Lake City. The workgroup, which consists of staff from the seven basin states and provides technical support to the Forum, met to initiate modeling work for the Forum's Triennial Review report. The USBR-led process should be complete in early 2020. The next meeting of the Forum is in Denver in June.

Objective: Implement Local Resources Program.

Perris II Desalter—Metropolitan staff attended the groundbreaking ceremony for the Perris II Desalter, which is supported by Metropolitan's local resource program funding. Eastern Municipal Water District representatives recognized Metropolitan, USBR, and the Santa Ana Regional Water Quality Control Board as funding partners for this project. *(photo right)*



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 101,000 acre-feet of water to member agencies in April. April deliveries averaged approximately 3,400 AF per day, an increase of 1,400 AF per day from March deliveries. Treated water deliveries for April totaled 56,000 AF, or 55 percent of total deliveries for the month. This was an increase of about 22,000 AF from March treated water deliveries.

The Colorado River Aqueduct operated at a 2-pump flow, or 900 AF per day. A total of 27,700 AF of Colorado River water was pumped in April. SWP imports averaged 4,600 AF per day, totaling 134,000 AF for the month. The target SWP blends for April were 100 percent at the Weymouth and Diemer plants, and up to 75 percent at the Skinner plant.

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

Metropolitan complied with all water quality regulations and primary drinking water standards during the month of March 2019.

On April 17, Metropolitan hosted its quarterly meeting with the State Water Resources Control Board, Division of Drinking Water, in La Verne. Topics included regulatory updates as well as new reporting requirements established by the America’s Water Infrastructure Act of 2018, recent updates to Metropolitan’s Capital Investment Plan, plans for the Water Quality Laboratory building improvement project, and an update on fluoride feed system shutdowns at the treatment plants.

Objective: Actively Engage in Capital Project Planning and Execution.

Staff continued repairs and refurbishment of the generator at the Valley View Hydroelectric Plant in the city of Yorba Linda. This month, staff installed the rotor and turbine runner, which spin to generate electricity. The refurbishment will be completed in May. [\(see photos below\)](#)



Staff installing the generator rotor at the Valley View Hydroelectric Plant



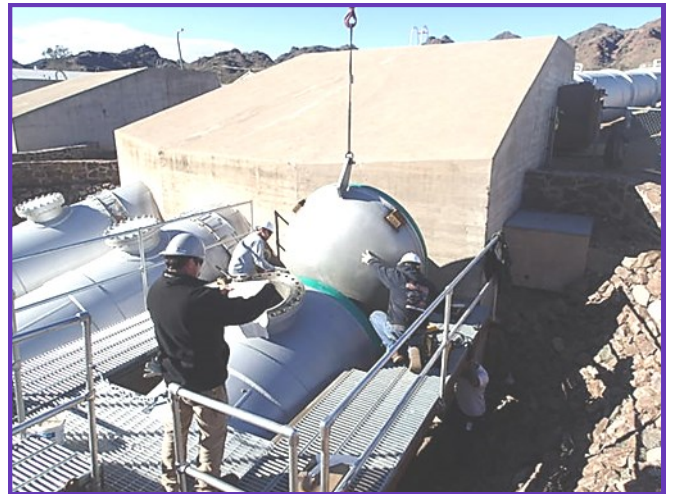
Staff securing the turbine runner to the generator shaft at the Valley View Hydroelectric Plant

WATER SYSTEM OPERATIONS

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

Objective: Actively Engage in Capital Project Planning and Execution

At the desert pumping plants, CRA pump discharge lines share a common manifold that combines flow from three adjacent pumps and directs it into a single pipeline. Isolation bulkheads are installed on discharge lines when staff conducts maintenance on pump or valve components. As part of the CRA Main Pump Rehabilitation capital program, the discharge lines are being upgraded to allow bulkheads to be quickly installed and interchangeable between units. Staff installed newly designed bulkheads and couplings at one of the pump units at Gene pumping plant to evaluate the proposed design in support of the capital program. *(see photo right)*



Staff removing isolation bulkhead from a discharge line at the Gene pumping plant

Objective: Optimize Maintenance

- Following pipeline inspection work during recent scheduled shutdowns of the Box Springs Feeder, Perris Bypass Pipeline, and San Diego Pipeline Nos. 1 and 2, staff returned to perform coatings on the exposed piping and components. Maintaining protective coatings on pipeline components prevents corrosion and extends the service life.
- The Orange County Feeder relining capital project is in progress, with the current outage extending from February through September 2019. While the contractor performs the relining work, staff is replacing and rebuilding isolation and control valves along the feeder. This month, staff installed new valves at Red Lion Pressure Relief Structure in the city of Costa Mesa. *(see photo below)*
- During a routine inspection at the Temescal Hydroelectric Plant, staff detected a minor leak on the turbine shaft seal. Staff performed repairs on the seal with the assistance of a mechanical apprentice. *(see photo below)*

Staff installing new valves at Red Lion Pressure Relief Structure



Mechanical apprentice assisting with repairs at the Temescal Hydroelectric Plant



WATER SYSTEM OPERATIONS

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

Objective: Optimize Maintenance continued...

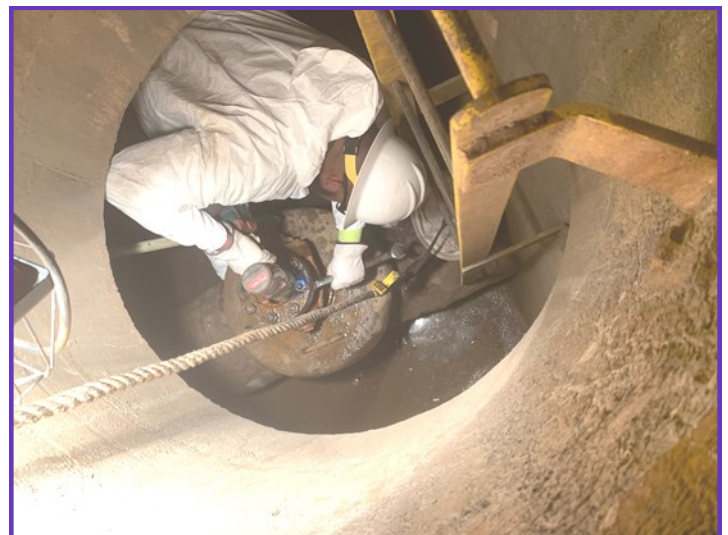
An acoustic sensor technology (SmartBall) was previously used to detect potential leak locations along the Santa Monica Feeder. The SmartBall travels within the pipeline, detecting any abnormal sounds that may be indicative of a potential leak. Based on the results of the pipeline inspection, internal bands were installed in April to repair a minor leak at a joint in the 28-inch cast iron pipeline in the city of Beverly Hills. After the bands were installed, staff put the pipeline back into service and used a tethered listening device technology (Sahara) to closely inspect the repair site, confirming that the pipeline is leak free. Use of these innovative technologies allows Metropolitan to inspect pipelines and ensure reliability while avoiding lengthy shutdowns. (see [photo right](#))

Sahara inspection tool inserted into the Santa Monica Feeder to confirm successful leak repairs



Staff relocated a water quality sample tap at the San Marino service connection (SMR-01) during a scheduled shutdown of the San Marino Lateral. This relocated sample tap now receives the water sample directly from the main flow stream of the pipeline, improving reliability and repeatability of the water quality sample. During this six-day shutdown, staff also replaced three plug valves to ensure system reliability. (see [photo right](#))

Staff replacing a 4-inch plug valve on the San Marino Lateral in Pasadena



WATER SYSTEM OPERATIONS

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

Objective: Optimize Maintenance continued...

- The La Verne Shops manufactured five heat sinks for the power supply units at the Skinner ozone facilities. The new heat sinks allow for regulation of temperature within the power supply units and ensure reliable operations.
- Staff installed a variable frequency drive (VFD) onto an existing portable generator at the Weymouth plant. This allows operation of the generator at varying frequency and voltage. The portable generator is used to provide power for pumps, ventilation fans, temporary lighting, and other electrical equipment at Metropolitan facilities and during shutdowns. The newly installed VFD allows staff to operate equipment at the optimal speed for varied applications. (see photo right)

Staff installing VFD on portable generator at the Weymouth plant



Objective: Manage the Power System.

On March 20, Metropolitan participated in an initial meeting with the Western Area Power Administration to discuss the Boulder Canyon Project FY 2020 Base Charge. The Base Charge represents capacity and energy charges associated with power from Hoover Dam. The final rates are expected to be finalized by September 2019.

Staff updated numerous procedures (e.g., event reporting, system restoration, and loss of control center functionality) to ensure compliance with the North American Electric Reliability Corporation standards. Compliance with these standards is required to avoid regulatory penalties.

On April 22-24, staff attended a Western Electricity Coordinating Council reliability and security workshop. The workshop provided guidelines and best practices that support operations of Metropolitan's Colorado River Aqueduct high-voltage transmission system.

Objective: Optimize Water Treatment and Distribution.

State Water Project target blends entering the Weymouth and Diemer plants were increased to 100 percent in early April. The SWP blend entering Lake Skinner was 100 percent for the month. The Skinner plant blend was up to 75 percent, due to the Colorado River water that was previously stored in Lake Skinner.

Flow-weighted running annual averages for total dissolved solids from March 2018 through February 2019 were 541, 532, and 530 mg/L for Weymouth, Diemer, and Skinner plants, respectively.

WATER SYSTEM OPERATIONS

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

Objective: Optimize Water Treatment and Distribution continued...

Staff completed repairs to isolation valves within the sulfuric acid feed system at the Diemer plant. The new valves will improve reliability of the chemical feed system. Sulfuric acid is used in the water treatment process to reduce the formation of disinfection byproducts and enhance the coagulation process. *(see photo right)*

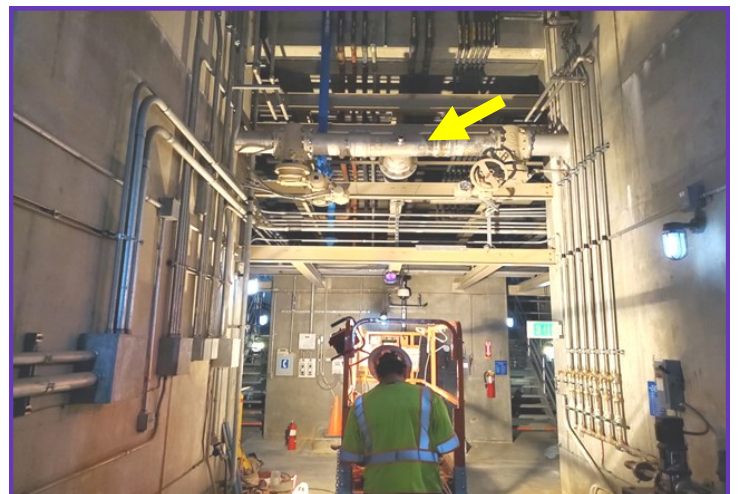
Staff repairing chemical feed system at the Diemer plant



Staff cleaned and prepared a chemical storage tank to receive an alternative chemical for the water treatment process at the Skinner plant. Over the past year, the Skinner plant switched primary coagulants from ferric chloride to aluminum sulfate (alum). Alum is less corrosive than ferric chloride, more readily available, and used as the primary coagulant at all of Metropolitan’s water treatment plants. The tank was fully drained and power washed, while solids at the bottom of the tank were removed and properly disposed of. *(see photo left)*

Staff cleaning and preparing tank for new chemical delivery at the Skinner plant

Staff installed a flushing port on a solids conveyance pipeline at the Skinner plant. Solids removed from one of the treatment process modules are conveyed to thickeners at the plant site for further processing. These solids travel nearly one mile with a minimal pipe slope. The line frequently clogs, requiring staff to use a high-pressure jet spray to clear the obstruction. Staff installed a flushing port where a fire hose can be connected to spray pressurized water into the line, providing a convenient means to quickly clean the line with minimal labor resources. *(see photo right ,arrow points to flushing port)*



WATER SYSTEM OPERATIONS

Objective: Prepare for Future Legislation and Regulation

Cyanotoxins are not currently regulated in water; however, they may be regulated in the future. California provides voluntary guidelines for managing recreational waters when cyanotoxins are detected. The U.S. Environmental Protection Agency published Health Advisories for cyanotoxins in drinking water in 2015, and retail drinking water agencies are required to monitor for cyanotoxins in treated water under the fourth Unregulated Contaminants Monitoring Rule. To ensure that Metropolitan is prepared to address this issue, staff is leading a project funded by the Water Research Foundation to refine and standardize cyanotoxin detection methods. The third progress report for this project was submitted to the funding agency on April 15, and the project is expected to be completed in mid-2021.

On March 27, the EPA published new requirements for vulnerability assessments for public water systems, now referred to as Risk and Resilience Assessments, and accompanying Emergency Response Plans. This action was in response to federal legislation (S.3021—America’s Water Infrastructure Act) that was signed into law on October 23, 2018. In 2003, Metropolitan submitted a Vulnerability Assessment for its infrastructure against physical threats from sabotage or terrorism. The new legislation expands the scope of the threat assessment to include malevolent acts, natural hazards, and cybersecurity. Staff is working to comply with the requirements, which include submitting letters to the EPA by March 31, 2020, and September 30, 2020, certifying that Metropolitan has met all requirements for the updated Risk and Resilience Assessments and Emergency Response Plans, respectively.

Staff worked with the Joint Utilities Group and California Municipal Utilities Association to provide comments on a California Air Resources Board draft regulation for reducing sulfur hexafluoride (SF₆) emissions from gas-insulated electrical switchgear. On April 8 and April 12, JUG and CMUA sent respective comment letters to CARB on its draft regulation. Formal rulemaking is expected to begin in late spring 2019, with final adoption of the rule by late 2020. Staff will continue to engage in the rulemaking process, as needed.

Objective: Provide Technical Support to Member Agencies.

Metropolitan’s Annual Water Quality Report, covering levels of constituents with primary and secondary drinking water standards in source and treated waters, was provided to member agencies on March 29. Member agencies use this report to prepare their Consumer Confidence Reports as required by regulations.

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 April 3, staff participated in a workgroup meeting held in Lake Havasu City for the Topock Chromium-6 Groundwater Remediation Project. The California Department of Toxic Substances Control and Pacific Gas and Electric updated stakeholders on the remedy construction progress and efforts to update the groundwater model with new site information. Construction of the project began in October 2018, and once complete in 2023, will help ensure continued source water quality protection of Colorado River water supplies.

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

Metropolitan’s hydroelectric plants generated an average of 8.6 megawatts for approximately 6,380 megawatt-hours in March 2019, with revenues of about \$363,500. Metropolitan’s solar facilities, totaling 5.5 megawatts of capacity, generated 835 megawatt-hours in March.

WATER SYSTEM OPERATIONS

GM STRATEGIC PRIORITY: Prepare for More Extreme Hydrology

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

Objective: Manage Water Reserves

State Water Project imports into the service area in April accounted for about 98 percent of Metropolitan's deliveries. Storage at Diamond Valley Lake is at 768,000 AF or 95 percent full. DWR discontinued Article 21 surplus supplies in April and Metropolitan continued to maximize SWP deliveries. Due to successful operational adjustments, Metropolitan received a total of approximately 60,000 AF of Article 21 supplies and delivered approximately 94,000 AF of SWP Carryover supplies prior to April. Water reserves continued to be managed according to Water Surplus and Drought Management principles and the 2019 Annual Operating Plan. Deliveries to the Semitropic storage program in the Central Valley began in April and staff is working with groundwater banking partners to increase scheduled storage at every opportunity. Deliveries of Colorado River water to groundwater storage in the Advanced Delivery Account with Desert Water Agency and Coachella Valley Water District (DWCV) resumed in April. DWCV deliveries ramped up to 400 cfs this month, for a year-to-date delivery of about 29,000 AF.

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 April 15, staff met with the Los Angeles County Sanitation Districts and project consultants to discuss various operational and testing responsibilities associated with the Regional Recycled Water Advanced Purification Center in Carson. This was the first operations coordination meeting for the project team. It is anticipated that the demonstration facility will begin operations in July 2019. In preparation for demonstration testing, staff also continued evaluating and refining pathogen detection methods, which will be used to assess pathogen removal through the facility's advanced water treatment processes.

On April 4, staff met with Los Angeles County Sanitation Districts to discuss storm water management practices and establish discharge procedures at the Regional Recycled Water Advanced Purification Center.

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 66-inch diameter packing box and three sets of 45-inch diameter lantern rings for the California Department of Water Resources' (DWR) Gianelli Power Plant pump-generating unit. Gianelli Power Plant is one of four pump-generating stations on the State Water Project. The packing box holds the seals that surround the rotating pump shaft and prevent leakage. It is manufactured of stainless steel with a carbon steel flange. Both are coated with corrosion-resistant high solids epoxy, an improvement from the original design. Performing this work through Metropolitan's reimbursable agreement with DWR helps to ensure reliability of the SWP.

WATER SYSTEM OPERATIONS

GM STRATEGIC PRIORITY: Foster Leadership and Strengthen Workforce Capabilities

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

Objective: Manage Vacancies.

WSO filled 11 vacant positions in March 2019.

Objective: Prepare Employees for New Opportunities.

The WSO Apprentice and Technical Training Programs help develop and train personnel to become qualified mechanics and electricians responsible for maintaining Metropolitan's water treatment and distribution systems. The Apprenticeship Program facilitated a Joint Apprenticeship and Training Committee (JATC) meeting this month at the Diemer plant. Local apprentices were invited to meet with the JATC and a representative from the Division of Apprenticeship Standards to discuss and ask questions on apprenticeship and program objectives. The JATC is a ten-member committee made up of labor and management representatives who meet regularly to oversee apprentices' progress and ensure compliance with the program's standards, policies, and procedures.

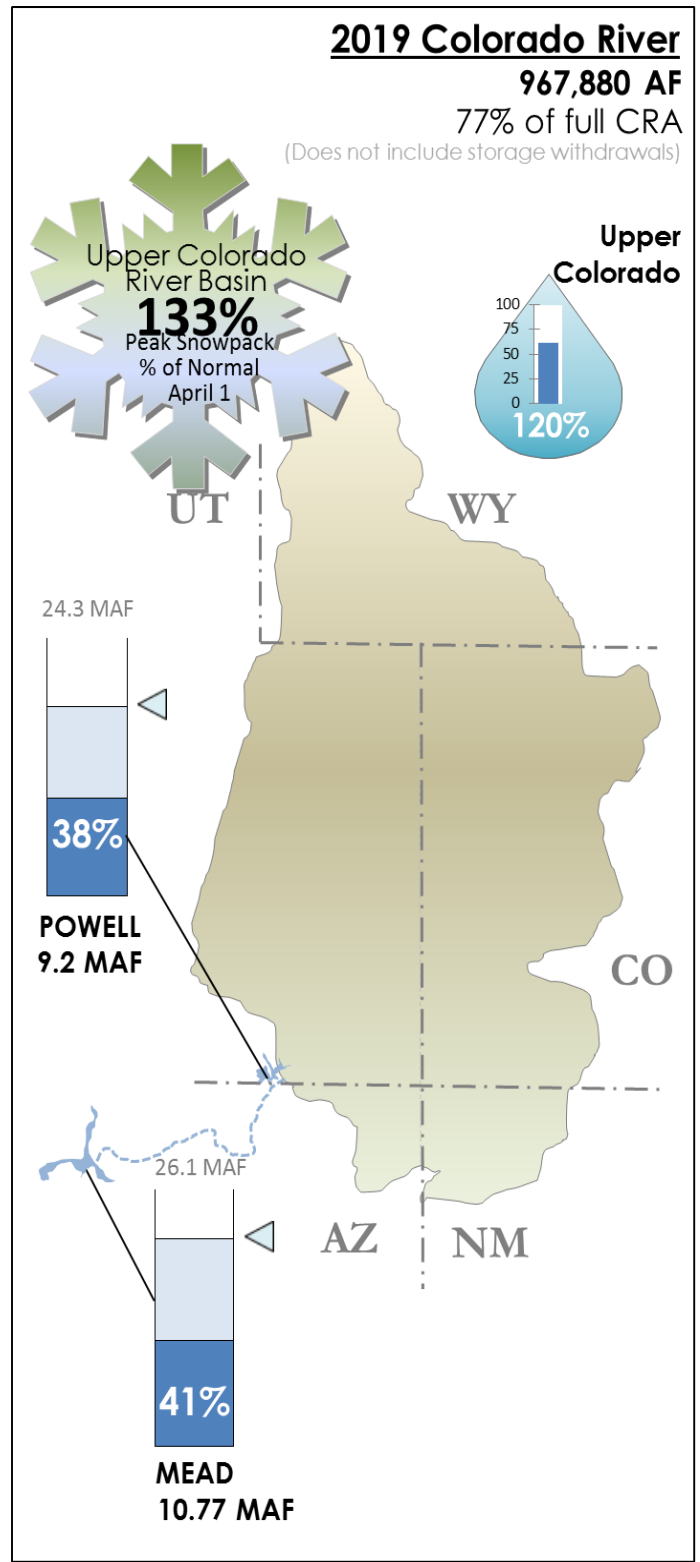
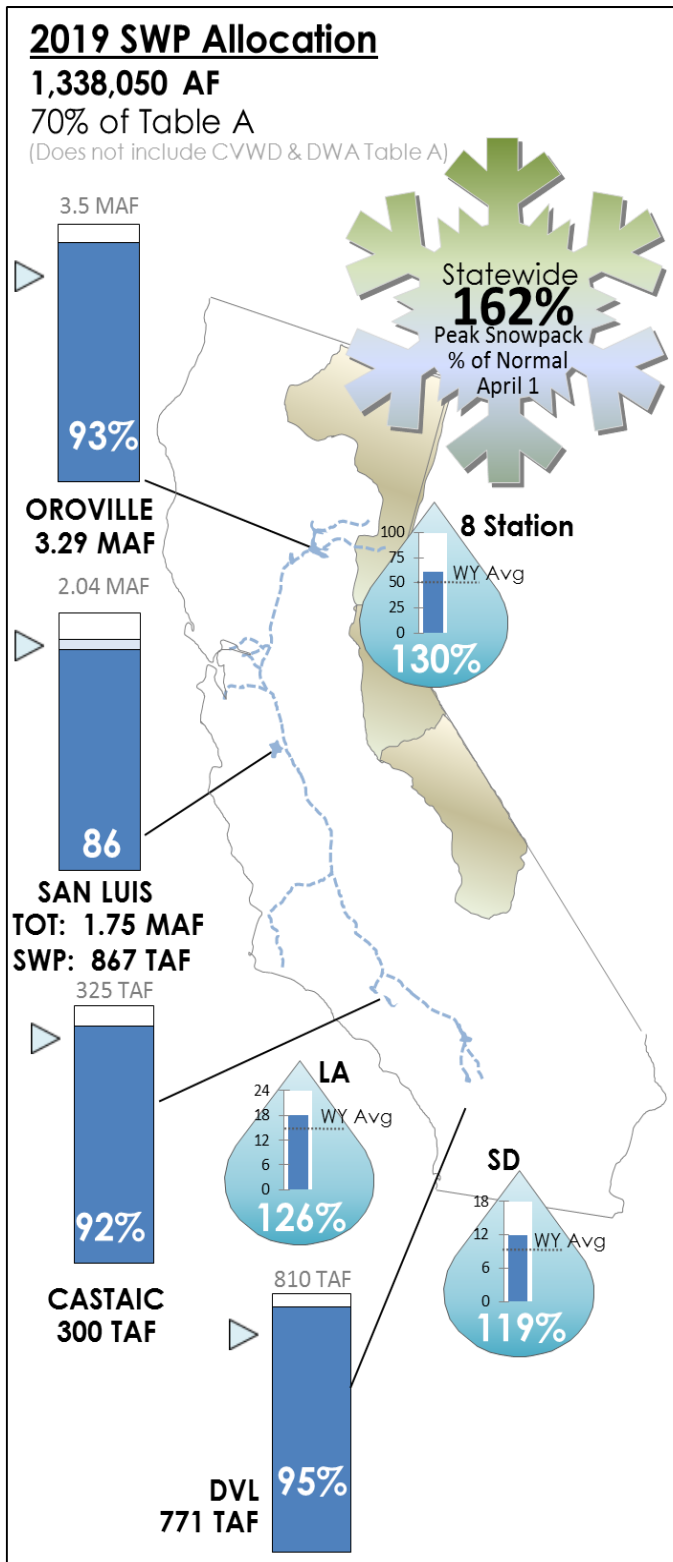
The fourth session of the WSO Management Academy was held in the Desert Region this month. Topics focused on communications in the management role. Participants completed a teamwork assessment, identified individual communication styles, learned to deliver effective presentations, and completed a case study on decision-making skills. WSO guest speakers provided a tour of Whitsett Intake pumping plant and an overview of the Conveyance and Distribution Section. The Academy consists of ten, one-day sessions scheduled through October 2019.


On April 24, WSO held its annual managers meeting at the Sheraton Fairplex Hotel and Conference Center in Pomona with about 110 WSO managers in attendance. The full-day meeting included information and perspectives from Chairwoman Gray and executive management, as well as WSO management. Guest speakers included Colonel Aaron Barta, Los Angeles District Commander of the U.S. Army Corps of Engineers; and Ted Craddock, DWR's Program Manager of the Oroville Spillways reconstruction effort. Additional presentations were provided on Engineering Services' vision, human resources topics, and a historical perspective on regional benefits provided by Metropolitan. Awards were also presented to WSO staff for their achievements this past year in safety and maintenance practices. ([see photo page 43](#))

Objective: Support Education and Outreach Initiatives.


- Staff conducted multiple tours of the Water Quality Laboratory for media representatives (April 4), member agencies (April 5 and 9), and the Southern California Coastal Water Research Project (April 9).
- Staff provided an overview of Metropolitan at Eagle Rock to guests from the North American Carbon World Conference. NACW brings together leaders in North American climate policy and carbon markets to address the most pressing policy issues and carbon management initiatives.
- Staff provided a tour of Diamond Valley Lake to guests from the West Basin Municipal Water District. Participants toured the West Dam, Inlet/Outlet Tower, and Wadsworth pumping plant, and received a presentation on Metropolitan's operational activities.
- Staff assisted with six CRA inspection trips in April. These included three-day inspection trips for Las Virgenes Municipal Water District, Coachella Valley Water District, and federal legislators; and two-day inspection trips for the San Diego County Water Authority, Eastern Municipal Water District, and the WSO Management Academy.

WATER SUPPLY CONDITIONS AS OF APRIL 30, 2019






Regional




WY Avg
% Normal

Rainfall to Date (in)



Capacity
Average EOM

Current Storage
(% Capacity)



Peak
Snowpack
% Normal
April 1

Water System Operations Annual Managers Meeting

Photo below for story on page 41



Storage	As of 4/30/19	% of Capacity
DVL	770,662 AF	95
Lake Mathews	162,460 AF	89
Lake Skinner	40,779 AF	93

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.

General Manager: Jeffrey Kightlinger
 Office of the GM No. 213-217-6139
 Email: OfficeoftheGeneralManager@mwdh2o.com

700 No. Alameda Street
 Los Angeles, CA 90012
 General No. 213-217-6000